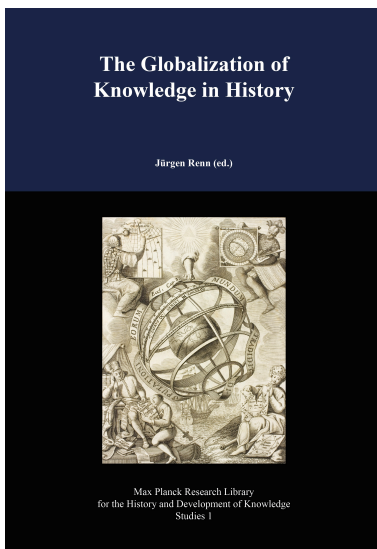


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Ludmila Hyman:

The Soviet Psychologists and the Path to International Psychology



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Chapter 26

The Soviet Psychologists and the Path to International Psychology

Ludmila Hyman

26.1 Introduction

Psychology today is undergoing a transformation. It is becoming an international science, which aspires to uncover universal laws of human behavior and cognition as well as to account for their cultural variation. How can we understand the transformation of concepts, ideas, and approaches involved in this process? In this chapter, I examine a historical precedent for the globalization of psychology. In the 1920s–1930s, a group of Soviet researchers led by L.S. Vygotsky proposed a new kind of scientific psychology that would be international in scope. It was revolutionary in its assumption that the study of mind and behavior, in phylo- and ontogenesis, had to be grounded in the study of the cultural and material conditions in which people live. Although this research program as such largely failed, the Soviet psychologists contributed much of value, and their ideas were taken up—and transformed—by Western psychologists. These ideas form the basis of the genuinely international psychology that is only just emerging today, and to which the “cultural-historical” psychology of the Soviets was a precursor.

The legacy of Vygotsky and his colleagues (most importantly, A.R. Luria and A.N. Leont’ev) is also illuminating in another, more specific respect. It can shed light on the mechanisms of knowledge transfer from one cultural context to another—a process central to the transmission and globalization of knowledge. The Soviets created a new psychology out of old resources. They heavily relied on the work of Western psychologists, which they integrated and revised to meet the unique needs of the new Soviet society. Their ideas, in turn, were later translated to new cultural contexts by their students in the West. Vygotsky hypothesized that local cultural conditions determine cognition. I reformulate this hypothesis as a question for the history of science: What happens to ideas when they travel? Understanding how knowledge is adapted to new cultural situations is key for the study of globalization, in history or now. Therefore, I start by examining how the local cultural context—post-Revolutionary Soviet society—influenced Vygotsky’s reading of Western psychologists.

I focus on Vygotsky’s reading of Jean Piaget, one of the most stimulating peers Vygotsky discovered in the West. In Section 26.2, I examine how Vygotsky

understood Piaget's concepts of egocentric speech and cognitive egocentrism. On this basis, I propose a taxonomy of possible ways for a scientist to use the ideas of others. I discuss in what respects the work of Vygotsky and Piaget was specific to the respective social conditions in which it was produced. I conclude that recontextualization of ideas is to be expected when psychological knowledge is applied to new cultural situations. Psychology is a human and social science that cannot (and should not) be impervious to social needs, practices, norms, and values.

In Section 26.3, I discuss Vygotsky's "cultural-historical" program as an early experiment in creating an international psychology. This project arose in the cosmopolitan social and intellectual climate of the Soviet Union in the 1920s. I examine three aspects of the "cultural-historical" psychology that made it an international science—its cross-cultural orientation, its focus on the cosmopolitan individual, and its design as a comprehensive paradigm—and discuss why this program failed. In Section 26.4, I put cultural-historical psychology in the context of subsequent developments in psychology and the discipline's progress toward globalization. First, I survey how the ideas of Vygotsky and his colleagues were recontextualized by later generations of Western psychologists. Second, I take a broader look at the history of psychology as a story of gradual internationalization—an outcome that Vygotsky would welcome. Finally, I discuss how psychologists understand the globalization of psychology today, what goals they envision for the future, what obstacles impede globalization, and what today's emerging global psychology owes to the work of Vygotsky and his colleagues.

26.2 What Happens to Ideas When They Travel

The Revolution made it exciting to be a psychologist in the Soviet Union. The new regime posed unprecedented pragmatic challenges, such as teaching literacy and professional skills to massive numbers of peasants across the vast expanses of the new federation, the socialist education of children (including seven million homeless orphans and many children with special needs¹), increasing efficiency at the workplace, and, more generally, explaining the human psyche in the context of socialism. The radical Soviet intelligentsia sensed a clean break with the past. Experimentation and pluralism flourished until the late 1920s and early 1930s; after that time the arts and the sciences became increasingly subject to central control, politicization and repression.² Vygotsky, Luria and Leont'ev saw themselves as the vanguard of psychology, who had an opportunity to revise the very foundations of the psychological science and to create something new.

Despite their eagerness for innovation, the Soviet psychologists paid close attention to the work of their Western colleagues. They were fluent in foreign languages and had access to Western literature. They maintained contacts with

¹See (Ball 1993, 229).

²See, for example, (Yaroshevsky 1992, 1994; Petrovsky 2007).

foreign colleagues through travel (whenever political circumstances allowed) and correspondence. In fact, Vygotsky's writings were so densely filled with references to Western psychologists (such as Adler, Bühler, Claparède, Freud, James, Janet, Köhler, Koffka, Lewin, Piaget, Stern and Werner) that he was accused of bourgeois leanings.³ Despite the Iron Curtain (which descended almost immediately after the Revolution in 1917), throughout his life Luria succeeded in regularly publishing in the West and enthusiastically took on and supervised foreign students.⁴

The Soviet psychologists were highly critical in their approach to Western sources. They read Western psychology as a story of limitations, side by side with successes.⁵ They tested and falsified certain claims⁶ and tried to incorporate the achievements of Western psychologists in their own theory and methodology. They intended their research program to be global in scope—both in the sense that they envisioned it as international, and in the sense that they sought a unifying paradigm to replace the various distinct schools of psychology that were current at the time.

Psychological ideas were transformed as they traveled from the West to the USSR. As a case study of such a transformation, I will focus on Vygotsky's interpretation and use of Piaget's concepts of egocentric speech and cognitive egocentrism.⁷ Vygotsky's reading of Piaget was a "creative misreading." Vygotsky approached Piaget critically, with a radically different set of philosophical commitments, and in the context of a radically different socio-economic reality. Vygotsky worked in the USSR and was a materialist and a Marxist, committed to the centrality of labor in cognitive development. By contrast, Piaget studied Swiss children, in what Vygotsky conceived of as a bourgeois setting; moreover, Vygotsky identified idealist commitments in Piaget's thinking.⁸

³(Rudneva 1937), cited in (Petrovsky 2007, 45).

⁴See (Luria 1994; Kuzovleva 1999; Cole et al. 2006).

⁵See (Leont'ev 2000; Vygotsky 2006a; Cole et al. 2006). According to Vygotsky, one such fundamental limitation consisted in the inability of Western psychologists to conceptualize the connection between the individual and the social; thus he claims that "they have not known social psychology in the West" (Vygotsky 2006a).

⁶For example, Luria (1976) demonstrated that the "universal" laws of perception described by Gestalt psychologists (e.g., concerning the perception of geometrical figures) did not apply to Uzbek peasants who led a traditional lifestyle. Given that in the 1920s and 1930s Gestalt theory aspired to become the leading paradigm in psychology, Luria's findings proved that a global paradigm could not succeed unless it was able to explain cultural variation in behavior and cognition.

⁷Based on Piaget's four early studies (1928; 1929; 1930; 1959), the only ones available to Vygotsky in his lifetime.

