

Lev Semenovich Vygotsky: Turbulent Life and Sociocultural Theory

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ABSTRACT

In this paper the author reviewed Lev Vygotsky's life and theoretical work in order to focus on how he responded to the fragmentation of psychology: confronting the competing paradigms of Behaviorism. Vygotsky saw a "crisis in the discipline" with psychoanalysis, and structuralism for the mechanistic, asocial, and subjectivist accounts. Vygotsky developed Sociocultural Historical Theory based on the principles of Marxist dialectical materialism; he believed that higher mental functions were socially constructed during interaction with others using a culturally transmitted tool.

KEYWORDS

Vygotsky; Sociocultural theory; Zone of proximal development; Mediation

1 Introduction

Lev Semenovich Vygotsky was born on November 5, 1896, in Orsha, an important trading center of the Russian Empire (today in Belarus) into a middle-class Jewish family whose father, a respected bank manager, and mother, a trained teacher, provided an atmosphere of intellectual inquiry at home--Vygotsky and his seven siblings were encouraged to argue about books, philosophy, and politics over dinner. This training in critical thinking paved the way for his later opposition to disciplinary boundaries. He entered the Faculty of Literature at Moscow University in 1913 and where he learned from major figures in the Russian formalist school such as Viktor Shklovsky about what was to be called "defamiliarization", a concept that found its way into Barthes' s conception of translation as a process of mediatization. Vygotsky majored in literature but took classes on psychology taught by noted psychologists such as Alexander Luria, who sparked an interest in culture, language and cognition that has lasted throughout his life.

When Vygotsky graduated from university in 1917--during the turmoil surrounding the Russian Revolution--he took up a job as a schoolteacher for a year in Gomel, where he could witness first-hand the disparate educational prospects of children suffering under the combined effects of war and poverty. This experience further reinforced his desire to apply psychological insights to real-life social issues: particularly for minorities. He moved to Moscow in 1924 and gained fame with a paper entitled "Consciousness as the Subject of Behaviorist Psychology," which he presented at the Second All-Russian Congress of Psychoneurology. This paper, which attacked behaviorism' s dehumanizing reduction of man into a machine responding to stimuli, attracted the attention of the highest educational authorities in the Soviet Union. Vygotsky had been appointed by to the Institute of Psychology, and charged with reforming special education. There, he established the Institute of Defectology--a radical institute which opposed the popular belief that disabled children were "uneducable" and argued instead that they could be nurtured to flourish if given appropriate social supports. He ran pilot projects on educating children with visual impairment, hearing impairments, and intellectual disabilities, designing curricula based on peer tutoring and the use of cultural tools for unlocking their developmental potential.

Vygotsky' s scientific production between 1925 and 1934 was massive despite the worsening of his physical condition caused by tuberculosis diagnosed in 1923. He published more than 100 papers and books, including *Thought and Language* (1986), which described the inter-connectedness between language and higher mental functions. In these works, Vygotsky argued that language was more than just a means of communication--it was a "psychological tool" which transformed the nature of thought as well: children first use language in order to talk to other people (e.g., asking the parent for help, and subsequently internalizing them to self-regulate its own actions (e.g. talking yourself through a puzzle).

2 Vygotsky' s Critique of Traditional Psychology

Psychology by the 1920s was caught in an intellectual stalemate: A science fractured into rival and frequently antagonistic camps, each claiming that it alone could account for human behavior and dismissing other approaches as unscientific, too subjective, or not relevant to real world experience. Behaviorism was now in ascendance in the US, championed by John B. Watson, who regarded behaviorism as a "purely objective experimental branch of natural science" and anathematized any mention of consciousness, emotion, or mental states (Watson, 1913). In Europe, Sigmund Freud' s psychoanalysis changed clinical work by revealing the role of unconscious processes, whereas Wilhelm Wundt' s structuralism--rooted in introspective analysis of "elemental sensations"--lingered in university laboratories as a relic of 19th-century positivism. In such an atmosphere of disciplinary isolation, Vygotsky appeared to be a radical agitator

who saw himself creating a “new psychological order of the world,” which would rise above these fragmented approaches. Vygotsky’s work was not only a criticism—it was a revolutionary declaration, methodically dismembering the body of each reigning school and identifying an epistemological disease afflicting the entire field.

