

3 The problem of consciousness in Vygotsky's cultural-historical psychology

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Introduction

The essence of consciousness: entity, activity, or relation?

Consciousness is one of the most “inconvenient” objects of psychological research. It is so evasive and idiosyncratic that the investigation of consciousness can be compared with the study of the footprints that appear on the sand at the beach and are immediately washed away. One cannot “touch,” “weigh,” or “capture” consciousness – and not only so because consciousness is ever changing. Psychology, as well as philosophy, keeps wondering whether consciousness as a phenomenon exists as such. If it is only a sum of other psychological processes or a side effect, an *epiphenomenon*, that accompanies such processes, then the legitimacy of the quest for the specific characteristics of consciousness is fairly questionable. Indeed, is it worthwhile to create a theory of something that does not exist?

American philosopher and psychologist William James was perhaps the first who raised this question in psychology in his treatise “Does ‘consciousness’ exist?” (1904), in which he argued that “it is the name of a nonentity, and has no right to a place among first principles,” and, therefore, proclaimed that “the hour is ripe for it to be openly and universally discarded” (James, 1904, p. 477). James’ proposition might seem absurd since it is just contrary to our personal experience. In everyday life we do not doubt that consciousness exists and that we do have it. We know that one can “lose” or “regain” consciousness, it can be “full,” “growing,” and “altered,” or flow in a “stream,” but in any case, in terms of folk psychology, it is definitely recognized as something actually existing in the world. However, for scientific psychology the *ontological*, existential status of consciousness has always been unclear and problematic.

Intuitively, we tend to believe that consciousness is some kind of image of reality, its subjective depiction. Consciousness is often identified with some internal world, subjective space in which the external world is reflected. However, let us wonder where exactly this hypothetical area is localized. If the metaphor of “internal space” is correct, then consciousness must at least have certain dimensions and occupy specific space. In this case, it would have a certain size and, possibly, even weight. Pushed to its logical limits, this metaphor appears obvious nonsense. Where exactly

is consciousness located? Is it in the head, on the tips of the fingers, or in our visual field? Do its limits coincide with the limits of the human body? What is its length and width, in centimeters? Or, alternatively: can one thought be heavier than another by twenty milligrams, or the feeling of jealousy be longer than the feeling of aesthetic pleasure by five micrometers? Subjectively, we might feel that some feelings are “heavier” than others, and we might even compare them on the “heavy–light” scale, but these differences definitely cannot be measured in grams.

Over more than a century of its development, psychology gradually came to the idea that the theory of consciousness as a spatial phenomenon is impossible, since consciousness is not an entity, nor even a kind of activity, but rather an *interrelation*, *interconnection of activities*. The failures of the first investigators of consciousness who attempted to study it as an entity, as “something,” were caused by the wrong perspective they took. Instead of asking the question “what is consciousness?” it is far more productive to pose other questions such as “how does it work?” or “what is it needed for?”; that is, to shift emphasis onto the process and function of the psychological phenomena.¹ William James, who initiated this line within the history of the theory of consciousness, argued that

There is . . . no aboriginal stuff or quality of being, contrasted with that of which material objects are made, out of which our thoughts of them are made; but there is a function in experience which thoughts perform, and for the performance of which this quality of being is invoked. That function is knowing.

“Consciousness” is supposed necessary to explain the fact that things not only are, but get reported, are known. Whoever blots out the notion of consciousness from his list of first principles must still provide in some way for that function’s being carried on. (James, 1904, p. 477)

Therefore, consciousness can be thought of as a function that takes life experience as its argument (in mathematical parlance), that is, as its input: in consciousness life experience is reflected, summarized, and generalized. Consciousness appears as a *relation* between various fragments of experience; it is a system, or a matrix, that connects into a meaningful whole different phenomena that are traditionally attributed not only to bodily experiences (such as sensations), but also to mental and even spiritual life (such as thoughts, emotions, meditations, and passions). It is exactly for this reason that it turns out to be a “fiction” that can have neither length nor weight, nor any other physical dimensions that would allow measuring. Still, one can assume that consciousness has certain non-spatial characteristics – similar to logical or linguistic ones – that allow its analysis and intellectual investigation. Thus, building on James’ speculations on consciousness, psychology as a field of empirical scientific research is drifting toward a theory of consciousness that relates it with *logos* (in the original sense of this Greek word), that is, with language and meaning.

Nevertheless, although the general contours of the future theory are more or less clear, a “working” psychological theory of consciousness has not been created to date. Psychologists tend to downslide to using the spatial metaphor for the simple

¹ Cf. Vygotskii, 1930.

reason that language itself provides verbal tools that suggest that something occurs “*in* consciousness,” that thought comes “*into* someone’s mind,” and that strong negative feelings get “suppressed *into* the subconscious.” It is difficult to predict what the vocabulary and terminology of the new theory would be that could save it from numerous rhetorical, grammatical, and philosophical traps. Such theory remains one of the most ambitious challenges for the psychology of the future. Of special interest in this respect is Vygotsky’s cultural-historical theory that made an attempt at studying consciousness from the perspective of its verbal, language-related nature. We may even assume that this theory is the most notable contribution to general psychological theory of consciousness to date.

Historical context of the investigations of consciousness in Vygotsky’s theory

This chapter began with an outline of the basic challenges for a theory of consciousness in order to suggest a direction in which contemporary psychology may develop and to discuss the scope of these challenges. Not only Vygotsky’s brief life – untimely interrupted by a deadly disease at the age of thirty-seven – but also the problem of consciousness itself, with all its associated complications and peculiarities, was the reason why Vygotsky never completed his work on this theory. The complexities of the problem also explain the varieties and diversity of theoretical models and hypotheses that Vygotsky proposed in order to explain consciousness as a psychological phenomenon.

The problem of consciousness was always of special importance for Vygotsky. One of his first works, called “The methods of reflexological and psychological investigation” (Vygotskii, 1926), dealt with the issues of consciousness and the methods of its investigation. The call for the future theory of consciousness concludes *Thinking and speech*, the last and perhaps the most famous of his works (Vygotskii, 1934a). Numerous plans of a major – unwritten – treatise on consciousness were discovered among personal notes in the scholar’s archive (Zavershneva, 2010a, 2012a). Vygotsky’s private journal entries and notebook records made during the last months of his life are mostly devoted to the discussion of the dynamics of consciousness (Zavershneva, 2010b, 2010c). And still, all these records can be best understood as a formulation of a research question rather than a ready-made answer presented in Vygotsky’s written works. Even by the end of his life Vygotsky did not arrive at a holistic and integrative conception of consciousness and could offer only a set of brilliant insights into its nature. These insights, however, demonstrate certain internal coherence supported by a common general idea of a distinctly human way of psychological development of somebody who *speaks* and *thinks*, or, even more precisely, *thinks by speaking*. This is why the mainstream of Vygotsky’s cultural-historical theory of consciousness was constituted by the studies of verbal thinking in its development.

Throughout his entire scientific career, Vygotsky never abandoned the idea of building a theory of consciousness. Keeping in mind that his biography is very

dynamic, we should not be surprised to discover three quite different models of consciousness in his works. Of utmost interest is the third model of the last period (1932–1934) that is based on the idea of consciousness as a dynamic semantic system; however, the stages that precede it are also essential for getting a full understanding of the outcome that Vygotsky reached by the end of his life.

This chapter provides a reconstruction of Vygotsky's conception of consciousness in its evolution throughout his scholarly life. First, we will discuss the main definitions of consciousness in Vygotsky's works. Then, these different ideas on consciousness will be further discussed in the general context of Vygotsky's cultural-historical theory. Finally, this chapter concludes with a critical analysis of the theory of consciousness from the perspective of its own "zone of proximal development" and its contemporary relevance.

Evolution of Vygotsky's views on consciousness

First model: consciousness as reflex of reflexes (1924–1926)

In his early works Vygotsky proposed a model of consciousness as a *transmission mechanism between systems of reflexes* (Vygotskii, 1925, 1926). The name of the model includes the key word "reflex" that looks fairly strange from the perspective of cultural-historical theory as it never occurs in the most well-known of Vygotsky's works. However, during the initial period of his scientific career this notion was virtually the most important one: Vygotsky was only beginning the quest for an original pathway in scholarly research and actively used the vocabulary of Ivan Pavlov's *physiology of higher nervous activity*, Vladimir Bekhterev's "objective psychology" that after the Bolshevik revolution of 1917 Bekhterev popularized under the banner of the discipline of *reflexology*, and Konstantin Kornilov's disciplinary invention, promoted as his *reactology*. For a while Vygotsky proclaimed his allegiance to these disciplines.

Reflexology and reactology were popular in Soviet Russia in the 1920s and both – each in its manner – were grounded in Pavlov's physiology and its foundational notion of *conditional reflex* (mistranslated into English and popularized in the West as "conditioned reflex"). According to these self-proclaimed scientific disciplines, the psyche is a system of reflexes or reactions that can be studied with the use of methods of natural sciences (or their derivatives) because the systems of reflexes can be fully described in terms of cause-effect relations. According to popular belief, the study of available systems of reflexes would provide a foundation for future techniques of control over one's behavior that would be instrumental in the formation of new systems of reflexes, for instance, using the method of conditioning. The ideas of Russian physiologists found great support in the United States and formed a foundation of *behaviorism* – a new theoretical movement initiated by John B. Watson in 1913.

It is interesting that the core ideas of Pavlov's physiological teaching were used by behaviorists, reflexologists, and Vygotsky in order to come ultimately to very different theoretical conclusions: Watson excluded consciousness from the goals and tasks of psychological research, Bekhterev and his followers acknowledged consciousness in principle, but in practice typically avoided dealing with consciousness as an object of their research and instead often focused on unconscious processes that take place in psychotherapy, under hypnosis, or through suggestion. In contrast, Vygotsky proposed that consciousness is accessible to objective investigation and should become the object of empirical research. In order to do so, Vygotsky suggested modifying the contemporary reflexological research (i.e. Bekhterev's tradition in human sciences) and focusing on certain somewhat marginal ideas originally introduced by some of Bekhterev's followers, but not particularly popular among the majority of them, such as the special role of a system of "speech reflexes." This line of reasoning eventually led Vygotsky to a critique of Bekhterev's legacy and helped him develop his own position on the nature of consciousness that might be referred to as "anti-reflexological."