⁸Vygotsky considered Piaget an idealist on the following grounds: Piaget refused to commit to ontological realism and take a strong (i.e. materialist) conception of causality; he declared "sociological" and "biological" modes of description as alternatives; and he considered the logic of the scientist as an alternative to the logic of a child (Vygotsky 2005a, 58–61, 64–68). Vygotsky claimed that as a consequence of his weak concept of causality, Piaget failed to explain how development happens. For Piaget, the egocentric thinking of a child is *replaced* by logical thinking; the child "weaves on two looms," in Claparède's expression (Vygotsky 2005a). Yet Piaget did not

Piaget (1959) defined *egocentric speech* as the child's speech addressed to it-self (in either the presence or absence of others) and *cognitive egocentrism* as the child's inability to imagine things from another's perspective, which fundamentally constrains the child's reasoning. Piaget observed that children developed cooperation and "sustained social intercourse," based on mutual understanding, no sooner than age seven or eight. Before this age, they were intellectually "egocentric," owing to weak "differentiation between another and the ego," and produced copious egocentric speech (Vygotsky 2005a, 243). Piaget assumed that egocentric speech was an outward manifestation of cognitive egocentrism. He theorized that the child developed from individualism toward an increasingly social orientation (Piaget 1959, 40).

Below I will specify four ways in which Vygotsky responded to Piaget's ideas. They constitute four basic options that a scientist has when borrowing from the work of others, or four basic moves in the transmission of knowledge.

26.2.1 Acceptance and Incorporation

Vygotsky accepted some ideas of Piaget and incorporated them into his own theory. For example, Vygotsky accepted Piaget's conclusion that the child's reasoning is genetically rooted in interpersonal argument (an idea that, according to Vygotsky, originated from Baldwin).⁹ Vygotsky used this idea as an example of interiorization—a transfer of social functions into the psyche—that drives development. (Vygotsky borrowed the concept of interiorization from Janet and extended it (Vygotsky 2006b, 351–353).)

26.2.2 Grounded Rejection

Vygotsky's cultural situation led him to reject some of Piaget's ideas about egocentrism.

1. He claimed that Piaget's interpretation of the child's peculiar way of thinking as a biological universal rested on limited and insufficient data (Vygotsky 2006d, 702, 735). Piaget relied on his particular observations of Swiss children at the Maison des Petits in Geneva. These children's relatively late socialization, Vygotsky argued, might be attributed to sociocultural factors. Soviet children, by contrast, exhibited a different pattern of socialization. At home and in the nursery they were encouraged to engage in close collaboration from an exceedingly young age.¹⁰ Piaget, in Vygotsky's view, imagined

explain how the integration occurs, i.e. how logical thinking arises on the basis of the egocentric substrate.

⁹"Reason-giving initially arises in an argument between children and only then is transferred inside the child; [...] thinking is born in argument" (Vygotsky 2006b, 351, 357).

¹⁰In *Thought and Language* Vygotsky did not describe in detail the empirical, experimental observations that drove his criticism of Piaget's work. We owe an account of Vygotsky's reasoning from empirical data to Levina (2001), a young member of his experimental team. Vygotsky also tacitly relied on his experience of interacting with Soviet children as part of his extensive

children as living in what we might call a “Charlie Brown world,” where adults play essentially no role in the child’s social development, and interaction with peers is all-important.¹¹ Vygotsky rather conceived of children as immersed in the world of adults and developing in response to adults and more mature peers (thus the child developed in what Vygotsky called the “zone of proximal development”¹²).

2. Piaget interpreted children’s thinking as “autistic” (a concept he derived from Bleuler)—a kind of dream-like fantasy, governed by desires, unaware of itself, strictly private and not communicable. Vygotsky found this view of the child’s thought flawed, since it did not do justice to the child’s participation in labor. For Piaget the child’s play was a purely imaginative symbolic activity opposed to everyday reality. But Vygotsky observed that the child’s play, however imaginative, *imitated* reality and prepared the child for an active role in society (Vygotsky 2006e). Piaget compared the child’s thinking to that of the “primitive,” where both were largely impervious to reality: “Experience undecives [...] [the savage] only on very special technical points (cultivation, hunting or manufacture) [...]” (Piaget 1928, 203). Yet, as Vygotsky objected, for primitive people “cultivation, hunting, or manufacture” constitute not “narrow technical cases” but the very substance of their life (Vygotsky 2005a, 7). Similarly, in the Soviet Union the child’s play imitated practical activity, the labor that determined social reality (Vygotsky 2005a, 72).
3. Piaget believed that logic originated in interpersonal communication—in argument, as minds adapt to each other. From Vygotsky’s perspective, Piaget’s hypothesis ignored the importance of the practical activity that gives rise to argument and imbues it with content (Vygotsky 2005a, 65, 68–69).
4. Piaget considered syncretism a vestige of the child’s egocentrism. For Vygotsky, it was a tool for organizing and comprehending the world—a source of hypotheses concerning unfamiliar objects against which the child is able to evaluate new experiences.¹³

26.2.3 Adaptation

Vygotsky did not merely criticize Piaget; he also adapted Piagetian ideas, which took on a different significance in Vygotsky’s cultural matrix.

1. Piaget considered egocentric speech as evidence of the child’s inability to engage with the social, or real, world—a mere “accompaniment” to the child’s

pedagogical and clinical work, as well as on the observations of his own children (Vygotskaya and Lifanova 1996; Yaroshevsky 2007).

¹¹(Piaget 1959, 5); cf. (Bruner 1985, 25).

¹²Vygotsky (1978, 86) defined this zone as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or collaboration with more capable peers.” See also (Levina 2001, 81).

¹³Cf. (Markman 1989; Vygotsky 2005a, 71).

actions. By contrast, Vygotsky saw it as a developmental milestone. Vygotsky demonstrated that egocentric speech performed an important intellectual function, overlooked by Piaget—the function of planning behavior—and that it was a transitional stage in the development of inner speech. Thus egocentric speech took on a new function and character in Vygotsky’s work; the concept was transformed.

Vygotsky conducted a series of experiments, prompted by Piaget’s work on egocentric speech, and on their basis he developed the following account of the genetic relationship of language and thought (Vygotsky 2006e). First speech serves as a means of communication with elders. Then it develops a demonstrative function, when a child learns to identify objects in reality “for oneself” (first the child notices how language ostensibly marks objects “for others”). Speech becomes a tool for the internal representation of external reality. It breaks the child’s sensory-motor syncretism and captures the essential; it creates schemata of experiences (Levina 2001, 84).

At this stage “speech becomes an investigator, a means [...] of mastering the world” (Levina 2001, 82). While Piaget interpreted this kind of speech as superfluous, Vygotsky claimed that it performed a “gnostic” (“reflective” or “reporting”) function. Subsequently the child starts using egocentric speech to plan behavior when it experiences obstacles. Planning speech is also schematic, but it is oriented toward action. Planning speech liberates the child from the “optical intellect” (i.e. the intellect limited by the visual field, as characteristic of apes¹⁴ and small children¹⁵) and makes symbolic thinking possible (Vygotsky 2006e).¹⁶ Planning speech arises in the presence of others and thus in an inherently social context (Levina 2001). By naming things, the child makes them both shareable and intelligible. Planning speech becomes the primary tool of self-regulation.¹⁷

2. Criticizing Piaget allowed Vygotsky to emphasize an important perspective on development. According to Vygotsky, Piaget wrongly considered “autistic thinking” as a starting point of development, which progressed toward increasing socialization of the individual. Vygotsky proposed a different order: the child develops from a less differentiated consciousness of social relations toward individuation, as it learns to use speech for self-regulation (Vygotsky 2006b, 357). Piaget worked in a capitalist society in which the individuation of the person was taken for granted, and the individual needed to be socialized. By contrast, Vygotsky worked in a communist society that took

¹⁴Cf. (Köhler 1915).

