What is Vygotskian Cultural-Historical Theory?

Introduction

One of the problems in understanding Vygotsky's psychology/philosophy is the fact that there is no single definition of the entire Vygotskian model. Cultural-historical theory is more than psychology, hence it is referred to as a metapsychology. A danger is posed when placing diverging aspects of this theory into various disciplines, all of which can ultimately lead to reductionism. As a result, cultural-historical theory has not been established within much of the institutionalized framework in university programs; however, A. R. Luria's neuropsychological cultural-historical theory is used in many rehabilitative programs worldwide. Cultural-historical theory must represent new and often underdefined philosophical concepts that are needed to change individuals and society, such as subjectivity and intersubjectivity. Simultaneously, this understanding of newness does not diminish the need to adapt Vygotskian principles within existing Cartesian structures, as that path is also necessary in making institutional inroads that help to humanize theories of psychology. Vygotskian cultural-historical theory is also viewed as a metatheory, meaning that it has reached a level of synthesis (it does not mean that it is metaphysical), and a requirement of this approach is that each person must adapt this theory individually, with needed individual changes first required to then transform society. This framework differs from older monolithic, vertical structures, and also varies from postmodern fragmentation. Cultural-historical theory ultimately returns the holographic concept of the human psyche to a more extended view of psychology. Another problem facing the interpretation of cultural-historical theory is the fact that many contemporary international scholars in this tradition do not combine theory with actual practice, which was a prerequisite for Vygotsky. Dialectical theory relates to practice, with practice then expanding and enriching theory, resulting in a true balance within Vygotsky's writing. Vygotsky's genius can be found in the profound understanding of how parts relate to the whole, while simultaneously comprehending the whole as a dynamic principle that also depends on the parts for its growth, be it world order, societal growth, or human development. At the same time it should be stated that Vygotsky's focus was on process and different moments, and not so much on whole vs. parts.

Vygotsky (1934) expressed the purpose of a developmental study as one which would be able “...to fuse any congealed...psychological form, to transform it into a running stream of interchangeable moments. Briefly, the aim of such an analysis is to study experimentally any higher form of behavior, not as a thing, but as a process...not from a whole thing to its parts, but from a process to its different moments [p. 132].” (Levy Rahmani, Soviet Psychology, 1973, International Universities Press, Inc. New York)

It is the constant dynamic and asymmetrical interaction of the dialectic (i.e., convergence of opposites to form a synthesis, which is never static but always changing), related to more absolute values, i.e., Spinozian and Marxian values that had meaning for Vygotsky.
The ultimate goal of cultural-historical theory in the West is not to become integrated into mainstream psychology or to be canonized in textbooks. The ultimate goal is to present an unfinished, living idea of how we can embrace change (both personal and societal) within the constraints of human rationality, keeping the ideal of potential human growth in mind all of the time. This understanding is truly revolutionary and radical. It represents the vision of a height psychology/philosophy within a more expanded context of potentiality and utopian growth. It is a living psychology-philosophy of life, and as such, it must be recreated and understood differently by each individual. Cultural-historical psychology/philosophy should be understood within the original Vygotskian tradition, as much as possible. “Cultural-historical psychology is connected with what Solov'ev called the ‘spiritual vertical,' what Pasternak called ‘spiritual equipment,' what Mandel'shtam called ‘the vertical section' of time, what Aleksandr Ukhтомskii and Bakhtin called the ‘Chronotope,' and so forth” (Zinchenko, 1995, p. 41). Vygotsky's cultural-historical theory takes the highest explanatory principle of philosophical consciousness, expanding it both outwards and inwards beyond psychology to include art, aesthetics, poetry, theater, semiotics, Marxism, Spinozist philosophy, and defectology (the study of mental and physical handicaps), while synthesizing and unifying the relationship of these and other disciplines to the understanding of the unconscious/subconscious. Vygotsky's focus includes a dialectical (not dualistic) vision within Spinozist and Marxist monism. Working within the tradition of German/Russian philosophy and psychology, Vygotsky took consciousness (in the real world, not just in philosophy) as his highest explanatory principle. Vygotskian thought is not based on linear, non-dialectical, Cartesian dualism. His basic metapsychological focus is the connection between the dialectic (representing the relative) and monism (representing the immutable, although it is assumed that this “substance” can also be subject to change). Holographic theory, in this context, is a metaphor that can be offered in today's frame of reference, where the whole is imprinted within the parts, with both being necessary for growth and development at all levels. This is a reason why Vygotsky juxtaposed the whole together with units and not elements. Van der Veer (1997, p. 372) states that “the analysis into units breaks down a whole into the smallest possible component parts which retain the properties of the whole.” On the other hand, when elements are broken down they lose the properties of the whole.

