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THEORY AND METHODOLOGY ТЕОРИЯ И МЕТОДОЛОГИЯ

On the Problem of the Semantic Structure of Consciousness

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In the article, the authors consider the methodological origins and foundations of psychological science. They point out the impossibility of a mechanical transfer of the paradigm and explanatory principles of natural science to the field of psychology, in which such an approach inevitably leads to a methodological dead end. A person becomes part of a deterministic relationship, losing their most important trait — their freedom. Lev Vygotsky proposed an approach that offers a path beyond this outdated methodology. In the cultural-historical approach, the central concept of psychology is the category of personality, while consciousness serves as the subject of study. However, Vygotsky interpretats consciousness in a significantly different way than it had been in psychology before him. He writes about the systemic and semantic structure of consciousness and it is this aspect that is primary for Vygotsky. The authors consider the works of Lev Vygotsky's closest disciples and associates in this context. In these works, the problem of consciousness and the relationship between sense and meaning is solved in a manner different from traditional psychology. A meaning is always a generalization. Consciousness operates these generalizations. In this article, the authors discuss the problems of theoretical and empirical generalization in the works of Vasily Davydov. The authors conclude that the solution to the problem of generalization, as proposed by Davydov, leads away from the scientific tradition initiated by the works of Lev Vygotsky and his followers.

Keywords: Cultural-historical approach, Activity theory, Developmental education, Consciousness, Sense, Meaning, Problem of generalizations, Methodology of psychology.

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К проблеме смыслового строения сознания

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В статье авторы рассматривают методологические истоки и основания психологической науки. Авторы указывают на невозможность механического перенесения естественнонаучной парадигмы и объяснительных принципов на психологическое содержание. Такой подход в психологии с неизбежностью приводит в методологический тупик. Человек оказывается частью детерминистических отношений и теряет самое главное — свою свободу. Выход за пределы этой старой методологии в своем подходе предложил Л.С. Выготский. В культурно-историческом подходе центральным понятием психологии является категория личности, а предметом изучения становится сознание. Но трактовку сознания Л.С. Выготский понимает существенно иначе, чем это имело место до него в психологии. Он пишет о системном и смысловом строении сознания. Причем для Л.С. Выготского первичен именно смысл. В этом контексте авторы рассматривают работы ближайших учеников и соратников Л.С. Выготского. В этих работах проблема сознания и соотношение смысла и значения решается иначе, чем в традиционной психологии. Значение — это всегда обобщение. Именно этими обобщениями и оперирует сознание. В статье авторы обсуждают проблемы теоретического и эмпирического обобщения в работах В.В. Давыдова. Авторы приходят к выводу о том, что решение проблемы обобщений, предложенное В.В. Давыдовым, уводит нас от научной традиции идущей от трудов Л.С. Выготского и его последователей.

Ключевые слова: культурно-исторический подход, теория деятельности, развивающее обучение, сознание, смысл, значение, проблема обобщений, методология психологии.

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This methodological article attempts to carry out a scientific search aimed at identifying the methodological foundations of the cultural-historical approach in psychology. Thanks to a return to the fundamental sources of non-classical psychology, it is possible to build a non-eclectic scientific theory and overcome the limitations inherent in positivist and empirical approaches. Such an analysis seems to be extremely necessary at the present time, since, due to many historical reasons, the ideas of L.S. Vygotsky turned out to be unclaimed and distorted within the framework of other scientific approaches.

The volume of this article allows us to cover only some of the existing positions in psychology on the issue under discussion, which does not detract from their importance and interest in consideration. However, the main subject of this work is not a critical attitude to numerous views in scientific psychology, but a new awareness and raising to the surface to discuss the original ideas of the non-classical theory of L.V. Vygotsky.

Clearly, any particular field of science is uniquely defined by its subject, that is, by what it aims to study. In traditional positive natural sciences, the issue of defining the subject of a particular science is usually not a matter of contention. It is intuitively clear to everyone who partakes in such fields what they are doing and where the boundaries of their professional competence lie. For psychology, however, the question is a vital and pressing one. After the bankruptcy of Wilhelm Wundt's physiological psychology, the science of psychology entered a dark period of open crisis, which eventually took the form of a chronic disease. Later on, psychologists became accustomed to this, in fact, deadly disease; many even

successfully adapted to it, finding their scientific niche. The trouble here is that the so-called "methodological pluralism," sometimes flaunted as a guarantee of productivity and future golden age of psychology is actually but vulgar eclecticism and indiscrimination in methodological issues.