¹⁵Cf. (Bühler 1930).

¹⁶Experiments demonstrate that children who are asked to vocally plan their actions reach beyond the situation in two ways: (a) they physically look around, and (b) they think about a possible course of action by reverting to past experience (Levina 2001, 88). Thus language creates psychological time: it sets the present against the past, and it stores present impressions for the future (Tomasello 1999; Levina 2001, 88).

¹⁷Cf. (Janet 1929; Vygotsky 2006b, 351).

the collectivist situation of the person for granted. In Vygotsky's thinking, thus, it was individuation that the person had to develop.

26.2.4 Omission

Certain of Piaget's ideas simply did not travel. They were incomprehensible where they did not fit.

1. Vygotsky misunderstood the importance of Piaget's concept of cognitive egocentrism, "the inability to differentiate between one's own point of view and those of others."¹⁸ Piaget stressed that children learn to cooperate—and to communicate effectively through language—only gradually, and often fail. Failure to adapt to another's perspective does not fully disappear in adulthood (Piaget 1929).¹⁹ A theory of development must account for these failures. Vygotsky disregarded this challenge, along with the plentiful evidence for cognitive egocentrism in the four studies by Piaget.²⁰
2. Vygotsky misunderstood the meaning of "the social" in Piaget. By "the social" Piaget meant "intellectual cooperation" between individuals, which depended on the ability to communicate one's thoughts and to understand the thoughts of others.²¹ Vygotsky found this dimension of social life "uninteresting" (Piaget 2000, 248). Vygotsky understood "the social" as the cultural and stressed the role of symbols, tools and activities in cognitive development.²²
3. Vygotsky emphasized the role of language in cognitive development. He explained the genesis of *verbal* thinking and recognized that language performs different functions in cognition and social life. Yet he underestimated the importance of Piaget's perspective on "intellectual operations," or *non-verbal* thought (as in logic and mathematics). He did not acknowledge *reasoning* as a problem in its own right: How does the child learn to reason about "what there is" from different perspectives, with and against others? Vygotsky explained cognitive maturation in terms of conceptual change, as the

¹⁸See, for example, (Piaget 1929, 167–168).

¹⁹Piaget rightly accused Vygotsky of "excessive bio-social optimism" (Piaget 2000, 243). There is political irony in Vygotsky's ignoring the importance of cognitive egocentrism. The failure of socialism in Eastern Europe can be attributed to the fact that communist theorists took social cooperation too much for granted, overestimating the natural human desire for brotherhood. Vygotsky himself greatly suffered from intellectual misunderstanding in the Soviet psychological community, especially in the 1930s (Vygotskaya and Lifanova 1996).

²⁰Piaget's early results have been repeatedly replicated, extended, and many of his conclusions confirmed. For example, in the 1980s Soviet psychologists conducted Piagetian studies of Moscow children in order to test whether their logic and conception of the world differed from those of Piaget's subjects in the 1920s (Obukhova 1981). Soviet researchers concluded that, despite some differences in the content of thought, Muscovite children exhibited the same general cognitive tendencies (realism, animism, artificialism, syncretism and so forth) and often gave the same answers as Piaget's children (Obukhova 1981, 98–99).

²¹See the final chapter of (Piaget 1959); cf. (Piaget 2000, 249).

²²See, for example, (Vygotsky 2006e).

child learns to understand the world increasingly by means of “scientific,” as opposed to “spontaneous,” concepts (for Vygotsky this change largely occurs through education (Vygotsky 2005a)). Yet concepts have to be studied side by side with reasoning structures that relate concepts to each other.²³

Vygotsky offers a rich account of concepts and an impoverished account of reasoning. Piaget presents a rich account of reasoning and an impoverished account of concepts.

Why does Vygotsky miss these important ideas of Piaget? Vygotsky underemphasized everything that had to do with interpersonal understanding, reasoning and dissent—issues that Piaget regarded as central. He failed to recognize social cooperation as a problem because he was immersed in a collectivist culture that took cooperation for granted. For Vygotsky the central problem was the acquisition of culture—a problem that arose from the exigency of spreading cultural tools (such as literacy) in the early Soviet Union, which entailed integrating vast populations into a new system of production.

In his response in 1962 to Vygotsky’s criticisms, Piaget identified some points of disagreement, but failed to acknowledge the complementary strengths of Vygotsky’s approach and Vygotsky’s reasons for pursuing it (Piaget 2000). Thus, the two psychologists had blind spots when reading each other. However, their creative misunderstandings can hardly be considered a defect, or a failure of scientific thinking. Their reading each other proved to be highly productive, for it allowed them to refine their concepts and methods and, in the case of Vygotsky, to develop new ones. Neither Vygotsky nor Piaget was fully persuaded by each other’s choices, but each continued to build knowledge within his own framework.

In his treatise on the methodology of science, *The Historical Significance of the Crisis in Psychology*, Vygotsky claimed that no scientific concept could be transplanted into another research program without modification (Vygotsky 2006a). The reason for this is that every scientific concept is in its deep logical structure inextricably connected to the methodological and philosophical principles on which the program is based. For a successful transfer, either the programs have to be methodologically compatible, or the concept has to be used heuristically—that is, as a rather loose prompt for original research, rather than a ready-made building block to be imported uncritically into a research program (Vygotsky 2006a, 92). Besides these methodological constraints, the process of knowledge transfer is influenced by social and cultural factors. As members of their societies, psychol-

²³Modern psychologists have tried to find ways to reconcile the Piagetian and Vygotskian approaches (Wozniak 1996). One possibility of the synthesis is suggested by Wittgenstein. Like Vygotsky, Wittgenstein maintained that language performs multiple functions, or uses. Like Piaget, he questioned how language can be used for thought in a social scenario. Wittgenstein’s concept of “language games” explains this process: People construct language within a shared activity, i.e. the meaning of linguistic units emerges in the context of mutually understood practical actions. This view combines Piaget’s focus on intellectual operations as they originate in social actions with Vygotsky’s (Marxist) focus on language as inscribed in practical activity, cf. (Malinowski 1923; Piaget 1951, 2001, 138–140;) on gesture and action in play.

ogists consciously or unconsciously bear social agendas that reflect the needs and emphases prevalent in these societies. The more they are at home in their time and place, the more we should expect that they will be creative when appropriating the ideas of others.

26.3 Soviet Psychology as International Psychology

The Soviet Union in the 1920s was international in outlook: The ideological and intellectual climate in the aftermath of the Revolution was cosmopolitan. For Vygotsky and his students, internationalism was also reflected in their broad pre-revolutionary education and cultural interests. The psychology they attempted to create was international in three respects.

26.3.1 Soviet Cross-Cultural Psychology

First, Vygotsky and his students believed that psychology had to account for cross-cultural variation in human cognition and behavior.²⁴ They proposed a research program that could reveal the role of culture in development. This program, known today as “cultural-historical” psychology, aimed at an understanding of the role of both biological and sociocultural factors in development; an explanation of cultural differences in cognition and psychic life; and an account of the most complex forms of cultural behavior and consciousness, such as reading, writing and thinking. To achieve these goals, Vygotsky and his students initiated a series of empirical studies, including experimental studies of memory, concept formation and problem solving,²⁵ as well as cross-cultural studies of cognitive processes of the peasant population in Uzbekistan (Luria 1979).