Within Vygotsky's method, there is a complete and constant connection between the individual and society that cannot be deconstructed into analyzable elements without losing the characteristics of the whole. It is the focus on the individual/social and internal/external that makes Vygotsky unique and holistic, not the reverse; however, this only makes sense when understanding that there is no culturally self-regulated individual without social structures emerging first. This point is very important, because Marxist philosophers have traditionally understood the “social” first, without a genuine focus on the individual, although Marxism was one of the philosophies attempting to place emphasis on individual activity via work, instead of focusing on idealized abstractions. Vygotsky's extension of the Marxist “method” recaptures various tenets of Marxism that are important for a future reevaluation of the cultural-historical framework, while simultaneously incorporating the essence of individual, internal mechanisms. Internalization is one of the core values of cultural-historical theory, not representing the
external/internal as the same isomorphic phenomena (as in activity theory), nor replacing it with conscious (versus subconscious) elements of mastery and appropriation (as in sociocultural theory). Rather, internalization is the dynamic, asymmetrical process of incorporating the social component and blending it with the spiritual alchemy and mystery of conscious and subconscious cultural sign mediation within our own lives, eventually producing individual self-regulation. Vygotsky did not want to return to the problems of introspectionism (i.e., non-objectified understanding only), nor to the problems of empiricism (objectified understanding only). Since no one can step outside of his/her consciousness, areas of internalization/externalization become very important from the start. We will never understand the dynamics of human consciousness simply because we will never be able to stand outside of ourselves to objectify the real meaning of this term. Therefore, consciousness is to be understood via semiotic mediation within a metapsychological level.

With his dialectical vision and understanding of psychology during the 1920s and early 1930s, Vygotsky established a method that was both abstract and concrete, one that would amplify and reflect upon consciousness related to theories of European philosophers, such as Spinoza, Marx, and von Humboldt, among others. Vygotsky then selected thinking and speech as his second explanatory principle, used as instruments in reflecting human consciousness. This process always includes a dialectical approach of positioning varying structures within opposite poles, while simultaneously including a holistic structure, in this case, consciousness. Vygotsky examined many trajectories of functional capacities (via their interrelationships), all of which maintain opposite points of origin. This process thus explains thought/speech and growth from a historical perspective, with each trajectory including change as a common dominator. It is precisely the trajectory of development that Vygotsky understood as growth, which takes place within the development of thought and speech, or variations on vocalized speech, such as sign language or Braille. For example, the origins of thought include the disposition of a pre-intellectual structure, whereas the origins of speech maintain the disposition of a pre-linguistic structure. It is through the dialectical process of “engagements” and “separations” of opposite poles of growth that development can occur. However, there must be a mature concept formation in place to construct and create meaningful generalizations. In order to understand psychology/philosophy from the perspective of a dialectical-monistic vision, Vygotsky needed a common denominator (both abstract and concrete) in order to measure thinking and speech that would reflect and mediate consciousness. It was here that Vygotsky discovered the power of word meaning as the unit of analysis.

