

# Scheme of Lev Vygotsky's Theory. Part 1.

**Tatyana E. Sizikova**

Novosibirsk State Pedagogical University, Novosibirsk, Russia  
ORCID: <https://orcid.org/0000-0001-7889-2043>, e-mail: [tat@ccru.ru](mailto:tat@ccru.ru)

**Vladimir T. Kudryavtsev**

Moscow State University of Psychology & Education, Moscow, Russia  
ORCID: <https://orcid.org/0000-0002-9283-6272>, e-mail: [vt kud@mail.ru](mailto:vt kud@mail.ru)

The relevance of referring to Lev Vygotsky's works and discovering the unknowable in them is a natural phenomenon that accompanies brilliant works of science, literature, art, etc. Discoveries are accidental and non-accidental at the same time, so they are either accepted immediately or pass the "corridor" of criticism. The history of the formation of Vygotsky's psychology is also the history of our way of understanding Vygotsky. The aim of the article is to reveal what Lev Vygotsky himself might not have highlighted. We have tried to penetrate into the logic, the scheme of his thinking. It is possible to carry out the reconstruction in different ways, as evidenced by the experience of the world "vygotskopovedeniya". In this article we argue the hypothesis about the logic of triangulation by L.S. Vygotsky. Triangulation acts as a method of analyzing the psyche with the help of "units of analysis of the whole". In our opinion, L. S. Vygotsky analyzed the psyche as a triangular dynamic network. The network structure allows to reveal new, logically substantiated connections between its elements. He constructed a logical "construct" allowing to confirm it empirically. The basis of the network is formed by trinities of mental functions and connections between trinities, when the same function is included in different trinities. A trinity is formed and in its development represents a synthesis of the elements forming it. Each mental function is a whole and reflects in itself a larger whole, i.e., the psyche. It is in the structure of the trinity network that this is most clearly traced. The analysis undertaken by L.S. Vygotsky undoubtedly belongs to the post-nonclassical type of scientific rationality.

**Keywords:** unit of analysis of the whole, triangular dynamic network, psyche, schema, triangulation, post-nonclassical type of scientific rationality.

**Acknowledgements.** The authors are grateful to the organizers and partners of the International Congress "L.S. Vygotsky and A.R. Luria: Cultural and Historical Psychology and Issues of Digitalization in Social Practices" (November 15-17, 2022, Novosibirsk) for their great efforts in preparing and holding it.

**For citation:** Sizikova T.E., Kudryavtsev V.T. Scheme of Lev Vygotsky's Theory. Part 1. *Kul'turno-istoricheskaya psikhologiya = Cultural-Historical Psychology*, 2023. Vol. 19, no. 1, pp. 9–17. DOI: <https://doi.org/10.17759/chp.2023190202>

# Схема теории Льва Выготского. Часть I

**Т.Э. Сизикова**

Новосибирский государственный педагогический университет (ФГБОУ ВО НГПУ),  
г. Новосибирск, Российская Федерация  
ORCID: <https://orcid.org/0000-0001-7889-2043>, e-mail: [tat@ccru.ru](mailto:tat@ccru.ru)

**В.Т. Кудрявцев**

Московский государственный психолого-педагогический университет (ФГБОУ ВО МГППУ),  
г. Москва, Российская Федерация  
ORCID: <https://orcid.org/0000-0002-9283-6272>, e-mail: [vt kud@mail.ru](mailto:vt kud@mail.ru)

Обращение к работам Л.С. Выготского актуально, поскольку оно сопровождается открытием в них непознанного. Открытия случайны и неслучайны одновременно, поэтому либо принимаются сразу, либо проходят «коридор» критики. История становления психологии Л.С. Выготского — это

и история нашего пути понимания Выготского. Цель статьи — раскрыть то, что Л.С. Выготский, возможно, и не выделил бы. Мы попытались проникнуть в логику его размышления. Реконструкцию можно осуществить разными способами, о чем свидетельствует опыт мирового «выготсковедения». В статье мы аргументируем гипотезу о логике построения триангуляции Л.С. Выготским. Триангуляция выступает как метод анализа психики с помощью «единиц анализа целого». По нашему мнению, Л.С. Выготский анализировал психику как триангулярную динамическую сеть, поскольку структура сети позволяет раскрывать новые, логически обоснованные связи между ее элементами. Им строился логический «конструкт», позволяющий подтверждать его эмпирически. Основу сети составляют триединства психических функций и связи между триединствами, когда одна и та же функция включена в разные триединства. Триединство формируется и в своем развитии представляет синтез образующих его элементов. Каждая психическая функция является целым и отражает в себе большее целое, т. е. психику. Из триединств именно это наиболее рельефно прослеживается в структуре сети. Анализ, осуществленный Л.С. Выготским, несомненно, относится к постнеклассическому типу научной рациональности.

**Ключевые слова:** единица анализа целого, триангулярная динамическая сеть, психика, схема, триангуляция, постнеклассический тип научной рациональности.

**Благодарности.** Авторы благодарны организаторам и партнерам Международного конгресса «Л.С. Выготский и А.Р. Лурия: культурно-историческая психология и вопросы цифровизации в социальных практиках» (Новосибирск, 15–17 ноября 2022) за огромную работу по его подготовке и проведению.