Vygotsky, Luria and Leont’ev worked at a time when Soviet scholars showed great interest in comparative studies of the populations of the USSR. In the 1920s such studies were conducted extensively by pedologists and psychotechnicians—researchers who performed anthropometric and psychometric studies of children, and assessed individuals’ fitness for professions, respectively. Pedologists and psychotechnicians conducted extensive studies of different groups of the Soviet population, across class and ethnic boundaries, including for the first time the “national minorities”—such as the peoples of Central Asia, Siberia, the Caucasus; Tatars; Bashkirs; and Jews. These disciplines employed standardized, international metrics (such as Pignet index measurements; the tests of Binet-Burt, Binet-Termin, Binet-Simon, Rossolimo, Levitov-Tolchinsky; questionnaires investigating children’s interests and ideals, and tests on moral conflicts (Kurek 2004, 25–26)). The generalizations made on the basis of these data turned out to be politically disturbing. Slavic peasants and workers showed considerably lower IQ

²⁴They were not alone. In the early twentieth century, many European researchers were developing accounts of cross-cultural variation, often in the context of discussing the relationship between ontogeny and phylogeny, see (van der Veer and Valsiner 1991, 190).

²⁵See (Leont’ev 1983; Shif 1935; Vygotsky and Sakharov 1998; Levina 2001).

and other measures of psychological development than the Slavic urban educated classes. The Turkic populations of Central Asia scored even lower.²⁶ The resulting data were in stark conflict with the official Soviet ideology of social progress and the radical plasticity of humans. Consequently, in 1936 pedology and psychotechnics were banned by the Soviet authorities, testing and cross-cultural psychometric studies were prohibited, and the leaders of pedology and psychotechnics repressed.

The work of the pedologists and psychotechnicians was an important foil for Vygotsky and his students. Vygotsky claimed that standardized testing, no matter how much adjusted and improved, could not serve as an adequate approach to the study of ethnic minorities. What was needed instead, he argued, was to explore the problem of cultural development through broad empirical studies and an ambitious theoretical program (Vygotsky 2004). Vygotsky stressed that cognition could not be studied in isolation from the structure of the environment, i.e. from everyday cultural forms of behavior, the history of the social group, its economy, art forms and so forth (Vygotsky 2006e, 226, 234). Cross-cultural studies had to proceed hand in hand with research on psychological functions (see below), which would reveal laws of cultural development. Vygotsky argued for the creation of a special research institute for the pedology²⁷ of national minorities, which would direct and coordinate cross-cultural investigations across the Soviet Union (Vygotsky 2004).

Vygotsky and Luria claimed that Rossolimo and Binet's intelligence tests measured at best the knowledge the child had already acquired at school, but that they failed to measure the child's intelligence as a capacity (Vygotsky and Luria 1930, 220, 226–231). For cultural-historical psychologists, intelligence consisted in the ability to use cultural, rather than natural, resources to solve problems. This ability, they proposed, could compensate for the lack of natural endowment (as sign languages function for the deaf and mute). During his expedition to Uzbekistan in 1931–1932, Luria assessed not only the performance of the local population on cognitive tasks, but also their zone of proximal development. This method, developed by Vygotsky, allows psychologists to assess an individual's potential for learning; it measures how well a subject performs a task when offered assistance. Luria (1979) showed that the Uzbek subjects possessed a high zone of proximal development. With minimal education they quickly acquired the more abstract, categorical forms of cognition typical of an educated urban population.

26.3.2 Vygotsky's Focus on the Psychology of the Cosmopolitan Individual

Second, Soviet psychologists were interested in creating a psychology and a pedagogy that would facilitate the production of “the new man”—the ideal Soviet

²⁶According to A. Stilerman (1928), cited in (Kurek 2004, 41), only 16.8% of Uzbek children qualified as normal in intellectual development, 63.3% as slightly retarded and 19.8% as severely retarded; they were 2–5 times less developed intellectually than Russian children.

²⁷By this term Vygotsky meant an integrated study of the child, including fields that were in practice separated, such as developmental psychology, pedagogy and pediatrics.

citizen, whose outlook was cosmopolitan rather than national. This orientation is especially pronounced in Vygotsky's *Pedagogical Psychology* (1926). Vygotsky stressed that contemporary developments in economics, science and technology were happening on a world scale and could only be understood on a world scale (Vygotsky 2005b, 248). Therefore, to excel in any of these domains one had to comprehend global tendencies (this argument is *a fortiori* relevant today) (Vygotsky 2005b, 259). Vygotsky, Luria and Leont'ev were living examples of this ethic. They attempted to create a new international psychology in dialogue with Western psychologists and thinkers.

26.3.3 The Soviets' Attempt to Create a Comprehensive General Psychology to Replace the Multiplicity of Schools and Paradigms

Third, Soviet psychologists attempted to create a single scientific psychology. According to Vygotsky, psychology in the 1920s was torn between two irreconcilable tendencies: (1) Materialist, causal, or explanatory psychology, which employed inductive and "objective analytical" methods (e.g., reflexology and behaviorism), and (2) idealist, descriptive, or teleological psychology, which employed introspection (e.g., Husserl's phenomenology and Wundt's introspectionism) (Vygotsky 2006a). Vygotsky envisioned a unified discipline—not as an amalgam of all schools, but as a qualitatively new paradigm that would stress the centrality of development in a culture (the emphasis that was missing in European and North American psychology). This paradigm would remain materialist, but it would not be reductionist. It would not ignore the real complexity of human consciousness and behavior. Cultural-historical psychology was the Soviets' attempt to create this paradigm.

As the core of cultural-historical theory, Vygotsky proposed to explain the genesis of the higher psychological functions, which he saw developing along similar lines in phylogeny and ontogeny. For Vygotsky, *higher psychological functions* are complex capabilities—such as voluntary attention, categorical perception, purposive memory, will, concept formation, and reasoning—that develop from a biological substrate through processes of acculturation, or socialization. The genesis of the higher psychological functions depends on the mastery of "external means of cultural development and thinking," such as tools and various semiotic systems (language, writing, counting, drawing, art and so forth, (Vygotsky 2006b, 227, 2006e)). The *cultural development of behavior* involves the interplay of external and internal processes. As the child internalizes cultural signs (originally means of social interaction), it learns to *regulate its own behavior*. It comes to recognize a sign "for others" as a sign "for oneself" and to use it in order to organize its own thoughts and actions.²⁸ Vygotsky considers self-regulation as the highest human capacity.²⁹ A human is *homo faber*, who "*builds* new organs," i.e. higher

²⁸Here Vygotsky follows Janet; see (Vygotsky 2006b, 329–322, 351–357, 2006c).

²⁹Cf. (Lewin 1935), see (Vygotsky 2006b, 328–329, 2006f, 1124–1125).

psychological functions, through instrumental activity in the process of social life (Vygotsky 2006c, 1020–1021, 1028, 2006f).

26.3.4 Why Cultural-Historical Psychology Did Not Succeed

Cultural-historical psychology, as a comprehensive research program that would uncover the laws of ontogenetic and phylogenetic development, failed.

Some reasons for this failure were external. Vygotsky died in 1934, having scarcely tapped his intellectual and organizational talents. Whereas Soviet culture in the 1920s was characterized by boundless optimism and unbridled creativity and experimentation, the end of the decade brought increasing repression and state interference in scientific research. The early cosmopolitan outlook of the USSR yielded to inward-looking paranoia. Vygotsky and Luria's cross-cultural studies were attacked on ideological grounds,³⁰ Luria's work in Uzbekistan was discontinued, with his results remaining unpublished until the 1970s. This empirical project, however, was crucial for the cultural-historical program, and the inability of the Soviet psychologists to continue cross-cultural work severely crippled their research.³¹ After 1936 Vygotsky's work was banned for decades. Luria and Leont'ev faced tremendous ideological and administrative obstacles in their later work. Moreover, at no stage did Vygotsky and his students have an adequate infrastructure for the research they envisioned. Although Vygotsky's students communicated with one another, they never worked together at a single institution (and in fact, political exigencies forced Luria repeatedly to move from institution to institution, abandoning earlier lines of research and taking up new ones).