From the perspective of Vygotsky's "reflexological model" of 1924–1926, consciousness is coordination of all internal psychic processes, their interconnection into integral systems of reflexes. In his first published scientific article, "Methodology of reflexological and psychological research,"² Vygotsky gives a definition of consciousness as "the interaction, the reflection, the mutual stimulation of various systems of reflexes. The conscious is what is transmitted in the form of a stimulus to other systems and elicits a response in them" (Vygotsky, 1997a, p. 46).

The operations of consciousness are based on verbal speech that Vygotsky in the mid-1920s understood as a special system of reflexes of the second order that can serve as a transmission vehicle between any other systems of reflexes. Thus, speech brings different processes to a "common denominator," serving as a "translator," for instance, from the code of thinking to the code of emotion. By virtue of verbalizing our experience we unify it even if the speech is voiceless, silent, the inner speech that occurs in our minds. According to early Vygotsky, human consciousness consists mostly of such "unvoiced" (in other words – unconscious) reflexes that did not get access to the external expression and are not expressed in articulated speech (Vygotsky, 1997a, p. 47).

The speech reflex mirrors other reflexes, and this is the main principle that underlies the functioning of consciousness, which is, according to the Vygotsky of the mid-1920s, the reflection of another reflection, mutual interconnections within the systems of reflexes,

a system of transmission mechanisms from some reflexes to others which functions properly in each conscious moment. The more correctly each internal reflex, as a stimulus, elicits a whole series of other reflexes from other systems, is

2 The paper was published in 1926, but it is based on Vygotsky's presentation that he made at the II Psychoneurological Congress that took place in January 1924 in Petrograd (soon renamed Leningrad; contemporary St. Petersburg).

transmitted to other systems – the better we are capable of *accounting* for ourselves and others for what is experienced, the more consciously it is experienced (felt, fixed in words, etc.). “To account for” means to translate some reflexes into others . . . The act of consciousness is in our opinion not a reflex, i.e., it cannot also be a stimulus, but it is *the transmission mechanism between systems of reflexes*. (Vygotsky, 1997a, pp. 40–41)

Language is located on the border between an individual and society, between the internal world of a person and reality: “Speech is, on the one hand, a system of reflexes of social contact and, on the other hand, primarily a system of reflexes of consciousness, i.e., for the reflection of the influence of other systems” (Vygotsky, 1997a, p. 42). Such a position of language makes it an ideal mediator.

In his first, “reflexological,” model of consciousness Vygotsky focused only on one function of speech that allowed it to serve as a “mirror,” reflection of both external reality and internal reflexes. Speech allows an individual to communicate with himself and learn self as if from the perspective of “another one,” external communicator. Thus, consciousness is at the same time a social, interpersonal phenomenon and self-directed contact with oneself that is constructed by the model of contact with other people. Vygotsky’s personal notes that he was taking in 1926 demonstrate this idea that he borrowed from philosophical and linguistic works of his predecessors: “Consciousness = speech within the self, it arises in society with language (Marx) . . . Speech is always dialogue (Shcherba).³ Consciousness – dialogue with self (Zavershneva, 2012a, p. 29; underlining in the original notes).

Vygotsky subsequently expanded this idea of the role of speech and language in the development of consciousness and added a number of functions to the function of “mirror.” However, in his earlier works there is nothing more than a sketch of a theory of consciousness in the spirit of reflexology. Besides, this sketch does not give a hint of how, according to Vygotsky, consciousness actually develops, which is the main question for Vygotsky’s future theory that approaches every single psychological phenomenon from the perspective of its genesis.⁴ As a matter of fact, this sketch of a future theory has all the features of a trial version of a theory. Fairly soon, Vygotsky abandoned the vocabulary of reflexology. By 1927 the notion of “reflex” dramatically lost most of its appeal for Vygotsky. The notion of “sign operation” took its place.

3 Lev Shcherba (1880–1944) was a prominent Russian linguist and a member of the Academy of Sciences of the USSR. Most likely Vygotsky refers to Shcherba’s studies of certain dialects of Sorbian languages that were published in 1915 and, specifically, Shcherba’s conclusion that “monologue is largely an artificial linguistic form and it is only in a dialogue that the language reveals its true nature.” For an in-depth discussion of the theme of dialogue in Vygotsky’s thought and related issues, see Chapter 18 by Marie-Cécile Bertau (this volume).

4 It is interesting that Vygotsky’s early work is in perfect agreement with William James and his conclusion that consciousness does not exist: James “explained that the whole difference between consciousness and the world (between the reflex to a reflex and the reflex to a stimulus) resides merely in the context of the phenomena. In the context of the stimuli it is the world; in the context of my reflexes it is consciousness. Consciousness is merely the reflex of reflexes. Thus, consciousness as a specific category, as a special type of being, is not found. It proves to be a very complex structure of behavior, in particular, the doubling of behavior” (Vygotsky, 1997b, pp. 78–79).

Second model: consciousness as the system of secondary connections between higher psychological functions (1927–1931)

Between 1927 and 1931 Vygotsky authored the most well known of his works that are based on the notions of higher psychological functions and sign mediation of higher psychological processes.⁵ During this period Vygotsky developed the theoretical foundations of his theory that would later become the basis of his theory of consciousness in the making. For not less than three years (1927–1930) Vygotsky was studying isolated psychological functions, but not consciousness per se and as a whole.

The earliest variant of the idea of a mediated action (as well as the first mention of word meaning) can be found in Vygotsky's papers of 1926, among notebook records that he made during his almost half-year stay at Zakhar'ino hospital, being treated for chronic tuberculosis. This notebook contains the first formulations of the future psychological theory of cultural development:

And so, what distinguishes the word: it is an artificially created stimulus (cf. technology), it is a tool of behavior, it presumes two subjects and one object . . . The word is a special stimulus for the regulation, the organization of behavior – both our own and that of others . . . But there is nothing super-natural in this. Technology is not an introduction of new forces, but the application of existing ones. Similarly, the word is artificial use of existing nervous forces . . . Meaning of the word is not the object that it substitutes, but dialogue (the function of listening – speech within oneself). (Vygotsky archive, underlining in the original notes; see also Zavershneva, 2012a, p. 27)⁶

Although as early as in this tentative formulation of the basis of the emergent psychological theory the word is the main factor in the development of consciousness, Vygotsky initially treats it only superficially, in its function of a tool that allows one to master one's own behavior. The notion of *sign operation* becomes the core of the theory. Vygotsky introduced the principle of sign mediation in his classic presentation "Instrumental method." This paper briefly discussed the essence of sign-mediated operation that creates a relatively complex two-stage sequence "stimulus – psychological tool – reaction" instead of a simple and direct sequence of "stimulus – reaction" (see Chapter 2 by Friedrich, this volume). The instrumental aspect of human action for a while became the main aspect of Vygotsky's research on consciousness. The word is understood as a psychological tool that transforms the pair "stimulus – reaction" into a mediated reaction to a stimulus. According to this model, the word's actual meaning is not taken into consideration and the word is treated as a meaningless sign-mediator.

⁵ For detailed discussion see Chapter 2 by Janette Friedrich (this volume).

⁶ This document of 1926 that I discovered in the Vygotsky archive is the first written record where original, distinctly Vygotskian theoretical formulations of his psychological theory in its "classical variant" can be discerned. It was previously believed that first postulates of Vygotsky's psychological theory were expressed and presented in his paper read at the First All-Union Pedological Congress (Moscow, December 1927 – January 1928).

Experimental studies on the role of sign in the development of “higher psychological functions” were systematically launched in 1927. In these experiments, Vygotsky and his associates believed they had demonstrated how all psychological processes acquire new, distinctly human characteristics with support that they receive through the use of sign systems, including those that were previously developed in human culture. They studied in particular primary forms of sign-mediated operations characteristic of each “higher psychological function,” for instance, how tying a knot or other mnemonics assist in remembering, the pointing gesture as an initial psychological tool that assists in keeping attention on an object, etc. (see the two preceding chapters by Miller and Friedrich). The most productive studies, however, turned out to be those on the “psychological function” of thinking, in which the word was used as the primary sign-mediator. As it emerged in the course of these studies, the word is in some important sense different from other psychological tools-mediators: the word is intrinsically related not only to thinking, but also to the development of other “higher psychological functions” and even to consciousness as a whole. The relatively simple scheme of an instrumental act such as “stimulus – sign-mediator – reaction” was apparently not sufficient to explain the special status of the word and language in the development of consciousness. Therefore, the research on the external, behavioral aspects of sign-mediated actions gradually transformed into investigation of the inner, deeper processes behind such actions. These internal processes were thought at that time to depend on the *meaning* of the word. Besides, Vygotsky and his associates came to understand that each and every “higher psychological function” is closely related and interlinked with other similar “functions” that cumulatively form a more general system of psychological processes. Therefore, the investigation of isolated “psychological functions” is methodologically not legitimate.

By the end of the 1920s, Vygotsky gradually came to the conclusion that “psychological tools” cannot be “built into” any single “higher psychological function” because a person is an integral being and in every act of human behavior all psychological processes are manifested. Thus, for instance, the studies on mediated remembering – in which participants had to memorize objects depicted on cards with the help of a second set of cards with different pictures on them (Leontiev, 1931) – demonstrated that a wide range of other “psychological functions” contributed to the processes of remembering. Without getting too deep into the details of this particular study, let us see how such integrated operation of various interrelated psychological processes takes place. The processes of perception and attention are necessary in order to identify objects, preserve them in the field of attention, and concentrate on them. These processes precede and prepare voluntary remembering. Perception, in turn, at the same time is based and relies on memory: past experience, visual and verbal, necessarily interferes with identification of objects and their depictions. Then, in order to deliberately form an association between an object to be remembered and a seemingly unrelated depiction of another object on the given card – the one that will be instrumental in remembering – the processes of imagination are typically employed. Furthermore, if the task is particularly difficult

for the reason that the imaginary interrelation between the object and the depiction on the card is unclear and counterintuitive, then thinking is also employed in the process of remembering. Thus, as a result, the interlinked and coordinated work of a range of “higher psychological functions” takes place: the process of remembering even in its simplest form requires activity of the whole consciousness.