**Для цитаты:** Сизикова Т.Э., Кудрявцев В.Т. Схема теории Льва Выготского. Часть 1 // Культурно-историческая психология. 2023. Том 19. № 2. С. 9–17. DOI: <https://doi.org/10.17759/chp.2023190202>

---

## Introduction

For more than a century psychology as a science has been in search of its foundations, which is perfectly natural for development, if it really takes place. Turning to the founders of science, revising their views, discovering what the paradigmatic framework did not allow us to see before, is an indispensable condition of development. The anthropological crisis of the early twentieth century affected all spheres of knowledge. The ontologically and methodologically complete project of L.S. Vygotsky, which synthesized natural-science and humanitarian (art, literature, philosophy) assumptions of the time, stepped far beyond them and is most relevant in our time of change.

As A.A. Puzyrej [17] denoted in his report devoted to the centennial of L.S. Vygotsky, disclosing, with the help not of Shakespeare's "Hamlet", but of Vygotsky's Hamlet, the turn to psychology, not of experience, not of personality development, but to psychology, distinguishing between "mystery" and "secret", the psychology of direct experience. Experience in our life is the experienced whole, the human state when he is aware of his state with all its nuances as a whole or "discontinuous. Integral structures of personality are responsible for the birth of such awareness and subsequent actions, as well as those that led to it. We find the most detailed concept of holistic structures in the psychology of L.S. Vygotsky. His "units of analysis of the whole" are the integral structures of personality, which are responsible for its development. We will proceed in this direction in our reasoning and will try to show what has not been the

object of psychology's close attention, but has existed "in secret" as the foundation of L.S. Vygotsky's logical scheme of constructing his theory of psychology, which reveals the "secret" of the psyche as a whole.

The need to extract the foundations of a new psychology from the works of L.S. Vygotsky is not disputed. New or developing L.S. Vygotsky's views? The words of Socrates cited by L.S. Vygotsky in "The Tragedy of Hamlet, Prince of Denmark by W. Shakespeare" characterize not only "reader criticism," but also the attitude towards the genius ideas presented in science, to which we relate the views of L.S. Vygotsky: "Socrates: "I went to the poets and asked them exactly what they wanted to say. And almost all of those present were better able to explain what these poets had done than they themselves. [10, p. 344]. It turns out that in our article we are helping Vygotsky to understand himself, how he thought, what his logic was, and thus to understand himself and our time better.

For researchers, L.S. Vygotsky's works are an enormous treasure trove, prompting discussions about the subject, method, boundaries and ontology of psychology. In the present article, we address L.S. Vygotsky's question about one psychology and his desire to develop it. What does one psychology mean to L.S. Vygotsky? Is it psychology revealing ultimate categories (hence the disputes about the subject) or psychology exhausting grounds (going beyond psychology, for example, into art)? What is ground and is the category itself a ground? Such questions and searches of answers lead away from L.S. Vygotsky's understanding. We assume that "one" can only be something that has tried to grasp the whole

and integrity (as a process) from the inside and outside (from the focus of other sciences and paradigms). Why is it that the psychology developed by L.S. Vygotsky can be "alone"? The answer is obvious: it is built on "units of the whole" possessing the property of the greater whole of which they are elements. The methodological maturity of a theory is to distinguish "units of the whole," but each theory distinguishes different units, e.g., substrate units or units that do not fully reflect the whole or are parts of it at all. L.S. Vygotsky took as units of analysis such "units of the whole" that reflect in themselves the whole, themselves being the whole; they generate and contribute to each other; they form different unities in relations among themselves and do not form a hierarchy, which differs essentially from the units of system analysis and substrate units, though he assigned the metaphor of "cell" (substrate unit) to "his units" [18]. In L.S. Vygotsky's works, we encounter "units of analysis" that are identical with the substratum unit and modality. This is what our further research is about.

The analysis of "psyche with the help of "units of analysis of the whole" in works of L.S. Vygotsky was studied by V.P. Zinchenko [13], B.G. Meshcheryakov [15], B.I. Bespalov [4], S.M. Morozov [16] and others. The aim of our article is not to reveal the method of analysis by "units of the whole", but to show the scheme of building connections between these "units".

Studying L.S. Vygotsky's works, discovering something new each time, as when repeatedly reading a multi-vector and multi-layered novel with many actors, we turned our attention to the previously overlooked trinity of "units of the whole". This allowed us to form a hypothesis of L.S. Vygotsky's application of triangular connections between "units of the whole" and the construction of a triangular dynamic network of the psyche with the help of "units of analysis of the whole".

### **L. S. Vygotsky is a post-nonclassic**

Vygotsky's work corresponds to the post-nonclassical type of scientific rationality. This statement requires clarification. Most psychologists are of the opinion that L.S. Vygotsky applies dialectical logic to constructing his notion of the psyche. S.M. Morozov's conclusion is indicative – "The main thing that L.S. Vygotsky accepted from Marxism is the dialectical method of construction of a subject of research. The leading link in the process of such construction – allocation of unit of the analysis by abstraction of "the simple beginning", "cell and further tracing transformation of "cell" into the unit, representing "molecule" – carrier of the basic properties, inherent in a complete subject of psychological research" [16, p. 109]. Such representation is not singular. We do not fully agree with this assertion. On the one hand, in L.S. Vygotsky, the "unit" has development, on the other

hand, the "unit" initially reflects the entire psyche in its explicit and potential state, otherwise its development would have to be viewed hierarchically rather than qualitatively, which L.S. Vygotsky was against. In his psychology, the natural function is transformed; consequently, it is not preserved in that natural form, but is present in a new qualitatively different form in the mental function.

