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Vygotsky's Pedological Distortions

The resolution of the Central Committee of the All-Union Communist Party (Bolsheviks) of 4 July 1936 entitled "On the pedological distortions in the system of the People's Commissariat of Education" calls for the exposure of the anti-Marxist, pseudoscientific concepts in the realm of education and upbringing and clears the way for the creation of a true Marxist science about children.

One of the "pillars" of pedology, whose books have done great harm to the Soviet school, was L.S. Vygotsky.

An analysis of Vygotsky's works published over the past ten years, beginning with [Pedology of school age] and [Thinking and speech] (1934), reveal the anti-Marxist character of his views and his organic link to the anti-Lenin "theory of the demise of the school."

Vygotsky offers reactionary writings of bourgeois scientists as "novelties." These reactionary sources also nurtured the stupid anti-Leninist "theory of the demise of the school."

The anti-Leninist theory of the demise of the school runs through all of Vygotsky's utterances, especially in [Pedology of school age] and [Pedology of the adolescent].

Already in his earliest works, Vygotsky was saying that parents and teachers do not have the right to prescribe their children anything. He often cites Tolstoy's words: "Upbringing spoils; it does not correct." He is against measures to encourage and to reprimand, against examinations, and against grades. In Vygotsky's opinion, educational work is an abnormality: when we warn pupils against bad deeds, we are purportedly fixing their attention on their deeds. Their formal education also should run on its own steam since, according to Vygotsky's erroneous idea, children's creativity yields elementary, but genuine, examples of art, poetry, etc.

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In Vygotsky's opinion, there will be not one building in the city of the future adorned by the sign "school," since school will become wholly a part of work and life, and will exist in factories, on public squares, in museums, in hospitals, and in the cemetery. As we see, we find in Vygotsky complete concurrence with the "leftist" statements by V.N. Shul'gin, who campaigned for the stupid anti-Leninist "theory of the demise of the school."

Even in his last works, [Thinking and speech] and [The mental development of the child in the process of formal education], Vygotsky denies the influence of form education on development, and underplays the role of knowledge. He thus attempts to refer to his own "investigations" in the area of the nature of the subject (understanding of oral and written speech) and of the distinctive characteristics of the child's mind (his interpretation of the development of psychological functions, concepts, etc.).

Vygotsky blindly followed every word of bourgeois psychology of the time. While attempting to "criticize" Piaget, Koffka, and others, he essentially followed the same path. He did not cast aside bourgeois psychological currents, but uncritically borrowed them. Eclecticism is very distinctly reflected in Vygotsky's concepts: it is difficult to find any current in bourgeois psychology that has appeared in the last two decades that has not found a place in his writings. Freud, Dewey, Lévy-Bruhl, Adler, Werner, Piaget, Claparède, Koffka, Köhler, and Lewin—they have all, to some extent, found a place in his eclectic system.

Throughout his life Vygotsky remained under the influence of a variety of pedological and psychological currents; and throughout all the stages of his work, he endeavored to provide a psychological foundation for the theory of the demise of the school.

Following his bourgeois teachers, Vygotsky also took from them their method of investigation. Hence, the work of Vygotsky and his pupils on children has essentially been a mockery of our Soviet children and amounted to stupid, absurd tests and questionnaires associated with Piaget, Claparède, and others.

Thus, Vygotsky the pedologist combined his damaging utterances to both psychological and pedagogical issues, attempting to resolve such problems in education and upbringing. In his writings he devoted much attention, especially in his last years, to the issues of thinking and speech, issues whose correct resolution will be of tremendous importance for psychology and for many pedagogical problems.

The problem of thinking and speech in Vygotsky

An analysis of Vygotsky's utterances on the question of thinking and speech shows that it consists of anti-Leninist, idealist positions. He regards the whole of man's mental activity not in the light of Lenin's theory of reflection, as a unified but complex dialectic process of active reflection of objective reality in the human consciousness, but as an idealist, immanent (internal, self-sufficient) process tak-

ing place independent of social-class relations and independent of people's productive activity.

For Vygotsky speech is an instrument, a tool organizing the whole of mental activity. "An active consciousness whose object is the activity of consciousness itself is what becoming aware means" ([Thinking and speech]. P. 193). According to Marx, the object of consciousness is conscious being; but for Vygotsky consciousness itself is an object: according to Vygotsky, higher scientific concepts are based not on the perception of tangible reality, but rather have speech as their source. The transition from one form of thought to another in the child is, according to Vygotsky, a self-developing process; and higher concepts such as scientific concepts "cannot be introduced into the child's consciousness from without" ([Thinking and speech]. P. 176). But, as we know, the development of thought in a child, his acquisition of the more complex forms of thought, takes place under the direct influence of education and upbringing as the child assimilates the cultural legacy of mankind. According to Vygotsky, however, attention and memory are the very special powers that we have within us. He disregards the material foundation of mental phenomena, though it is quite obvious that without a material substrate, we can neither understand nor explain psychological processes. Lenin attached tremendous importance to study of the material substrate of mental phenomena. He wrote: "Scientific psychology has discarded philosophical theories about the soul and jumped directly into study of the material substrate of mental phenomena—nervous processes—and produced, for example, an analysis and explanation of a variety of mental processes." Lenin considered study of the material substrate so important that he compared, to a certain extent, the revolution brought about in psychology by this study to the revolution Marx accomplished in the study of society.1

On the basic issues of cognitive psychology, Vygotsky took the positions of subjective idealism; but, as an eclectic, he combined it with vulgar materialism, especially in the period 1925-1930. Thus, in works published in 1926-1927, he combined reflexology with Freudianism; in [Pedology of school age] (1928), he combined reflexology with structural psychology; in [Pedology of the adolescent] (1931), he combined reflexology with Piaget's theory, etc. Hence, it is not surprising that in some of Vygotsky's works, we find vulgar, materialist statements, and in others, we find subjective, idealist judgments on the same issues. With regard to consciousness and individual mental functions, we encounter vulgar, materialist judgments such as "Consciousness is only a reflex of reflexes" (the collection [Psychology and Marxism]. P. 190), that "The unconscious and mental also signify reflexes passed on to other systems," etc. (Ibid. Vygotsky's article, pp. 187–89). Vygotsky sees every mental function from the standpoint of reflexology. Attention is a system of reactions. Memory is, from Vygotsky's crudely mechanistic perspective, merely the connection between internal stimuli and a group of reactions. The entire learning process is based on reflexology, i.e., it is reduced to mere training.