Some reasons for this failure were internal. If external circumstances had been more favorable, was cultural-historical psychology a viable research program that could have had international uptake? What limited Vygotsky's efforts was the overemphasis on theory at the expense of systematic empirical work. Cultural-historical theory was indeed supported by some experiments (e.g., on egocentric speech, memory and concept formation) and clinical observation (e.g., Vygotsky's extensive work with abnormal children).³² But a careful record of these procedures, such as protocols, is conspicuously missing in Vygotsky's published work. He tends to describe his data only briefly and focuses on conclusions from and ramifications of the data, rather than on the process of inference. Vygotsky considered his role as a reformer of psychology, who could create new theory and institutions. Diagnosed with terminal tuberculosis, he rushed to develop ideas, which his students could further elaborate and test through experimental research. Vygotsky acknowledged that his cultural-historical theory was only an

³⁰See (Vygotskaya and Lifanova 1996; Razmyslov 2000; Kurek 2004, 121).

³¹See (Vygotsky 1996).

³²Most of these experimental data have never been published, and, given the complexity of the archival situation and possible attrition of materials, it is not even clear which remain extant. Some have been published in the work of Vygotsky's students, see, for example, (Shif 1935; Leont'ev 1983; Levina 2001).

“abstract development of concrete psychology” of social groups—a prolegomenon to detailed studies of cross-cultural difference and cultural development (Vygotsky 2006c, 1030). His texts are rich in ideas, but he failed to develop many of these ideas into genuine scientific concepts. Vygotsky’s specific research methods were interesting and innovative;³³ his understanding of methodological problems of psychological science was quite refined;³⁴ and his depth of analysis of specific experiments and observations was remarkable;³⁵ but he failed to create a comprehensive methodology that would translate cultural-historical theory into an actionable research program.³⁶

Similarly, Leont’ev devoted himself largely to theory building. In his later years, he confessed that he regretted not having created a fuller empirical basis for his theory (Leont’ev et al. 2005). Luria was the only member of the troika who made himself into a systematic empirical investigator. He called the early methods of cultural-historical psychologists “banal in and of themselves”: “Today we would consider them no more than student projects,” or “pilot studies.” He acknowledged, however, that “the general conception that organized these pilot studies [...] provided a set of experimental techniques which [he] was to use throughout the remainder of [his] career” (Cole et al. 2006, 51). The experiments of cultural-historical psychologists, no matter how promising, did not amount to a systematic experimental program that would lend proper empirical grounding to a new psychology.

The Soviet psychologists, in giving short shrift to experimental documentation and empirical research, separated themselves from their Western colleagues who were actively collecting and publishing their data. Vygotsky criticized Wundt and Freud for their theoretical assumptions, but he seemed to miss the rigor of the Wundtian laboratory, as well as the thoroughness of Freud’s clinical descriptions. We must remember that scientific knowledge depends not only on insightful ideas and the depth of analysis, but also on the sheer bulk of empirical work that can prove and refine ideas. When Western psychologists came to read the texts by the Soviets, they read them in the context of an empirically based program of research, naturally assuming that the ideas of Vygotsky and others could be tested in the laboratory. The Soviet cultural-historical school was important and innovative; many of its ideas have been taken up by Western psychologists, and it still contains lessons concerning the depth and breadth of scientific thinking. Sadly, Russian psychology still remains largely isolated from the international

³³For example, in the studies of egocentric speech, prompted by Piaget, Vygotsky combined experiment, clinical observation and pedagogical intervention (the technique is described in (Levina 2001)).

³⁴See, for example, (Vygotsky 2006a).

³⁵For example, he drew his understanding of the genetic relationship between thought and language from his investigations of egocentric speech, see (Vygotsky 2005a, 282–347), including his observation of his own children, see (Vygotskaya and Lifanova 1996); an example is described in (Vygotsky 2005a, 44).

³⁶See (Lamb and Wozniak 1990; Cole 1995).

mainstream, and current researchers tend to develop elaborate theoretical edifices that rest on limited real data.

26.4 Recontextualization of Soviet Psychology and the Growth of a New International Psychology

26.4.1 Recontextualization of Soviet Psychology

Certain ideas of Soviet psychologists were taken up, primarily in America, starting in the 1960s, especially in two areas: in psychology of language and in pedagogy. Interest in Vygotsky's school resulted from a kind of internationalization—a thaw in the relations between the US and the USSR. Vygotsky's work was discovered in the West through two publications: the translation of *Thought and Language* by Hanfmann and Vakar (1962) and the compilation of Vygotsky's cultural-historical writings *Mind in Society: The Development of Higher Psychological Processes* (1978). After 1956, the Soviet authorities allowed Luria to travel; he attended many international conferences and hosted many foreign students (Luria 1994; Kuzovleva 1999). Since the 1960s, his books have been widely published in the West. One of Luria's works (1932) was even published in English before it appeared in Russian (2002). Leont'ev's work was discovered in the West somewhat later. His important *Problems of the Development of the Mind* (1959) appeared in English only in 1981. His other major works remain largely untranslated and in fact only now are some being published in the original Russian (Leont'ev 2000). Leont'ev's version of activity theory initially attracted the attention of Finnish and Scandinavian researchers (Engeström 1987), and recently it has become influential in North America as well (Wertsch 1981).

The enthusiastic reception of Soviet psychologists in the West cannot be attributed merely to the publication of their work in translation (translations, which in fact often left much to be desired, in some cases were only partial, and lacked—and still lack—a proper scholarly apparatus). Rather, Western researchers and educators took up the work of the Soviets because it seemed to fill certain gaps and answer important questions that had hitherto remained unanswered.

In developmental psychology, Vygotsky's approach offered a promise of a theory that would integrate and explain a wealth of empirical data that lacked an overarching theoretical framework.³⁷ The reception of Vygotsky was also facilitated by social factors—such as American educators' growing interest in a pedagogical reform that would de-emphasize the traditional, individualist view of learning. Pedagogy and child psychology were moving away from a reliance on behaviorist models. They needed a new paradigm, and in the context of increasing liberalism (partly provoked by the Vietnam war) the Vygotskian approach seemed particularly appealing. The new, Vygotskian perspective stressed that the child is embedded in a social context. From this perspective, children learn together

³⁷(Goswami 2002); cf. (Rowe and Wertsch 2002).

and from one another; one teaches not individual children but the whole class; adults as well as more advanced peers play a key role in the child's cognitive development. In fact, Vygotsky's concept of the zone of proximal development has been emphasized by those who react against political pressures for standardized academic testing in the US (Rowe and Wertsch 2002, 552).

Vygotsky greatly influenced (largely through *Thought and Language* and the experimental elaboration of some of his ideas by Luria³⁸) Western psycholinguistics,³⁹ literacy research⁴⁰ and research on concept formation.⁴¹ He has been read and recontextualized by cognitive psychologists (Bruner 1985; Frawley 1997) and evolutionary psychologists (Tomasello 1999). His work (along with that of Leont'ev) has inspired research on distributed cognition, which studies how knowledge is acquired and distributed in a group, such as an institution.⁴² Perhaps most significantly, Vygotsky's work became the foundation stone for cultural psychologists, who have taken his insights to a new level.⁴³

Luria has exerted an extensive influence on neurologists and aphasiologists all over the world.⁴⁴ He played a fundamental role in the rise of neuropsychology, now a flourishing field. Luria was found to be the most frequently cited Soviet (Russian) psychologist in North America (Solso and Hoffman 1991). Despite rapid advances in neuropsychology, he continues to play a key role in the field. According to a 1996 survey (Ryan and Bohac 1996), Luria's *The Working Brain: An Introduction to Neuropsychology* (1973) and *Higher Cortical Functions in Man* (1980) remain among the top essential readings in neuropsychology, and, if duly updated, have every reason to stay relevant (Tupper 1999, 2–3). Luria's influence on Western neuropsychology—a field dominated by narrow empirical results—can be attributed to his emphasis on an overarching framework (rooted in Vygotsky's cultural-historical theory) that can help explain and integrate many empirical findings (Tupper 1999, 1). Luria also brought to neuropsychology a distinctive perspective that differs markedly from North American approaches. Whereas North American neuropsychology tends to rely on quantitative methods applied in group studies (an approach derived from psychometry), Lurian neuropsychology stresses the clinical assessment of individuals in single case studies, with a focus on identifying links in the functional system of cognitive processes in

³⁸See, for example, (Luria 1959, 1961).

