The Ist International Symposium
on Cultural-Historical Psychology
Urgent Problems of Cultural-Historical Psychology

Tatyana E. Sizikova
Novosibirsk State Pedagogical University,
Novosibirsk, Russia

Первый международный симпозиум
по культурно-исторической психологии
«Актуальные проблемы культурно-исторической психологии»

Татьяна Э. Сизикова
Новосибирский государственный педагогический университет,
Новосибирск, Россия

Corresponding author. Email: tat@ccru.ru

Abstract. Addressing cultural-historical psychology is one of the responses to the challenge of our time in the search for a new psychology. The appeal, "forward, back to Vygotsky," made by A. A. Puzirey (1996) indicates the path and the final result of such a search. In the work of the symposium, the following problems of our time: crisis of modern psychology; development of personality, creativity, higher mental functions; the problem of personal freedom, especially aggravated in the context of digitalization; issues of the impact of digitalization in preschool and school education; questions of defectology and problems of training were identified. The solution of these problems is possible with the help of cultural-historical psychology.

The article contains excerpts from the speeches and presentations of the participants of the symposium.

The e-version of the video materials of the symposium is available on the Novosibirsk State Pedagogical University website: https://cloud.mail.ru/public/smn9/wniFTMogW The e-version of the collected works is available on the Novosibirsk State Pedagogical University website: https://reg.nspu.ru/sites/index.php?s=51

Keywords: cultural-historical psychology; personality; development; creativity and art; defectology; digitalization; training

Аннотация. Обращение к культурно-исторической психологии является одним из ответов на вызов современности — поиск новой психологии. Призыв «вперед — назад к Выготскому», сделанный А. А. Пузырей (1996), указывает на путь и конечный результат такого поиска. В работе симпозиума были обозначены следующие проблемы современности, решение которых возможно с помощью культурно-исторической психологии: кризис современной психологии; развитие личности, творчества, высших психических функций; проблема свободы личности, особенно обострившаяся в условиях цифровизации; влияние цифровизации на процесс дошкольного и школьного образования; вопросы дефектологии, проблемы обучения.

В статье представлены отрывки из выступлений и презентаций участников симпозиума.

Электронная версия видеоматериалов симпозиума доступна на сайте Новосибирского государственного педагогического университета: https://cloud.mail.ru/public/smn9/wniFTMogW Электронная версия сборника научных трудов доступна на сайте Новосибирского государственного педагогического университета: https://reg.nspu.ru/sites/index.php?s=51

Ключевые слова: *культурно-историческая психология; личность; развитие; творчество и искусство; дефектология; цифровизация; обучение*

Introduction

The Ist International Symposium on Cultural-Historical Psychology was held on November 17–19, 2020. About 5500 people, of which more than 300 participants from 19 countries (Australia, Belarus, Brazil, Germany, Spain, Kazakhstan, Canada, Mexico, Norway, Peru, Portugal, El Salvador, USA, Ukraine, Philippines, Finland, Czech Republic, Sweden, Japan) took part in its work. The symposium was broadcast twice a day, creating conditions for participation for people from both hemispheres.

The aim of the symposium was the development of cultural-historical psychology, strengthening international scientific cooperation, and consolidation of scientific achievements in the field of humanitarian disciplines.

The symposium attracted various specialists who made presentations. They were psychologists, clinical psychologists, neuropsychologists, teachers of preschool, secondary and higher education, defectologists, psychophysiologists, geneticists, philosophers, as well as heads of organizations and parents.

The opening of the symposium was accompanied by the words of J. M. Glozman: "That day on November 17, 1896, L. S. Vygotsky was born, and traditionally, on the initiative of E. E. Kravtsova, the Readings or a conference, or a symposium named after L. S. Vygotsky start on November, 17 for many years. What cultural-historical psychology is, how it develops and its usefulness in modern times are discussed there." According to J. M. Glozman the basic principle of constructing the symposium program was outlined by L. S. Vygotsky: "Every theoretical proposition is verified by practice […] and its truth

is established only when the practice built on it justifies itself." Theoretical propositions revealed in plenary reports and lectures were deepened and confirmed with the help of the results presented in session reports, collective video presentations, master classes and round tables.

