

incorporate them into a more rigorous critical psychology of our everyday life.

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Online Resources

- Thornton, S. P., *Solipsism and the problem of other minds*.
<http://www.iep.utm.edu/solipsis/>

Soviet Psychology

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Introduction

Soviet psychology is a unique theoretical tradition which emerged and developed in a “special way” during the twentieth century in Soviet Union. Concepts, theories, and approaches emerged in the context of soviet psychology (cultural-historical psychology and activity theory) had significant influences on the development of psychology and scientific discussions in different countries yet again after the collapse of the Soviet Union (see International Society for Cultural and Activity Research website).

Definition

The term “Soviet psychology” refers to a wide range of diverse approaches and trends in the field of psychology which despite significant differences between them have some broad common

theoretical and methodological orientations, situated within a specific sociocultural-historical context – in different periods in the USSR’s history. Soviet psychology does not mean merely a geopolitical space, but, mainly a conceptual space created by an attempt to overcome concepts and opposition of the traditional psychology and reconstruct the psychology in accordance with the theoretical framework of Marxism (Payne, 1968).

Keywords

Soviet psychology; Marxism; cultural-historical psychology; social transformation, activity theory; historicity; crisis of psychology

History

Soviet psychology emerged and developed in a time of radical social transformation connected with the October Revolution. The new forms of social practice required new theoretical approaches from the social sciences and radically different forms of their organization. Luria (1979) argued that the atmosphere immediately following the revolution stimulated incredible levels of activity to systematic, highly organized scientific inquiry.

Prerevolutionary Russian psychology developed in the context of strong social and ideological contradictions that found their expression in the tension between objectivist and subjectivist psychology (McLeish, 1975). Ivan Mikhailovich Sechenov (1829–1905), the author of the book *Reflexes on the Brain* (1863) is the founder of objective physiological psychology in Russia. Sechenov suggested that psychic activity could be analyzed by objective methods. He considered physiological and psychical reactions as reflex actions. Sechenov’s reflex theory influenced the formation of I. Pavlov’s (1849–1936) and V. Bekhterev’s (1857–1927) research programs. In contrast to objectivist trends in Russian psychology, many Russian philosophers and psychologists as N. Grot (1852–1899), A.I.

Vvedensky (1856–1925), L. Lopatin (1855–1920), and G. Chelpanov (1862–1936) believed that “the method of introspection is the primary and necessary means for studying psychic and inner experience” (Umrikhin, 1997, p. 19).

Soviet psychology is formed mainly but not only under the influence of objective psychology. V. Bekhterev attempted to construct a reflexology, a complex science focused on the objective study of man from the biosocial viewpoint. Bekhterev’s view of “nervous energy” as a unifying concept of all biological phenomena was presented as a theoretical foundation for an interdisciplinary study of human beings (Valsiner, 1994). Another strong scientific school in Soviet psychology was founded by I. Pavlov. Although Pavlov did not accept Marxist or communistic ideas and frequently criticized the new regime, the Soviet government supported him in continuing his scientific investigation. Pavlov elaborated his “doctrine of higher nervous activity” (McLeish, 1975). Higher nervous activity is the activity of the higher centers of the central nervous system of organisms allowing complex relations between the organism and the external environment.

P. Blonsky (1884–1941) carried out the first serious attempt at reconstruction of psychology. Blonsky in his works *The Reform of Science* (1920) and *An Outline of Scientific Psychology* (1921) suggested a reorientation psychology which would become a science of studying behavior (Umrikhin, 1997). In contrast to American behaviorism, he proposed that behavior can be understood only as a history of behavior.

K. Kornilov (1879–1957) suggested another way to create a new psychology based on Marxism. Kornilov rejected not only idealistic psychology but also reflexology, promoting a “dialectical synthesis” of subjective psychology and objective psychology in the framework of his “reactology.” In fact, the concept of reaction was an eclectic, mechanistic combination both of mental and physical components.

In the 1920s many attempts to introduce and apply diverse approaches and trends in the field of psychology (introspective psychology, psychoanalysis, reflexology, reactology, the doctrine of higher nervous activity, etc.) were made in the

light of social challenges of that era. New applied disciplines developed, for example, pedology (the complex science of childhood and child development), psychotechnics (engineering psychology), mental hygiene (the science of enhancing mental health, prevention, and control of neuropsychiatric diseases), psychotherapy, and defectology (a branch focusing on the study of anomalous development and correctional education).