³⁹For example, (McNeill 1970, 1992; Bowerman and Levinson 2001).

⁴⁰For example, (Scribner and Cole 1981; Tobach et al. 1997; Lee and Smagorinsky 2000; van Kleeck 2004; Singer and Bashir 2004).

⁴¹For example, (Keil 1989; Mandler 2004). Vygotsky's work on conceptual thinking in schizophrenia influenced Western researchers from the 1930s on, see (van der Veer and Valsiner 1991, 278–283); cf. (Mandler 2004).

⁴²See (Douglas 1986; Resnick et al. 1991; Cole and Engeström 1993; Salomon 1993; Rogoff 1994, 1998; Zhang and Norman 1994; Hutchins 1995; Leigh et al. 1999; Perry 2003; Gureckis and Goldstone 2006; Ross et al. 2007).

⁴³See (LCHC 1982; Cole 1995, 1996, 1999, 2006; Cole et al. 1997; Tobach et al. 1997; Valsiner 2000).

⁴⁴See (Goodglass 1993; Das 1999; Tupper 1999).

the context of the patient's personality (an approach derived from clinical neurology and psychology).⁴⁵

In developing his theory and methods, Luria demonstrated his commitment to combining "classical" and "romantic science"—a distinction first introduced by Max Verworn. Classical science is reductivist, analytical and logical; it aims at constructing abstract models of phenomena and discovering universally applicable laws. In contrast, romantic science resists "splitting living reality in its elementary components" and aims to capture the real, systemic complexity of "life's concrete events" (Cole et al. 2006, 174–175). Without denying the advantages of "classical" reductivism, Luria insisted on the importance of clinical observation, description and analysis of individual case studies, in the tradition of nineteenth-century medicine (Cole et al. 2006, 176–177). He pioneered a new genre of scientific writing, in which he presented literary portraits of his patients in the context of "classical" scientific analysis of their pathologies: *The Mind of a Mnemonist* (1968) and *The Man with a Shattered World* (1972). The genre of "romantic essay" was enthusiastically picked up most notably by Oliver Sacks,⁴⁶ but also by many others.⁴⁷

Leont'ev's activity theory—a framework for understanding how subjects achieve their goals (e.g., in the workplace) through the mediation of tools and artifacts—was taken up by researchers interested in the study of contemporary work practices, such as practices of production (e.g., in industry and in research institutions), as well as in organizational learning and communication, knowledge transmission, innovation, network collaboration, product evolution, motivation and decision making in the workplace.⁴⁸ Leont'ev's theory was adapted to Western working conditions (e.g., the concepts of "community" and "rules" were introduced). It has recently acquired significance in the fields of human-computer interaction, information systems and software design.⁴⁹

A number of Western psychologists played a key role in bringing Soviet psychology into the mainstream. Foremost is Michael Cole, who studied with Luria in Moscow in the 1960s. Cole facilitated the spread of the ideas of the Soviets by editing the translation journal *Soviet Psychology* and several important books,⁵⁰ including Vygotsky's *Mind in Society* (1978). He now edits *Mind, Culture, Activity: An International Journal* and previously edited the *Journal of Russian and East European Psychology*, which is intended to familiarize the international psychological community with the current and historical work of Russian and Eastern European psychologists. James V. Wertsch contributed greatly to the explication

⁴⁵See (Luria and Majovski 1977; Luria 1999; Tupper 1999, 3).

⁴⁶For example, (Sacks 1973, 1985, 1995).

⁴⁷For example, (Schaller 1991; Damasio 1994; Cytowic 2003).

⁴⁸For example, (Engeström 1987, 1992; Hyysalo 2003; Engeström 2004, 2005; Miettinen 2006; Miettinen et al. 2008).

⁴⁹See (Kuutti 1991; Nardi 1996; Bardram 1998; Redmiles 2002; Turner and McEwan 2003).

⁵⁰See (Cole and Maltzman 1969; Cole 1978a,b; Cole and Cole 1979; Cole and Wertsch 1996; Cole et al. 2006; Daniels et al. 2007).

of the legacy of Vygotsky's school and its relevance for developmental psychology and education.⁵¹ Jerome Bruner wrote the introduction to the first English translation of Vygotsky's *Thought and Language* (Hanfmann and Vakar 1962). Yrjö Engeström (1987) popularized and extended Leont'ev's activity theory. Rene van der Veer and Jaan Valsiner (1991) composed a definitive intellectual biography of Vygotsky.

Certain Western psychologists not only facilitated the spread of the ideas of the Soviets, but also developed these ideas as part of their own research programs. For example, Cole took the Soviet cultural-historical activity theory as one of the sources of his cultural psychology (Cole 1995, 1996). Bruner drew attention to Vygotsky's concept of the zone of proximal development and, moreover, extended it with his own concept of "scaffolding" (structuring the participation of the adult to promote learning) (Bruner 1983, 1986). Michael Tomasello (1999) employed Vygotsky in his evolutionary account of human cognition. David McNeill (1992) used Vygotsky's ideas on thinking and speaking in his theory of the unity of gesture and verbal thought.

What is common to all of these researchers is that they do not slavishly rehearse the ideas of the Soviets, but make critical and selective use of them, recontextualizing these ideas when necessary. In other words, just as the Soviet psychologists entered into critical dialogue with the authors they read, modern psychologists engage critically with the Soviets.⁵² Vygotsky believed that one can only truly understand the work of others (i.e. analyze the methodological principles of psychological writings) if one reads this work in the context of one's own ongoing research (Vygotsky 2006a). Vygotsky himself, as well as his students, should be read this way. Psychological science proceeds by empirical work, not by theorizing *in abstracto*. Parroting the Soviets⁵³ is not going to produce any new knowledge.⁵⁴

26.4.2 International Psychology: Its Origins and Present Status

History

Since Wundt founded the first psychological laboratory in Leipzig in 1879, psychology spread quickly around the world even in the first generation of Wundt's students, who took it to the US (Hall, Catell, Ladd, Angell, Titchener), Switzerland (Durr), Denmark (Lehman), Italy (Kiesow), Russia (Chelpanov, Lange), Georgia

⁵¹See (Wertsch 1981, 1985a,b, 1991).

⁵²It is useful to remember in this context that Vygotsky himself was a great polemical reader, who passionately mined psychological literature for data and insights relevant to his own work, cf. (Vygotskaya and Lifanova 1996).

⁵³See, for example, (Robbins 2001).

⁵⁴I do not intend to criticize genuine historical and scholarly research, for example, (van der Veer and Valsiner 1991; Vygotskaya and Lifanova 1996; Yasnitsky and Ferrari 2008; Yasnitsky 2008, 2009).