Vygotsky’s attack on behaviourism in particular focused on this very notion of reductionism and how it reduced everything to a simple “stimulus-response” equation for human behaviour. They were seen as treating people as: mechanistic animals such as lab rats or Pavlov’s dogs eliminating the special ability of consciousness and agency, and culture meaning-making. Watson’s infamous 1920 “Little Albert experiment” exemplified this flaw: in the study, an infant was conditioned to fear a white rat through repeated association with a loud, jarring noise. Behaviorists hailed the experiment as proof that emotions could be reduced to conditioned responses, but Vygotsky countered that it ignored Albert’s developing cognitive abilities, his social bonds with caregivers, and the cultural context of fear itself. “A child does not react to a white rat in a vacuum,” he wrote. “He reacts to it through the lens of the stories his parents tell him, the games he plays, and the cultural meanings attached to animals in his community” (Vygotsky, 1997). Vygotsky further criticized behaviorism for its failure to account for higher mental functions—such as language, abstract reasoning, and intentional memory—which he argued could not be explained by isolated stimuli and responses, but only through the mediation of cultural tools and social interaction.

Moving on to psychoanalysis, Vygotsky recognized a major achievement in the study of the unconscious by Freud: repression and transference had shattered the myth of human rationality and revealed the hidden forces that shaped behaviour and mental health. But, he censured psychoanalysis for its overemphasis on the individual pathology at the expense of social context. Freud’s case studies, including that of “Anna O.,” a patient whose hysterical symptoms were traced back to a repressed trauma—rooted in the inner conflicts of rich and educated European patients, without much thought to the role that poverty and inequality, or culture may play in causing mental distress. Vygotsky maintained that psychoanalysis regarded the individual as an isolated, autonomous system and severed it from the social milieu, when actually, “the most secret psychological processes are formed under the influence of the historical and cultural conditions of the society within whose boundaries we live” (Vygotsky, 1997).

Last but not least, Vygotsky attacked structuralism, the oldest of the three schools that had been founded by Wundt himself back in 1879 with the first formal psychological laboratory. The goal of structuralists was to map out the “elements of consciousness” via trained introspection, a technique wherein observers were asked to describe their own subjective experiences (e.g., the ‘feeling of red’ or the ‘feeling of happiness’) in minute objective detail. Vygotsky rejected this method as fundamentally unscientific because he viewed introspection to be subjective and non-replicable, and not capable of capturing the dynamic, developmental nature of our minds. Furthermore, structuralism was concerned with static “elements” of consciousness and ignored how children learned (how adults solve problems, and how cultural tools transform thought through the years). Vygotsky claimed that psychology must study development, not only structure—not only the way in which mental functions develop out of social interaction into individual capabilities but also the role played by culture at all stages along the way.

3 Vygotsky’s Critique of “Crisis in the Discipline”

Vygotsky diagnosed the “crisis in psychology” not simply as a matter of scholarly dispute, but rather as an impasse with methodological and epistemological implications: none of the reigning schools could account for the whole richness of human cognition, particularly the higher mental functions distinguishing men from other animals: abstract thinking, logical reasoning, and volition. Behaviorism had turned human beings into animals; psychoanalysis had turned them into patients; and structuralism had turned them into passive observers of their own consciousness. What was needed in psychology, Vygotsky believed, was a new model, one that could combine the rigor of the natural sciences with the interpretation of the humanities, and the latter of which placed social and cultural contexts at the forefront of human development.

His criticism found an audience among a generation of intellectuals who were disillusioned with the status quo. His work fit within the Marxist emphasis on social change in the Soviet Union, which resulted in his hiring at the Institute for Psychology and the creation of the Institute for Defectology that applied his concepts to help children with defects. In the West, his work was only rediscovered in the 1960s, when behaviourism’s supremacy started being questioned by psychologists such as Jerome Bruner or Michael Cole. Bruner then wrote that Vygotsky “opened up the possibility of an approach which is at once scientific and humanist: a psychology sensitive enough to realize that man is not simply brain-in-body but man-as-member-of-a-cultural-community” (Bruner, 1984).