It is necessary to note a peculiarity inherent in scientists: a paradigmatic vision of the subject of research. At the time of the classical: natural-scientific paradigm in L.S. Vygotsky, attention was drawn to his solution of the psychophysical problem and his reference to the biological bases of child development was emphasized. About this E.E. Kravtsova stated simply that they saw that "everything that was done by L.S. Vygotsky and his followers does not go beyond the limits of traditional, classical science" [14, p. 61]. She also points out that "it is impossible not to agree with one of the researchers of L.S. Vygotsky's work, A.A. Puzyrej who emphasizes that L.S. Vygotsky was not engaged neither in natural mental functions, nor in higher, he investigated the process of transformation of natural functions into higher, cultural ones. In order to study this process, the psychologist should be on two positions simultaneously – he or she should consider both what the person has today, and his or her zone of the nearest development" [14, p. 63]. Under the dominance of the non-classical paradigm, L.S. Vygotsky's works were characterized by dialectics, the unity of the biological and the social, and a new way to analyze the psyche and experiment – the genetic method, in which the historical method is dissolved. The opinion that L.S. Vygotsky's views correspond to the postneoclassical paradigm is presented in the works of A.G. Asmolov [1–3], V.T. Kudryavtsev [3], B.D. Elkonin [20], S.M. Guseltseva [12], T.G. Bohan [5], T.E. Sizikova [18], etc. Each of them singles out this or that key thing in the concept that corresponds to the modern paradigm: the idea of personality, higher mental functions, the method of research "units of the whole", etc. T.G. Bohan [5] deduces self-organization in the works of L.S. Vygotsky. However, we would say that L.S. Vygotsky's works reveal free cultural self-organization. It is in the post-non-classical paradigm that the subject of research is a self-developing and self-organizing system. Unity, integrity, reflection by a system element of the properties of the whole system and the whole is not equal to the sum of its parts, but are the basic principles, respectively, and the logic of scientific research is dialectical, but not closed on the allocation of Hegelian synthesis. In the new logic, the synthesis of not two but three or more elements is possible, and the synthesis of the trinity is not at the expense of one having another, but at the expense of unity. Unity is a type of synthesis known since ancient times and preserved in the trinity studied by theology.

### **On the method of theory construction**

The historical situation at the beginning of the last century, as at the time of the emergence of scientific knowledge in the sixteenth and seventeenth centuries, developed within two opposing determinants: materialism and idealism. L.S. Vygotsky, who was observant and educated, understood the limitations of these approaches, and in his works he devoted attention to a thorough analysis of the concepts of psychoanalysis, functionalism, structuralism, behaviorism, Gestalt psychology, personalism, reflexology, etc., step by step building the middle way for his scientific concept, looking at the concepts and connections between them considered in these scientific directions from a different angle.

Finding limitations and "discontinuities" in the logic of existing approaches of research of the psyche, L.S. Vygotsky, as he himself wrote, constructed a scheme: "... The scheme obtained by us in the course of research, of course, cannot be regarded as correctly reflecting the real process; development... It would be a great mistake to regard this schematic representation... as something more than a scheme. Quoted by A.N. Leontiev, A.R. Luria, and B.M. Teplov in the preface to L.S. Vygotsky's *Development of Higher Mental Functions* [11]. We attempt to reveal L.S. Vygotsky's scheme from the focus of postnonclassical scientific rationality. Vygotsky's interfunctional relations are based on the principle of triangulation: the whole he describes is a unity of three functions, their synthesis, which gives rise to a qualitative leap. Unity is not identity and means a common of different things. L.S. Vygotsky singles out a whole from reality, constructs it, reveals its internal connections. The whole, not equal to the sum of its parts, refers not only to the psyche, but is multidimensional and includes sociocultural, activity and communicative conditions. Earlier, analyzing "free action" [19], we encountered in L.S. Vygotsky a triple, rather than double, connection between the functions, as was traditionally established in the direction of L.S. Vygotsky's research analysis, and we approached the disclosure of the network structure of the psyche in his works. In the present article, we will reconstruct L.S. Vygotsky's scheme of construction of psychology. We would like to draw attention to the fact that the scheme and the method of research differ. Vygotsky's genetic-historical method of research is not a scheme of theory building.

### **Triangular relations of the "whole"**

Vygotsky's psychology is a "living" dynamic system. He concentrates on relations between different functions of the psyche; he does structural, functional, genetic and historical analysis as a single analysis of development of the psyche. He cites, as established in research

works of L.S. Vygotsky, the dual relationship between mental functions, for example, between affect and intellect, perception and attention, memory and attention, perception and memory, memory and thought, etc. The conclusion about duality is not without foundation. But even now, after reading about these connections, the researcher will think of a triple connection, and the connection of each "triangle" with another "triangle."