(Usnadze), Japan (Matsumoto) and China (Yuanpei) (Lück et al. 1984). Psychological laboratories modeled upon Wundt's were rapidly established in these countries, as well as in France, the United Kingdom and India (Jing 2000, 573–574). In the beginning of the twentieth century, most psychological research was done in the US, Germany, Great Britain and France (Fuchs and Milar 2003). Throughout the twentieth century, the spread of psychology around the world was marked by the establishment of national psychological organizations, on the model of the American Psychological Association, which had been founded in 1892 (Rosenzweig 1992). By the end of the 1950s, most industrialized countries had a national psychological association, whereas in Latin America, Africa and most third world countries, psychology mainly developed after World War II.⁵⁵

In different countries psychology had different roots and was influenced by different local traditions (Pawlik and d'Ydewalle 1996). Whereas psychological research in the US and Germany derived from the Wundtian experimental tradition (and in the US was quickly succeeded by behaviorism, starting with Watson, 1913), British psychology at its inception was strongly influenced by psychometrics (Galton, Pearson, Spearman) and French psychology by clinical analysis (Ribot, Janet, Binet). In China psychology (especially educational psychology) was influenced by Confucianism (Ching 1984; Higgins and Zheng 2002). In India, although mainstream psychology relied on Western concepts and methodologies (Asthana 1988; Pandey 1988), it subsequently developed in the context of classical Indian thought and practices.⁵⁶

Even in the early period psychologists felt the need for international congresses. The first was held in 1889 in Paris, and subsequent congresses were held every three to four years (with an interruption between 1937 and 1948).

In the second part of the twentieth century, the move toward globalization took on increasing momentum. Two new trends were the rise of international psychological organizations and of journals explicitly devoted to international aspects of psychology. Three types of international organizations were formed:

1. General: the International Union for Psychological Science (1951),⁵⁷ the International Council of Psychologists (1959).⁵⁸
2. Regional: the Interamerican Society of Psychology (1951) and the European Federation of Professional Psychology Associations (1981).
3. Specialized: the International Neuropsychological Society (1967), the International Society for the Study of Behavioral Development (1969), the Jean Piaget Society (1970), the International Association for Cross-Cultural Psy-

⁵⁵Cf. (Pawlik 1985; Sinha 1987; Rosenzweig 1992; Jing 2000, 575). For a discussion of factors that determine the development of psychology in a country, see (Jing 2000, 575–577).

⁵⁶For example, (Sinha 1980; Pande and Naidu 1992; Mishra 2006); for an example of work in this tradition written outside of India, see (Varela et al. 1991).

⁵⁷See (Rosenzweig et al. 2000).

⁵⁸See (Halpern 2008).

chology (1972), the International Test Commission (1974), (Pickren and Fowler 2003).⁵⁹

These organizations serve to provide fora for the exchange of knowledge, to improve conditions for research, to raise the prestige of psychology upon which funding ultimately depends, and to establish standards of training and practice. Important journals devoted to international psychology include:

1. General: *International Journal of Psychology* (1965), *International Journal of Applied Psychology* (1951), *The International Journal of Psychotherapy* (1996), *World Psychology* (1995–1997), *Transcultural Psychiatry* (1956)
2. Regional: *European Journal of Social Psychology* (1971), *European Psychologist* (1996), *European Review of Applied Psychology*, *Scandinavian Journal of Psychology* (1960), *Journal of Russian and East European Psychology* (1962)
3. Specialized: *International Journal of Psycholinguistics* (1993), *The International Journal of Clinical Psychology* (2001), *International Journal of Disability, Community and Rehabilitation* (2002), *International Journal of Eating Disorders*, *International Journal of Testing* (2001), *International Journal for the Psychology of Religion* (1991), *The International Journal of Aging and Human Development* (1984), *International Journal of Cross Cultural Management* (2001).

In addition, reviews and special issues on international perspectives are published in such journals as *Annual Review of Psychology* and *American Psychologist*.

English is the lingua franca in psychology, yet psychologists recognize that research in other languages is often neglected as a result.⁶⁰ To increase the accessibility of publications in other languages, *PsycINFO*, the most comprehensive database of psychological literature, not only systematically catalogues non-English publications, but also includes English abstracts of works in other languages.⁶¹ There are also translation journals, such as the *Journal of Russian and East European Psychology* (1962) and *The German Journal of Psychology* (1977).

In the past few decades, the trend toward globalization in psychology has gained considerable momentum. Today psychological research not only welcomes international collaboration but depends on it. Since the 1990s there has been increasing awareness in the psychological community that psychology is changing: Globalization is changing the quality of psychological research. Psychologists have explicitly discussed the increasing internationalization of psychology and “international psychology.”⁶² The International Union for Psychological Science (IUPsyS) is stepping up efforts to foster international collaboration. A regularly published CD-ROM (Wedding and Stevens 2007) provides members with information on international contacts, member organizations and other resources relevant to in-

⁵⁹A selection of only the most important and influential organizations is given.

⁶⁰See (Draguns 2001); Luria cited in (Brandt 1970; Russell 1984).

⁶¹On the accessibility of foreign-language psychological literature, see also (Bauserman 1997).

⁶²For example, (Lunt and Poortinga 1996; Fleishman 1999; Jing 2000; David and Buchanan 2003; Stevens and Gielen 2007).

ternational psychology.⁶³ Increasingly the World Wide Web is providing fora for international communication among psychologists. An outstanding example is XMCA, an e-mail discussion group sponsored by the Laboratory of Comparative Human Cognition at the University of California, San Diego.

Today we have the following picture. On the one hand, North America and Western Europe, in particular the US, continue to play a leading role in the production of psychological knowledge. This knowledge is exported all over the world; an increasing number of psychologists are trained to work within Western frameworks. On the other hand, Western theories and methods have created a tension with local traditions, concepts and needs.⁶⁴ This tension has led to new kinds of research: cross-cultural studies,⁶⁵ indigenous psychologies⁶⁶ and cultural psychology.⁶⁷ Internationalization amounts to the spread of mainstream (Western) paradigms and simultaneously to the growing interest in cultural variation.

Definitions and Ideals

International psychology can be defined as the sum total of “psychological knowledge and research obtained throughout the world,” where psychology means the study of universal and local factors that determine “human behavior and experience” (Pawlik and Rosenzweig 2000, xxxi). There are three main features that qualify modern psychology as an international science: (1) the same paradigm is used in different countries; (2) psychologists are interested in cross-cultural problems; and (3) psychologists are becoming increasingly interested in the robustness of their results, that is, the degree to which experimental studies conducted in Western countries can be replicated elsewhere.

There is a growing understanding that if psychology is to become a rigorous human science, it has to be international. If it is not international—if it is not shared by all humans—it remains merely a Western science, which can only understand certain aspects of the human situation. Psychology has to avoid the charge of being, to borrow an expression from Heidegger, “the American interpretation of Americanism” (Heidegger 1977, 153).

The spread of psychology across the globe has brought about a re-evaluation of how psychological knowledge is produced. New methodological problems have arisen. For example, there is an opposition between current approaches to the study of cultural variation: the *cross-cultural* approach (which applies Western concepts to local conditions and investigates the limits of these concepts; this approach is supposed to lead to the identification of cultural and universal aspects of human behavior and cognition (Poortinga 1997; Keller et al. 2002); the *cultural*

⁶³See also (Sexton and Misiak 1976; Sexton and Hogan 1992; Pawlik and Rosenzweig 2000; Stevens and Wedding 2004).

⁶⁴See (Koch 1985; Graumann 1997; van Strien 1997; Jing 2000).

⁶⁵See (Kagitçibasi 1987; Kagitçibasi and Berry 1989; Gergen et al. 1996).

⁶⁶See (Enriquez 1992; Sinha 1997; Jing 2000; Yang and Hwang 2000; Kim 2001; Kim and Park 2004; Allwood and Berry 2006; Kim et al. 2006).