In 1929 over 600 books within the subject area of psychology were published in the USSR. Russian psychological literature ranked third in the world after psychological literature in English and German. Many significant works in psychology were translated into Russian. There was a very lively scientific discourse and dozens of scientific journals were published (*Psychology, Pedology, Journal for the Study of Early Childhood, Journal of psychology, neurology and psychiatry, Psychiatry, Neurology and Experimental psychology, Issues of defectology, Psychological Review*, etc.) (Bratus, 2000).

Radical transformations in the social structure, such as industrialization and collectivization, which occurred in the Soviet Union changed the psychological agenda and influenced the production of psychological knowledge. L. Vygotsky (1997) analyzed the crisis in psychology not only as a result of fundamental philosophical tensions in the domain of psychology but also as a product of the tension between existing psychological theories and rapidly growing practice. Vygotsky (1896–1934) introduced his cultural-historical psychology as a means of overcoming the crisis in psychology. Vygotsky and Luria (1902–1977) were interested in what happens with psychological functions, when a transformation from traditional to modern society occurs. In the early 1930s, Luria (1976) investigated the cognitive development of different groups of people living in the hamlets and nomad camps of central Asia.

During the period 1930–1950, new theories and scientific schools in the field of psychology appeared and developed (Vygotsky’s cultural-historical psychology, Leontiev’s (1903–1979) activity psychology, Rubinstein’s (1889–1960)

activity psychology, Uznadze's (1886–1950) theory of set). At that same time, the basic theoretical and methodological principles of Soviet psychology were formulated by S. Rubinstein in his monumental work *Fundamentals of General Psychology* (1940): (1) the principle of psychophysical unity, (2) the principle of development, (3) the principle of historicity, and (4) the principle of the unity of theory and practice. Rubinstein regarded these principles as an expression of the basic principle of the unity of consciousness and activity (Payne, 1968).

During the same period (1930–1950), many directions in the field of psychology were suppressed (pedology, psychoanalysis, psychotechnics, cultural-historical psychology, etc.); the publication of many scientific journals was stopped (*Psychology*, *Pedology*, *Soviet Psychotechnics*, etc.) and caused great damage especially in applied psychology. After a decree of VKP (b) Central Committee "On Pedological Perversions in the Narkompos System" (July 4, 1936) "...great numbers of psychologists were forced to leave the applied branches of psychology" (Van der Veer, 1990, p. 216).

In the context of the "second wave" of persecution which occurred in the later end of the 1940s (Petrovskii & Jaroshevsky, 1996), whole scientific disciplines (Genetics, Cybernetic, etc.) were declared as "pseudosciences" and persecuted. Between June 28–July 4, 1950, a scientific session on the Physiological Teachings of Academician Ivan P. Pavlov was organized by the Academy of Sciences and Academy of Medical Sciences of the USSR. The main task of this session was the further development of Pavlov's teaching in the understanding of behavior and in the foundation of medical sciences. At this session, L. Orbeli (1882–1958), P. Anokhin (1898–1974), and other scientists faced a devastating criticism of deformation of the fundamental principles of Pavlovian reflex theory (Graham, 1987). One of the errors of the "Pavlovian session" was the reduction of psychology to physiology of the nervous system and neglect of the active character of reflection by Man. Scientific meetings and conferences which were held in the coming years (1952, 1962, etc.) focused on

the boundaries of psychology as a subject matter and that underscored how it was not possible to reduce it to physiology. It is worth noting that the limitation of the Pavlovian theory of reflexes was to a large extent recognized by physiologists, who had developed new approaches: the theory of functional systems of P. Anokhin (1898–1974) and N. Bernstein's (1896–1966) theory of movement behavior.

In mid-1950 the ideological control over science weakened. In 1955 the journal *The Issues Relevant to Psychology* (*Voprosy Psikhologii*) began circulating. In 1956 one volume on Vygotsky's works was published. In 1966 the psychological faculty at Moscow University was founded. In the same year the *XVIIIth International Congress of Psychology* was held in Moscow (Bratus, 2000). After two decades of isolation, Soviet psychologists started reconnecting with their colleagues of other countries. A "cultural shock" was experienced by the first Western psychologists connecting with Soviet psychology. "Coming upon Soviet psychology and psychological physiology for the first time is a little like Darwin first visiting the Galapagos. Different forms of species have evolved, as a result of isolation and interbreeding" (Cole & Maltzman, 1969, p. 37).