Consider carefully the connections highlighted and we see two related triangles: "perception – attention – memory" and "affect – intellect – thought." The triangles are obvious. "Where is the connection?" – the researcher will ask. The connection is implicit, it is through thought, thought is stored in memory, and in the work of thought there is memory, thus L. S. Vygotsky points to the connection of thought and memory. But by means of what? By means of the sign, in this connection – the word. Thus, we face not two, but three "triangles": "perception – attention – memory," "affect – intellect – thought," and "memory – thought – word. All three are interconnected, and what we wanted in our reasoning to represent as a connecting link turned out to be equal and in line in the final point of reasoning. In doing so, we have presented a fragment of the network of the psyche as developed by L.S. Vygotsky. Such a network makes it possible, from whichever end one takes, to pull the entire network together and to trace, more visibly, the connection in the trinity of mental functions and, more covertly, the connection between the trinities.

Reading Vygotsky's "Lectures on Psychology," starting even from the table of contents, we can get the impression that L.S. Vygotsky takes one mental function and studies it, thus sort of dividing the psyche into its component parts. Paying tribute to the tradition, already established in psychology, of presenting each mental function independently, L.S. Vygotsky, after expressing his attitude to various approaches to the study of this function, correctly leads the researcher to connections forming in the genesis of this function. As a result, the triangular connection of perception, meaning and meaning; memory, visual thinking and perception; speech, word and perception; perception, motor and feeling; thinking, image and word; will, affect and thinking; sound, thought and meaning; and other variations of the connection, dynamic, involving the same function in different "troikas." This is what refers to triangulation, and triangulation of a special kind, not the kind presented in geodesy or by Kurt Levy in his "field." It can be confused with the one in which every two mental functions find a third. Thus, meaning, sign, word, etc. are found. At the same time, when development is included in the triangulation, it is found that the connection is dynamic and constantly reconfigured within the trinity, and, for example, word and intellect "find" the will. Consequently, depending on the focus of consideration, L.S. Vygotsky shows those or other connections

in the trinity that are equal, dynamic, and developing. These characteristic properties of connection also apply to connections between trinities, because any of the elements of a trinity in the network necessarily enters into other trinities and cannot fail to manifest in genesis its inherent connections included in its development from other trinities. The psyche, according to L.S. Vygotsky, is strict in its structure; it is difficult to describe it, and the network structure creates additional difficulties and requires the researcher to be able to "grasp the whole", which is characteristic of L.S. Vygotsky. Triangulation is a postneoclassical method that allows one to considerably broaden the cognitive perspectives of analysis, which, perhaps, L.S. Vygotsky did not bring to the final rigorous formality.

Here are a few examples given by L.S. Vygotsky, which we consider as arguments for our ideas about his triangular scheme.

1. Vygotsky develops the concept of a connection between intellect and affect, overcoming the gap between them in classical psychology. The connection has acquired a new quality — unity, which represents a dynamic triad (triangular) system. He writes: "...there is a dynamic semantic system that is a unity of affective and intellectual processes" [9, p. 22], and we remember that where a dual relationship is represented, there is necessarily a third link — meaning or sign. This new system allows us to explore both the influence of thinking on affect and the reverse influence of affect on thinking through the regulating function of meaning. "Conscious function, acquires other possibilities of action. To be aware is to a certain extent to be mastered... Things do not change from the fact that we think them, but affect and its associated functions change according to being conscious. They become in a different relation to consciousness and to a different affect, and consequently their relation to the whole and its unity changes" [6, p. 251]. L.S. Vygotsky deduces the connection of this dynamic triangulation with the will, motive, need, interests, motives, i.e., what directly directs thought, through which one's attitude toward reality is formed. Another important result of the unity "affect — meaning — intellect" is the idea. It is the idea that can be regarded as the substrate unit of this unity. L.S. Vygotsky, having undertaken at the end of his life an in-depth study of Spinoza's writings on passions, placed even greater emphasis on the regulating function of meaning and linked this unity with freedom.

2. Triangular connections form a network among themselves — a triangular network. The word formed as a result of the triangulation "sound — meaning — thought" is a unit in another series of triangular network of psychological functions and forms in its unity with thinking and speech another unit of the whole — communication. Reading L.S. Vygotsky, it is not difficult to single out such connections — they are prescribed by him with extreme precision. Here are two quotations

from his work — "Thinking and Speech: "The meaning of a word, which we have just tried to reveal from the psychological side, its generalization represents an act of thinking in the proper sense of the word. But at the same time, meaning is an integral part of the word as such; it belongs to the realm of speech as much as to the realm of thought. A word without meaning is not a word, but an empty sound. A word devoid of meaning no longer belongs to the realm of speech. Therefore, meaning can be regarded equally as a phenomenon, speech by its nature, and as a phenomenon belonging to the realm of thought" [9, p. 17]; "Speech as though combines in itself both the function of communication and the function of thinking, but in what relation these two functions stand to each other, what has caused the presence of both functions in speech, how their development occurs, and how both are structurally united among themselves — all this has remained and remains unexplored up to now. Meanwhile, the meaning of a word represents in the same measure the unit of these both functions of speech, as the unit of thinking" [9, p. 17]. For the same unit to be a unit of different wholes, which in turn are units of other wholes and other units, it is necessary to perceive the world as a network and to construct the object under study as a network. This is what L.S. Vygotsky did, in our opinion. The rows of triangulation are not built linearly; this is also one of the features of Vygotsky's vision and thought of the psyche. He could fit several rows of triangulation in one inference. Here is how he does it: "A word is almost always ready when a concept is ready. Therefore, there is every reason to consider the meaning of a word not only as a unity of thinking and speech, but also as a unity of generalization and communication, communication and thinking." [9, p. 19]. The meaning in these unities is the third unit that links and regulates the dynamic equilibrium of the other two units. He categorizes these systems as "sense intellectual dynamic".