In his methodological study, The Historical Meaning of the Crisis in Psychology, Lev Vygotsky notes that the external manifestation of this crisis is the emergence of many psychological schools and approaches, and its essential content is the loss of the subject of psychological science. [1, pp. 292–436] Each approach has its own theory with its own explanatory principle, which means it has its own interpretation and definition of what the subject of psychology is. Accordingly, there are as many psychologies as there are different approaches, theories, and prominent psychologists. This is precisely the case in modern-day psychology. The question arises naturally: which psychology are the field's students to be taught?

When analyzing the state of psychology in 1926, Vygotsky paid attention not only to the crisis in the field, but also the science's fundamental characteristics, as well as to finding ways out of the crisis [1, pp. 292-436]. He concludes that psychology is, first, a unified science with its own special subject, method, and a general theory. Second, psychology is an explanatory science, meaning that its theory has its own explanatory principle. Third, psychology is an experimental science. Later on, in his work The History of the Development of the Higher Mental Functions, written in 1931, and partially published only in 1960, Lev Vygotsky reproaches traditional child psychology, claiming that it "...was not aware, as we have seen, of the issue of the higher mental

functions, or of the problems of a child's cultural development, which is essentially the same thing. Therefore, the central, ultimate problem of all psychology remains closed for it. It is the problem of personality and its development." [4, p. 40—41] According to him, "Only a decisive step beyond the methodological limits of traditional child psychology can lead us to the study of the development of the highest mental synthesis, which with good reason should be called the personality of a child. The history of a child's cultural development leads us to the history of personality development."

Thus, according to Vygotsky, the central and ultimate problem within this field of science, that is the problem of personality should be the primary subject of analysis and the backbone of the general theory of psychology. No exhaustive definition of this concept is given in his works. However, the writings of Vygotsky offer a general context of its use, as well as fairly precise and specific statements clarifying his views on the subject. It should also be noted here that Lev Vygotsky was a genuine Marxist. He explicitly did not want to conceive yet another psychological theory simply by pulling a few citations from the classics. He saw his task in learning from Marx's entire method before writing his own analog to Das Kapital within the field of psychology. The non-classical psychology created by Lev Vygotsky is not simply a new form of that field, but a fundamentally new science and a new way of comprehending reality.

Karl Marx did not use the concept of personality, since it was not found in everyday use or the scientific works of his time. When writing about a person as a personality, he would use the wording "free individuality." From our point of view, this is an extremely abstract, yet accurate definition of the essence behind the concept of personality. It fully conforms to Vygotsky's views on the subject. In his work, Pedology of an Adolescent, he notes: "Where we feel ourselves to be the source of movement, we attribute a personal character to our actions." [5, p. 227] To be the source of an act is to be free. This is the most important postulate by Baruch Spinoza, to whose works Vygotsky repeatedly refers.

Spinoza considered himself a disciple and follower of René Descartes, even though he refuted almost all the fundamental provisions of Cartesian philosophy in his works. First, his worldview does not contain the total mechanicism proclaimed by Descartes. Causal determinism corresponding to the Cartesian approach is now inherent in all traditional science, which traces its lineage back to Galileo Galilei and Isaac Newton. Second, Spinoza claimed that everything in the world was animated. Such panpsychism is categorically opposed by "serious scientists," even though this view of the universe is the only one that offers a constructive approach to solving the famous mind — body problem as addressed by Descartes. Thirdly, Spinoza was the first in the history of philosophy to introduce the idea of self-causal being and

internally driven movement, that is, the idea of "causa sui." Thus, the whole, totally dominant logic of justification through the other, which naturally follows from the formal logic inherited from the "father of all sciences", as Aristotle was known in the Middle Ages, can, after the works of Spinoza, be contrasted with the logic of internal self-determination. However, while for Spinoza internal self-causality was only an idea, in Vygotsky's cultural-historical psychology, this idea was embodied in concrete psychological studies [17].

The keyword for the "stumbling block" that those who partake in traditional science, naturalistic in origin, have been unable to overcome is the philosophical category of freedom. There is no room for freedom in such science. Classical science is totally deterministic — dominated by causal determinism: everything in the world has an external cause. Freedom for the natural sciences is an ephemeral thing that only exists in the minds of people far removed from "real" science.