To date, most researchers in the Cartesian tradition view any science from the inductive, bottom-up perspective, deriving truth(s) from individual, often isolated, experiments that strive for the same results of the same experiments carried out in different conditions. Vygotsky’s focus was to view holistic units first, capturing their essence, and then proceed by analyzing them scientifically (within the Humboldtian
tradition), always connecting the units to the whole structure. Once again, Vygotsky viewed units within a dialectical frame of reference, which is asymmetrical and nonlinear, always connected to a more absolute level of higher explanatory principles (i.e., whole), which often expands his thinking into a tripartite method. Development is located within emerging relationships when the individual is ready to absorb a new concept. For example, when the conditions are right, thinking is completed in the word and word is completed in thinking. For this to happen, there needs to be a general understanding that the development of concepts and word meaning function together within Vygotsky's metapsychological framework. Like grammar, word meanings are both concrete and abstract. With Vygotsky's development of spontaneous (everyday) and scientific or non-spontaneous (academic or scientific) concepts, many Western interpreters have misunderstood him. One pole is not higher or better than the other (and certainly not the cognitive side); and both of these seemingly opposite poles must merge in an asymmetrical, dynamic fashion to complement and actually complete each other, while including affective areas as well. Vygotsky viewed spontaneous concepts within a bottom-up direction, while scientific or non-spontaneous concepts were viewed within a top-down framework. Once again, this represents a dialectical, even dual vision without Cartesian dualism. Both directions of development are necessary in establishing a holistic unit, and both directions of individual development are related to a monistic and holographic completeness.

Since his father first gave him a book by the 17 th century Dutch philosopher Baruch Spinoza in his youth, Vygotsky viewed life from Spinoza's philosophical perspective. This is one of the exact points that distinguishes cultural-historical theory from activity theory, and sociocultural theory. Spinoza understood the world from a higher unified philosophical perspective, which he called the “monad,” differing from Leibniz's concept of monad. Spinoza's understanding represented a simple metaphor of the absoluteness ascribed to nature or God, sometimes referred to as one “substance.” Within Vygotsky's dialectics and monism, a basic principle represents a higher level of human development being located within human actions, not passions in Spinozian terminology; and personal development is also viewed within societal development. Spinoza distinguished between two types of affections: (a) actions, “which are explained by the nature of the affected individual, and which spring from the individual's essence” (Deleuze, 1981, p. 27); and (b) passions, “which are explained by something else, and which originate outside the individual” (Deleuze, 1981, p. 27). Therefore,

[H]e [Spinoza] believed that human freedom was not, as was commonly held, indeterminacy of choice, but was self-determination, entirely by one's own nature, free from external compulsion. This, for him, was action proper, while determination by extraneous causes was passion, the subjection to which he called bondage. (Harris, 1992, p. 6)

Spinoza “did not accept the existence of Descartes' free, undetermined soul and refuted his dualism. This attitude was very important to Vygotsky, whose aims were similar . . .” (van der Veer & Valsiner,
1991, p. 356). This practice lifts the individual to a higher level of selflessness. Regarding these beliefs, Vygotsky cannot be viewed as a relativist or an absolutist. He was a thinker truly interested in synthesis. The basic problem that remains paradoxical for many Westerners is the Spinozian tenet of determinism, which goes against human free will in individualistic societies:

Since Spinoza was an eminent determinist, it followed from Vygotsky's presentation that a new form of determinism was generated in the philosophy of Spinoza—as a methodological base of a new psychological theory free of the birthmarks of the Cartesian method of thinking. According to Vygotsky, this theory has as its subject man as an integral and active psychophysical being, striving toward self-development, motivated only by bodily—spiritual needs. Its key category is the concept of motivation. (Yaroshevsky, 1999, p. 264)

It was within this higher explanatory principle that Vygotsky's method can be understood as a metapsychology. It is particularly important to note that absolute and relative aspects stand in relation to each other; for example, monism and holography stand in relation to dialectics, with both complementing each other. It should be understood that during his lifetime, Vygotsky did not accept all aspects of Spinoza's philosophy in explaining contemporary problems; for example, Spinoza did not include dialectics in his philosophy, something which became popular long after Spinoza's death. However, Spinoza wrote about the whole being connected to the parts, just as the parts are connected to the whole, and it was this vision of completeness that motivated Vygotsky's research throughout his entire life. Within the individual plane of consciousness, Vygotsky's philosophy of language and semiotics are directed at the potential free action of each person, which is located within internal, subjective relationships, together with the social, intersubjective networks of each individual. This understanding of free action is not in line with the Western tenets of the pursuit of individual happiness. Vygotsky's dialectic and monistic, or holographic, vision connects individual needs to that of the social, all of which combine to form a unity. It was precisely the value placed on the internal and emotional aspects of human life that distinguish Vygotsky's method. This position has been misunderstood in the past with some theorists prioritizing external functions, such as actions and speech, over internal functions, and often not recognizing the value of internal activity. Certainly, the external should first be prioritized in Vygotsky's dialectical and monistic = holographic vision that always focuses on a synthesis and a unified whole. Vygotsky went a step further in viewing one's social and individual nature as a holistic unit that can only be broken down once the whole is approximated (which cannot happen without simultaneously analyzing the units). The only way to approximate an understanding of the whole is through the holographic lens of a metaphor and metatheory. Because of the vast nature of this undertaking, one does not speak of a completed Vygotskian theory. In addition, Vygotsky did not attempt to be prescriptive (apart from describing the stages of crises in child development), and this is another reason that there is no single Vygotskian method; each researcher and educator needs to establish his/her own unique Vygotskian method. Also, Vygotsky truly and sincerely believed in the philosophical, psychological, and societal potential of Marxism, something that differentiated him from
many other Russian Marxists during the 1920s. It is suggested that Vygotsky was interested in the overall concept of Marxism to establish a radically new psychology, and not simply place psychology within Marxism. Governed by his belief in a holistic framework, he adopted Marx's understanding of the “cell.” Vygotsky (in Vygodskaiia & Lifanova, 1999) stated:

We must determine what we can, and must, get from Marxism . . . The teachers of Marxism can give us not the solution to a question, not even working hypotheses . . . but a method for constructing such hypotheses . . . I want to learn the whole of Marx's method, how to build a science, how to approach the study of the mind . . . What we need is not disconnected statements, but a method. (p. 3)

The underlying premise is that there is no attempt to offer a simple Vygotskian approach, strategy, or even method. What is offered instead is the ultimate level of consciousness raising of each individual to establish his/her own working method that can also be implemented in practice. It is the higher level of metaphor that is first encouraged. The second principle is to acknowledge that human beings are not born into this world as free-thinking individuals, but into a world of pre-established social norms and conventions. We can only become individuals in the true sense of the word by connecting to the social world in a new fashion. The main focus of cultural-historical theory regards the transformative nature of internalization, which then leads to societal transformation. A. N. Leontiev (1997) commented that:

A sign is any conventional symbol which has a certain meaning. The word is the universal sign. A higher mental function develops on the basis of an elementary one which becomes mediated by signs in the process of internalization. Internalization is the fundamental law of development for the higher mental functions in onto-and phylogenesis. (p. 30)

However, if this holistic unit is viewed alone we will not reach the potential of becoming self-actualized individuals. We must always incorporate the general genetic law of development, or the doubling experience, into our own Vygotskian method: “any function in the child's cultural development appears twice or on two planes . . . It appears first between people as an intermental category, and then within the child as an intramental category” (Vygotsky, 1987, p. 21). Another key component in establishing one's own Vygotskian method is to always keep the view of process (as opposed to product) and development in mind. For example, often in the classroom we view one bad test of a student as a sign that influences our overall evaluation of that student. We often “fossilize” the capability of that student with the intentions we establish, which can be hurtful for the student, the class, and ultimately for the instructor as well.
The following section will offer various tenets that capture part of the spirit of Vygotsky's cultural-historical method. This summary is not meant to be exhaustive, but represents an outline of some of the basic ideas that differentiate cultural-historical theory from other similar theories.