In the [Pedology of school age] (1928) he also reduces thought and individual mental functions to reflexes. In his introductory article to a book by Thorndike entitled Principles of education based on psychology (1930), Vygotsky calls Thorndike's behaviorist conception "Bolshevism in psychology."

These utterances of Vygotsky's on the question of the mind show that he explicitly disregards the Marxist-Leninist theory that the mind cannot be reduced to the movement of matter. But we all know how Marx and Engels and Lenin struggled against such vulgar oversimplification. In [Materialism and empiriocriticism], Lenin wrote: "These views (of materials—E.R.) do not consist in deriving sensation from the movement of matter while reducing it to the movement of matter, but in the acceptance that sensation is one of the properties of moving matter (Lenin, [Materialism and Empiriocriticism]. Vol. 13, p. 38).

In his last writings ([Thinking and speech], [The mental development of children in the process of formal education], etc.), Vygotsky's retains mechanistic positions. The methodological and pedagogical flaws in Vygotsky's theory of thinking had a particular impact on the way he interpreted concepts.

Vygotsky devoted much attention to the question of the formation and development of concepts in children, especially in his last work ([Thinking and speech]), in which he presented a totally false division of concepts into scientific and everyday. The "investigations" of his closest disciples, Shif (["The development of scientific concepts in schoolchildren"]) and Zankov (["On the development of thinking in schoolchildren"]) are also devoted to these questions. Above all, Vygotsky's division of concepts into everyday and scientific is totally wrong. According to Vygotsky's "theory," everyday concepts occur as a result of communication with the environment, whereas scientific concepts arise from everyday concepts in the process of formal learning. A scientific concept, according to Vygotsky, can arise only from an everyday concept, and, moreover—and this clearly contradicts the basic positions of Marxism—not through reflection of the objective world in our consciousness; rather, it is generated by speech. Similarly, Vygotsky's conception of the nature of a concept is clearly at variance with Lenin's theory of a concept. Marx states quite definitely: "Dialectics of concepts is in itself only a conscious reflection of the dialectic movement of the external world" (Marx, "Ludwig Feuerbach and the end of German classical philosophy." Collected works. Vol. 1, p. 350). According to Lenin, a concept is a reflection of nature in man's consciousness.

Vygotsky also sees the development of a concept in childhood as a process of independent internal development. He speaks of the maturation of a concept: there is a constant succession of qualitatively different stages of a concept as a result of internal laws.

According to Vygotsky, the development of a concept in children takes place in three stages: syncretic, complex, and conceptual. The first stage (up to the age of two-three) is characterized by the fact that a child's ideas are formed by Thorndike's trial-and-error method and constitute an "inchoate, unordered multitude."

The stage of complex concept formation, which Vygotsky postulates, following Werner, in his opinion continues to the age of 12-13. Vygotsky thought that concepts were distinguished by their subjectivity at this stage of development; the establishment of a connection between concepts about different objects takes place independent of any connection with objective reality. "Randomness, indeterminacy of contours, and a fundamental lack of boundaries are the distinctive features of complex thought." According to Vygotsky, a child begins to think in concepts only after the age of 12. "It is only after the age of 12, i.e., the beginning of puberty, that processes leading to concept formation and to abstract thought begin in the child" ([Thinking and speech]. P. 106).

Thus, according to Vygotsky, even the transition from one stage of concept development to another is exclusively the result of self-development. He attempts to explain all development of concepts in the child in terms of developmental features; and he bases the concept of development by stages on a development that proceeds from within, a peculiar self-development, i.e., on the basis of the same counterrevolutionary "biogenetic law." The absolute opposition between everyday concepts and scientific concepts is a related result of Vygotsky's idealistic position, his formal-logical interpretation of a scientific concept as having no concrete content, and his attribution of concrete content only to his own artificial construct of an everyday concept.

Vygotsky presents an extremely mistaken contrast in his comparison of these two concepts:

The development of the concept of "brother" [an everyday concept—E.R.] began not with an explanation by a teacher and not with a scientific formulation of the concept. Rather, this concept is filled with the child's own rich personal experience. But one can certainly not say this about the concept of "Archimedes' law." [Thinking and speech] (P. 177)

Vygotsky's pupil Shif repeats the same erroneous position: "The weak side of scientific concepts is their poverty, their verbalism. . . . Everyday concepts have a quite large saturation of content" (Shif, [Development of scientific concepts in schoolchildren]. P. 68). Thus, Vygotsky treats the concept in the spirit of formal logic.

Formal logic established an inverse correlation between the scope and the content of a concept. "The broader the scope of a concept, the more general it is, and the poorer is its content; and the richer it is in content, the narrower is its scope" (Vvedenskii, [Logic as part of the theory of cognition]. P. 68). Vygotsky's interpretation of the scientific and the everyday concept indicates that he understands the abstract and the concrete in the spirit of bourgeois psychology, which is based on formal logic.

Vygotsky clearly is ignorant of the Marxist-Leninist theory of the abstract and the concrete. The dialectics of the transition from sensation to thought, from the singular to the universal, entails that the universal does not discard the singular, but preserves it.