Questions of the Place of Cultural-Historical Psychology in the Scientific Knowledge of the Last Century and Determining its Potential for Modernity

(1) J. M. Glozman characterized the historical conditions for the birth of cultural-historical psychology as, on the one hand, the presence of enormous tasks of studying the person's behavior and, on the other hand, the impossibility of reflexology to cope with them. She testified that L. S. Vygotsky and A. R. Luria, together, carrying out a search for a new psychology, set it the following tasks: "To study a person as an integral biological, social and psychological complex […] to study the psyche of a real human personality as a whole, and individual mental phenomena as functions, links of this single whole organism (A. R. Luria, 1921)." S. A. Smirnov, in his report *Anthropological Turn in the 20th Century and the Place of Lev Vygotsky's Project: Lessons and a Step of Development in it* called the historical state of the beginning of the last century anthropological crisis. The representatives of various sciences tried to start thinking differently, and this "different way of thinking" consisted of overcoming all sorts of reductions and speculations, of Western and domestic speculative metaphysics and quasi-spiritual religiosity, modernity, conciliarity and total unity, all that which led away from the understanding of a man. The representatives of new thinking, according to S. A. Smirnov, during the anthropological crisis were the Bakhtin brothers, S. Eisenstein, P. A. Florensky, O. Freidenberg, M. Kagan, O. Mandel'shtam, B. Pasternak, L. Pumpyansky, G. Shpet, P. Sorokin, L. Vygotsky, and others, among Western scientists they were E. Cassirer, M. Heidegger, M. Scheler, L. Wittgenstein and others. "The main task was to develop new means of analysis that would allow a person to adequately understand himself/herself. Each representative of the anthropological turn carried out his/her own author's search for a new paradigm of thinking and action. The refusal to understand a person as an object and the refusal to reduce a person to an individual unites many of these authors. They are trying to understand a person as if rebuilding himself/herself every time."

Comprehending how L. S. Vygotsky developed the foundations of cultural-historical psychology, G. G. Kravtsov in his report *Psychological Ways and Approaches to the Construction of Scientific Didactics* said that "L. S. Vygotsky did not have the logic of internal justification, which V. S. Bibler wrote about and L. S. Vygotsky had to create the method of psychology intuitively, from a scratch." V. T. Kudryavtsev in his report *Cultural-Historical Psychology — The Science of Freedom* explained that L. S. Vygotsky proceeded from art, creativity, the instrument of which is freedom, and he showed that L. S. Vygotsky had his own, the third way — he was looking for objective psychology through culture.

G. G. Kravtsov emphasized in his report that "Cultural-historical theory is not a closed system, like the theory of activity by A. N. Leontiev, it is an incomplete, it is an open system. L. S. Vygotsky said that we can take any methodology and use it, it is neither the matter of methods, nor techniques, nor those accumulated data, but everything can be absorbed and subsumed, it is all about methodology […] to reveal, to pull out a living method of cultural-historical psychology and on this basis any achievements of psychology can be absorbed, digested and successfully applied."

(2) J. M. Glozman in the report *L. S. Vygotsky and A. R. Luria. The Miracle of Co-Creation* highlighted those necessary qualities that are the potential for creating new knowledge, the solution of contradictions of the existing situations by practice and theory. These qualities are characteristic of L. S. Vygotsky and A. R. Luria, who made it possible to create a doctrine that has survived a century and is relevant today. She marked these qualities as following:

— special sensitivity to trends in the development of science, the ability to catch "points of growth" that reveal the prospects for further scientific development;
— heuristic, ideas ahead of their time;
— the style of humanitarian thinking, interest in subjective content of mental functions, in life circumstances of a particular person and his/her role in the formation of society, a wide appeal to historical and cultural associations.