⁶⁷See (Scribner and Cole 1981; LCHC 1983; Cole 1996; Cole et al. 1997).

approach (which studies behavior and cognition in the context of specific local activities (Cole 1996)); and the *indigenous* approach (which aims to derive psychological concepts and methods from local cultural practices (Enriquez 1992)). Some psychologists believe that the future of international psychology lies in the synthesis of the three approaches.⁶⁸

The ideal of international psychology should be to identify in behavior and cognition what is innate, what arises in ontogeny as a result of uniform aspects of human experience, and what varies among cultures. A group of leading theoreticians has written that:

[...] methodological difficulties of culture-informed developmental research reflect to an important extent the absence of more precise and testable theories. Probably the most promising perspectives are those that will combine biological and cultural-contextual underpinnings of behavior. (Keller et al. 2002)

Similarly,

[...] cross-cultural studies can make an important contribution to the testing of such theories, providing data to help differentiate between species-wide processes and contextually bound variations in developmental patterns. (Poortinga 2005, 112)

Obstacles Toward the Internationalization of Psychology

On the way to internationalization, psychology faces some serious obstacles. Concepts in the natural sciences tend to be uniform, well-defined, and hence easily exportable to different cultural contexts. One major source for this uniformity is the uniformity of the natural world. Physical phenomena are essentially the same for an American, a Japanese and a Kenyan. By contrast, psychology as a human science deals with a subject—the human—that is considerably determined by cultural variation. A psychologist in Japan is likely to observe psychological phenomena that differ markedly from those that an American psychologist might observe. Hence cultural heterogeneity raises obstacles for the equilibration of psychological concepts. For example, American studies of *behavior* were rooted in the American culture of the first half of the twentieth century; Bowlby's *attachment* reflects a particular Western cultural understanding of the mother-infant relationship; Vygotsky's *zone of proximal development* reflects aspects of a collectivist Soviet culture, where children closely interacted with adults who were responsible for their *Bildung*.

Intercultural psychology depends on the equilibration of psychological concepts. Culturally specific phenomena must be identified and concepts that claim universality, but are limited in validity to a particular cultural domain, must be

⁶⁸See (Cole 1992; Kagitçibasi 1992; Poortinga 1997; Sinha 1997).

modified. There are several reasons to believe that such equilibration will take place. First, general processes of globalization at the social level will create an increasingly shared cultural background. Second, the increasing interest in cultural approaches in psychology will help to disentangle what is culturally specific from what can be part of a general and universal psychological theory. In this project, the history of psychology, insofar as it closely scrutinizes the evolution of specific psychological concepts, can play a valuable role.

The Necessity of Really Global Psychology and Promising Signs

Psychology is by definition a science concerned with the study of human, not American or European, behavior and cognition. It is then inherently universal rather than parochial. If a psychology is only applicable to certain cultures, then it has failed in its aims. As other processes of globalization take place, and as a truly international culture emerges, psychologists are much better positioned to create a psychology that is general and universal, while at the same time accommodating, and even explaining, the range of cultural variation that is actually observed.

There are promising signs that global psychology is, however slowly, emerging. As George Mandler writes:

One of the most salient aspects of [recent] advances is that they are occurring not just in the United States but also in Europe, Latin America, Japan, China and other countries with active psychological communities. It appears that psychology is developing a catholic consensus, an international paradigm that did not exist prior to the mid-twentieth century. (Mandler 2007, 245)

Moreover, we observe an increase in the number of papers co-authored by researchers from different parts of the world—irrefutable evidence of global cooperation. Electronic media serve as enabling technologies for international collaboration, and both their utilization and the possibilities they offer are only likely to increase. An authority on international psychology predicts that:

In the foreseeable future, along with the globalization process and increase in international exchanges there will be more convergence in the structure and content of the study of behavior and consciousness, and more commonalities than differences may exist in international psychology. (Jing 2000, 581)

Although globalization is creating new human problems—such as the rapid growth of immigrant groups who are poorly assimilated into their new society; conflicts, armed or otherwise, that arise from inequalities in the distribution of wealth; and an increasing uncertainty throughout the life course (Hofäcker et al. 2006)—international psychology has the potential to help solve these problems. Areas of application include therapy that targets culturally specific attributes of

post-traumatic stress disorder (Sack et al. 1997; Perilla et al. 2002; Pole et al. 2005); addressing the problem of culture shock (Ward et al. 2001); providing culturally appropriate counseling to refugees (Bemak et al. 2003; Blackwell 2005); facilitating conflict resolution in different cultural contexts (Sandole and van der Merwe 1993; Tinsley 1998); creating programs to address domestic violence and battered women syndrome around the world (Walker 1999); and developing culturally targeted models in organizational and work psychology (Aycan 2000). In fact, the need for such applications may itself constitute a force that advances global psychology.⁶⁹

International psychology depends on an integration of cross-cultural and cultural psychology into the mainstream of psychology.⁷⁰ Ultimately this integration entails a complete assimilation; thus:

Cross-cultural psychology will be shown to have succeeded when it disappears. For, when the whole field of psychology becomes truly international and genuinely intercultural—in other words, when it becomes truly a science of human behavior—cross-cultural psychology will have achieved its aims and become redundant. (Segall et al. 1998)

What International Psychology Owes to the Work of the Soviet Psychologists

Although the program of the Soviet psychologists failed as such, it served as a precursor to the international psychology that is emerging today, and contemporary psychology has incorporated, and sometimes transformed, concepts and ideas of the Soviets. The Soviet psychologists played an important role in recognizing the contribution of social and material factors to psychological functioning.⁷¹ In particular, they drew attention to the development of higher mental functions, which are especially influenced by social and material factors.⁷² Vygotsky's ideas about the role of language and social context for learning have been integrated in the new "explanation-based" paradigm of cognitive development (Goswami 2002, 513–514). Luria played a key role in the creation of neuropsychology, a paradigm that integrates psychology and the brain sciences. If psychology is going to develop along two divergent paths—one firmly rooted in the brain sciences and the other humanistic in character (Kagan 2006)—Luria must be recognized as a major contributor to both; to the first with his pioneering neuropsychological investigations

⁶⁹Cf. (Jing 2000, 582). It is remarkable that the first international association of psychologists was the International Association of Applied Psychology. It was established in 1920 by Claparède and was initially called the International Association of Psychotechnics.

⁷⁰As Michael Cole observes, although there have been significant recent advances in cultural psychology, much work remains to be done for its integration into a general paradigm (Cole 1995, 187).

⁷¹The Soviet psychologists derived this idea from Marx, but they were the first to show *how* one might demonstrate that human development depends on social and material factors.

⁷²Cf. (Tomasello 1999, 163).

already in the late 1930s, and to the second with his famous essays on “romantic science.” Vygotsky’s cultural-historical theory and Luria’s work in Uzbekistan became a lasting inspiration for cultural psychologists (Miller 1997).

Vygotsky had a vision of psychology as a unitary scientific enterprise that would explain cultural variation (Vygotsky 2006a). This vision was premature, and Vygotsky mistakenly believed that psychology needed a theoretical paradigm that would be developed top-down.⁷³ Contrary to Vygotsky’s vision, international psychology is emerging piecemeal from research along many different lines. But psychology is becoming increasingly integrated as Vygotsky imagined it would (Vygotsky 2006a). It seems today that the international psychology Vygotsky envisioned is gradually taking shape.

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⁷³Today an interesting attempt to unify psychology top-down is made by evolutionary psychologists, who rely substantially on cross-cultural research, see, for example, (Schmitt 2004; Tooby and Cosmides 2005). The viability of the evolutionary paradigm is now being hotly debated in the psychological community. Time will show how tenable the new paradigm is, but most participants of the debate agree that the only productive way for psychology to develop is through the integrated study of mind and behavior across different fields and disciplines, such as cognitive psychology, neuropsychology, social psychology, differential psychology, ethology and anthropology, see, for example, (Panksepp and Panksepp 2000).

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