Summary of Basic Principles of Vygotsky's Cultural--Historical Theory

Vygotsky's psychology/philosophy is ascribed with attributes such as future-oriented, “flow,” height (as opposed to depth), and non-classical psychology. In reviewing the tenets of Vygotskian cultural-historical theory, the following points will be established in a recursive summary: First, there needs to be a fundamental inclusion of German psychology-philosophy, and a basic understanding of the theories of Spinoza. As well, Vygotsky did not exclusively base his methods on the German Idealism of Hegel, but upon a bridge of understanding between Hegel, Feuerbach, and Marx. Vygotsky used the theories of the dialectic in particular to account for change, while anchoring these aspects within an absolute structure of monism (i.e., Nature, God, and the immutable). It is the holographic nature—‐together with a focus on functions and intra/interrelationships—‐that lifts Vygotsky's theories to the level of synthesis and unity. From this perspective, individual freedom is anchored within a grounding of more absoluteness, with the traditional indeterminacy of monism now being understood as a vital, dynamic, not static, principle. Second, “for Vygotsky the major problem was not that of socialization but rather of individualization of the originally communicative speech-for-others” (Kozulin, 1996, p. 108). Within the image of Leibniz’s monad, the individual functions very much alone, as in individualistic societies. Tension between the individual and the social parallels a similar tension between dialectics and monism (once again viewed metaphorically), and this tension builds upon a tripartite model. “... All cultural development has three stages: development in itself, for others, and for oneself” (Vygotsky, 1989, p. 56). Third, the genetic-developmental approach—‐connected to history viewed as change—‐is pivotal in understanding the focus on process as opposed to product. Within this approach, emotions, subjectivity, and intersubjectivity play a large role. Fourth, Vygotsky had an inclusive view of psychology/philosophy, incorporating areas of research ranging from aesthetics to the problems of the handicapped, all within a unified theory. Fifth, the role of Marxism is very important. It is precisely the problem of placing historical materialism together with dialectical materialism that creates a misunderstanding, with various categories often being mixed. For example, categories within dialectical materialism, such as quantity-quality, the triad, the universal connection (cf. Vygotsky, 1997, p. 330), are often mixed with categories in historical materialism, such as value, class, commodity, capital, interest, production forces, basis, and superstructure (cf. Vygotsky, 1997, p. 330). It is at this point that the role of metaphor, methodology, and the application of these principles to history become important in avoiding the pitfalls of a simplistic reductionism. Vygotsky (1997) stated:

The direct application of dialectical materialism to the problems of natural science and in particular to the group of biological sciences or psychology is impossible, just as it is impossible to apply it directly to
history and sociology . . . We do not need fortuitous utterances, but a method; not dialectical materialism, but historical materialism. (p. 330)

At the same time, this Marxist structure—viewed in the political and even philosophical sphere—needs to be expanded and revised in light of its historical failure to promote individual freedom of action. Another problem is the abstract, pure, and almost reified nature of many Marxist categories, which historically have not been viewed within a socially constructed frame of reference, but an idealized perspective that has often led to fossilization in the development of Marxist theories. Douglas Kellner (1989) has discussed another problem when discussing the early Marxism of Jean Baudrillard:

Although Marx stressed the sociohistorical production of needs, he never analyzed how needs were produced, ordered and systematized by signs—that is, by the working semiology. Since advertising, fashion, mass media, and so on were not as well developed in his day as in ours, Marx failed to perceive the important role of sign value and social differentiation in structuring needs and value. (p. 36).

An updated philosophy of Marxism will need to include areas traditionally forgotten, such as newer societal roles of women, the structuring of free time, the development of children and teenagers, art and aesthetics, issues with mental and physical challenges, the collective comprehension of emotional tragedies and violence, and many other areas. When considering the restructuring of Marxism, thoughts of Foucault come to mind, as stated in Best & Kellner (1991, p. 56): “Instead of the Marxist binary model of class struggle between antagonistic classes, Foucault calls for a plurality of autonomous struggles waged through the microlevels of society, in the prisons, asylums, hospitals, and schools.” Although Marxism represents a fundamental anchor for Vygotsky's theories, it is claimed that it was not the ultimate level of his thinking or that it represented the highest explanatory power within his theoretical system, mainly because the aspects of consciousness and thinking/speech are not addressed in a comprehensive manner within traditional Marxist theory.

Vygotsky's writings at this stage are most confusing and incomplete, with various paradoxes and apparent contradictions, if read in a literal way. However, it is suggested that his image is holographic in nature, asking the reader to assume an abstraction of the whole, via the framework of the Marxist “cell,” to then view various units (containing the components of the whole) concretely, in a precise and methodological analysis, always incorporating the understanding of history as change. In order to remain true to the intentions of Vygotsky's method, it is required that we view many of his theories through the lens of a metaphor and metatheory. Vygotsky constructed a new way of thinking which itself corresponds to his method, and this thinking is not written in a straightforward and scientifically logical way, and it does not represent a step by step guide to creating a new psychology. James Wertsch
explains part of the paradox by describing Vygotsky as an “ambivalent enlightenment rationalist” (Wertsch, 1995, pp. 56-57). Sixth, the subconscious is not viewed as the seat of psychological problems, but is understood as a way to solve problems creatively, through art. Aesthetics and art were some of the guiding principles of the highest goals within human culture. Seventh, in taking human consciousness as the highest explanatory principle, Vygotsky then selected word meaning as his overall unit of analysis. Word meaning is the primary unit of both thinking and speech:

Is word meaning speech or is it thought? It is both at one and the same time; it is a unit of verbal thinking . . . in the same sense that word meaning is a unit of thinking, it is also a unit of both these speech functions . . . from a psychological perspective, word meaning is first and foremost a generalization . . . Therefore, generalization in word meaning is an act of thinking in the true sense of the word. At the same time, however, meaning is an inseparable part of the word; it belongs not only to the domain of thought but to the domain of speech. A word without meaning is not a word, but an empty sound. (Vygotsky, 1987, pp. 46-49)

What should be understood is that word meaning includes a multitude of components, both conscious and unconscious, emphasizing the enhanced and expanded view of meaning (always tied to the word as a generalization), which incorporates emotions, and other sub-components in psychology. Vygotsky's primary psychology-philosophy is structured around a very deep understanding of semiotics, semantics, and mediation of culture. Eighth, word meaning can only be understood within a relational, functional mode of comprehension. For example: Vari-Szilagyi (1991) has stated that:

[I]n order to realize the dynamic functional role of the acquired verbal meanings, we have to switch over from the genetic plane to the functional plane, and what we have to study is not the development of meanings and the changes in their structure, but the process of how the meanings function in living, verbal thought. (p.113)

It is precisely the constant development of word meanings within a social and personal habitus of activity (both internal and external) that form a core aspect of cultural-historical theory. A. N. Leontiev (1997, p. 26) stated the following: “Thus, for Vygotsky the study of the problem of generalization, the development of concepts, the problem of word meaning became the path to investigate the ontogenesis of thinking, which became the nerve center of his whole theory.” Vygotsky spoke about the fact that word meaning within psychology (related to the thoughts of Paulhan) traditionally remains frozen (cf. Vygotsky, 1997, p. 132). Vygotsky then fused word meaning within what he called psychological linguistics and psychology, within which the change of contextualized meaning, such as metaphor and irony, could be examined (cf. Vygotsky, 1997, p. 132). Ninth, within the Vygotskian
tradition of cultural-historical theory, an understanding of different philosophers of language and semiotics of the 19th and 20th centuries is critical. For example, Wilhelm von Humboldt wrote about the connection of the inner meaning of the word and activity. The Ukrainian linguist A. A. Potemkyn (1835-1891), widely read by Vygotsky, brought von Humboldt's ideas from Germany back to Russia. Vygotsky was influenced by other linguists and semioticians, such as Jakubinsky, Trubetzkoy, Spet, Marr, Karcevskiji, Eisenstein, David Vygodysky, and perhaps Roman Jakobson. The core of cultural-historical theory represents a philosophy of language focused on speech, thought, and the semiotics of real life and culture—not just related to communication—as well as development and concept formation, all of which are fused with real life. Language, thought/speech, motives/emotions, and meaning, inter alia, are the real tools of personal transformation connected to the social—external. Van der Veer (1997, p. 7) calls it a “linguistic psychology.” Tenth, Vygotsky was interested in a revolutionary rather than evolutionary approach to development. For Vygotsky, “development was not a process of replacement but a process of transformation . . .” (Valsiner & van der Veer, 2000, p. 381). Eleventh, there is a dialectical unity within Vygotsky's writings. Although the cultural-historical approach he took was very consistent, he did not have time to follow through with many of his theories, dying at the age of 37. Twelfth, Vygotsky always remained an outsider to psychology, despite adding a tremendous depth and height to the field, and many of his thoughts were metaphorical. By incorporating so many areas outside of psychology, Vygotsky was able to apply metaphors, and by writing about consciousness through the prism of language, thought, mediation, and internalization, he was able to transcend many traditional views of psychology. His theories and method can only be understood as a metapsychology, as opposed to the systems approach of activity theory. It is claimed that one of the basic differences between cultural-historical theory, activity theory, and sociocultural theory is that the latter two cannot be viewed within the same level of metatheory as cultural-historical theory. Within cultural-historical theory, one focuses on the higher explanatory principles of consciousness, together with the guiding tools of analysis to better explain these principles.