For the epigraph to his methodological study, The Historical Meaning of the Crisis in Psychology, Vygotsky took a quote from the Gospel of Matthew: "The stone that the builders rejected has become the cornerstone..." [1, p. 291]. And in his notebooks, Vygotsky wrote that the ultimate problem of psychology is the problem of human freedom. It is generally accepted in psychology that consciously controlled action is free. This very wording indicates that the origins of freedom lie in the realm of consciousness.

According to Vygotsky, the primary difference between the higher mental functions and the elementary ones lies in the fact that the former are arbitrary and, therefore, consciously controllable and manageable. One might say that a person has a space of conquered freedom in one's higher mental functions. One is free in one's arbitrary acts, and this freedom is exercised easily and without effort. Arbitrariness itself is the acquisition of freedom, unlike the stage that precedes it, in which volitional efforts are required. In Russian, the word "arbitrariness" (произвольность, "proizvolnost") has a particular etymology: it is what is derived (производное, "proizvodnoye") from will (воля, "volya"). Will is something that only a person has. It is their ultimate psychological tool and the guide of consciousness.

In his lecture, The Problem of the Will and its Development in Childhood, Lev Vygotsky divided the existing theories of the will into heteronomous ones that attempt to derive this function of the psyche from some nonvolitional processes, and autonomous ones that explain the will based on the laws inherent to the volitional action. However, heteronomous theories "...were unable to explain what is most essential to will. They were unable to explain the volitional nature of acts, the voluntary nature of the act as such. They could not explain the internal freedom that the individual experiences in making a decision or the external structural variability

that distinguishes the volitional action from the nonvolitional action." [2, p. 457].

As is well known, Vygotsky referred to consciousness the subject of cultural and historical psychology. The concept of consciousness has no unambiguous, universally accepted definition, either in psychology or in philosophy. Some researchers consider it an intuitively clear concept that does not require a deep psychological analysis or a special study of its composition and structure. However, Lev Vygotsky and Aleksei Leontiev, giants of Russian psychology, considered this concept a fundamental problem of psychology. When analyzing this concept, the etymology of the Russian word "consciousness" (сознание, "soznaniye"), draws attention right from the start. There is an undoubted hint: "soznaniye" (lit. "with-knowledge"), that is, the attitude to what is realized with knowledge. However, the very concept of knowledge is extremely problematic. In Socratic philosophy, famously, the lack of true knowledge is the main cause of all human misfortunes. Thus, arises a well-founded assumption that Socratic "knowledge" differs significantly from the generally accepted meaning of this word today. According to Plato, his teacher confessed to hearing an inner voice that did not tell him what he should do, but warned him against what he should not do. This represents vitally important knowledge about the most important thing in our lives — that is, how to avoid undesirable consequences from one's actions, particularly irreparable consequences. Today, the word "knowledge" usually means informedness; or competence, scarcely different concepts; or one specific skill or another, or the ability to perform certain activities. This, however, is not at all the knowledge Socrates spoke about. [16, pp. 24–28]

Plato's philosophy raised the question of the origins and essence of true knowledge. According to this teaching, the path to understanding the truth leads into the depths of human subjectivity. The external world in which we live is Plato's world of shadows and a source of delusions. Therefore, Socrates' maieutic conversations, forcing the interlocutor to look inside themselves, are the way to get closer to true knowledge. This ancient wisdom echoes the core principles behind Vygotsky's cultural-historical concept. Both Socrates and Vygotsky see communication as the be-all and end-all of self-exploration and self-improvement.

In our opinion, Vygotsky's idea of the systemic and semantic structure of consciousness is extremely important for the entire science of psychology. It would seem that all psychologists know this perfectly well; alas, this idea has yet to see proper theoretical and experimental elaboration. As is well known, Vygotsky understood the system of consciousness as a kind of a warehouse containing the interrelations between mental functions at a particular stage of one's development. This, according to him, is an external characteristic

of the structure of consciousness. Now, the inner, and therefore the essential characteristic of consciousness is its semantic structure.