(3) In the aspect of assessing the potential of cultural-historical psychology in his lecture *Vygotsky's Legacy at the Beginning of the 21st Century: New Discoveries and New Questions N. N.* Veresov presented the disposition of views: (a) L. S. Vygotsky did not create any complete psychological system (G. S. Gurgenidze, M. G. Yaroshevsky); (b) L. S. Vygotsky managed to create a psychological system that has not yet been fully studied (A. R. Luria). N. N. Veresov pointed out that "in the 1980s and 1990s, due to the limited sources, that is, the available source texts of Vygotsky, there could not have been another, more complete and more accurate picture of cultural-historical theory (CHT) — a synthesized picture of a holistic theory. But this does not mean that such a holistic picture cannot exist now. Why? Because over the past 20 years, what I call a 'new reality' in relation to Vygotsky's legacy has emerged […]. On its basis, we can begin work on the creation and reconstruction of an integral systemic conceptualization of Vygotsky's theory, which should give a new vision of the theory exactly as a system […], not as a set, not as a list of insights, etc."

We consider the designation of these possibilities of cultural-historical psychology to be the most significant, due to the fact that it allows us to both systematize the available scientific knowledge and build practice on a unified methodological basis.

The reports of B. I. Bespalov, A. A. Hoffman, N. V. Papuch, G. I. Perevozchikova, T. E. Sizikova can be viewed as indications of the ways of cultural-historical psychology development in modern conditions.

Deep study of the theory of L. S. Vygotsky, finding new works and construction of new clarifications and even discoveries have been done, for example, as N. N. Veresov did in his lecture, exploring the laws of development of higher psychological functions

in cultural-historical psychology, or as it was presented in the report by N. V. Papuch *The Hamlet of Psychology (What Actually L. S. Vygotsky Did)*.

Application of the ideas of L. S. Vygotsky is in constructing substantiations for a different developed psychological concept. In the report of B. I. Bespalov, the possibilities for the contribution of cultural-historical psychology to the substantiation and development of the theory of life acts of people, being developed by the author were revealed.

In cultural-historical theory, those concepts that L. S. Vygotsky uses as explanatory are singled out and studied, but they were not the object of his special research. T. E. Sizikova's report showed the prospects for the development of understanding reflection from the position of modal analysis, drawing an analogy between the concepts of modality and "unit of integrity" as by L. S. Vygotsky.

(4) Application of the foundations of cultural-historical psychology in modern practice. Practical examples of scientifically grounded application of cultural-historical psychology in practice of personality development were presented in the report by G. I. Perevozchikova *Personal and Professional Education of Students in Extracurricular Activities at University by Developing Educational Environment*. She showed educational environments, organized on the basis of the Russian State University for the Humanities (RSUH), thanks to which and in which personality development and professional development are carried out. A significant contribution is the demonstration of the implementation of the principles developed by E. E. Kravtsova: (a) creating conditions for teaching in unity with upbringing, where the main mechanism is productive communication of students with each other, as well as teachers with students, activation of randomness and awareness; (b) it is necessary to create a solid psychological basis for the formation of students' professional self-awareness, since the formation of professional self-awareness is a psychological criterion for the development of a person's personality, professional self-awareness is associated with the formation of moral behavior; (c) creating conditions for the emergence of a stable image of the profession, which can be created by observing the work of different professionals. The report raised the issue of prolonging the period of childhood and indicated that the university carries out the process of growing the student up — the upbringing student initiative and responsibility — to the required psychological age.

Psychological research, the subject of which are the phenomena researched by L. S. Vygotsky is conducted, new aspects in these phenomena are identified and the influence of the factor of cultural development of mankind for almost during a century are determined. In the report of A. A. Goffman *Cultural Genesis of Intentional Forgetting: On the Way from Interpsychic to Intrapsychic Form*, the application of cultural-historical psychology in order to study intentional forgetting at all four stages of a child's cultural development was shown.

The Problem of the Subject of Psychology

As in the days of the birth of cultural-historical psychology, the problem of finding the subject of psychology is urgent.