In a number of his works Vygotsky alludes to the ideas of German philosopher Ludwig Feuerbach when he states that “it is not thought that thinks: a person thinks” (Vygotsky, 1989, p. 65) and points out that in each specific case it is necessary to research the holistic reaction of the person who uses a sign-mediator:

Further, as soon as a person thinks, we ask: What person (Kaffir, a Roman . . . , Freud’s neurotic, an artist, etc. etc.)? The process will be different, although the laws of thought are the same . . . , depending on in what person it takes place. Cf. not natural (the cortex, the subcortex, etc.) but social relations of thought (its role in a specific individual). (Vygotsky, 1989, p. 66, quoted with correction of the errors of translation)⁷

Sign-mediated operation always includes not only cognitive, but also emotional processes, is driven by certain motives, is grounded in specific social and personal contexts, and so on; therefore it reflects the action of the whole personality rather than mere cooperation of “higher psychological functions.”

In order to provide a theoretical explanation of consciousness as a holistic action, Vygotsky introduced in his theory the *principle of a system*. At the end of 1930 he prepared and delivered a talk, “On psychological systems,” in which he laid down the basis for the analysis of consciousness as a system (Vygotsky, 1930/1997). Thus, he shifted the focus of his theory from seemingly isolated functions to *inter-functional relations* that are established with the help of the use of the sign-mediator. In his analysis of the development of consciousness, Vygotsky came to the conclusion that the primary, “natural” interrelation between functions – that forms an indivisible unity at the beginning of individual development – at a later stage of development is destroyed. Instead, new interfunctional systems of connections establish with the mediation of the sign (in particular, the word in its significant function). In these new, artificial, flexible, and voluntarily controlled systems, as Vygotsky seemed to believe they were in the early 1930s, one function dominates the others. The dominant function is either the most developed or the most appropriate for a specific task. The higher the level of psychological development of the person, the more flexible and differentiated his or her consciousness is. Let us clarify this abstract scheme using concrete examples.

Animals – like people – are equipped with systems of natural psychological functions: their memory, attention, thinking, and other functions coordinate with

⁷ Given numerous criticisms of English translations of Vygotsky’s texts (van der Veer and Yasnitsky, 2011), the author of this chapter very cautiously and consciously approached the task of quoting Vygotsky’s works in English. Thus, depending on the quality of the available translation, a choice was made between (a) quoting the translated text as is, (b) quoting it from an English publication, yet with correction of the errors and/or omissions of translation, or (c) providing my own translation from the original Russian text.

each other, but the kind of connections between functions is different from the kind of interfunctional connections in humans. In particular, the connection between emotions and thinking in animals is inborn, natural. Besides, this connection is very rigid and hardly susceptible to modification. Even the smartest apes are not capable of solving a problem if they are under the influence of a powerful emotion such as fear or anger. In other words, an extraordinarily strong emotion virtually destroys thinking and problem-solving abilities of an animal. In an adult human being, in contrast, the connection between reason and passion is more flexible and dynamic: people in principle are capable of overcoming a negative emotional state and of reasonable action even in adverse circumstances. This ability is not innate: new systems of functions develop under the influence of cultural and social factors. The reconstruction of the connections between the functions becomes possible for two reasons: first, the use of sign-mediated operation, and second, on the basis of the verbal thinking that evolves during the first years of life of the child.

Vygotsky believed that thinking is the dominant function in adults that allows them to control their own behavior. In contrast, the dominant function in the preschooler is memory: following perception that in early childhood turns into a system of sign-mediated operations, the memory of the preschooler gradually transforms and, thus, acquires the instrumental character and becomes voluntary. The child of early school age – unlike the preschooler – is already capable of remembering a series of words and objects with the aid of auxiliary tools, such as cards with pictures on them, that help them associate these pictures with the objects they need to remember (see experimental study by Vygotsky's associate: Leontiev, 1931). However, sign-mediated operation unfolds mostly externally, as a behavioral act: without the use of auxiliary aids the remembering rate in children remained low. All relevant associations that the children formed with the help of auxiliary cards were mostly due to their remembering previously experienced situations. In rare cases the children formed associations using their imagination, and virtually never were these associations voluntarily created by the force of thinking – just because these latter functions had not developed well enough in the child. This is why the operations of thinking in the child of the early school age are often substituted by the working of memory: at this age reproducing the previous experiences is considerably easier than independently solving a whole new problem.

Unlike children, the adult subjects of their study virtually never used auxiliary cards for remembering a simple sequence of words or objects. Adults organized the situation of remembering in their minds, and all their associations were internal, that is, were not mediated by any kind of behavioral actions. The interrelations between memory and thinking in the child and the adult were different:

Whereas the thinking of the pre-adolescent child rested on memory and to think meant to remember, for the adolescent memory rests mainly on thinking: to remember is first of all to search for what is needed in a certain logical order. This rearrangement of functions, the change of their relationships, the leading

role of thinking in absolutely all functions as a result of which thinking turns out to be not just one function among a number of others, but a function which restructures and changes other psychological processes, we observe in adolescence. (Vygotsky, 1930/1997, p. 99)

The interrelation between memory and thinking dramatically changes as the child grows physically and matures psychologically:

All of these new types of connections and interrelations of functions presuppose self-consciousness, reflection of his own processes as a substrate in the consciousness of the adolescent . . . Characteristic for psychological functions in the transitional age is participation of the personality in each separate act. [It is so that as if] the child would say, impersonally, “it seems to me,” and “it comes to my mind,” but the adolescent would say “I think” and “I remember.” In the true expression of [Georges] Politzer, it is not the muscle, but the man that works.⁸ Similarly we can say that it is not memory that remembers, but man. This means that the functions entered a new connection with each other through the personality. (cited by Vygotsky, 1998a, p. 182, with correction of the errors of translation)

Thus, we can see that psychological systems in animals, children, and adults are organized differently: the progression from animals to adult humans is characterized by the rupture of the natural connections between psychological functions and the evolution of new, flexible, and voluntary (in their origin) functional interrelations that, in the ideal scenario and at the highest levels of human development, result from reflective processes of self-observation and self-consciousness. In other words, unlike children, adults are in principle capable of developing awareness of how they organize their psychological processes (such as voluntarily remembering) and deliberately use special techniques and strategies that facilitate or even allow them to control and master these processes.

According to Vygotsky's second model as it is presented in his speculations of 1930 (Vygotskii, 1931; Vygotsky, 1930/1997), psychological systems are constituted by three types of interfunctional connections: *primary*, *secondary*, and *tertiary* ones. Primary connections are those that are innate coordinators of psychological processes. Secondary connections evolve in situations where signs are involved in psychological processes and, as a result of sign-mediated operations, the psychological system gets restructured. Vygotsky asserts that it is at this level of human development that consciousness emerges as a system of secondary interconnections between the “higher psychological functions.” Finally, tertiary connections characterize a mature, psychologically developed person and determine such a psychological system that allows for voluntary and conscious control over one's own behavior. Thus, the highest forms of consciousness are directly related to free voluntary action and the formation of a mature personality, which is only possible due to the emergence of a new form of consciousness: awareness of one's own psychological processes, self-reflection, and self-consciousness.

⁸ This is a hidden quote from the above-mentioned Ludwig Feuerbach.

From 1930, as evidenced by his various writings, oral presentations, and private notes, Vygotsky repeatedly criticized his previously held views as incomplete and even erroneous. Thus, for instance, he rejected the idea of the dual-level construction of the human psyche, that is, he departed from the radical separation between the “lower” and the “higher psychological functions” (Zavershneva, 2010c, pp. 41–42). The idea of the sign as the mediator between nature and culture was still used as a heuristically useful abstraction, but it gradually shifted to the background of the theory and was virtually replaced by other notions and ideas. The notion of the “system of psychological functions,” or the “psychological system,” in turn, required its concrete instantiation. Besides, no answer was given to the question about the structure of consciousness, whether it constituted a “system of higher psychological functions” or if its “molecules,” i.e. the units that had all the characteristics of the whole, were something else, but not these “functional systems.” Vygotsky came to understand that notions he had been using so far, such as “sign mediation” or “functional system,” could not fully explain the whole complexity of human consciousness.

Thus, the idea of sign mediation of the higher psychological processes required additional empirical studies that would concretely present and expose the mechanisms of mediation. How exactly and in what way does a word (a sign, a tool) get integrated into the sequence of our actions? Do children and adults use words in the same way? What allows a person to transcend from the level of secondary interfunctional connections to the level of tertiary ones? In other words, what is the basis on which a mature personality emerges capable of voluntary choice and action?

Similarly, the idea of the system of functions – that accounted only for the formal and *structural* aspect of the formation of the integral unity of the human psyche – required support and explications with the help of other psychological principles that would address consciousness as a *dynamic* whole. It was only at the beginning of the 1930s that Vygotsky started his analysis of the internal, semantic (i.e. meaning- and sense-related) aspect of consciousness on the basis of the previously accumulated theoretical and experimental material.