Moving from the concrete to the abstract, thought does not depart—if it is correct, N.B. (and Kant, like all philosophers, speaks of correct thought)—from the truth, but approaches it. The abstraction of "matter," a law of nature, the abstraction of value, etc., in a word, all scientific (correct, serious, and not nonsensical) abstractions reflect nature more profoundly, more truly, and more completely. (Leninskii Sbornik IX, pp. 165–166, or [Philosophical notebooks]. P. 166)

"The concrete is concrete because it is a combination of multiple determinations, it is the unity of diversity" (Marx, ["Introduction to the critique of political economy"]. In Marx & Engels, [Works]. Vol. XII, part 1, p. 191).

The problem of the formation and development of concepts is a timely one in pedagogy; it involves such fundamental questions of the learning process as the method of teaching and the compiling of textbooks and visual aids.

Vygotsky's understanding of a scientific concept as being empty with regard to content inevitably leads to schematism in formal classroom instruction.

One cannot digest a generalization if it does not contain a wealth of factual material. Generalization will be valuable if it embraces a large quantity of factual material. Only an organic link between factual material and generalization can create a stable base in consciousness, a firm foundation for further knowledge.

Vygotsky's division of concepts into scientific and everyday is artificial and contrived. It is difficult to surmise in Vygotsky's conception why "cinema" is an everyday concept, but "exploitation" is only scientific. The term *similar* not only is directly related to a child's personal experience but can also be given meaning under a teacher's guidance; but concepts of exploitation can, from the outset, be acquired from a child's own experience in a capitalist country. Vygotsky's treatment of the problem of thinking leads not only to schematism in formal learning but also to complexity. According to Vygotsky, the development of concepts in 12-year-olds is complex; hence, according to these false views, formal learning should also be complex. Structural psychology, which doubtless had an influence on Vygotsky in his last years, he drew on to justify a complex system of formal learning. Unlike the old psychology, which viewed mental phenomena as a mechanical combination of sensations and ideas, bourgeois structural psychology sees every mental phenomenon as a whole independent of the properties of its parts.

Koffka is very consistent when he says, on the basis of the principles of structural psychology, that learning is never specific, which, translated into the language of the school, means independent of its content.

"Learning is the formation of structure," says Vygotsky, following Koffka. In Vygotsky's understanding, having structure means eviscerating discrete objects of their distinctive characteristics and complexity in formal learning.

The complex system of learning condemned by the Party and the government, and refuted by the theory and practice of learning, is "justified" psychologically by Vygotsky in all of his writings.

In 1934 he reiterates that complex thought is a fact; for him the mistake of

pedologists is merely that they orient teachers toward complexity in learning when complexity is already a stage that has been passed.

Thus, despite all the resolutions of the Central Committee of the All-Union Communist Party (Bolsheviks), Vygotsky remained a fundamental defender of the complex system of learning in the school.

The theory of the origin and development of language from which emanates a denial of the role of grammar in formal learning, as we shall show below, is anti-Marxist, and antiscientific.

An idealist, formal, scholastic interpretation of written and oral speech leads Vygotsky to ultra left-wing conclusions with regard to the role of grammar. Vygotsky's assertion that thinking and speech have different genetic roots is contrary to Marx & Engels's theory of the origin and development of thinking and speech from the social process of labor. This position of Vygotsky's also conflicts with the findings of Marxist-Leninist linguistics and with Marr's Japhetic theory of the unity of language and thought.

Thus, a transition from a linear language, gesticulating and mimetic, to a phonetic language, and from concrete thought to abstract thought, is related to the transition from the use of natural tools to man-made tools. "The roots of inherited language lie not in external nature, not within us, within our physical nature, but in society, in its material base, in economics and technology" (Marr, [Japhetic theory]. P. 18). As for the origin of thought, Marr writes: "Awareness came about not in the process of natural history on the basis of the simple fact that an object is situated in a physical environment, but in the process of the elaboration of technical means, taken not from nature, but from production" (Ibid. P. 84).

Between thinking and speech, which, according to Vygotsky, derive from different sources, complex functional relations are established in the process of a long development, the result of which is the unity of thinking and speech.

According to Vygotsky, the unity of thinking and speech lies in the meaning of the word. Thus, he ended by identifying thinking and speech.

In reality, every word is not only a generalization but also a grammatic unit. There is a dialectic unity between the content and the form of a word, but not identity: the word can be complex in content and simple in form, and vice versa. Disregard of the form of a word is tantamount to underestimating grammatic rules.

Vygotsky concludes:

A preschooler already possesses all the basic grammatic and syntactic forms. In school, during formal instruction in his native language, the child does not acquire essentially new skills of grammatic and syntactic forms and structures. From this standpoint, learning grammar is truly a useless business. ([Thinking and speech]. P. 213)

These ultra-left-wing conclusions, which have done so much damage to the school, derive from Vygotsky's anti-Marxist "theory" of language.

An analysis of Vygotsky's statements on higher mental functions and on other issues directly related to the process of learning shows quite clearly that vestiges of the anti-Leninist theory of the demise of the school, mentioned in the resolution of the Central Committee of the All-Union Communist Party (Bolsheviks) of 3 September 1935, are nurtured by Vygotsky's conception.

Vygotsky developed his "theory" of higher mental functions in his early works, [Pedology of school age] (1930) and [Pedology of the adolescent], and repeated it without special changes in his later books.

The starting premise of Vygotsky's theory is the false division of all mental functions into lower and higher.

According to Vygotsky, the basic features of higher mental functions are that they are voluntary and that they are conscious. A mental function must become conscious and voluntary to become higher. Higher mental functions are mediated, intellectualized, and restructured on the basis of thought.

The essence of the cultural development of any mental function would presumably be: "that the child learns functionally to use certain signs as tools for performing one or another psychological operation" ([Pedology of school age]. P. 30). Quite mistakenly, Vygotsky says that the mediation and intellectualization of functions take place under the influence of the word, which serves as a sign and a symbol.