In the mid-1950s the basic theoretical and methodological principles of Soviet psychology had been formulated and the application of those principles to specific areas came into the foreground. During the next decades an extensive development of Soviet psychology was carried out: the separation and the development of new branches of psychology (developmental psychology, pedagogical psychology, social psychology, psychophysiology, psychology of work and engineering psychology, psychology of creativity, psychology of sport, etc.), and a quantitative accumulation of a wide range of experimental data took place. The use of psychological knowledge to solve practical problems and applied psychological research was reinforced (Koltsova & Oleinik, 2004). Significant new ideas, approaches, and applications in the field of psychology appeared. Examples are A. N. Leontiev's theory of the development of psyche;

the psychophysiology of individual differences of B. Teplov (1896–1965) and V. Nebylitsyn (1930–1972); the neuropsychological theory of A. Luria (1902–1977) and his students; Elkonin’s theory of child development; theory of developmental learning activity of V. Davidov (1930–1998); Galperin’s (1902–1988) theory of systematic formation of mental actions; various personality theories (V. Myasishchev (1893–1973), L. Bozovitsch (1908–1981), B. Ananiev (1907–1972), etc.); A.A. Leontiev’s (1936–2004) theory of psycholinguistics; etc. Meshcheryakov’s (1923–1974) “experiment” of education of blind and deaf children which was based on cultural-historical psychology and activity theory provoked intense discussions involving psychologists and philosophers (E. Ilyenkov (1924–1979), F. Mickailov (1930–2006), D. Dubrovsky (1929–), etc.).

One of most important characteristics of Soviet psychology was the close connection of practical and applied psychological questions with the consideration of fundamental theoretical and philosophical issues (Budilova, 1972; Payne, 1968). In the late 1950s, in the Soviet Union the opportunity to deal independently with issues of history and methodology of science appeared. Of great interest are the discussions that developed during the 1960s and 1970s on the methodology of Marx’s *Capital* (M. Rozental (1906–1975), E. Ilyenkov (1924–1979), V. Vazioulin (1932–2012), etc.). Many Soviet psychologists and philosophers concerned themselves with the application of Marx’s methodology in the field of psychology. However, the attempts of Soviet psychologists (A.N. Leontiev, S. Rubinstein, B. Lomov (1927–1989), etc.) to solve the problem of systematization of psychological concepts did not lead to a truly satisfactory solution.

The death of the founders of the classical trends of Soviet psychology (A. Luria, 1977; A.N. Leontiev, 1979; A. Zaporozets, 1981; D. Elkonin, 1984; P. Galperin, 1988) created an irreplaceable vacuum. In the period between 1970 and the early 1980s, the tendency to limit research in theoretical and methodological issues dominated the field of psychology and a shift to applied psychology was reinforced (Zdan, 2008).

The collapse of the Soviet Union directly influenced the development of Post-Soviet Psychology. Vassilieva (2010, p. 157) argues that psychology’s position in the post-Soviet era is being refigured “in the context of a free-market economy, anticollectivist cultural politics, and the overriding value of consumerism”.

Traditional Debates

Attempts have been made to study Soviet psychology from different perspectives (Payne, 1966; McLeish, 1975; Kozulin, 1984; Budilova, 1972; Valsiner, 1988; Bratus, 2000), yet Western psychologists have confronted serious difficulties in broaching the subject matter. This is due to the different historical, sociocultural, and divergent philosophical underpinnings of Soviet psychology as compared with other Western psychologies. Moreover, Western scholars often have limited knowledge of Russian terminology (Mecacci, 1974).

Traditionally, Western scientists considered the main focus of scientific activity of Soviet psychologists their research on the “higher nervous activity.” Even today some handbooks of the history of psychology refer only to Pavlov and V. M. Bekhterev as prominent Russian psychologists and physiologists.

In the past decades, Vygotsky became the Soviet psychologist who attracted the attention of many psychologists and educators in the English-speaking context. Jerome Bruner, one of protagonists of the cognitive turn, incorporated some discrete concepts of Vygotsky’s theory in his learning theory (Papadopoulos, 1996). With the publication of the eclectic compilation of different works by Vygotsky entitled *Mind in Society* (1978), the “Vygotsky Boom” started in the North America. Vygotsky’s concept of the zone of proximal development (ZPD) became one of the most popular concepts in contemporary pedagogical literature. However, the concept of zone of proximal development in isolation from other concepts of cultural-historical psychology could easily be misunderstood. The contemporary reception of Vygotsky is “highly

selective, distorted and perhaps over-simplified in its apparent coherence” (Gillen, 2000, p. 184).