We leave the system of inter-functional relations out of the scope of our analysis in a bid to focus on the essential sphere of consciousness, namely, its semantic structure. According to Vygotsky, sense is a unit of consciousness. In cultural-historical theory, the concept of sense is inseparable from the concept of meaning, and sense takes precidence over meaning. This is corroborated by Vygotsky's psychological analysis of the phenomenon of autonomous speech, described in his article, Earlier Childhood. This type of speech, as is well known, begins to manifest in children from one to three years of age. The child begins to speak in some self-invented "gibberish" language. The "words" the child uses may not be at all similar to the normative sounds of adult speech, and their meanings will also be very different from those of adult words. Nevertheless, by using these "words" that sound unlike anything universally accepted, the child successfully achieves mutual understanding with close adults; the child's goal is achieved as the needed help is provided. Amazingly, through such unusual "words", which, unlike full-fledged words, have nothing but a self-invented inner sense, the child enjoys the main psychological means of communicating with adults. Upon analyzing the phenomenon of autonomous speech, Vygotsky concludes that its presence at the appropriate developmental stage is natural and mandatory for all young children. It follows that the sense takes precidence over the meaning of words that form an established, universally recognized zone of unique meaning.

Aleksei Leontiev proposed a radically different solution to the problem of sense and meaning, even one directly opposite to that of Lev Vygotsky. While rightly pointing out that a sense is always a sense of something, he argued that it is not always the sense of a given word. According to Leontiev, "speech is not a demiurge of consciousness." In his theory, the demiurge of everything in the human psyche, and, perhaps, even beyond, is activity. He considers action, or rather, objective action to be the unit of activity. Accordingly, only this unit of activity has sense. In Leontiev's concept, the basis and criterion for distinguishing a specific activity is what the activity is aimed at, that is, its subject, referred to in this theory as the activity driver. Now, the criterion for distinguishing an objective action is its purpose. While the purpose of the action is always realized, the activity drivers, according to Leontiev, are usually not realized. [14]

The next step in the theory of activity is the assertion that the concept of sense is the sense of an objective action. Similarly to Vygotsky's theory, the sense of something singular is established through its relation to the whole of which it is a part. In Leontiev's theory of activity, the sense of an action is generated by the relation of its purpose to the driver of the activity carried out as

part of it. Having tied the concept of sense to the concept of objective action, Leontiev, nevertheless, was forced to propose his own solution to the problem of sense and meaning in the traditional sense of the relationship between a word and its meaning. According to him, a child first learns the meanings of words that exist independently in the outside world. However, the sense of the learned words has a different origin than the meanings. This is no longer dealing with the objective reality of speech, but rather the deep sphere of the human psyche. In Leontiev's theory, and, perhaps, in the activity-centered approach as a whole, the motivation/need sphere of the psyche is declared to be the core of the personality. To explain the relation of the sense and meaning of words, Leontiev cites the word "war"; its meaning is the same for a young man who has yet to smell powder, as for someone who has been through the tribulations and hardships of a war with all the associated misfortunes. Of course, the sense of the word "war" will be significantly different for each of these people. [13]

Thus, sense and meaning are qualitatively different psychological realities in Leontiev's activity theory; they differ both in their origin and in their inner essence. Meanwhile, in Vygotsky's concept, meaning and sense are, one might say, the same psychological reality; only there is sense, multidimensional and unique, and meaning, a certain part of the former that has settled down and become common. The meanings of words enable people to communicate and understand each other, including at the semantic level.

From our point of view, the activity-based interpretation of the problem of sense and meaning justifies and theoretically legitimizes didactics in educational practice, which still remains faithful to the principles set forth 365 years ago by John Comenius in his work, Didactica Magna. [9, pp. 8–12] Overcoming the limits of such fundamentally medieval didactics is closely tied to the solution of the problem of sense and meaning, proposed in the cultural-historical concept. Now, if sense and meaning are radically different, both in origin and essence, then this must mean that the teacher first needs to explain words unfamiliar to students and get them to digest and correctly reproduce the definitions of these words. However, the semantic content of the knowledge assimilated by schoolchildren will be determined by their subsequent experiences, including school life and education. Nevertheless, education in modern public schools is subject to the principles of John Comenius's didactics, based on elementary common sense and the philosophy of Aristotle.

This educational strategy, widespread in Russian schools, earned criticism from Pyotr Galperin, Daniil Elkonin, and Vasily Davydov [7, pp. 24-31]. This strategy leads to the forcible ingraining of artificial everyday concepts and ideas in schoolchildren. If a former student goes on to get involved in science and proves capable of

thinking within the system of scientific concepts, then, according to Elkonin, this is an exception that owes nothing to schooling. Such a student is usually lucky to have met an adult interested in the development of children. Most likely, this happens outside the school and it is through this communication that the student develops scientific thinking.