3. The generation of some rows of a triangular network by other rows can be traced on the example of L.S. Vygotsky's study of memory. He singles out the process of substitution of some functions by others as a transition from one state of the triangular network to another. "The point is this: when you study mediated remembering, that is, the way a person remembers, relying on known signs or techniques, you see that the place of memory in the system of mental functions changes. What in direct remembering is taken directly by memory, is taken in mediated remembering by means of a series of mental operations which may have nothing to do with memory; there is, therefore, a sort of substitution of one mental function for another. In other words, as the level of age changes, not only and not so much the structure of the function which is designated as memory changes, but the nature of the functions by means of which memorization occurs changes, and the interfunctional relation connecting memory to other functions also changes" [7,

p. 392]. Interfunctional changes are the source in the triangular network.

4. We have distinguished triangular relations in L.S. Vygotsky's works based on L.S. Vygotsky's ability to see from different focal points and different positions and to make sense of reality, not only mental reality. His texts are dialectical and dynamic, not in the sense of chaos in the free designation of these or those phenomena, but in the sense of precise and clear designation for the solution of certain tasks. For L.S. Vygotsky everything is functional, any naming makes sense and solves the task of highlighting development to organize learning. L.S. Vygotsky was aware of this and wrote in his work on defectology: "In our studies of higher psychological functions we have always seen that meaningful and active remembering and attention are one and the same thing, only taken from different sides: that one can speak of logical attention and logical memory with the same right that one speaks of logical attention and arbitrary memory, that higher psychological functions are intellectualized and volitional functions at the same time and quite equally, that awareness and mastery go hand in hand" [6, p. 251]. Such a view directs attention to qualitative changes within the triangular series and confirms its dynamic essence.

### **Triangular series of "whole"**

For full disclosure of the scheme of Vygotsky's theory, it is important for us to distinguish cultural functions. It is necessary to note some basic moments in his distinction of mental and psychological functions. An independent researcher of the history of L.S. Vygotsky's work wrote the following regarding the use of the terms "mental" and "psychological" higher functions in his work "Tool and Sign in Child Development: "As Peter Kyler's study shows, Vygotsky's terminology and phraseology differ markedly from the phraseology attributed to him in a number of places. For example, in many, but by no means all, cases Vygotsky's original phrase "higher psychological functions was changed to "higher mental functions in posthumous editions and reprints of his works, beginning with *Thinking and Speech (1934)*" [21, p. 589]. He points out the change associated with translation and republishing. L.S. Vygotsky himself in "History of Development of Higher Mental Functions" refers the concept of "cultural" to forms of behavior. In his work "The Problem of the Cultural Development of the Child," we meet cultural ways of thinking and cultural development of mental functions. L. S. Vygotsky writes, "We shall try to show that the cultural development of the child passes, if it is possible to trust the artificial conditions of experiment, in four basic stages or phases, successively replacing each other and arising from one another. Taken as a whole, these stages describe

a full circle of cultural development of any psychological function". [8, p. 12]. He leads us from natural functions (primitive and naive psychology) to psychological and cultural ones through mastering a tool and a sign, interiorization and subsequent application in behavior. The stage when functions are no longer natural, but not yet cultural, refers to mental functions: already human, but not yet cultural.

In the opposition held by L.S. Vygotsky between cultural and non-cultural human development, the distinction between psychological and psychic higher functions strengthens the opposition. Higher mental functions exist in humans as well as in primates, cetaceans, parrots, and other representatives of the animal world. L.S. Vygotsky [16] describes and analyzes with great care the experiments of C. B. Hler, R. Yerkes, W. Koehler and others with animals to identify natural functions, natural forms and mental functions similar to those of humans. Overcoming the behaviorist approach, L.V. Vygotsky singles out the third type of functions, which is peculiar only to the person. According to L. S. Vygotsky, the higher psychological functions are possessed by a personality and are inherent in a cultured person, who has mastered his or her behavior and become a personality. In L.S. Vygotsky's works, psychological and cultural functions are synonyms.

In studying the relationship between development and learning, L.S. Vygotsky will preserve the distinction between psychological and mental functions. It is also preserved in the triad – "natural (involuntary) action – voluntary action – free action. The same logic of distinction is derived in the triad as between oral speech and voluntary action, respectively, between written speech and free action. The transition from voluntary action to free action is a qualitative leap in the generalization of the personality's development, the construction of a system of beliefs and values, meanings and significance, i.e. mastering himself, his consciousness, thinking, behavior, affects, hence, the triad "speech – free action – meaning" is formed in a cultured person. Regarding written speech L.S. Vygotsky notes that in addition to freedom and arbitrariness, it requires awareness. In L.S. Vygotsky's study of speech, the triad "arbitrariness – logicity – consciousness", which passes through all triads of the three states of development of mental functions, is most clearly traced. Such triads should be carefully considered, which requires a separate study.