Defining the subject of cultural-historical psychology, G. G. Kravtsov said that "only in cultural-historical psychology and nowhere else, in any other theory, the highest form of movement, development, where development would be a real object and subject of study, was not taken as a subject. L. S. Vygotsky did not distinguish between the object and the subject in cultural-historical psychology, the category of development was both an object and a subject of research, it is also the explanatory principle of his theory and the backbone of the experimental-genetic method that he proposed."

In his lecture *Vygotsky's Legacy at the Beginning of the 21st Century: New Discoveries and New Questions N. N.* Veresov holds to the same point of view and quotes L. S. Vygotsky: "The origin and development of higher psychological functions, their composition, their method of activity and their interconnections and dependences, the laws which rule their course and their fate — all they are the exact content and true subject of these studies (Vygotsky, 2003, p. 200)." G. G. Kravtsov emphasized that L. S. Vygotsky pointed out that "development is always self-development, internally conditioned movement, which, according to B. Spinoza, is necessarily a free movement, and self-conditioned movement."

In connection with the change in scientific rationality in modern science, psychology does not need only a new subject, but also a new vocabulary as well — this idea was pointed out by S. A. Smirnov in his report. He explained that the words *formation*, *essence*, *object*, and attempts every time to describe, package and shape a person are "the rakes and dead ends." "The definitions of a person should move to the act of development," S. A. Smirnov said, and that echoes the call of G. G. Kravtsov to the study exactly of the development of personality as a subject of cultural-historical psychology, which is in demand today.

The Problem of Freedom

G. G. Kravtsov quoted the following words that are in Vygotsky's notebooks: "The highest problems of psychological science are the problems of human freedom." In traditional psychology that laid the foundation for all streams of modern psychology, there is no place for freedom. G. G. Kravtsov explained that V. S. Bibler wrote in *Thinking as Creativity* about the need for a different logic, a logic of justification not through something else, he wrote about the construction of a logic of internal self-justification, but such a logic has not yet been built.

G. G. Kravtsov said that L. S. Vygotsky was not only a Marxist, but also a "hard-core Spinozist"; a portrait of Spinoza hung over his desk. Spinoza's idea of the self-causality of movement underlies L. S. Vygotsky's understanding of personality development, "development of the personality is always self-development of the personality," said

G. G. Kravtsov, quoting L. S Vygotsky. Also G. G. Kravtsov pointed out that according to Spinoza, any self-determined, self-conditioned movement is free. In psychoanalysis there is no place for freedom, in role theories, where the personality is a set of roles, personality is given antipersonality. In the theory of A. N. Leontiev, where the core of the personality is the motivational-need sphere, there is no room for freedom, because everything is subordinated and explained through the logic of the other, the external, and this determinism comes from the formal logic of Aristotle, and leads to the absence of any freedom. A. N. Leontiev in his activity theory followed the track of Newtonian mechanics. The activity theory could not hold on to the methodological height that L. S. Vygotsky set by his works. None of the disciples could take from L. S. Vygotsky the thing that was the most important, but D. B. Elkonin succeeded and took the method of thinking and the method of problematization. Then he continued further that "will is a manifestation of freedom, and in the activity theory there is no will as such, there is a struggle of motives and only there it appears."

In the report of O. V. Lukyanov *Self-determination — a Method and Subject of Educational Policy* it was indicated that "the practice of cultural-historical psychology is the practice of self-determination."

Problems of Learning

The problem of learning has received several directions of analysis, in relation to modern conditions:

(1) The question of new scientific didactics on the example of an educational program for preschool and primary school age.

G. G. Kravtsov in his report *Psychological Ways and Approaches to the Construction of Scientific Didactics* presented the analysis of the program "Golden Key" for children of preschool and primary school age. He showed that this program is largely a response to the remark made by D. B. Elkonin, who argued that L. S. Vygotsky's idea of the unity of affect and intellect did not receive its embodiment either in theory or in practice. D. B. Elkonin stated that in psychology, affect and intellect are split, and the very concept of personality is unjustifiably reduced to the motivational-need sphere. There is a traditional gap between education and upbringing, between family and social upbringing, and the goal of education (that is the comprehensive and harmonious development of the child's personality) is not implemented, and is criticized, since each word must be deciphered and scientifically substantiated.