Third model: consciousness as dynamic semantic system (1932–1934). General overview

In the middle of 1932, after a period of intense self-criticism and considerable intellectual work, Vygotsky made an important theoretical advancement. He introduced a theoretical innovation – the notion of consciousness as a *dynamic semantic system* – but failed eventually to unfold and theoretically expand this idea because of his not unexpected yet untimely death (in 1934). Between 1932 and 1934 he augmented the idea of a system with the principle of the *semantic construction of consciousness* that is inseparably related to the notion of consciousness understood as a system:

Systemic construction of consciousness might arbitrarily be called external construction of consciousness, whereas semantic construction, the character of generalization, is its internal structure. [Generalization is a prism that transforms all functions of consciousness.] (quoted by Vygotsky, 1998b, p. 278, with correction of the errors and omissions of the translation)

The fingers of one hand would be enough to count the main works of this period that deal with the theory of consciousness. First, the problem of the dynamics of consciousness is in broad strokes outlined in the final chapter of *Thinking and speech* (1934). Second, the same problem was discussed at the research meetings (the so-called “internal conferences”) of Vygotsky’s closest associates held in 1932–1934. The notes of one such meeting in December 1932 were subsequently published under the title “The problem of consciousness” (Vygotsky, 1997c). Third, an important contribution to this theory in its making is Vygotsky’s article “The problem of mental retardation” (Vygotskii, 1935) that was published posthumously in 1935. Fourth, a series of Vygotsky’s writings of this period present the topic of word meaning that was relatively more developed in his thinking and, in addition, was supported by experimental practice. Thus, the theme of word meaning was directly addressed in Vygotsky’s *Pedology of the adolescent*, volume III (Vygotskii, 1931) and his *Thinking and speech* (Vygotskii, 1934a). Fifth, and finally, an important addition to this corpus of Vygotsky’s and his associates’ printed texts is a series of his personal notes that are stored in the Vygotsky family archive. There is no general access to these materials, yet some archival documents were published recently (van der Veer and Zavershneva, 2011; Zavershneva and Osipov, 2012a, 2012b; Zavershneva, 2010a, 2010b, 2010c, 2012a, 2012b). What is required from a researcher in this situation is more than attentive reading. In the process of rendering Vygotsky’s conception, as fragmented as it is, “imaginative reconstruction” of the missing fragments of the unfinished theory or even creative development of his ideas is virtually unavoidable.

On the basis of these sources we will unfold and summarize a number of Vygotsky’s ideas that emerge in his last works, in which the problem of consciousness is discussed. A word of caution is needed before we proceed any further.⁹

The two notions that constitute the core of Vygotsky’s theorizing during the last two to three years of his life, namely “consciousness” and “sense,” provide a really impressive lineage of derivative notions – most of them widely used by Vygotsky and some of his Russian associates – that allows us to see these two ideas not only as presumably static phenomena, but also as dynamic processes, goal-directed actions, attributes, or qualities that may be represented, grammatically, by transitive verbs, passive and active participles, adjectives, adverbs, and, finally, action nouns (roughly corresponding to gerund in English) and quality nouns. Such a multitude of derivatives of either “consciousness” or “sense” is simply inconceivable in the English language. In order to remove the linguistic stumbling block posed by the

9 The following paragraph and the table are quoted from the manuscript of a yet-unpublished paper by A. Yasnitsky, “Lost in translation”: Talking about sense, meaning, and consciousness, manuscript preprint.

Table 3.1 *English equivalents of the Russian words “soznanie” (consciousness) and “smysl” (sense, meaning), and their derivatives*

Root noun	Transitive verb	Gerund	Adjective	Quality noun
Consciousness [Rus.: <i>soznanie</i>]	(to) cognize (something)	cognizing (something)	conscious (of) <i>or</i> cognizant (of)	cognizance (of something)
Sense [Rus.: <i>smysl</i>]	(to) make sense (of something)	sense-making <i>or</i> making sense (of something) ¹⁰	semantic (e.g. analysis) <i>or</i> meaningful (e.g. activity)	meaningfulness

vocabulary and cultural traditions of its use, a “phraseological toolkit” for the theory of consciousness in English has been designed and will be used here in the subsequent discussion. Although the English language resists an effort to fully and consistently reconstruct the amazing lineage of the Russian derivatives, some progress has been achieved (see table 3.1).

Now, after this brief detour into the “linguistic preamble” and these terminological clarifications, nothing prevents us from further discussing Vygotsky’s theory of consciousness in the making in 1932–1934.

For Vygotsky, the *meaningfulness* of consciousness is its special “relation to the external world” (Vygotsky, 1997c, p. 137) so that the world – both physical and psychological – becomes observable, accessible to cognizing and meaningful action, and reveals itself as a whole where each element of it, each event, is perceived in connection with other events: “conscious” reminds us of the Latin etymology of the word, “*con-*” and “*scious,*” the “knowing with,” that is, “knowledge in connection” (Vygotsky, 1997c, p. 137). *Making sense* of the world becomes possible with the help of speech. Embodied in the system of word meanings, speech is used to categorize the physical and the psychological worlds, and establishes a firm foundation for cognizing the two.

Vygotsky believed that speech allows us to see the universal interconnection of the phenomena of the world: an animal exists in the “environment” and it is only for *Homo loquens*, “the verbal human,” instead of the environment of an animal that there is a meaningful world that has, possibly, a cognizable “construction.” The extent of the interconnection between our ideas about the world and the possibility to act in this world is determined by the level of development of word meanings: the differentiated, complex system of verbal meanings that emerges in the course of the development of consciousness is capable of reflecting all the diversity of the world’s phenomena. Such reflection of the world in vocabulary, its “alienation” and linguistic “projection,” empowers us to act in the world not only intelligently, but

10 For a historical precedent of similar use of this expression, see e.g. Bruner and Haste, 1987.

also freely. In other words, the higher the level of making sense of the world we reach, the more freedom we have.

It is by virtue of making sense of the world that we in certain ways also organize the psychological world that appears in parallel with our cognizing of the physical world, our interaction with this world and other people. The physical world, represented in word meanings, becomes an integral part of the psychological world. Consciousness emerges as some form of interrelation of all psychological processes:

thinking and speech are the key to understanding the nature of human consciousness. If “language is as old as consciousness,” if “language is practical consciousness that exists also for other men, and for that reason [alone] it really exists for me,” if <“from the start the ‘spirit’ is afflicted with the curse of being ‘burdened’ with matter, which here makes its appearance in the form of agitated layers of air, sounds, in short, of language”> then it is <obvious that> it is not only thought but consciousness as a whole that is connected <in its development> with the development of the word. <Actual> studies consistently demonstrate that the word plays a central role not in the isolated functions but the whole of consciousness. (Vygotskii, 1934a, p. 318; Vygotsky, 1987, p. 285)¹¹

The unit of analysis of consciousness in the later version of Vygotsky’s theory was initially the unit of verbal thinking: *word meaning*. Vygotsky regarded it as the contents of sign-mediated operation, as its internal structure that is represented not only by the information rendered with the help of the word, but also by the range of practical operations that typically accompany the use of this word. According to Vygotsky, word meaning is the meeting place of all psychological processes and, therefore, it reflects the dynamics of consciousness as a whole: “Meaning and the system of functions are internally connected. Meaning does not belong to thinking but to consciousness as a whole” (Vygotsky, 1997c, p. 138). Word meaning equally belongs to the domains of the physical and the psychological and serves as the intermediary in our interrelations with the world: on the one hand, it is “one’s way to the thought” (Vygotsky, 1997c, p. 134), the means to transform inarticulate thoughts into actual spoken or written speech; on the other hand, it is a means of generalization of experience and communication with other people, that is, it represents the “unity of communication and generalization,” unity of the internal and the external, the individual and the social, the person and the environment. Thus,

¹¹ This paragraph is quoted from the English edition of 1987 in the translation of Norris Minick. Necessary changes were made in agreement with the original Russian edition of 1934. Therefore, the quote restores, in angular brackets, the omissions of the English translation and, respectively, of the Soviet post-World War II editions of the text from which this translation was made. In addition, the quotes in the text denote citations from K. Marx and F. Engels’ *German ideology* that was first published in Moscow in 1932, just two years before Vygotsky’s *Thinking and speech*, in original German. No translation of this work existed then. Therefore, Vygotsky (or the editor of this posthumously published text) quoted the source in his (or her) translation, but did not provide the reference. In this publication, the quote from Marx and Engels is rendered according to the English edition of 1987, omissions of the Russian translation are corrected in accordance with the Russian original edition of 1934 and restored here in square brackets.

Vygotsky's earlier ideas about the verbal nature of consciousness that surfaced in his reflexological model of consciousness in the 1920s were further developed in his later model in the 1930s.

Perhaps the way to consciousness through *word meaning* was the only opportunity available to Vygotsky, despite its apparent limitations: on a number of accounts Vygotsky was accused of intellectualism due to his emphasis on consciousness viewed primarily from the standpoint of verbal thinking. He failed to reveal all aspects of consciousness in word meaning as the unit of analysis: intellectualistic bias dominated in all his empirical studies of the development of word meaning. It appeared an ideal object for the study of verbal thinking as such, but holistic study of consciousness required a different unit that would equally well represent personality, motivation, volitional and emotional processes in their interrelation with the intellectual sphere. Initially, *sense* became such a unit of analysis, but, in addition, during roughly the last year of his life, Vygotsky was considering a notion that would take into account the person as a whole, in the unity of all psychological processes. Vygotsky discussed such a unit of analysis and, using a Russian word, referred to it as *perezhivanie* (a Russian equivalent of the German *Erlebnis* with its mixed meaning of intellectual and emotional life experience). However, this line of theorizing remained at the level of mere speculation, and Vygotsky's theory of consciousness was not developed any further than a sketch of a promising future theory.

These are the general outlines of the theory of consciousness that Vygotsky was developing in 1932–1934. The theory is of relatively greater interest than his earlier attempts; therefore, we will focus on the constituent parts and stages of its development in its concrete forms.

Vygotsky's theory of consciousness (1932–1934): reconstruction and reinterpretation

The notion of meaning and the stages in the development of word meaning

It seems that word meanings are fixed and clearly defined in dictionaries, therefore they should not pose a problem of definition in psychology. However, in real speech even the simplest everyday words and expressions are used in a fairly broad context that is often quite distant from that captured in dictionaries, and even sometimes in the meaning directly opposite to the dictionary meaning. There is no rigid and firmly established interrelation between the word and its actual meaning in everyday speech: this interrelation is flexible and dynamic, it is composed of a great many of the shades of meaning and always bears the imprint of the speaker's personality.