The distinction introduced by L.S. Vygotsky concerning natural: mental and psychological functions, leads us to the idea of three rows of triangular network: the first row of triangulars – natural functions, the second – mental, the third – psychological (cultural) mastering of a person's behavior. But! L.S. Vygotsky denotes that this is not a hierarchy of functions and that each state is not independent, it is not preserved in development, but is objectified in each subsequent state. It may

be difficult to imagine, but the triangular network does not actually have three rows. It has one row by virtue of its genesis and dynamism, constantly changing and appearing now as natural, now as natural (mental), now as mental (cultural), now as psychological (cultural). Within the series — heterochronicity — changes in the trinities follow a chain reaction as the changes occur, caused by age, learning and self-organization (mastering oneself).

### Discussion of the results of our reasoning

Today in the humanities the method of triangulation is used in social psychology and sociology. N. Dentsin [22] distinguishes four main types of triangulation in humanities research: data triangulation, research triangulation, theoretical triangulation, methodological triangulation. He believes that all types of triangulation allow for reliable, in-depth, reliable and large-scale results, giving a detailed, voluminous and balanced view of the research subject. Intuitively, without focusing attention, L.S. Vygotsky uses this method and understands its qualitative difference from other methods. He writes, "It has always been assumed that all mental functions act jointly, that they are bound together; however, the nature of connections, how functions are interconnected and what changes in them depending on this connection have never been studied. [9, p. 414].

Hegelian, who was the founder of psychology, W. Wundt applies the triadic relationship in the construction of the psychological system, but reduces the driving forces of development to the dual mechanism of association and apperception, as did the founder of psychoanalysis, Z. Freud, who revealed the triadic structure of consciousness, reduces development to the mechanisms of "libido" and "thanatos. The triadic relations themselves were viewed statically. Vygotsky's recognition of the triadic relations in the psyche, its time and space, and personality allowed him to create a viable dynamic concept. Triadicity acquired its dynamic properties, and we will use the modern term "triangulation" to distinguish it, implying a dynamic triad.

Let us note the positive influence of the network structure of the Internet, thanks to which we are now mostly ready to understand L.S. Vygotsky. The means

used influence the development of thinking and the formation of ideas about the world; in turn, thinking and imagination influence the means. The trinity "means — thinking — imagination" in relation to reality allowed us to see it differently, from a network perspective, the way L.S. Vygotsky saw it, we assume. In order to understand network reality, it is necessary to be meaningful and to apply the born meaning in the use of the medium. This is the task of learning in our new reality.

In developing practical psychology, L.S. Vygotsky "highlights" such integrities, by studying which it would be possible to influence learning, education, productive activities that benefit development. Triangular connection was built in such a way that it was possible to isolate the mutual influence of wholes to solve problems of organization and self-organization, change in a certain direction. This direction for L.S. Vygotsky was the "cultural man", a person with developed higher (cultural) psychological functions — a personality.

### Conclusion

Understanding of Vygotsky's scheme of psychology of mental functions in the sense of functions of the psyche allows not only to investigate his works from a different angle, but also, the most important, to apply in practical activity the knowledge that whichever end you pull and influence, changes will affect the entire network of the psyche. These changes can be traced not through the chain, but through the network, when changes are manifested in the trinity, which places new demands on the conduct of diagnostic research, in which there is no place for disjointed testing or observation of individual mental functions. Development of new methods covering, firstly, the trinity of mental functions, secondly, consequences, tracing changes in a network, thirdly, development of methods aimed at development of such functions which are results of synthesis in the trinity of functions, for example, free action as result of synthesis in the trinity of awareness, logicity and arbitrariness. Such functions are the results of synthesis, i.e., generated by the trinity is a separate topic in our research. In the present paper we have presented arguments in favor of confirming the hypothesis of Vygotsky's triangular scheme of the psyche.

### References

1. Asmolov A.G. Istoricheskii smysl krizisa kulturno-deyatelnostnoi psikhologii. *Natsionalnyi psikhologicheskii zhurnal [National Psychological Journal]*, 2014. Vol. 1, no. 13, pp. 3–17. DOI:10.11621/npj.2014.0101 (In Russ.).
2. Asmolov A.G. Po tu storonu soznaniya: metodologicheskie problemy neklassicheskoi psikhologii. Moscow. Publ Smy'sl. 2002. 480 p. (In Russ.).

### Литература

1. Асмолов А.Г. Исторический смысл кризиса культурно-деятельностной психологии // Национальный психологический журнал. 2014. №1(13). С. 3–17. DOI:10.11621/npj.2014.0101
2. Асмолов А.Г. По ту сторону сознания: методологические проблемы неклассической психологии. М.: Смысл. 2002. 480 с.