M. I. Kuznetsov revealed the embodiment of the didactic foundations of the program Golden Key in the report *Lessons from Elena Kravtsova. 25 Years of Friendly Cooperation*. He highlighted the following: family atmosphere; involvement in creativity and educating of not only children, but also their parents and relatives; groups of different ages, in which two teachers-educators work at the same time, making up a common family environment with children; the application of the method of play, for example, the game-travel

to Egypt, Greece; mastering one's own culture through comparing other cultures, balls of the Pushkin era, and more; embedding program material, corresponding to preschool and primary school age from 3 to 10 years (where age is not physical, but psychological one), into games and communication; and other things. Much work in this program was carried out on the additional education of teachers; the work has been done not only on involving educators, but also parents. Summarizing, he said about the program Golden Key: "There is a scientific group that studies personality and has achieved more understanding in it than others, there is a practical implementation of such an understanding in the form of an educational program and the basis of this program, its implementation is a mini-society."

G. G. Kravtsov pointed out, that the Golden Key program solved the issues of the unity of affect and intellect (L. S. Vygotsky) and implemented the idea of amplifying the development of children (A. V. Zaporozhets), i. e. the idea of providing children in the educational program and the system of teaching with maximum opportunities for disclosing the individuality of the child and the abilities, inherent in them. Problems of children psychological readiness to study at school have been solved. The strategic result of the 30-year work of the program turned out to be not in demand by mass educational practice, including modern ones. Modern psychology and pedagogy still rejects the systemic principles on which this educational program is built.

(2) Issues of unity and intelligence in learning.

It was indicated that L. S. Vygotsky's theory about the unity of affect and intellect is inscribed in a wide context: sociological, philosophical, anthropological, etc. The development of this theory led to the birth and development of many new theories of our time: the theory of emotional intelligence, the theory of communication, and it influenced the development of differential psychology. The report of O. M. Razumnikova *The Relationship between the Components of Emotional and General Intelligence* revealed both age-related and gender differences in the unity of affect and intelligence. In his report *The Principle of the Unity of Affect and Intellect and its Violation in the Space of Modern Information Technologies*, L. V. Menshikov showed that the means of digitalization distort the image, which is one of the main categories in this theory and cause impoverishment of thinking and, as a result, distortion of this unity. In general, the influence of values and meanings on this unity as well as alexithymia as violation of this relation were revealed.

(3) Application of the foundations of cultural-historical psychology in teaching subject disciplines.

D. V. Kashirsky showed how to influence the development of the personality of a student when teaching mathematics in his report *Development of the Personality of Students in the Process of Teaching Mathematics at School: A Cultural-Historical Approach*. D. V. Kashirsky pointed out that for L. S. Vygotsky, the main question was: "How does human development take place? How does the cultural development of personality take place?" He explained that in the 1920s and 1930s cultural-historical psychology was traditionally viewed as the basis for the design of education. D. V. Kashirsky presented

nine interconnected (intertwined) concepts of cultural-historical psychology to build their possible projections on the process of teaching mathematics at school:

(1) "Tracing the cultural development of mental functions, we draw a path for the development of the child's personality (Vygotsky, 2003, p. 84)," it is not possible to separate the psyche from the personality, personality from development and personality development from cultural development. The projection of this concept into the sphere of teaching practice means that any genuine knowledge is always personal; the entire didactic toolkit should be aimed not so much at transferring knowledge to students, but at interacting with the student and, thanks to it, at the development of personality; it should not be teaching mathematics, but the development of students with the help (means) of mathematics; it is necessary to find answers to the question "What are we to do with the content of education so that the student can master it?" in the process of interaction with the object of teaching and assimilating the content.

(2) "The law of selectivity of mental activity in teaching mathematics. The projection into the sphere of practice is not the transfer of ready-made knowledge (meanings), but the creation of conditions for students to discover the meaning of the educational material; development of a need-semantic theory and methodology for teaching mathematics (a vector of movement is from sense to meaning)".