For instance, for a preschooler the meaning of the word "dog" might include such characteristics as "ears, paws, and a tail," "my favorite toy," "the neighbor's puppy

Buddy,” “someone who barks loudly,” or “someone who can bite.” For a toddler a dog is someone who is “soft” (i.e. its fur), “wet” (i.e. its nose), or who can be “pulled by the tail.” For the dog’s owner who is not enthusiastic about waking up early or leaving home on a cold weekend morning in order to walk the dog his pet might become a “burden,” whereas for a biologist who is writing a scholarly paper about dogs this is the “domestic dog (*Canis lupus familiaris*),” a “subspecies of the gray wolf (*Canis lupus*),” and a “member of the *Canidae* family of the mammalian order *Carnivora*.” This far from exhaustive list of examples shows that virtually every word of a natural human language can have a great multitude of characteristics that can hardly all be taken into account.

The characteristics of a word – such as the possible characteristics of a dog that we have just sketched here – are not homogenous and uniform. They reflect different personal perspectives and various ways to “see” a dog, focusing on its visual and perceptual features, its relations with the world, or the animal’s functional characteristics, etc. Among these we can distinguish, on the one hand, essential features understood as those that in the most direct and straightforward way relate to the nature of the object and are not separable from it, and, on the other hand, non-essential features, that is, such temporal, occasional, or secondary traits that may or may not be present in the concrete representative of this general class of objects. According to basic postulates of logic, the set of essential traits that are shared by all instances within a class of objects comprise its meaning (or concept, notion). This class of objects can include sub-classes or, in turn, be included itself in larger classes, as their sub-class.

Real notions that we use in everyday personal communication differ considerably from these ideal logical schemes. They can include virtually any features, and not necessarily those that are considered essential in impersonal, formal logic. Orderly relations between notions and classes of objects are an exception rather than a rule. Children and adults do not create these classes in a similar way: one and the same *sign* (such as a word) can *signify* (that is, mean) quite different things. In other words, the real, *psychological meaning* of a word is not constant; it changes and passes several stages in its development. In one of the most famous studies conducted within the Vygotsky Circle (Yasnitsky, 2011) using the method of Vygotsky-Sakharov at the end of the 1920s (Sakharov, 1930; Vygotskii, 1931, 1934a), Vygotsky and his associates investigated the process of the development of concepts and formulated main regularities of the grouping characteristics of objects into a system at different stages of *ontogeny*, the individual’s development.

The description and discussion of this experimental study can be found in the first chapter of this handbook of cultural-historical psychology that is authored by Ronald Miller (see also his profound analysis in Miller, 2011). In the present chapter, I would like to complement this discussion with the interpretation of the development of meanings from the perspective of the *principle of system* that Vygotsky endorsed from the end of 1930 or so and focus on the structural and semantic organization of the three main forms of meaning in the ontogeny.

At the first stage (i.e. in toddlers and during early childhood), – the stage of *syncretism* – human thinking is predominantly *syncretic*, and the main form of meaning is a *syncrete*. This means that features of an object are grouped into a chaotic and diffuse whole, according to a purely subjective and experiential “logic of wishes and emotions.” The syncrete is replete with meaning, and the connection of personal experiences in a syncrete outweighs the connection of phenomena and objects. It is devoid of structure, and total ignorance of the whole idea of the importance of essential features reigns over the syncretic thinking. The syncretic meaning is oversaturated with subjective relations, it is unstable and easily mutable. For instance, the class of objects that are referred to by the word “dog” can include a pack of wool yarn, but this very word might be used by a child to talk about a dog’s leash or a food bowl. Syncretic thinking does not have any restrictions, anything can be related to anything. One word, one notion is enough to grasp the whole universe, no division into sub-classes is needed, and no abstraction is required for syncretic thinking. Instead, the world and its meaning is captured as a whole, in its global and diffuse unity. The world as it appears in syncretic thinking is a quintessence of meaning and is undifferentiated into objects, processes, and phenomena.

The second stage (i.e. in preschoolers and during early school age until adolescence) the stage of *complexive thinking* – has many variations and sub-stages. However, what is important is that at the basis of each thought *complex* is a concrete, factual, apparent connection between the characteristics of objects that are established in the practical life experience of children and have a certain meaning to them. The process of abstracting traits is already at work here, but it is still fairly weak and immature at this stage. The essential characteristics are distinguished and figure against the background of the non-essential ones, but are still not sufficiently and consistently separated from them, therefore the overall structure of the meaning remains inconstant and vague: “if empirically present, *any* connection is sufficient to lead to the inclusion of an element in a given complex” (Vygotsky, 1987, p. 137). The interrelations between different classes of objects are unstable as well: they might overlap unevenly so that one and the same object is included at the same time in several classes and changes its affiliation with a certain class of objects – despite any possible contradictions this might entail.

The third stage – the *conceptual thinking* of adults – is characterized by the highest form of meaning: the *concept* that includes only the essential traits that are in a certain way interrelated with each other. The psychological basis of conceptual thinking is the process of abstraction of the essential features and their eventual synthesis into a new gestalt, a new structural unity. A concept is formed only by the necessary clusters of associations both inside a class of phenomena and between such classes. The whole multitude of concepts comprises a balanced and meaningfully organized semantic network that is organized hierarchically and in which notions are ordered according to the extent they generalize reality in an abstract way. Unlike complexive meanings, the real concept has its proper and constant place in this verbal network and hierarchical system. The object that is

represented by these concepts is stable; similarly, the whole worldview created with the help of such concepts is stable. The real concept is inseparably interrelated with other concepts, it is defined through and in relation to them, and, thus, “can be represented through other concepts in an infinite number of ways” (Vygotsky, 1987, p. 226), which is similar to how we can express a number with the help of an endless number of mathematical operations of adding, multiplication, etc. applied to this and other numbers. Vygotsky expressed this idea in his *law of the equivalence of concepts* that he introduced in *Thinking and speech*. Thus, it is only at the highest stage of the development of concepts that we encounter a description that resembles the view on verbal meaning and concepts that is suggested by logic.

The child uses the same words as the adult, but imbues them with different meaning and uses a different set of psychological operations of meaning making. Each stage of the development of word meanings is characterized by a distinct configuration of the entire system of psychological processes. In the case of the syncretic, it is the unity of the immediate emotional state and perception (the “logic of feeling,” the “logic of the visual form,” etc.). In complexive thinking memory dominates other psychological processes. Only at the stage of conceptual thinking does proper abstract thinking emerge as the fundamental psychological process. Thus, the three types of word meanings are different from each other from structural and functional perspectives.

The real concept is based on the processes of abstraction, therefore it is free from its concrete manifestations and is independent of visual images or perceptual experiences. At this stage a synthesis of the word and the thought establishes so that thinking is free not only from experiential input, but also from verbal matter as such. Indeed, a thought can be expressed with the help of a range of different words and phrases and, in its most advanced forms – such as in philosophy or in poetry – it becomes pure thought not bound by images, feelings, or semantics. According to Vygotsky, every person whose verbal thinking is at the stage of real concepts is free – in their mental and emotional life, and in everyday behavior: “Freedom [is] affect in concept . . . The grand picture of development of personality: the path to freedom” (Vygotsky, 2010, pp. 92–93; underlining in the original notes).

Vygotsky no doubt describes here an ideal situation, an unattainable ideal. The majority of educated adults in Western society in their life employ complexive thinking just because routine everyday situations most often do not require a high level of generalization. Furthermore, human language itself is predominantly of a complexive nature: perhaps at the very least it resembles an ordered and hierarchically organized system of notions. The vocabulary of the living language constantly changes, and words acquire a multitude of new meanings depending on the context in which they are presented. Language can describe not only what has already occurred, but also something that never took place or even is not entirely possible. Natural human language is redundant and ambiguous. From this perspective the complexive and syncretic character of the child’s speech is hardly its drawback: on the contrary, it reveals the plenitude of opportunities. The child plays with language

as if trying, testing, and tasting it. This freedom of verbal expression is preserved in adults since, as Vygotsky points out, complexive thinking always remains in the background of conceptual thinking and is its hidden semantic reserve (Vygotskii, 1931).

In sum, it is the level of development of conceptual thinking that is the indicator of the level of development of consciousness. This is the conclusion Vygotsky reached at the beginning of the 1930s: “Stages in speech – stages in abstraction – stages in consciousness” (Vygotsky archive, unpublished record, “My remarks,” presumably 1933). Compare this with another Vygotsky record: “Meanings are not *psychische Gestalten*, but *sozio-Gestalten*: consciousness is a relation, [i.e.] my relation to my environment” (Vygotsky archive, unpublished record, “The role of semantic field,” 1933; underlining in the original notes).

The extent of commonality between concepts

In order to assess the level of development of the system of meanings, Vygotsky introduced the notion of the *extent of commonality between concepts*.¹² Theoretical discussion of this notion first appears in his *Thinking and speech*, while its application to practical problems – as well as, for that matter, other potential uses of Vygotsky’s psychological theory in clinical settings – was explored by his colleagues and associates Gita Birenbaum, Nikolai Samukhin, and Bluma Zeigarnik in their work in the first half of the 1930s (Birenbaum and Zeigarnik, 1935; Birenbaum, 1934; Kaganovskaya and Zeigarnik, 1935; Samukhin, Birenbaum, and Vygotskii, 1934; Samukhin, 1934, 1935; Zeigarnik and Birenbaum, 1935; Zeigarnik, 1934).