Vygotsky's analysis of the phenomenon of autonomous speech convincingly demonstrates that there is no such thing as a mechanical assimilation of words in the mother tongue by children. One might say that the child starts by inventing their own language and actively uses it from their earliest days. The words of autonomous speech, as is well known, do not have universal meanings; nor do the "words" spoken by the child have a normative sound. All they have is the unique personal sense that the child attaches to these "words". Over time, the child adjusts the invented words to the commonly used meanings and sound forms of words in the mother tongue. Thus, the child does not mechanically memorize the words in the mother tongue, but, one might say, rather invents it. There is no such thing as direct assimilation of speech, but there is the child's introduction to the reality of the mother tongue, which occurs through the creative generation of the words' meanings, their semantic basis, and their commonly used sounds by the child. This logic of mastering a child's mother tongue is essentially the unified logic of the mental and personal development of children in ontogenesis.

According to Vygotsky, generalization is the key to the problem of the semantic structure of consciousness. He writes that the main psychological tool for a person is the word; the word is a sign; the sign is a sign because it has a meaning (Russian: знак [znak]) — "sign"; значение [znacheniye] — "meaning"); a meaning is a generalization; and a generalization has an obverse side, which is communication. We generalize as we communicate, and vice versa. Communication and generalization, according to Vygotsky, are two sides of the same coin. This is, in our opinion, an amazing statement. It would seem that it contains a blatant contradiction. After all, communication is the establishment and exercising of interpersonal relationships, that is, something interindividual, whereas generalization is a purely mental construct, that is, an inner property of a person. The result defies comprehension, like comparing apples to oranges. In fact, though, this is a brilliant insight into the unity of the external and internal in the composition of consciousness. This, we believe, is the fundamental postulate paving way to solving the famous problem of universals, as the problem of generalizations was seen in the Middle Ages [11, pp. 88–97.].

Aleksei Leontiev made the remarkable observation that the axe also generalizes. From our point of view, this is a profound and very meaningful notion. However, when explaining how exactly an axe generalizes, CULTURAL-HISTORICAL PSYCHOLOGY. 2022. Vol. 18, no. 3

Leontiev does it completely in line with the theory of empirical generalizations. According to him, the strike of an axe upon a log extracts from it hidden properties, thereby allowing them to be abstracted and brought to the appropriate generalization, designated by a word. It must be admitted that Vygotsky, who revealed the true nature and essence of generalizations by conceiving the thesis of communication and generalization being two sides of the same coin, stuck to the theory of empirical generalizations in his own psychological research. In his monograph, Thinking and Speech, devoted to the development of word meanings, Vygotsky's main experimental tool was the double stimulation technique, known as the Vygotsky — Sakharov method. It was derived from the method created by Narziß Ach, as was pointed out by Vygotsky himself [3, pp. 120-130]. We shall not describe this technique, known to all Russian psychologists, here; we will pay attention only to the fact that the source of the artificial meanings invented by the subject were the properties of real objects — cubes, parallelepipeds, cones, pyramids, and other items of different sizes, shapes and colors. In other words, in this experiment, the generalizations offered by the subject originated in real objects. This means that all the values invented by the subjects were traditional empirical generalizations.

Vasily Davydov paid special attention to the problem of generalizations in his works. In his monograph, Types of Generalizations in Teaching, he based his own educational theory on the opposition of empirical and theoretical generalizations. [8] However, both fundamental concepts in Davydov's theory raise questions. The empirical generalization in his works is interpreted in full accordance with the tradition that extends back to Aristotle. The main flaw in the Aristotelian theory on the origin of generalizations lies in the very attempt to deduce the general from the singular. Strikingly, the "father of all sciences", whose legacy is the framework of formal logic—its requirements still religiously observed by modern science and scientifically based practice — built a logically impossible structure of empirical generalization.

Davydov fought the hegemony of empirical generalizations in education, setting them against theoretical generalizations. However, he struggled with what people had artificially created. At this point, one cannot help but think whether one really has to fight what already exists, but rather simply provide children with a proper life and schooling to ensure that it no longer exists.