Basing himself on the extremely counterrevolutionary "theory" of cultural development, Vygotsky said that a child's memory, like the memory of primitive man, is eidetic. According to Vygotsky, 50 percent of children pass through an eidetic stage; and if we include children with latent eideticism, the figure is 100 percent.

The essence of eideticism consists in the capacity to see, in the literal sense of the word, an image in all its details even after it ceases to act directly upon visual perception. Eidetic memory is memory independent of ideas; it restricts the child's perception solely to the situation at hand.

Eidetic images are subjective and undifferentiated, and allegedly proper also to man at the lower stage of cultural development.

This arch-reactionary "theory" was borrowed by Vygotsky from the German psychologist E. Jaensch, who at present functions as a direct agent of fascism.

Among other things, Vygotsky, who knew foreign languages well and who had been abroad, could not have been unfamiliar with the zoological hate entertained by the fascist demagogue Jaensch for the Soviet Union and for Marxism. Nonetheless, he shamelessly dragged this nonsense onto the pages of our press.

In line with bourgeois psychologists and pedologists, Vygotsky says that by the age of twelve, the memory children have from the sphere of perception passes into the sphere of thought, and essentially dissolves in thought. He treats logical memory as free of everything concrete. He writes: "Memory is filled not so much with images of concrete ideas as with their concepts, their connections, their relations" ([Pedology of the adolescent]). "Remembering concrete images is replaced by assimilation of concepts" ([Pedology of the adolescent]).

The reduction of cultural and logical memory to the "memory of concepts" and

connections independent of concrete images is essentially based on an idealistic conception of the nature of memory and leads to its dissolution in thought.

This interpretation of memory is an expression of the Machist statements of Janet that "Time is created by memory—everything in human cognition is a construction of mind."

In terms of teaching children, this divorce of logical memory from images and ideas leads to a justification of schematism, sociologizing, and the teaching of the basics of science. According to Vygotsky, by the age of 12-14 years, attention, like memory, makes a transition from the direct and nonvoluntary to the mediated and voluntary; from the system of perception it passes into the system of thought, and is de facto dissolved in it.

This understanding of attention, this radical divorce of the voluntary from the involuntary, is refuted by the development of memory over time and functionally. Voluntary attention arose out of involuntary attention, as Ribot demonstrated.

As for the development of intellectual functions, Vygotsky is under the influence of the bourgeois psychologists Piaget, Claparède, and Adler. Vygotsky borrowed from Adler the "theory of compensation," which essentially amounts to the following: the underdevelopment of higher intellectual processes, which, according to Adler, is more often found in workers, is compensated for by the development of elementary mental functions. This extremely harmful bourgeois "theory" was used extensively by Vygotsky in dealing with the question of mentally retarded children. Adler's "theory" of compensation "justifies" the reactionary "law" of contemporary pedology that the children of workers are doomed to mental retardation.

Learning and mental development of the child in Vygotsky's pseudotheory

Questions concerning child intellectual development are obviously of interest to every teacher and everyone who works with children. Intellectual development is highly dependent on the organization and the method of teaching. The unity of the learning and upbringing process and a child's intellectual development follow from the Marxist-Leninist theory of cognition. Learning and development constitute a unity. Learning gives rise to and steers a number of processes of intellectual development. Acquisition of knowledge leads to the development and improvement of mental functions. For us, intellectual development is not so much a precondition for learning as it is its result. But pedological pseudotheoreticians have approached this question with their counterrevolutionary "law" that states that a child's fate is sealed.

But on this question as well as on a number of others, Vygotsky remains the faithful pupil of bourgeois theoreticians, consistently reflecting the influence of Thorndike, Bühler, Piaget, Koffka, and others. Bourgeois psychologists, in accordance with their methodology, regard the development of intelligence as something separate from reality, abstracting it from the concrete conditions of the

cognitive learning process, which results either in the separation of intellectual development from formal learning (Piaget), or in the dissolving of formal learning in development (Koffka) and an underestimation of school knowledge.

Vygotsky says that formal learning and development are in unity, formal learning playing the leading role. Formal learning promotes development, but only if it is based not on matured functions, but on maturing functions, on functions that have not yet completed their development—not on development today, but on development tomorrow. The leading role of formal learning is apparent, imaginary; in reality, for Vygotsky, formal learning plays an external role relative to development and makes no alterations in a child's development. This is an absolutely invalid, scurrilous affirmation. Every teacher knows very well how a child's development improves when he enters school, and that it is completely impossible to separate a child's development from formal learning.

Vygotsky's harmful views of formal learning and development had a very strong impact on the so-called "theory" of the zone of proximal development. Vygotsky uses the term zone of proximal development to designate "the distance between the level of actual development, determined by tests, that a child can do independently and the level of possible development, also determined by tests, but ones that a child can do only under the guidance of an adult." The "theory" of the zone of proximal development that Vygotsky and his pupils proclaim to be a "discovery" they borrowed from the American scientist McCarthy.

Vygotsky ascribes a very major role to the zone of proximal development in pedagogy. In his opinion, it is a tool for "diagnosing intellectual development, achievement, and the composition of classes."

In this pseudotheory of Vygotsky's, the school and the teacher are completely unable to change a child's development. This becomes especially clear when Vygotsky discusses the influence of the school on intellectual development and on pupils' achievement.

Vygotsky says that a low level of achievement in children who come to school with a high intellectual development (IQ) compared with the achievement of children with a less-developed intelligence may be attributed to the fact that the zone of proximal development was already exhausted in the first group, and he stresses a dire figure: 57 percent of schoolchildren are doomed to failure since they have already "gone through" the zone of proximal development.