4 Vygotsky’s Sociocultural Theory

The solution to such a crisis was an integrative approach combining natural science’s objectivity and the human sciences’ subjectivity. It is in Marxist philosophy that Vygotsky found his primary inspiration, in particular, “man’s essence is not an abstraction inherent in individual, but in his social relations” (Marx & Engels, 1973). Translating this into

the domain of psychology, Vygotsky asserted that higher mental processes such as abstract thought, problem solving, and self-regulation do not arise innately but rather are socially constructed via interaction with MKOs, including the parent, teacher or peer. He famously separated out two types of mental functions: 1) lower mental function, such as sensation, perception, and involuntary memory that are common to all animals; 2) higher mental functions, such as logic, intentional memory, or metacognition that are achieved by interacting with the culture's artefacts.

Vygotsky's greatest legacy was his concept of the zone of proximal development (ZPD): "the distance between actual development level as determined by independent problem solving and the level of potential development as determined by problem-solving under adult guidance." Vygotsky argued that education should target ZPD by using scaffolding (e.g., asking questions, providing models or feedback) to enable children to extend what they already knew. This notion is now central in contemporary education, informing pedagogical practices such as cooperative learning, problem based learning, and differentiated instruction (Lantolf & Poehner, 2011).

The philosophical foundation of Vygotsky's theory is dialectical materialism, a world view which sees everything as interrelated, ever-changing, and historically conditioned. He transplanted three main elements of dialectics into psychological theory: 1) The unity of opposites. Thought and feeling, or any other pair of mental functions, do not exist as fixed entities. They change in a dynamic process that emerges from their conflict with each other, such as social interaction or individual reflection. 2) Quantitative to qualitative change. Small, incremental changes of social interaction (e.g., repeated exposure to a language) cause drastic qualitative change in cognition (e.g., the emergence of abstract thinking). 3) Historical materialism. Human psychology cannot be understood in isolation from its social and historical context. Cultural tools and practices determine how we think and act. Vygotsky's lecture reported that behaviorism's emphasis on observable behavior overlooked the role of consciousness, which he described as "the highest form of mental activity". Rather, he argued that consciousness is a systemic phenomenon, determined by a combination of biologic, sociologic, and cultural influences. This view anticipated contemporary accounts of embodied cognition that highlight the contribution of the body and environment in shaping thought.

Vygotsky was also a proponent of combining experimental psychology with neurology, because he believed that mental functioning is grounded in brain activity without being reducible to it. Vygotsky worked together with Alexander Luria on studies of brain-injured patients, demonstrating that cognitive deficits do not localize to particular areas in the brain, but represent a disruption to the systemic structure of consciousness. This set the stage for contemporary neuropsychology, where the brain is considered to be a dynamic and connected system (Luria, 1973).

Vygotsky's sociocultural theory, developed in collaboration with his students Alexei Leontiev and Alexander Luria (collectively known as the "Vygotsky-Luria-Leontiev school"), posits that culture is not an external influence on human development but an inherent part of it. He argued that humans are unique in their ability to create and use cultural tools--symbolic systems like language, mathematics, and art, as well as physical tools like hammers, computers, and maps--to mediate their interactions with the world. To illustrate this, Vygotsky used the example of digging a hole to plant a tree: without tools, humans rely on innate physical abilities, similar to other animals; with tools like shovels or augers, they can dig more efficiently and precisely. Crucially, the tool does not just enhance physical ability—it transforms the entire activity. Digging with a shovel requires planning (choosing the right tool), inhibition (suppressing the instinct to dig with hands), and problem-solving (adjusting technique based on soil type). This mirrors the transformation of mental activity: cultural tools enable humans to move beyond immediate, concrete experiences to engage in abstract, symbolic thinking.

Vygotsky's sociocultural theory was further elaborated by his students Alexei Leontiev and Alexander Luria who contends that the culture does not enter as an alien element in man's development, but it forms part of his development itself. We were special because of the capacity for making and using what he called "cultural technology" --symbolic systems such as languages, mathematics, and objects of all sorts (including artistic works) and even implements such as hammers, computers, and maps to help them act on the world.

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