In its nature, human language and speech is obviously not self-contained, and serves as an intermediary between the world and man. On the one hand, the word is rooted in the system of language, and has a meaning only in relation to other words; on the other hand, the significance of the word is determined by its relation to reality, to the world of objects, phenomena, events, and processes that it denotes. Thus, the meaning of the word is dually determined at the same time by an entire system of verbal meanings of the given language and by reality. In order to take into account the double determination of word meanings, Vygotsky discusses the degree of generality of concepts that he metaphorically presents within the semantic field and measures it by the two dimensions that he refers to as the *longitude* and the *latitude* of a concept. These two dimensions of a concept designate both the place that the concept occupies between the poles of extremely concrete and extremely abstract thought about the same object, and the place it occupies among other concepts of the same degree of abstractness, but related to other objects of reality. Vygotsky emphasizes that “the extent of commonality that exists for every concept is instrumental in establishing interconnections between this concept and

¹² The usual English translation of this Russian expression “*mera obshchnosti poniatii*” as the “degree,” “measure,” or, even worse, the “level of generality” is fundamentally wrong and highly misleading.

all other concepts” (Vygotskii, 1934a, p. 242). These interconnections provide opportunities for transition from certain notions to other ones, therefore the extent of commonality is essential for creating the “equivalence of concepts” (Vygotskii, 1934a, p. 242).

According to Vygotsky, the child at the stage of syncretic thinking does not realize the commonality between concepts whatsoever: “Concepts lie in a single series that lacks hierarchical relationships . . . Since the only possible relationships between these concepts are object relationships, it would be more accurate to say that no verbal thinking is possible” (Vygotsky, 1987, p. 226). The child cannot reach the “correct” conclusion with the help of the network of notions just because this network does not yet exist as such. Instead, the child creates an *ad hoc*, an immediate and temporary chain of notions, in which each and every next step is “correct.” The thought of the child travels through this syncretic network of loosely related notions and might well eventually return to the original point of departure having lost its initial thread and the purpose of thinking. In contrast, in the case of mature conceptual thinking an ordered, constant, and hierarchically organized network of concepts not only allows freedom of transitions between concepts, but also secures the independence and equivalence of different ways toward a final conclusion. Similarly to how we can end up at number 3 as a result of an endless set of mathematical operations (e.g. $3 \times 1 = 3$; $6 \div 2 = 3$; $\sqrt{9} = 3$, etc.), conceptual thinking clearly traces all connections that lead toward one and the same notion or conclusion – equally well accounting for abstract and concrete relations – and allows for expressing it in a variety of ways without distorting its truthfulness.

The criterion of correct operation of thinking, from Vygotsky’s standpoint, is the extent to which it is adequate to the object or the overall context and specific situation.¹³ “Correct thinking” is that which, adequate to the task, fits the two coordinates (the longitude and the latitude), stays in touch with the context, and keeps the balance between the abstract and the concrete in the development of thought. Disorders of thinking are caused by confusion of the extent of commonalities between notions and are manifested by clinical instances of spontaneous unmotivated theorizing and moralizing (i.e. cases of loss of concrete situation-related thinking in schizophrenia), or, on the contrary, total dependence on the immediate situation and loss of ability to generalize (e.g. in various types of dementia). Thus, the notion of the extent of the commonality – seemingly a speculative construct – turns into a useful tool in the work of a psychologist in applied clinical settings.

A concrete example of the disorder of the extent of commonality was described in the study that was conducted in the 1920s by Birenbaum and Zeigarnik

13 Thus, for instance, while writing a scholarly paper on a newly discovered kind of wild dog it is adequate to regard it as yet another species that belongs to the *Canidae* biological family, tribe *Canini*, genus *Canis*, and to correlate it with the already-known species within this family of animals. In contrast, so far as the neighbor’s puppy Buddy is concerned, in order to communicate adequately with the pet it is enough to know that it *bites, adores hamburgers*, and likes to *play ball*.

(Birenbaum and Zeigarnik, 1935), former Berlin students of renowned German-American psychologist Kurt Lewin. Subsequently, both Birenbaum and Zeigarnik moved to Moscow where they worked under Vygotsky's supervision from the beginning of the 1930s. In their case study, patient A, who suffers from epilepsy, demonstrates a number of symptoms such as undifferentiated consciousness, diffusion of "everything with anything," resembling the diffuse syncretic thinking of the child. Thus, given the task of selecting appropriate cards with pictures of objects that would match the word "water," the patient proclaims that water is contained "in animals, plants in general, and in all solid objects," and therefore, in addition to the pictures of a watering can, a jug, and a cup, he selects images of a horse, a mushroom, and a rooster (Birenbaum and Zeigarnik, 1935, p. 77). It seems that what we observe is an outcome of theoretical generalization; however, in fact, the patient's choice is determined, on the one hand, by his pathological inability to focus on necessary and sufficient features of the notion "water" and immediately relate to its objects such as everyday tools and equipment, and, on the other hand, by the attraction of the concrete and visually appealing depictions that the patient presently sees on the table in front of him. He appears to be bound by the "visual field" and feels compelled to include in his generalization and, thus, selection of cards all images that attracted his attention at this instant. High theoretical generalization in essence turns out to be a syncretic operation of joining a heap of objects that are not sufficiently related with each other in the context of this specific situation.

These peculiarities of thinking of patient A are particularly notable in the attempt to give a definition of the word "occupation,"¹⁴ which requires having the ability of higher-order abstraction:

Occupation may be related to a kind of human activity – no, it is characteristic of animals' activity too; for instance, a squirrel and nuts: it is preoccupied with storing nuts for the winter – therefore, this is a kind of activity of animals . . . Occupations can be different: one can be occupied with the purpose of having fun, or with the purpose of studying, with the purpose of acquiring goods. This word is also used in relation to industry, meaning that this is clothes or any other finished product. One can be occupied with literature, including creating literary pieces . . . Also, occupation can be related to school-related or political occupations. A politician, a social activist – since they are preoccupied with learning – can be called an occupation. In general, there is much to what it can be applied . . . science, arts, games . . . Well, all kinds of learning including military training, this is also an occupation. By occupation it is usual to mean the kind of activity related to learning.¹⁵ Occupations can be divided into theoretical and practical, whereas, importantly, theoretical ones pertain to humans only, and the rest – to all animal species. (Birenbaum and Zeigarnik, 1935, pp. 77–78)

¹⁴ In this context, this is a rough equivalent of the original Russian word "*zaniatie*."

¹⁵ A second meaning of the Russian word "*zaniatie*" is "learning," "training," and "instruction." This ambiguity is lost in this English translation. In order to compensate for the lack of a fully adequate translation of this paragraph, the reader is invited to think about a hypothetical situation in which an English-speaking patient in this context would digress into thinking about "occupation" understood as "the seizure and control of an area, especially a foreign territory, by military forces."

We can see that the patient made full circle in his argument and touched upon all life situations that came to his mind; however, he never presented the requested definition of the word. His thinking demonstrates the misbalance between the level of generalization and the concrete material. The patient does not reach the needed intersection between the topic and the level of abstractness – in Vygotsky’s words, the required longitude and latitude of the concept – and seems to be involuntarily floating in both dimensions. On the one hand, his speech reveals the unguided rises and falls of abstraction (“high theorizing”), and, on the other hand, he keeps getting distracted from focusing on the specific subject of discussion and gets involved in talking about too concrete and, thus, unrelated issues.

This and other clinical studies conducted by Vygotsky and his associates demonstrate the practical realization of the methodological principle of the interconnection between the development and degradation of psychological processes, according to which degradation starts with the most recently acquired, the highest processes, and uncovers earlier, more “archaic” strata of psyche. Therefore, disease is a continuous regress to earlier stages of the development of consciousness or retreat to an earlier form, like we observe in the case of patient A. Vygotsky and his colleagues demonstrated that many pathological states are manifested with a specific variation of the failure to reach the adequate extent of commonality and related disruptions in other domains such as motivation, volition, and practical action. These researchers identified a number of operations of consciousness in a healthy state, and explicated how the operations of consciousness disrupt in a range of pathological cases. Unfortunately, these valuable works of the 1930s are rare, they have never been republished, and, therefore, remain largely unknown.

Sense as an outcome of sign-mediated operation

Preoccupied with work on word meaning, Vygotsky succeeded in taking into account mainly the cognitive sphere of consciousness. Although in practice Vygotsky and his associates were also dealing with motivational and volitional psychological processes, the results of these studies could not be fully explained with the help of the conceptual apparatus of their theory, in which the conceptions of “higher” emotions, will, and personality had not yet been developed.¹⁶ In 1931 Vygotsky launched a new project, and started writing a new large monograph on emotions, in which he was going to develop a theory of “higher” emotions. He never reached this goal. Vygotsky did a meticulous critical analysis of the existing contemporary theories of emotions, but never advanced to the positive part of the treatise – to the new teaching on emotions – and eventually, in 1933, the work on the book came to a halt. Half a century later, the unfinished manuscript was

16 In fact, the members of the Vygotsky Circle frequently used the conceptual apparatus of Kurt Lewin’s theory and, thus, by doing this they merged Vygotskian theory with Lewin’s topological and vector psychology that was particularly successful in explaining motivational-personality components of psyche. Notably, in some instances the merger between the two theories was not always correct and methodologically rigorous.

first published in Russian (Vygotskii, 1984a). In the opinion of the author of this chapter, it was the overemphasis on the intellect, quite characteristic of Vygotsky's theoretical standpoint, that prevented him from fulfilling the task. Specifically, the major handicap that he failed to overcome was the deliberate isolation of interfunctional connection of "thinking-affect" that he put into the foundation of his theory. In Vygotsky's view, intellect a priori, by definition and necessarily, dominated in this pair, therefore emotional processes were doomed to be treated exclusively through the lens of thinking: first, as the processes that are always subordinate and guided; and, second, without taking into consideration the distinctive specificity of the domain of emotions. Having realized this limitation of his approach, Vygotsky spent the last two years of his life trying to overcome the intellectualistic bias of his theory and to find the integrative point of view that would equally well account for cognitive and emotional-motivational spheres of psyche that, for instance, surfaced in his repetitive proclamations of the inseparable "unity of intellect and affect," quite often in his writings and public presentations of the last two years of his life (see e.g. Vygotskii, 1934a, pp. 14–15).