According to Vygotsky, what will happen is that, if the level of intellectual development of children who go to school rises under the influence of the growing level of culture of workers, achievement in school will diminish. He writes:

They [those who come to school with a higher level of intellectual development—E.R.] acquire it at the expense of the zone of proximal development, i.e., they go through their zone of proximal development faster and hence find themselves in the relatively small zone of development since they have already put it to use to some extent. (Vygotsky, [The mental development of children in the formal learning process]. P. 52)

Thus, in writing, formal learning is dominant and leading, but de facto the significance of formal learning is denied. Vygotsky comes to the absurd "conclusion" that school not only does not promote a child's intellectual development but even retards it.

It turns out that "he" (i.e., a child who has come to school with a high level of intellectual development—E.R.) will be the last; the school will have an unfavorable influence on his mental development, slowing it down (Ibid. P. 78). In his writings, for Vygotsky formal learning plays a dominant role, but de facto he argues for and defends Shul'gin's position on the question of the influence of the school on children's intellectual development.

From the perspective of this absurd, antiscientific "theory," the period of formal learning should be adapted to the intellectual development corresponding to the zone of proximal development; Vygotsky considers any divergence upward or downward to be equally damaging. The zone reflects the level of maturity of functions. It exists in children, but is absent in adults, in whom processes of maturation have been completed. The absurdity of Vygotsky's arguments reach the point where he says that development stops with the onset of maturity: the mind of the adult remains unchanged; it acquires no new qualities.

Just as an optimal temperature of 37 degrees exists for the human body and any deviations upward or downward threaten to impair vital functions and ultimately cause death, so, with regard to formal learning, it has its own "optimal temperature" for teaching each subject. If we begin too early or too late, formal learning will be impeded to an equal degree. ([The mental development of children in the formal learning process]. P. 35)

One need not prove that this conclusion has been refuted by all the achievements of the cultural revolution in our country. Vast masses of workers, numbering many millions, in our country have risen up, and been aroused to participate creatively in the building of socialist society, and are mastering the most difficult areas of science. Vygotsky attempted to slander workers by establishing an "optimal" age for learning and trying to reduce the tremendous conquests of the Great October Socialist Revolution in the area of culture to nothing.

Vygotsky, following bourgeois scientists, advances the reactionary and harmful theory that all stages of child development are punctuated by crises, i.e., periods in which the development of each child is impaired. According to this "theory," school age, on the one hand, borders on a crisis that falls at the age of seven, on the one hand, and on the critical period of puberty on the other.

The "theory" of crises leads to the conclusion that any circumscribed period in a child's development not only creates insurmountable difficulties for learning and upbringing but also dooms the child to a pathological condition. According to this "theory," retardation and relative abnormality are the lot of every child at the various stages in his development. This extremely harmful theory, linked to the "theory" that a child's fate is foredoomed by biological and social factors, demobilizes and disarms the teacher: instead of showing a teacher the most useful ways

to educate and rear children, Vygotsky perniciously affirms that the "crisis" years lower a schoolchild's achievement.

In this regard Vygotsky was a pupil of his bourgeois teachers: Meumann, Piaget, Terman, and others.

The well-known bourgeois pedagogue and psychologist Meumann wrote: "Perhaps one can say that a child is able to grasp and understand conclusions he has already drawn or the purpose of drawing conclusions only in the last grade of public school, at the age of fourteen" (Meumann, *Essays in experimental pedagogy*. P. 187).

According to Piaget, children begin to think logically at the age of twelve. Many bourgeois psychologists, faithful servants of the exploiting classes, have written that the thinking of peasant children never develops to the level of abstract and logical thinking. Binet and Terman both say that children acquire the capacity to interpret phenomena only at the age of 12–14, whereas every parent knows that even three- and four-year-old children can explain phenomena accessible to them. In this regard Vygotsky is not alone; according to Blonsky, the horizon of a seventh-grader does not go beyond the bounds of his home, of his immediate environment (Blonsky, [The development of the thinking of the schoolchild]). He goes on to say that a seventh-grader's vocabulary consists of only 5 percent abstract words, whereas words referring to the immediate environment make up 53 percent (the other words refer to the home, lessons, etc.).

Vygotsky wholly accepts the periodization of childhood and the development of thought established by bourgeois scientists. Hence his clearly invalid statement that: "The acquisition of logical thinking becomes an actual fact only in adolescence" ([Pedology of the adolescent]. P. 313).

In his last book, [Thinking and speech], Vygotsky also says that before the age of twelve, a child does not have the capacity to form concepts.

All of these developmental characteristics were used to back up the alleged decline in achievement in the teaching of any discipline.

Such false assertions were also reflected in the works of our experts on method in the teaching of history: thus, V.N. Vernadskii comes to the following conclusion in his article ["Results of work in history in the seventh grade"], noting the poverty of concrete historical knowledge and the schematism in students: "The conclusion is therefore clear. It is certainly not anything new, hitherto unknown to the expert on method, or to a good practicing teacher. It has been formulated by a number of bourgeois experts on method who noted that the adolescent's intellectual powers are limited."

Instead of mobilizing the attention of the teacher to organize instruction and demonstrate the best ways of working, and to arm teachers of history with the best methods, Vernadskii, the expert in method, causes damage to the teaching of history by repeating the pedological nonsense that an adolescent's intellectual powers are limited. Vernadskii proposes, on the basis of a description of age he borrowed from pedologists, to teach only facts to pupils in the incomplete secondary school,

which is tantamount to proposing simplified instruction and rules out any systematic course in history not only for the primary school but also for the secondary school.

Vygotsky's profoundly mistaken "theory" did tremendous harm to the school concerning the question of learning and development. His statements on teaching specific disciplines caused great damage to our school, and should be acknowledged to be ruinous.