Theoretical generalization and education based in it are central to Davydov's research; however, the very word "theoretical" raises many questions. There is no single, well-established opinion on this concept in the philosophical and psychological literature. There has been much discussion on this issue, so far leading to nothing. In Davydov's works, this issue has a logical, unambiguous solution: in order to define the concept of

"theoretical," one needs to turn to a sphere of reality in which something obviously theoretical exists explicitly. Naturally, this is science. Scientific theories are, without doubt, theoretical. It follows that anything more or less significantly related to science will be theoretical. Scientific theory, according to Davydov, is based on a genetically initial abstraction as a germ cell; following the logic that ascends from the abstract to the concrete, the corresponding theory grows from it and unfolds to the fullest extent. In this matter, he agreed with the findings of Vygotsky on psychology being an experimental science based in an appropriate theory whose explanatory principle is a fundamental concept that generates all the consequences and conclusions of this theory. In Davydov's concept, the genetically initial abstraction that generates a psychological theory should be a real life relationship, rather than a mental construct. [8]

The above provisions of Davydov's concept raise certain questions. For example, it is unclear how the ascent from the abstract to the concrete is different from elementary logical deduction. Mathematicians claim there are at least a dozen and a half ways to prove the Pythagorean theorem. This theorem is relatively easy to prove in a geometric manner, based on Euclid's axioms and the rules of inference from them. Still, it took the genius of Pythagoras to introduce this theorem to mankind. He didn't have anything to lean on, however; no laws of formal logic or of deduction. All he had was clarity of mind and brilliant intuition. The question of the ascent from the abstract to the concrete and the possible replacement of this practice by logical deduction remains an open one.

The mistake made by Davydov was his interpretation of the concept of "theoretical". Having tied this term to scientific theory, he made a concrete practical conclusion, quite a logical one, that the basics of sciences should form the curricula for primary schools. Since the main activity at this age is learning, theoretical in nature, the subject of assimilation for younger schoolchildren must be theoretical generalizations, related in their origin to scientific theories. Tellingly, the sciences themselves come to realize their fundamentals only at the height of their development. Davydov proceeded from the fact that scientific theory is based in some ontologically initial relation; within the logic of ascent from the abstract to the concrete, it unfolds into a system of provisions explaining everything that this theory claims to explain. This understanding of the essence of science is consistent with Vygotsky's idea that an explanatory principle, as a fundamental concept, should be the basis of psychological theory. However, it needs to prove its "royal origin," that is, be philosophically cogitated and justified. This, one might say, is the most important notion Vygotsky has to offer; however, it is missing from Davydov's works. The latter does not have a single word to say about philosophical reflection justifying the initial idealization. Without that, no theory is worth much. Neither the initial abstraction nor the ascent from the abstract to the concrete in any way provide the theoretical essence of scientific theory by themselves; they in no way clarify why scientific theory is "theoretical". This means that not even the fundamentals of the sciences, in Davydov's understanding, can be a source of theoretical generalizations.

As we have seen in our research work, Davydov's erroneous definition of the concept of "theoretical" casts doubt on his theory of developmental learning and the curricula he created. According to him, the concept of theoretical generalization is fundamental. In his view, younger schoolchildren learn theoretical generalizations and concepts as part of educational activities and under the guidance of a teacher. This helps them master theoretical thinking. However, our research and practical work with children of this age shows that younger schoolchildren are fundamentally incapable of scientific thinking [12]. At the same time, we have seen them be able to hold the position of a theorist quite steadily and think theoretically. In other words, theoretical and scientific thinking are fundamentally different mental processes, significantly separated on the ontogenesis timeline.

As is well known, both Lev Vygotsky and Jean Piaget believed that scientific thinking could only be accessible to adolescents [15]. Our research shows that this window of opportunity opens up towards the end of adolescence, and only to those who were lucky in individual development, having met an educated adult capable of thinking within the system of scientific concepts and sincerely interested in the development of children; such communication led adolescents to become carriers of scientific consciousness.

As already noted, philosophical reflection is of utmost importance when selecting and justifying the explanatory principle of a theory. The issue, however, is that the very concept of reflection is missing from the activity approach. This approach initially stems from the subject-object relationship, which is in no way a reflexive one. Reflection cannot be deduced from activity in principle; conversely, activity cannot be obtained from reflection. It follows that any theoretical constructs in line with the activity approach are fundamentally incapable of defining and justifying the concept of "theoretical", since its very essence is reflexive.

Summing up some of the findings of our analysis, we can say that the fundamental concepts behind Vasily Davydov's theory, namely empirical and theoretical generalizations, do not stand up to scrutiny. The challenge of revealing the true nature and essence of such generalizations as part of the consciousness semantic developmental mainline in preschool and primary school age children calls for a different interpretation of these concepts. In the most general terms, the direction of inquiry to that end can be seen as a deep psychologization of research in pedagogy and education in line with the cultural-historical approach.

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