The first notion to appear in Vygotsky's theory that reflected the motivational aspect of consciousness was the notion of *sense*. One of its definitions appears, for instance, in the final chapter of *Thinking and speech* where "sense" is interpreted as the "aggregate of all the psychological facts that arise in our consciousness as a result of the word" (Vygotsky, 1987, p. 276). Earlier we mentioned that semantic features behind a word in actual speech are most diverse and redundant, and not all of them are eventually included in the structure of word meaning. According to Vygotsky, word meaning emerges as a result of condensation and concentration of the multitude of senses and in a way represents an "extract" of the whole richness of our interrelations with the world:

Sense is a dynamic, fluid, and complex formation which has several zones that vary in their stability. Meaning is only one of these zones of the sense that the word acquires in the context of speech. It is the most stable, unified, and precise of these zones. . . . Meaning is a comparatively fixed and stable point, one that remains constant with all the changes of the word's sense that are associated with its use in various contexts. (Vygotsky, 1987, p. 276)

From the perspective of the binary opposition between the individual and the universal, sense represents the extreme of the individual in the process of communication and generalization, whereas word meaning characterizes the other extreme of the universal. Word meaning is used in the process of communication with other people, unified, and adjusted to the social norms of word use, which allows for understanding between the interlocutors. The transformation of sense into word meaning is a complex dynamic process that takes place in the inner speech and is accompanied by the loss of a number of personal nuances and shades of meaning, emotional and semantic connotations, etc. This is why sense is essentially larger than word meaning. Vygotsky points out that, ultimately, sense "depends on one's understanding of the world and on the internal structure of personality as a whole"

(Vygotsky, 1987, p. 276, with correction of an error of translation). Thus, sense is an integrative unit that in principle could be used in the studies on the dynamics of consciousness and that appears to be more intimately tied to personality than word meaning.

And yet, the ideas on sense in Vygotsky's *Thinking and speech* remain vague and self-contradictory. He discusses certain peculiarities of sense-making, but does so within the framework of pure *phenomenology* (if not *introspectionism*), and introduces neither the method of research, nor the ultimate definition of "sense." In its most explicit form the notion of sense is dealt with in the record of Vygotsky's talk of 1932: the brief notes of this presentation were later published as "The problem of consciousness" (Vygotskii, 1968). Vygotsky underlines that "sense-making is the main function of a sign" and, thus, postulates that the outcome of sign-mediated operation is sense, however, not as an isolated element of consciousness, but as a special organization of consciousness understood as a system of meaningful actions:

Sense is what enters into meaning (the result of the meaning) but is not consolidated behind the sign . . . Sense is broader than meaning . . . Consciousness as a whole has a semantic structure. *We judge about consciousness on the basis of its semantic structure, for semantic structure of consciousness is the relation to the external world.* (quoted by Vygotsky, 1997c, p. 137, with correction of the errors of translation; emphasis in the original text)

More concretely, we can state that sign generally (and word in particular) establishes a special format of psychological activity, in which this activity becomes reasonable and meaningful. Consciousness is this format, i.e. it is mutual interrelation of the components of psychological activity. Thus, it is not a "thing," neither is it a "process," but rather the interrelation of processes:

The connection between the activities – this is the central point in the study of each system . . . The problem of the connection must be opposed to the atomistic problem. *Consciousness is primordially something unitary* – this we postulate. *Consciousness determines the fate of the system, just like the organism determines the fate of the functions.* Each interfunctional change must be explained by a change of consciousness as a whole. [Vygotsky, 1997c, p. 130.] . . . the sign changes the interfunctional relationships. [Vygotsky, 1997c, p. 131.] *Speech produces changes in consciousness.* "Speech is a correlate of consciousness, not of thinking." [Vygotsky, 1997c, p. 137; emphasis in the original text.]

Vygotsky also indicates direct dependence of sense not only on sign and meaning, but also on psychological motive: "Real understanding lies in the penetration into the motives of the interlocutor. *The sense of the words is changed by the motive.* Therefore, the ultimate explanation lies in motivation" (Vygotsky, 1997c, p. 136; emphasis in the original text). Therefore, sense is connected with the external structures such as sign, and the internal ones such as meaning and motive. These very components determine the structure of consciousness as the system

of meaningful actions and serve as the basis that allows operationalizing and empirically investigating the evasive sense.

The analysis of Vygotsky's theory that his distant associate Piotr Galperin conducted a year after his death clarifies and expands Vygotsky's original project. In his paper of 1935 (first published in Russian in 2009) Galperin slightly revised the notion of *sense* and presented it as the dynamic unity of not three, but four components: *goal*, *motive*, *sign*, and *meaning*. These components

enter into the system of real activity that, driven by the motive, solves the problem with the help of meaningful means. In this meaningful activity they form not two sides – external and internal – and the situation is not such that on the one hand we have goal and means, and on the other hand there is motive and meaning. But these are not consequent stages of the unfolding activity either: it is so that as if they all form a structure that is extended in time so that at every stage that we experience there are all other ones. This unity of motive, meaning, real means and the defined goal is the unity of the meaningful action, and *this actual unity is in fact the sense*. Separation of one component from others leads to the loss of sense . . . Only including all these into an action leads to the situation when motive becomes motive, the goal turns into something that requires solution and action, and activity acquires sense. (Galperin, 2009, p. 120; emphasis in the original text)

Apart from a similar interpretation of Vygotsky's ideas, there were also other attempts, partially caused by the ambiguous use of the notion of sense in *Thinking and speech*. However, Vygotsky himself indirectly supported Galperin's interpretation. The notion of sense understood as the unity of motive, meaning, and means appears for the last time in the known published works of Vygotsky in his article "The problem of mental retardation" (Vygotskii, 1935). Although this paper is a response to Kurt Lewin's publication of 1933 (Lewin, 1933, 1935), and discusses a series of concrete, empirical studies, in a certain sense it summarizes the development of the whole of Vygotsky's theory as at the beginning of 1934, that is, by the time of Vygotsky's death.

At the end of the 1920s, Vygotsky revealed the extremely close proximity of his ideas with those of Lewin, initiated personal contacts and intellectual exchange with him (Yasnitsky, 2012a, 2012b), and started learning his *experimental method* and the techniques of *formal-dynamic analysis* of consciousness that equip the researcher with the tools for investigating the dynamics of consciousness in cases of both normal and abnormal development. These techniques allowed him and his collaborators to get the above-mentioned results of empirical clinical studies of the workings of consciousness in pathology. Following in the footsteps of Lewin and developing their understanding of the essence of psychological processes, Vygotsky and his team replicated a series of other experimental techniques of the Lewin group, in particular the study methods of Anitra Karsten on psychological satiation (Karsten, 1928, 1976), Gita Birenbaum's research (1930) on forgetting intentions, and Maria Ovsiankina's (*alias* Rickers-Ovsiankina) study on the resumption of interrupted actions (Ovsiankina, 1928; Rickers-Ovsiankina, 1976). Applying the

same experimental method to normal and to mentally retarded children, Vygotsky demonstrated that each of these cases is characterized by the unity of emotion and intellect, specific configuration of consciousness as the system of meaningful actions, and distinctive dynamics pertaining to them.

Thus, in the first series of experiments, Vygotsky and his colleagues investigated the processes of mental satiation and those means that helped to sustain activity; the study used the experimental method of Karsten, in modification of Solov'ev-Elpidinskii (Solov'ev-Elpidinskii, 1935). It turned out that in the case of "feeble-minded children" the deliberately meaningless – therefore, in principle unrewarding and essentially boring – activity could be sustained by means of making changes in the concrete settings of the experimental situation. The attraction of the task of drawing something would increase considerably when ordinary pencil was replaced with a red and blue one, then, this one was replaced with a set of colored pencils, then, the pencils would be replaced by a set of colored paints and a brush. A quite different situation was observed in the case of a normally developed child for whom

It was sufficient to change the meaning of the situation without ever changing anything in the situation itself . . . Thus, with the child who interrupted his work, it was sufficient . . . to ask him to work a little bit more in order to show another child – or to teach him – how the work needs to be done. The child would assume the role of the experimenter and performed in the capacity of a teacher or an instructor, therefore, the sense of the situation would change for him . . . Then, we could – like it was in our experiments – consistently take from him . . . the paints, substituting these with colored pencils, then take colored pencils and provide red-blue pencil instead, then replace the red-blue pencil with the ordinary pencil, and, finally, take this latter and give an unattractive pencil stub instead. The sense of the situation determined for the child the full force of his affective drive related to the situation, regardless of the fact that the situation itself was increasingly losing all attractive features related to the objects and immediate activity with them. We could never get this opportunity to influence the affect from the top, by merely changing the sense of situation, with the feeble-minded children of the same age. (Vygotskii, 1935, p. 31)

Similar results were obtained in other experimental studies that used the techniques of Ovsiankina and Birenbaum. The mentally retarded child was bound by the situation, he would resume interrupted activity only if he had an unfinished drawing in front of him, and could substitute an interrupted activity with another one, similar in its nature (e.g. to draw a dog – to draw something else instead), but not in its sense (e.g. to draw a dog – to create a plasticine figure of a dog). The underdeveloped child would demonstrate the drive to act, the persistence, and the attention comparable or even superior to those of the normally developed child; however, his ability to be flexible and to deliberately influence the situation "top-down," i.e. by changing its sense, was highly limited. The dynamics of affect in such children were rigid and slow, the ways of avoiding or bypassing the unpleasant situation did not emerge, and no attempts were made to change the unfavorable situation.

In all these experiments the normally developed child in comparison with the "feeble-minded child" demonstrated a more flexible approach to the solution of the

problem, which was possible due to the child's ability to change the overall sense of the situation, i.e. his or her own attitude to the task. Such a child was notably freer in relation to the concrete settings of the experiment: earlier we discussed the "freedom from the visual field" and the "freedom in concepts," which in this instance was also the freedom of purpose or the freedom of affect. In this, all components of sense would change: a new goal would appear, according to which the task was revised and reformulated, a new motive emerged, new means were discovered, and the entire sign-mediated operation would develop differently from the psychological perspective.