3. Asmolov A.G., Kudryavcev T.V. Lev Vy`gotskij: zona varriativnogo razvitiya [E`lektronny`j resurs]. *Obrazovatel'naya politika [Education policy]*, 2016. Vol. 3, no. 73. URL: <https://cyberleninka.ru/article/n/lev-vygotskiy-zona-variativnogo-razvitiya> (Accessed 12.01.23). (In Russ.).
4. Bepalov B. . Logiko-semanticheskii analiz i razvitie predstavlenii L.S. Vygotskogo o «edinicax» i «elementax» psikhologicheskix system. *Nacionalnyi psikhologicheskii zhurnal [National Psychological Journal]*, 2014, no. 1, pp.18–31. (In Russ.).
5. Boxan T.G. Kulturno-istoricheskii podxod kak metodologicheskaya osnova razrabotki problemy stressa s uchetom principov postneklassicheskoi nauki. *Vestnik Tomskogo gosudarstvennogo universiteta [Bulletin of Tomsk State University]*, 2008, no. 314, pp. 165–168. (In Russ.).
6. Vygotskii L.S. Osnovy defektologii. *Sobranie sochinenii: v 6 t. Vol. 5. In Vlasova T.A. (ed.), Osnovy` defektologii*. Moscow. Publ Pedagogika, 1983. 368 p. (In Russ.).
7. Vygotskii L.S. Pamyat i ee razvitie v detskom vozraste. *Sobranie sochinenii: V 6-ti t. Vol. 2. In Davydov V.V. (ed.), Problemy obshhei psikhologii*. Moscow. Publ Pedagogika. 1982. 504 p. (In Russ.).
8. Vygotskii L.S. Problema kul`turnogo razvitiya rebenka (1928). *Vestn. Mosk. un-ta [Vestn. Moscow university]*. Ser. 14, Psixologiya, 1991, no. 4, pp. 5–18. (In Russ.).
9. Vygotskii L.S. Problemy obshhei psikhologii. *Sobranie sochinenii: V 6-ti t. T. 2. In Davydov V.V. (ed.), Problemy` obshhei psikhologii*. Moscow. Publ Pedagogika. 1982. 504 p. (In Russ.).
10. Vygotskii L.S. Psikhologiya iskusstva. Rostov-na-Donu. Publ Feniks. 1998. 479 p. (In Russ.).
11. Vygotskii L.S. Razvitie vysshix psikhicheskix funkci. Moscow. Publ APN RSFSR. 1960. 500 p. (In Russ.).
12. Guseleva M.S. Kulturno-istoricheskaya psikhologiya: ot klassicheskoi k postneklassicheskoi kartine mira. *Voprosy` psikhologii [Questions of psychology]*, 2003, no. 1, pp. 99–115. (In Russ.).
13. Zinchenko V.P., Morgunov E.B. Chelovek razvivayushhij. Oчерки rossijskoi psikhologii. Moscow. Publ Trivola. 1994. 304 p. (In Russ.).
14. Kravczova E.E. Neklassicheskaya psikhologiya L.S. Vy`gotskogo. *Nacionalnyi psikhologicheskii zhurnal [National Psychological Journal]*, 2012. Vol. 1, no. 7, pp. 61–66. (In Russ.).
15. Meshcheryakov B.G. Vzglyady` L.S. Vy`gotskogo na nauku o detskom razvitii. *Kulturno-istoricheskaya psikhologiya = Cultural-historical psychology*, 2008. Vol. 4, no. 3, pp. 103–112. (In Russ.).
16. Morozov S.M. Dialektika Vygotskogo: vnechuvstvennaya realnost` deyatelnosti. Moscow. Publ Smy`sl. 2002. 120 p. (In Russ.).
17. Puzyrej A.A. Manipulirovanie i mayevtika: dve paradigmy psixhotexniki [Elektronnyi resurs]. *Voprosy metodologii [Questions of methodology]*, 1997, no. 3–4, pp. 148–164. URL: <https://www.fondgp.ru/publications/manipulirovanie-i-majevtika-dve-para/> (Accessed 12.02.23) (In Russ.).
18. Sizikova T.E. «Edinicza analiza» L.S. Vygotskogo i «modalnost» N. Gartmana. *Sibirskii psikhologicheskii zhurnal [Siberian psychological journal]*, 2022, no. 85, pp. 6–34. (In Russ.).
19. Sizikova T.E., Kudryavcev V.T. Priroda svobodnogo deistviya i refleksiya. In Sizikova T.E. (eds.), *L.S. Vygotskii i A.R. Luriya: kulturno – istoricheskaya psikhologiya i voprosy cifrovizacii v socialnyh praktikax. Mezhdunarodnyi Kongress, (Novosibirsk, 15–17 noyabrya 2022 g.)*. Novosibirsk: Publ NGPU, 2022, pp. 275–289. (In Russ.).
3. Асмолов А.Г., Кудрявцев Т.В. Лев Выготский: зона варриативного развития [Электронный ресурс] // Образовательная политика. 2016. № 3 (73). URL: <https://cyberleninka.ru/article/n/lev-vygotskiy-zona-variativnogo-razvitiya>. (дата обращения: 12.01.2023).
4. Беспалов Б.И. Логико-семантический анализ и развитие представлений Л.С. Выготского о «единицах» и «элементах» психологических систем // Национальный психологический журнал. 2014. №1. С.18–31.
5. Бохан Т.Г. Культурно-исторический подход как методологическая основа разработки проблемы стресса с учетом принципов постнеклассической науки // Вестник Томского государственного университета. 2008. № 314. С. 165–168.
6. Выготский Л.С. Основы дефектологии. *Собрание сочинений: в 6 т. Т. 5. Основы дефектологии / Под ред. Т.А. Власовой. М.: Педагогика. 1983. 368 с.*
7. Выготский Л.С. Память и ее развитие в детском возрасте. *Собрание сочинений: В 6 т. Т. 2. Проблемы общей психологии / Под ред. В.В. Давыдова. М.: Педагогика. 1982. 504 с.*
8. Выготский Л.С. Проблема культурного развития ребенка (1928) // Вестн. Моск. ун-та. Сер. 14, Психология. 1991. № 4. С. 5–18.
9. Выготский Л.С. Проблемы общей психологии. *Собрание сочинений: В 6 т. Т. 2. Проблемы общей психологии / Под ред. В.В. Давыдова. М.: Педагогика. 1982. 504 с.*
10. Выготский Л.С. Психология искусства. Ростов-на-Дону: Феникс. 1998. 479 с.
11. Выготский Л.С. Развитие высших психических функций. М.: АПН РСФСР. 1960. 500 с.
12. Гусельцева М.С. Культурно-историческая психология: от классической к постнеклассической картине мира // Вопросы психологии. 2003. № 1. С. 99–115.
13. Зинченко В.П., Моргунов Е.Б. Человек развивающийся. Очерки российской психологии. М.: Тривола. 1994. 304 с.
14. Крайцова Е.Е. Неклассическая психология Л.С. Выготского // Национальный психологический журнал. 2012. № 1(7). С. 61–66.
15. Мещеряков Б.Г. Взгляды Л.С. Выготского на науку о детском развитии // Культурно-историческая психология. 2008. Том 4. № 3. С. 103–112.
16. Морозов С.М. Дialeктика Выготского: вневчувственная реальность деятельности. М.: Смысл. 2002. 120 с.
17. Пузырей А.А. Манипулирование и майевтика: две парадигмы психотехники [Электронный ресурс] // Вопросы методологии. 1997. № 3–4. С. 148–164. URL: <https://www.fondgp.ru/publications/manipulirovanie-i-majevtika-dve-para/> (дата обращения: 12.02.2023).
18. Сизикова Т.Э. «Единица анализа» Л.С. Выготского и «модальность» Н.Гартмана // Сибирский психологический журнал. 2022. № 85. С. 6 – 34.
19. Сизикова Т.Э., Кудрявцев В.Т. Природа свободного действия и рефлексия // Л.С. Выготский и А.Р. Лурия: культурно-историческая психология и вопросы цифровизации в социальных практиках. Международный Конгресс, 15–17 ноября 2022 г. / Под ред. Т.Э. Сизиковой, Г.С. Чеснаковой; Министерство просвещения Российской Федерации. Новосибирск: НГПУ. 2022. С. 275–289.
20. Элькоин Б.Д. Психология развития с позиции культурно-исторической концепции: Курс лекций. М.: Некоммерческое партнерство «Авторский Клуб». 2022. 344 с.