Vygotsky, however, regarded and valued the concrete experience, simultaneously writing at a higher level applicable to various diverging concrete theories. The vision for understanding Vygotskian cultural-historical theory is one of a dialectical focus, where two levels are viewed simultaneously, within asymmetrical patterns of development. Some examples are: the higher explanatory principle together with tools of analysis; the whole with the parts; sense and meaning; spontaneous and scientific concepts; internal/external, among others. Vygotsky's thoughts on concept formation can indeed be viewed through the lens of child development, and with the inclusion of the role of intentionality and conscious awareness (cf. Roter, 1987, pp. 105-110), many of his theories can also apply to adult development (see Robbins, 2001, pp. 12-13), particularly within the realm of second language learning, if studied from a semiotic point of view. Further, cultural sign mediation can often be understood within a triparite model of a higher order, which will often include internal, subconscious components such as motive, image, and emotions. Sergei Eisenstein was not only a film maker, but also a real world semiotician, who collaborated with Vygotsky. Eisenstein viewed thought processes within the dialectical nature of both thematic-logical and image-sensational components. H. Eagle (1980) discusses Eisenstein's position, which is
also important in understanding Vygotsky. There is a dialectical level in place, which is often situated within a tripartite model. Regarding the image-sensual side of semiotics, Eagle explains Einstein's thoughts in the following way:

in image-sensual structure . . . a concept is conveyed not by an abstract generalizing sign, but by members of paradigm classes bearing either [a] metonymic or metaphorical relationship to aspects of the complex concept . . . metonymic relationships underlie the indexical properties of the sign (the signifier is part of the signified, in the sense of contiguity in space and/or time and/or causality), whereas metaphorical relationships underlie iconic properties (the signifier is in some way homologous to the signified). Eisenstein 's model of inner speech comprises the three principal sign-types of Peirce's typology: symbol (conventional sign . . . ), icon, and index. (p. 174--175)

Since this understanding is only focused on the image-sensual side of semiotic mediation, Yaroshevsky (1993, p. 26) offers a more general tripartite Vygotskian model: “Hence, Vygotsky was actually proposing replacing the duality of consciousness-behavior that absorbed the attention of the other psychologists with the triad of consciousness-culture-behavior (Yaroshevsky, 1993)” (p.26).

Thirteenth, there appears to be a misunderstanding in viewing Vygotsky's overall framework within the construct labeled communication. Communication only represents an element of Vygotsky's holistic, holographic vision. Fourteenth, V. P. Zichenko and B. Mescheryakov (2001) wrote four laws established by Vygotsky, which represent the core of cultural-historical theory:

(1). The law of mediation—the law concerning the transition from natural forms of behavior to cultural ones (mediated by tools and signs); (2). The law of transition from cultural forms of behavior to individualized ones (in the course of development means that served as social forms of behavior become a means for individualized forms of behavior); (3). The law stating that functions pass from outside to inside: “This very process in which operations pass from outside to inside we call the law of ingrowth;” (4). The law of transition from awareness to appropriation: “General laws of development consisting of both awareness and appropriation are peculiar only to higher stages in the development of mental function. They appear late.” (pp. 2-3)

Fifteenth, the aspect of subjectivity and sense are often misunderstood within the tradition of Wundtian tradition of introspectionism. Fernando González-Rey describes Vygotskian subjectivity this way:
It is an attempt to understand ontology not in its essential or causalistic version of being, but rather as a
different domain of objectivity of sense. It is the reason why I believe that the topic of subjectivity can
only really be understood from the cultural-historical perspective. Sense is produced socially within the
permanent tension between the present moment of a subject's life, which takes place in his/her activity,
and the configuration of his/her history in terms of sense. There is a constant dialectic in the
development of objectivity. It is a way to emphasize that human production is a production of the sense,
and in the end, this is a reason that we can never be completely rational. Sense contains emotions,
which are involved in our personal histories beyond our conscious states . . . Subjectivity allows us to
overcome the understanding of the human psyche as a simple taxonomy of content. (Personal
correspondence, March 30, 2002)

To continue with another important aspect of Vygotskian subjectivity, Mohamed Elhammoumi (2002)
states:

Vygotsky's major quest was always for a way to define the role of human agency or, in other words, to
develop a theory of "subjectivity" or "practice" that moves between two poles: On the one hand, an
individual is different from an animal because of his/her capacity to mold his/her own environment in a
goal-directed way by means of tools and signs. This means that subjectivity is real if a human individual
can indeed control his/her own real social life. That is, on the other hand, human control over nature is
subject to limitations that are largely determined by the level of technological forces (tools and signs)
and social organization (the nature of social relations of production) in any given society at any stage of
historical development. (p. 96)

Sixteenth, and perhaps one of the most important points. Vygotsky worked with the handicapped in
many areas, and he brought a new understanding of the word “normal” to psychology with his global
acceptance of those with physical and mental challenges. It is this point that appears to be neglected
within general reviews of Vygotsky, and in the overall understanding of his method. This dialectic
demonstrates the consistency of his approach, and offers direction for those working within his cultural-
historical method. Seventeenth, much of Vygotsky's cultural-historical method may be summarized in
the following quote (Vygotsky, 1997); however, a caveat is given: We should differentiate between
dialectical materialism and dialectical psychology:

The theory of the psychological materialism or dialectics of psychology is what I call general psychology
[p. 330] . . . Dialectical psychology proceeds first of all from the unity of mental and physiological
processes. Because for dialectical psychology mind is not, in the words of Spinoza [1677/1955, p. 128],
something that is situated outside nature or as a kingdom within a kingdom, it is a part of nature itself,
directly linked to the functions of the higher organized matter of our brain . . . It [dialectical psychology] does not mix up the mental and physiological processes. It accepts the nonreducible qualitatively unique nature of the mind. But it does claim that psychological processes are one . . . We must not study separate mental and physiological processes outside their unity, because then they become completely unintelligible. We must study the integral process, which is characterized by both a subjective and an objective side at the same time. (pp. 112-113)

Lastly, Vygotsky's method is theory in real time. Vygotsky's main interest was to use theory to change both individual consciousness and societal structures, such as education, and work with the handicapped. In order to stay within the tradition of Russian cultural-historical theory, these and many other tenets must be understood and applied. D. B. El'konin labeled Vygotsky's thoughts as representing a non-classical psychology of consciousness, as opposed to classical psychology (cf. Asmolov, 1998, p. 21). In other words, Vygotsky established an entirely new direction in psychology, sometimes called height psychology (viewing the future potential of a person), as opposed to Freudian or depth psychology (cf. A. A. Leontyev [Leontiev], 1992, p. 42.

For more information on Leibniz's understanding of monads, see Jolley (1995, pp. 132--133): “. . . he [Leibniz] defines a monad as nothing but a simple substance that enters into composites—simple, that is, without parts . . . Simplicity is demanded of monads, since without simples there would be no composites; composites, by their very nature, are nothing but collections, or aggregates . . . However, in order to qualify as genuine simples, monads must be without parts, and hence without extension, shape or divisibility. From this initial definition, Leibniz draws two important consequences. First, a monad is subject to neither generation nor corruption . . . Second, there is no conceivable way in which one monad can be affected by another.”

This quote can also be found in The Collected Works of L. S. Vygotsky (1997, Vol. 3, p. 331): “What can be searched for in the teachers of Marxism before is not a solution of the question of the question, not even a working hypothesis . . ., but a method to develop it . . . I want to learn from Marx's whole method how to build a science, how to approach the investigation of the mind.”

“Lammers has pointed out that Humboldt really carried on his studies at three levels, corresponding to the individual, the nation, and the whole of humanity. So far as language is concerned, three levels might also be distinguished. Humboldt paid attentions to the language behavior of the individual, and the ability of the individual to make innovations in language; he studied the languages of nations, and regarded these as organic wholes; and at the highest level he studied the language ability common to all men, and the universal characteristics of language” (p. 119 in Robert L. Miller, 1968, The Linguistic
Roman Jakobson and Lev Vygotsky were both university students in Moscow at the same time. During the first part of the 20th century all university students were required to take a course in linguistics. Lev's older cousin, David Vygotsky, who later became a noted Russian linguist, initiated study groups with people such as Eisenstein, Marr, and Vygotsky. It is certain that David Vygotsky knew Roman Jakobson before he left Russia for the United States.