Thus Shif, Vygotsky's pupil, in her book [The development of scientific concepts in the schoolchild], which she wrote under his direct guidance, sees the task of formal instruction to be not that of arming pupils with a specific knowledge in the area of history, but, like her teacher, she reduces school education to making knowledge already possessed conscious and voluntary. For Shif evidence of this awareness is that children scored high in correct use of conjunctions of opposition and causality in tests of scientific concepts. Children were given all the same antiscientific tests of "scientific and everyday concepts" broken off at the words because or although and were asked to complete the sentences. Leaving aside for the moment an analysis of this obviously mistaken procedure, borrowed without any alterations from Piaget, it is necessary to stress the complete invalidity of reducing awareness in the social sciences to use of grammatical forms. Awareness in social science, history, and any other discipline constitutes an organic unity with the assimilation of facts. But for Shif they serve only as illustrations.

This interpretation of the nature of formal learning in the social sciences can only lead to sociologizing, to the dissolution of learning in the development of formal logic, and to a denial of factual knowledge, so necessary in the study of any subject. This position of the author fundamentally contradicts the instructions of Comrades Stalin, Kirov, and Zhdanov for the conspectus of textbooks in history and the resolutions of the Central Committee of the All-Union Communist Party (Bolsheviks) on the teaching of civilian history, which requires the study of facts and their correct elucidation.

Almost all of Shif's works glaringly contradict Party directives against schematism in the teaching of history and social science; she underscores, with the "modesty" characteristic of Vygotsky's students, that her "investigations" anticipated the resolution of the Central Committee of the All Union Communist Party (Bolsheviks) on the teaching of history.

Some psychologists attempted to insist on the correctness of the way Vygotsky posed the question of learning and development even after the resolution of the Central Committee of the All Union Communist Party (Bolsheviks) entitled ["On pedological distortions in the system of the Public Commissariat of Education."] Thus, Comrade Kolbanovskii said, in one of his journal articles, that Vygotsky's mistake was simply that he overestimated formal learning.

This position is absolutely invalid. Vygotsky's harmful system of development and learning is linked to the anti-Leninist "theory of the demise of the school," and should be exposed and discarded, not corrected. From a pedagogical perspective, Vygotsky's statement on formal learning and development serves the anti-Leninist "theory" of the demise of the school. Their methodological foundation is the Machist understanding of intelligence, of the self-development of intelligence, its independence of the external world, and the metaphysical separation of thought from its content.

Vygotsky's method of "investigation"

The unity of intellectual development and the process of formal learning obliges the teacher not to avoid study of the child's mental characteristics.

It obliges a psychologist not to separate the investigation of the development of a child's intelligence from the process of formal learning; it is only then that the findings of his investigations will be able to help the teacher in his work. As we have already said, Vygotsky moved from one bourgeois method to another with regard to his methods of investigating children.

But the method used by bourgeois science for measuring intelligence, beginning with Binet's system in all its various forms, strives to isolate itself from a child's knowledge, his learning, from his upbringing, and from the child's own experience.

The method for studying a child's intellectual development from Binet to Piaget's procedures, so widespread among pedologists, was the tool with which bourgeois psychologists attempted to demonstrate the intellectual superiority of children from the ruling classes over working-class children. And it was carried over to our conditions in a completely uncritical way.

It must be borne in mind that the experimental work in Vygotsky's investigations occupy a very limited place. He speaks much about the results of "experimental investigations" and extremely little about the method that he used.

He and his pupils (Luria, Sakharov, Shif, Zankov, Leontiev) occupy a prominent place in uncritical dissemination of bourgeois method in our country, in particular, Piaget's method. One of Vygotsky's pupils, Sakharov, devised a method for studying concepts that does not essentially differ from the method of the well-known German psychologist and fascist, N. Ach; it consisted of finding a meaningless relationship between the shape of a toy and some fanciful abstract name for it. The absurdity of this method was obvious to anyone with common sense: the only name one can give to these stupid "experiments" is that they are an authentic mockery of our children.

Vygotsky and his pupils also used Piaget's method to study the development of concepts; they, too, gave children incomplete sentences, breaking off with the words *because* and *although*; the children were required to finish the sentences.

To explain their point that for a child, transfer of a name also signifies the transfer of a property of one thing to another, Vygotsky and his pupils attempted to use the following absurd questions: "If a dog has horns, will the dog give milk?"

This method fits perfectly the evaluation given by the resolution of the Central

Committee of the All Union Communist Party (Bolsheviks):

These purportedly scientific "investigations," carried out among a large number of pupils and their parents, were directed mainly at poorly performing pupils or pupils who could not adjust to the school regime. They were intended to demonstrate, from the purportedly "scientific," "biosocial" perspective of contemporary pedology, the hereditary and social roots of a pupil's poor performance or of certain behavioral defects. . . . (Resolution of the Central Committee of the All Union Communist Party (Bolsheviks) entitled ["On pedological distortions in the system of the People's Commissariat of Education"])

Vygotsky's "law" that a child's fate is irrevocably sealed by the influence of heredity and the environment

The resolution of the Central Committee of the All Union Communist Party (Bolsheviks) entitled ["On pedological distortions in the system of the People's Commissariat of Education"] revealed, with utmost clarity, the class intent of the antiscientific theory that the fate of the child is irrevocably sealed beforehand by the influence of heredity and the environment.

The Central Committee of the All Union Communist Party (Bolsheviks) establishes that this theory could have come into being only as a result of a noncritical transfer of the views and principles of antiscientific bourgeois pedology to Soviet pedagogy, the purpose of such pedology being to demonstrate that the exploiting classes and the "superior races" are especially gifted and have special rights to existence and, on the other hand, that the working classes and the "inferior races" are physically and intellectually foredoomed, the intent being to preserve the domination of the exporting classes. (Resolution of the Central Committee of the All Union Communist Party (Bolsheviks) entitled ["On pedological distortions in the system of the People's Commissariat of Education"])

Vygotsky formulated very clearly this fatalistic determination of children's destiny by hereditary factors not only in his early works but also in his very last.

"Without the slightest exaggeration one can say that definitely all devices and movements a future human being and world citizen will have at his disposal in the course of his entire lifetime are already given as he lies in the cradle flailing about helplessly, unable to fix his gaze and hold his hand steady"—that's what Vygotsky wrote in 1926. This view is utterly reactionary and is the contraband of the most damaging theories of bourgeois psychology.