In recent years, many Western scholars and practitioners engaged in various versions of cultural-historical activity theory (CHAT) as a theoretical framework which unified three “generations”: Vygotsky’s theory of cultural mediation, Leontiev’s activity theory, and some contemporary approaches such as Engeström’s analysis of activity systems. The concept dubbed activity has transcended the boundaries of psychology and has been relegated to an interdisciplinary concept. The confluence of diverse disciplines on activity theory has created many questions regarding a cohesive and comprehensive theoretical framework to be used in research. For instance, Engeström’s version of CHAT has been criticized for neglecting essential aspects of dialectics which connected with the understanding of contradictions (Langemeyer & Roth, 2006).

Many researchers are concerned with the challenge of reevaluating and rewriting the history of Soviet psychology (van de Veer, 1990). Kozulin (1984), in his book *Psychology in Utopia*, argues that Soviet psychology is characterized by an attempt to create a society based on a utopian conception. Valsiner (1996) also argues that social utopias affect both the direction and contents of knowledge construction in Russian (Soviet) psychology.

In post-Soviet historiography, Soviet psychology is treated as a “repressed” and “ideologized science.” Bogdanchikov (2008) in his analysis of the tendencies of post-Soviet Russian historiography in the study of Soviet psychology highlights that post-Soviet monographs and textbooks are dominated by a rejection of the term “Soviet psychology” and a preference for the ideologically neutral expressions, such as “Russian psychology in the Soviet period,” “psychology in Russia in the 1920s–1930s,” and “national psychology in the 1920s–1950s.” Bogdanchikov (2008) suggests considering Soviet psychology as a general psychological concept that evolved under the influence of Marxist ideology, included a scientific component, and served as a starting point and the methodological

basis for all theoretical constructs in psychological science during the Soviet period.

Although utopian components could be found in Soviet psychology, if we focus exclusively on these components, it would be extremely difficult to adequately explain the knowledge produced and the constructions such creative theories as cultural-historical psychology and different versions of activity theory brought about.

Critical Debates

Many concepts and ideas of Soviet psychology have been further developed within the context of German critical psychology. Klaus Holzkamp was inspired by Leontiev’s activity theory and attempted to reconstruct psychology. He reconceptualized the basic categories of psychology by modifying activity theory. Holzkamp accepted Leontiev’s approach to the development of human psyche and suggested the consideration of psychological concepts in the context of natural history, prehistory, and history of humanity (Teo, 1998). Holzkamp criticized conceptual foundations of traditional psychology and proposed the foundation of psychology from the perspective of the subject. Critical psychologists in Germany discussed the advantages and limitations of Leontiev’s and Rubinstein’s versions of activity theory.

The “Archival Revolution” in Vygotskian studies which started in 1990 contributed to the reconsideration not only Vygotsky’s legacy but also the history of Soviet psychology. The canonical approach of the “school of Vygotsky-Leontiev-Luria” has been criticized and has highlighted the differences between Vygotsky’s research program and that of Kharkov’s school (Leontiev, Luria, Galperin, etc.). New critical reconstructions of the history of Soviet psychology focused not on “Great Mans” as it did the traditional historiography but in personal networks, group dynamics, schools, etc. (Yasnitsky, 2011).

Soviet psychology was not a uniform, homogeneous theoretical corpus, but a field of coexistence and problematization of different

theoretical approaches, perspectives, and scientific schools. It is interesting to mention that the establishment and development of Soviet psychology was carried out by scientific schools. These were research and learning communities of psychologists who worked on the basis of specific research programs (Vygotsky's school, Leontiev's school, Rubinstein's school, Uznadze's school, Teplov's school, etc.) (Budilova, 1972). In the context of Soviet psychology, a great diversity of views, approaches, and scientific schools emerged simultaneously with strong, unifying characteristics and common orientations.

Critical discussions on interpretation and application of Soviet psychology's ideas and concepts take place in different parts of the world. The reception of implementation of Soviet psychology in different regions and countries takes place through the lenses of each region's social and cultural agenda.

Soviet psychology was introduced in Latin American countries through three main avenues: through Marxist circles, through a group of Cuban psychologists who did their studies in the Soviet Union, and through North American Psychology (CHAT). Cultural-historical psychology is presented by critical psychologists and critical educators as an alternative to traditional psychology. Critical psychologists criticize the reduction of cultural-historical theory to a neutral position centered on psychological instruments and individual actions with objects. Critical psychologists suggest the reintroduction of the topic of subjectivity which was ignored by both Soviet and Western psychologies (González Rey & Martínez, 2013).

International Relevance

Many fundamental issues of psychology as a science have been raised and examined in the scientific discussions that were carried out at the different stages of development of Soviet psychology: the problem of the nature of psyche and its relation to the world, the issue of social and cultural mediation of psychological

processes, the connection between reflection of the world and man's activity, the problem of discovering the moving forces and the historical development of the psyche ("psychika"), etc. (Budilova, 1972).