20. El'konin B.D. Psikhologiya razvitiya s pozicii kulturno-istoricheskoi koncepcii. Kurs lektsii. Moscow: Publ Nekommercheskoe partnerstvo «Avtorskij Klub», 2022. 344 p. (In Russ.).

21. Yasnitskii A. «Oрудie i znak v razvitii rebenka»: samaya izvestnaya rabota L.S. Vy`gotskogo, kotoruyu on nikogda ne pisal. Psikhologiya. Zhurnal Vysshei shkoly ekonomiki [Psychology. Journal of the Higher School of Economics], 2017. Vol. 14, no. 4, pp. 576–606. DOI:10.17323/1813-8918-2017-4-576-606 (In Russ.).

22. Denzin Norman K. The Research Act: A Theoretical Introduction to Sociological Methods. New York. Publ Transaction Publishers, 2017. 368 p.

21. Ясницкий А. «Орудие и знак в развитии ребенка»: самая известная работа Л.С. Выготского, которую он никогда не писал // Психология. Журнал Высшей школы экономики. 2017. Том 14. № 4. С. 576–606. DOI:10.17323/1813-8918-2017-4-576-606

22. Denzin, Norman K. The Research Act: A Theoretical Introduction to Sociological Methods. N.Y.: Transaction Publishers, 2017. 368 c.

### **Information about the authors**

*Tatyana E. Sizikova*, PhD, Associate Professor of the Department of Correctional Pedagogy and Psychology of the Institute of Childhood, Novosibirsk State Pedagogical University, Novosibirsk, Russia ORCID: <https://orcid.org/0000-0001-7889-2043>, e-mail: [tat@ccru.ru](mailto:tat@ccru.ru)

*Vladimir T. Kudryavtsev*, Doctor of Psychology, Professor of the UNESCO Chair “Cultural-Historical Psychology of Childhood”, Moscow State University of Psychology & Education, Moscow, Russia, ORCID: <https://orcid.org/0000-0002-9283-6272>, e-mail: [vtkud@mail.ru](mailto:vtkud@mail.ru)

### **Информация об авторах**

*Сизикова Татьяна Эдуардовна*, кандидат психологических наук, доцент кафедры коррекционной педагогики и психологии института детства, Новосибирский государственный педагогический университет (ФГБОУ ВО НГПУ), г. Новосибирск, Российская Федерация, ORCID: <https://orcid.org/0000-0001-7889-2043>, e-mail: [tat@ccru.ru](mailto:tat@ccru.ru)

*Кудрявцев Владимир Товиевич*, доктор психологических наук, профессор кафедры ЮНЕСКО «Культурно-историческая психология детства», Московский государственный психолого-педагогический университет (ФГБОУ ВО МГППУ), г. Москва, Российская Федерация, ORCID: <https://orcid.org/0000-0002-9283-6272>, e-mail: [vtkud@mail.ru](mailto:vtkud@mail.ru)

Получена 01.06.2023

Принята в печать 22.06.2023

Received 01.06.2023

Accepted 22.06.2023