With regard to the question of the environment and heredity, Vygotsky was under the influence of such obscurantists as Busemann.

Busemann, the author of a number of books on questions of the environment that were zealously disseminated in our country by our pedologists, continually stresses the backwardness of the thinking and speech of a proletarian child. Vygotsky refers to his demagogic writings more than once.

Busemann is one of the most outstanding obscurantists of fascist Germany.

Together with E. Jaensch and N. Ach, whose influence on Vygotsky we have already mentioned, he attacked a number of German psychologists, accusing them of "Bolshevizing materialism" and disregarding the "national" and religious spirit. Vygotsky made use not only of Binet's method of investigation of mental aptitudes but also quoted his statements on questions of the environment and heredity that were of an openly bourgeois nature. In his book *Contemporary ideas about children*, Binet says that a proletarian child displays a backwardness in achievement, is lacking in attention, and at the age of eleven is at the level of a nine-year-old. He also says that "a correct moral definition of an indigent is not 'a person who has no money' but 'a person who is unable to take care of his money'"—the bare face of the bourgeois shows itself here without a mask.

Vygotsky also refers to other bourgeois psychologists who, with a specific class objective, demonstrate the burden of the hereditary factor on a child (Bühler, Peters, etc.). Bühler argued that there was a high correlation between a sojourn in prison on the part of parents and of their children: of 30 children whose parents had been in prison, 28 also ended up in prison. Peters found a correlation between parent and child achievement. Although the bourgeois class intent is quite clear here, Vygotsky seconds this archreactionary statement.

With regard to the environment, throughout his works Vygotsky insisted on the influence of an unchanged environment on a child's development, hence differing in no way from other pillars of pedology (Zalkind and Blonsky). In lectures on pedology he gave in 1934 at the Moscow Pedagogical Institute, Vygotsky mentions the environment as a source of the whole of a child's development: "The environment is the source of all of a child's specific human properties; if the appropriate ideal form is lacking in the environment, the appropriate activity, the appropriate property, the appropriate quality will not develop in the child" ([Foundations of pedology], 1934. P. 114).

Vygotsky "psychologizes" the environment. He speaks of changes in the environment in the process of subjective experience. In [Foundations of pedology] (1934) and elsewhere he mentions a case in which three children in the same environment are in exactly the same conditions (difficult family circumstances, an ill mother) but react to them each in his own way. Here we have a subjective psychological change in the environment, but objectively it remains unchanged. Vygotsky borrowed the "theory" of psychologization of the environment from Busemann, whose "methodological" positions we discussed above.

Stern's theory of convergence had the greatest influence on Vygotsky concerning questions of heredity and the environment. This theory, which mechanistically combines hereditary factors with the environment, was regarded by the pillars of pedology as very progressive.

The theory of convergence, hereditary and environment predetermination, postulating two predetermining factors at the same time, is used by bourgeois scientists to demonstrate the superiority of the ruling classes and the backwardness of the exploited classes.

To the end of his life, Vygotsky retained these Sternian positions concerning the question of the environment and heredity. For Vygotsky, the principle of convergence pervades every aspect of physical and mental development.

"Give me only a single reaction of the newborn child and a single intersecting of influences in the structure of the environment and I will predict, with mathematical accuracy, the behavior of an adult at any given moment," said Vygotsky in 1926. He maintained this eclectic "theory" in all of his writings, beginning with [Pedology of school age] and ending with [Foundations of pedology] (1934).

The influence of Stern, Freud, and, especially, Adler, with his extremely damaging statements about the constant struggle between the child and the environment, is also discernible in Vygotsky's statements about the environment and heredity. Unrequited desires recede into the unconscious, go underground, as he put it, and enter into a struggle with the environment; and the task of upbringing is the sublimation of these desires in higher forms, the establishment of an equilibrium between the environment and the child. It is certainly no accident that Vygotsky called Freud's conception materialist and dialectic in his foreword to Freud's book Beyond the pleasure principle.

The "theory" of equilibrium was a component part of the eclectic, antiscientific, bourgeois "theory" that a child's fate was sealed beforehand by biological and social factors.

The anti-Marxist, antiscientific "theory" of equilibrium, the "theory" of man's adaptation to the environment, was complementary to Freud in Vygotsky's writings: according to Vygotsky, a constant struggle goes on between the child and the environment, between the pupil and the school; and the task of education is to establish an equilibrium between the child and the environment, i.e., to subordinate the child to his environment.

The founders of Marxism showed the erroneousness and reactionary nature of the "theory" of equilibrium. According to the definition given by Comrade Stalin: "it has nothing in common with Leninism." "Absolute rest, unconditional equilibrium does not exist. A particular movement strives toward equilibrium, but movement as a whole destroys that equilibrium anew" (Engels, Anti-Dühring. Vol. 14, p. 62). Engels showed that Dühring, drawing on the principle of equilibrium, came to the conclusion that class contradictions would die away in capitalist society.

All of Vygotsky's writings are pervaded by completely overt biologism. Although criticizing Köhler, Koffka, and, especially, Thorndike for transferring the laws established for animals to man, Vygotsky himself was guilty of this.

In his early works he, like Bühler, said that a child, like an animal, passes through three stages of development: instinct, training, and intelligence. But in his last writings, he follows Köhler and Koffka regarding the common features of the development of intelligence in primates and in man.

The biogenetic law of development, as it is called, has to do with the principal law of contemporary pedology. The biogenetic "law" is adhered to by the majority of bourgeois psychologists and pedologists.