Soviet psychologists had to deal with the challenge of the radical social transformations taking place during and after the October 1917 Revolution. Moreover, Soviet psychologists attempted to overcome the crisis of traditional psychology by creating original theories (cultural-historical psychology, Leontiev's activity theory, Rubinstein's activity theory, Uznadze's psychology of set, etc.).

Many concepts and ideas of Soviet psychology have been incorporated and transformed in world psychology. Scholars and practitioners from different parts of the globe are involved in discussions on cultural-historical psychology and activity theory. Indicatively, it is possible to mention the *Journal of Russian & East European Psychology* which publishes and comments on the works of Leontiev, Luria, Uznadze, Vygotsky, Zaporozhets, and other prominent Soviet and Russian psychologists. The *International Society for Cultural and Activity Research* (ISCAR) supports scientific communication regarding different aspects of sociocultural, cultural-historical, and activity theory.

Practice Relevance

Many Soviet psychologists have given great importance to the establishment of close relationships between theory and practice. Vygotsky discussed the perspective of the foundation of the *philosophy of practice* as means to overcome the crisis in psychology and the reconstruction of its theoretical and methodological foundations. For Vygotsky, practice serves both as the deepest foundation for the development of psychological knowledge and "the supreme judge of theory" (Vygotsky, 1997, pp. 305–306). However, from the 1930s to 1950s, many applied branches as pedology and psychotechnics were exterminated.

During the 1960s, rehabilitation of applied and practical psychology started. Many Soviet

psychologists were engaged in various kinds of practical interventions in different settings. Luria developed methods of neuropsychological assessment and rehabilitation of patients with brain damage. Meshcheryakov was involved with the education of children with multisensory impairment. Davydov organized interventions of developmental teaching and learning in schools (Sannino, Daniels, & Guitierrez, 2009).

Cultural-historical psychology and activity theory have also inspired many Western scholars to develop theories with multiple practical applications: Bruner's concept of scaffolding, Engeström's theory of expansive learning, etc. Multiple practical applications of the concept zone of proximal development by many Western scholars and educators could be found (Chaiklin, 2003; Hedegaard, 2005).

In the context of German critical psychology, conferences and discussions took place on practice research from a critical psychological perspective in which Leontiev's and Ilyenkov's ideas had been used (Nissen, 2000). One of the main questions from a critical standpoint is how cultural-historical psychology and activity theory could promote (and/or could be used as tools for) social transformation and personal growth.

Future Directions

The paradox is that despite "Vygotsky's boom," Vygotsky and other prominent Soviet psychologists remain undiscovered (Veresov, 2010). Rethinking Soviet psychology's legacy and elaborating a theoretical and methodological strategy for its contextualized and historical study from a critical standpoint remains an open question.

Moreover, cultural-historical psychology and activity theory and other trends of Soviet psychology face new challenges connected with "travelling" and being transformed and applied in so many parts of the globe. Their reflection and further development should take into account both the context of their formation in the Soviet Union during the twentieth century and the multiple contexts of their reception and application in different parts of the globe (Daniels, Cole, &

Wertsch, 2007). The future of cultural-historical psychology and activity theory depends on scholars' and practitioners' ability to grasp adequately the ongoing societal and cultural transformations at the national, international, and local level and redevelop these theories.

Many concepts and ideas of Soviet psychology crossed the boundaries of psychology as a discipline and started developing at an interdisciplinary level. However, the mainstream approaches for integrating cultural-historical psychology and activity theory in interdisciplinary research are based on an eclectic rather than a dialectical framework. Building a dialectical meta-theoretical framework for further development of cultural-historical psychology and activity theory and narrowing the gap between theory and social practice remain tasks for the future.

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Online Resources

- International Society for Cultural and Activity Research (ISCAR). <http://twww.iscar.org/>
- Journal of Russian and East European Psychology. <http://www.mesharpe.com/mall/results1.asp?ACR=RPO>
- Lev Vygotsky Archive. <http://www.marxists.org/archive/vygotsky/>

Space, Overview

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Introduction

Space attained special prominence in early modern philosophy because of its importance in the new science. Immanuel Kant, for example, discussed space and spatiality in his early works on physics and metaphysics. Kant regarded spaces as the appearance of the external relations of unitary monads (Hatfield, 2006). In psychology, the study of space can be traced back to the nineteenth century. William James (1887), in his work *The Perception of Space*, argued that sensations were directly experienced as spatial in nature. James, in his later reviews, considered that spatial relations