Experimental studies of Vygotsky and his co-workers that were conducted with the help of the techniques developed by the Lewin group are of interest primarily as research in which the notion of sense served as the theoretical core of the psychological investigation: in these studies, sense is the main controlled variable. The given examples provide a demonstration of how exactly the researcher can modify the extent of the meaningfulness of actions in the course of the experiment. In his paper "The problem of mental retardation" Vygotsky discusses the parameters of the assessment of consciousness, including the extent of its differentiation and other dynamic features in normal and abnormal development. These experiments are also important as a demonstration of the use of the method of investigating consciousness that was proposed by Vygotsky. This method that he referred to as the "semic" analysis is the tool for the study of the meaningful attitude to the environment on behalf of the conscious individual. Vygotsky analyzed an overall, holistic attitude of the child to the task that is expressed in concrete actions open to observation and empirical research. The experimental situation might vary in each of the four components of sense: we can alter the motive by changing the instruction and study how it is reflected in sense as a whole, or the sign (i.e. the means for the solution of the problem) can be changed by providing the subjects of the experiment with different auxiliary tools, etc. Besides, of considerable interest is Vygotsky's interpretation of the experimental method of Kurt Lewin, who seems to have been the first to have introduced into psychology the method of well-rehearsed, scenario-based quasi-experiment that remains one of the most promising experimental designs in psychology to date (Dembo, 1993; Mahler, 1996; Zeigarnik, 1981, 1984). These theoretical-methodological achievements, in our opinion, did not receive adequate discussion and assessment in contemporary psychology and require a special study. Likewise, the first attempt at the merger between the theories of Lewin and Vygotsky is virtually unknown and seems to be utterly important from the perspective of the perceived need to establish a general psychological theory of consciousness.

New unit of investigation of consciousness and personality: *perezhivanie*

In 1933–1934 Vygotsky initiated a transition from sense to a special unit of analysis that he refers to as *perezhivanie* – the closest Russian analog of the German *Erlebnis*, very frequently used in contemporary psychological discourse of the

interwar period – and discussed it in a series of papers, lectures, and presentations, some of which are accessible through subsequent publications such as Vygotskii, 1934b, 1984b, 1996, 2001; Vygotsky, 1994. Vygotsky vaguely identifies it as the unit “in which all main features of consciousness are given as such, whereas . . . in thinking no connection of consciousness is given” (Vygotskii, 2001, p. 213). For Vygotsky, *perezhivanie* is the interrelation between the child and the environment, the “indivisible unity of personality and situation,” related to the making sense of a situation experienced by a personality. In the lectures on child psychology of 1932–1933 Vygotsky pronounces:

The real dynamic unit of analysis . . . in which all main units of consciousness are given as such . . . that is, the full unit, from which consciousness is derived, is *perezhivanie* . . . *Perezhivanie* includes, on the one hand, environment in its relation to me, and, on the other hand, the peculiarities of my personality . . . environment acquires [a] leading role due to the *perezhivanie* of the child. This mandates deep internal analysis of the *perezhivanie* of the child, that is, the investigation of the environment that is transferred to a considerable extent into the child himself. (Vygotskii, 1984b, p. 383)

The notion of *perezhivanie* encompasses all aspects reflected in the notion of *sense*, as well as reflects the unity of the environmental and personal aspects. Therefore, Vygotsky’s theory revealed the new horizons for theoretical developments and future studies, in which the problem of personality and its interaction with the environment become the center of the entire research.

It was around 1929 that Vygotsky observed that personality is the “primary [matter that is] created together with the higher functions” (Vygotsky, 1989, p. 67). Personality is some kind of supreme principle that from the methodological standpoint is above consciousness: personality guides consciousness, it is built above it as a system of tertiary connections above the secondary, cultural ones, and uses it as an instrument of self-development and self-perfection. Therefore, the regularities of the dynamics of consciousness (for instance, reorganization of the system of psychological processes) reflect the dynamic changes in personality. Only from this perspective can the problem of consciousness be adequately resolved.

The main pathways leading to the eventual construction of the psychological theory of personality, according to Vygotsky, are the analysis of the processes of the development and degradation of psyche and consciousness. That is why *pedology*, the science of the child, and clinical psychology that studies the processes of normal and pathological development, acquired enormous importance for Vygotsky. The vast majority of Vygotsky’s works of his later period were collaboratively done by his team in either of these two fields (for an overview of these studies see Yasnitsky and Ferrari, 2008; Yasnitsky, 2011). On the other hand, understanding personality is impossible without a good grasp of speech processes, as Vygotsky observed in his earlier works, in which he described personality as a dialogue between the person’s different poles, sub-personalities, as the transferred inside system of interpersonal relations between people that includes not only meaningful others such as the immediate family of the person, but also social relations (see e.g. the

related discussion in Chapter 1 by Miller, this volume). The more personality is developed, the better the external social world is represented in the inner world of the person. Therefore, the problem of personality eventually is the knot, in which all main threads that originate in the problem of consciousness, such as the role of speech, society, environment, the problem of freedom, and the principles of the systemic and semantic nature of psyche, weave together.

The critique of Vygotsky's theory of consciousness of 1932–1934

In sum, all three models that Vygotsky created in order to build a theory of consciousness are united by the hypothesis of the *leading role of speech in the formation of consciousness*, the idea of its *systemic and semantic organization*, *speech-based construction*, and the notion of consciousness *originating from the acquisition of social norms of behavior*. Consciousness serves as the means of active relation to the environment, as the interconnection of psychological activities; it is a special form of their interrelations that integrates all psychological processes into the indivisible whole emerging on the basis of language and speech.

The analysis of Vygotsky's theory of consciousness shows that the perspectives of this theory are enormous, but they remain mere perspectives to date because the theory is still at the initial stage of its development. Assessing the state of the theory in 1935, Piotr Galperin pointed out that this intellectual system was incomplete both from "above" and "below": it did not have a theory of motivation, affect, and volition, i.e. the personality aspect as such. Similarly, it lacked a well-developed theory to explain the interrelations of the personality with the environment: in particular, ideas of "internalization," or the transfer of the social forms of behavior inside the individual psyche, remained underdeveloped at that time in terms of empirical research on the concrete psychological mechanisms of such transfer. Theoretical sketches that were made in the direction of solving these problems are not sufficiently supported with experimental and applied material. Besides, in my opinion, Vygotskian psychology is in dire need of the theories of the middle-level that would mediate between, on the one hand, general theory and methodology and, on the other hand, social practice. Theoretical hypotheses of the high level of abstraction require their "grounding" and transfer into experimental hypotheses that would clearly delineate what exactly is to be studied and how:

Thus, as of today the system does not have somebody who would act, driven by some or another motive, neither does it consider actual reality, within which his psychological life could unfold, – there is neither personality nor its interrelations with the real world. (Galperin, 2009, p. 122)

In order to rectify these mistakes and omissions, it is required to

regard the theory of consciousness as a step to the theory of personality. The key to this theory must be found in the further investigation of the meaningful action,

and first of all, the investigation of the process of the formation of the task and the motive. (Galperin, 2009, p. 122)

Therefore, it is necessary to develop concrete applications of the principles of the semantic and systemic nature of consciousness; extend the principle of the unity of affect and intellect to all stages of ontogeny (including the earliest stages of human development); investigate individual development not as the history of the system of higher psychological processes, but from the perspective of personality development; return personality to the environment; explore the mechanisms of the translation of social experience from the point of view of their concrete instantiation, etc. In sum, what is needed is the concrete realization of the theory in order to expand the implicit opportunities it offers to the researcher.

In relation to Vygotsky, all these criticisms are no doubt justified. Still, one needs to keep in mind that some requirements of the evolving psychological theory of Vygotsky were met in the studies of his students, followers, and former associates. Thus, for instance, a theory of personality was developed by Lidia Bozhovich and her colleagues, a theory of child development loosely related to Vygotsky's ideas on *perezhivanie* can be found in the work of Daniil Elkonin, and an attempt at a theory of emotions was made by Aleksandr Zaporozhets. In addition, Galperin – as the author of the theory of stepwise formation of mental actions – demonstrated what psychological processes might be hidden behind the term “internalization.” Besides, numerous studies along the lines of Vygotskian research, but within a range of other conceptual frameworks, were done by Soviet and international scholars, among which one might recall Aleksandr Luria, Nikolai Bernshtein, Sergei Rubinshtein, Aleksei N. Leontiev, etc. Historiography of psychology only now is approaching the task of the holistic reassessment of the entire legacy of Vygotsky and his circle (Yasnitsky and Ferrari, 2008; Yasnitsky, 2011, 2012c). Methodological analysis of the theory of consciousness and personality that could have emerged as a result of the theoretical synthesis of Vygotsky's and Lewin's ideas has not yet been achieved. However, the contours of the new theory of consciousness can already be discerned.

This new theory is the theory of consciousness as a non-spatial phenomenon, in which it is studied not as an entity or activity, but as a special verbal format of psychological activity that creates a meaningful interrelation with the world. Consciousness was previously compared with the stage, on which the drama of personality – its emergence and development – was performed, and later with the drama itself, that is, with those psychological processes that take place “inside” consciousness. In contrast, in Vygotskian psychology consciousness is rather a genre of an “interactive” theatrical performance, whose main participant is personality – and, by extension, the multitude of people that stand behind it. In this sense, consciousness “does not exist,” as a theater in general does not exist outside the concrete performance, and, on the contrary, it does exist to the same extent as the genre of a theatrical performance exists. Perhaps it is not surprising that the ideas of psychological analysis of consciousness as narrative, script, language game have

been spreading recently. And these processes seem to be taking place under some influence of Vygotskian thought that in its psychological fashion has yet again reminded us that *in the beginning was the word*.

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