The whole of the so-called theory of cultural-historical development created by Vygotsky starts out from the premise that a child repeats the path of the whole of mankind in his development. The development of mental functions historically consisted in a transition from natural forms of behavior to cultural forms; an individual masters functions, and their use becomes voluntary and conscious—and all this takes place under the influence of tools and signs. In the stage of cultural development, the word plays the role of tool. For pedologists, including Vygotsky, slander of the children of workers goes hand in hand with slander of imperialists of the colonial peoples to justify the seizure of new territories in the name of "progress" and "culture."

Such, for example, is the claim that there is no difference in primitive man between perception and memory; memory is eidetic. Memory is acquired under the influence of signs (knots, reed cords, the claws of a lynx, etc.), which vary throughout the course of development.

The thinking of primitive man is, according to Vygotsky, syncretic and complex. "Primitive man has no concepts; abstract and generic nouns are alien to him" (Vygotsky, [Studies in the history of behavior]).

Vygotsky extends the "principle" of biogeneticism to the educational process as well. Thus, learning to write should, in Vygotsky's opinion, be natural. The history of the development of writing, which involved mastering a system of signs, should be repeated by the child in the schoolroom. This learning should be "constructed from pedological perspectives as a transition from the drawing of things to the drawing of speech" ([Mental development of children in the process of formal learning]). The natural method of learning to write entails moving from pictographic writing to ideographic depiction via abstract signs.

In learning arithmetic, according to Vygotsky, a child should also repeat the path of development of science from natural arithmetic, which is based on the numerical figures, to cultural arithmetic, characterized by the use of signs.

The reactionary biogenetic "law" in formal learning leads to some gross errors. Concurring with the counterrevolutionary biogenetic "law," representatives of pedological pseudoscience went so far as to deny logic in formal learning: in place of systematic exposition of some subject to children, what is proposed is tatters, fragmentary information in a random combination, in accordance with the claim that this method is related to the distinctive features of age. This clearly contradicts the basic propositions of our pedagogy.

The school should provide knowledge in logical form. Engels writes:

Thus a logical method was the only suitable one. But essentially, this is also the historical method, only divested of its historical form and free from disruptive chance events. The course of thought should begin in the same way that history begins, and its further movement will be nothing other than a mere reflection of the historical process, assuming an abstract and theoretically consistent form; a corrected reflection, but corrected in accordance with laws derived from the actual historical process, in which each moment may be regarded at the highest

point of its development, in its full maturity and perfection. (Karl Marx, [Selected works in two volumes]. Vol. 2, p. 283. Moscow: Partizdat, 1933)

Everything Vygotsky said on questions of the environment and heredity are in glaring contradiction to the theory of Marx, Engels, Lenin, and Stalin. The conception of heredity Vygotsky borrowed from bourgeois scientists has produced an idea of development and education as a passive process. This conception of development inevitably leads to a denial of the role of formal education and upbringing. Marx and Engels saw human development as a single dialectic process in which there is a constant struggle between heredity and the creative side, adaptation, which breaks down what has been inherited.

A theory of development shows how, from the very first cell, each step forward to the most complicated plant, on the one hand, and man, on the other, is accomplished in the form of a constant struggle between heredity and adaptation.

One can then see how little applicable are the categories of, for example, "positive" and "negative" to such forms of development.

One can see heredity as a positive, conserving side; and adaptation as a negative aspect constantly undermining what has been inherited; but just as effectively one can see adaptation as the creative, active, positive aspect and heredity as a source of resistance, as a passive, negative activity. (Engels, Dialectics of nature. Vol. 14, p. 433)

Vygotsky does not understand the Marxist-Leninist theory of the environment; he disregards the role of man in transforming the environment. The Menshevik "theory" of spontaneity, the right-wing opportunist "theory" of movement by itself, are evident in the role assigned to the omnipotent environment. In pedagogy, denial of the role of the individual person and a spontaneous understanding of the environment led to underestimation of the educational process and the role of the teacher, which is the basis of the anti-Leninist "theory" of the demise of the school. The founders of Marxism always struggled most vigorously against spontaneity, in whatever form and in whatever area it appeared.

Marx and Engels's materialist conception of history underscores the creative role of the individual. Marx and Engels, Lenin and Stalin, repeatedly pointed out that the economic aspect is not the only factor in the course of history: other factors, above all man, act along with it.

"Human beings, endowed with consciousness, acting thoughtfully or from passion, and posing goals for themselves are the actors in the history of society" (Marx, Selected works. Vol. 1, p. 354). In The German ideology, Marx and Engels say that circumstances "create people in the same measure as people create circumstances."

In a conversation with E. Ludwig, Comrade Stalin underscored the Marxist conception of the active role of the individual. "It is people, albeit only insofar as they correctly understand the conditions that they have found in finished form, and only insofar as they understand how these conditions change, who make history" (From a conversation between Comrade Stalin and E. Ludwig, p. 4).

Adoption of Stalin's constitution, the greatest document of our epoch, which

sums up the results of the struggle and victory of socialism and, at the same time, reveals the perspectives of new victories and conquests, shows especially distinctly how the "law" that says that children are fatalistically ordained by heredity and social factors is alien and hostile to Marxist science and to our building of socialism.

This intimate, inseverable link between the principal "law" of contemporary pedology that says that a child's development is preordained by heredity and environmental factors, coupled with the anti-Leninist "theory" of the demise of the school, had an extremely obvious influence on Vygotsky's views. A brief analysis of Vygotsky's conception reveals its antiscientific, erroneous, and harmful nature for the school. A critique of Vygotsky's works is a timely matter, and must not be put off, especially as some of his followers have still not been neutralized (Luria, Leont'ev, Shif, etc.).

The resolution of the Central Committee of the All Union Communist Party (Bolsheviks) of 4 July entitled ["On pedological distortions in the system of the People's Commissariat of Education"] calls for exposure and eradication of all such theories as an obligatory condition for successful functioning of the Soviet school.

Note

1. See [What is the friends of the people and how they fight against social democrats] (3rd ed.), Vol. 1, pp. 61–65.