(3) "The general genetic law of cultural development (History of the Development of the HMF, 1983, vol. 3, p. 145). The projection means that the content of the lesson will become a personal belonging if it caused experience (in the 20s of the last century, the psychogenetic was considered through experience, if there is no experience, then there is no memory left, thinking is not active, etc., therefore it is not a coincidence that the unit of psyche analysis according to L. S. Vygotsky is experience)."

(4) "Development of the consciousness of students at mathematics lessons. Consciousness reveals itself in numerous connections (mediations) of the subject with the world of developing human culture. L. S. Vygotsky understood consciousness as a systemic and semantic formation created by the dynamics of the HMF and expressing the unity of intellectual and emotional processes. The projection is the development of consciousness, incorporating cultural experience (mathematics, etc.); learning must be meaningful and deliberate; the result of training is qualitative changes in the content and structure of the student's consciousness; the development of different sides of the consciousness of students is by means of reactive, spontaneous or blended learning; orientation is towards the principle of consistency in mathematics and education (mathematics is part of the cultural experience of mankind); the leading role of communication is in training (the unity of communication and training, communication and generalization)."

(5) "The idea of instrumentality and sign mediation (or mediation, as an exit to the intermediary function of generalization (positional communication: 'great-grand — we,' 'above,' 'under,' etc.). The projection means that mathematics

is a science, as well as a humanitarian educational subject and a cultural tool developed in the history of mankind, a tool that can be 'discovered' by a school-child for himself 'anew' and turned into a psychological tool for the development of his personality."

(6) "The structural-functional model of teaching is a change in interaction, when between a teacher and a student, mathematics is a cultural means in interaction."

(7) "We believe this methodological approach can and should be transferred to other subject and metasubject disciplines in the education system and in teaching teachers, what to teach and how to teach, developing one's own personality and influencing the development of the student's personality."

(8) "The principle of integrity. The projection is to teach methods, ideas (one task and several ways to solve it is better than one way and many similar tasks); show how ideas add up to one system; show different interpretations of the same mathematical problem in different languages of description (the idea of 'transfer,' transformation of material, which gives development in teaching)."

(9) "The principle of historicism. The projection means that teaching should be based on the logic of the main didactic lines."

(10) "Understanding the pedagogy of mathematics as Practice. The projection is the use of technical means as means, and live communication as a generalization."

We support the opinion of the participants of the symposium about the need to introduce this methodological approach into the practice of education, for which, at present, all conditions, aggravated in connection with digitalization, have matured. Taking possession of a sign, a person takes possession of himself, builds his/her personality. "Not only the connection between the teacher and the student is important, but also between the method and the student, whether the method is adequate for the student," J. M. Glozman reminded to her listeners the words of M. K. Kabardov, which support the need to introduce cultural-historical psychology into modern practice.

(4) Problems of learning difficulties in preschool, school and higher education.

J. M. Glozman pointed out that "learning difficulties are most often noticed when the child has gone to the first grade, but their reasons manifest themselves much earlier, for example, the child has difficulties in drawing and neuropsychologists can help in resolving them so that there is no the need to work with dysgraphia. The sooner difficulties are noticed, the more effective the help will be. Different specialists — teachers, psychologists, neuro-psychologists, parents and others — should take part in solving the arising difficulties."

Neuropsychology is now developing research methods for qualifying learning difficulties and it should implement the qualitative approach by L. S. Vygotsky and A. R. Luria.

Discussing the issues of helping a child at school, regarding the development of higher mental functions, J. M. Glozman gave the following example: "The brain will not develop if the speech function, which will later become the leading one in the child, is not stimulated. Speech accompanies the child even before birth and it is very important that the mother speaks with the child during this period and after birth. Another example

is when preventive work is not carried out. The hyperactive child becomes the hyperactive adult, which is what manufacturing companies now face. ADHD, when identified the earliest, is better amenable to correction than in adulthood. The proportion of children with ADHD in the normative population is up to 20 %. In the group of children with learning difficulties, the percentage of children with ADHD reaches 70–80 %. This means that ADHD contributes greatly to the very problem of learning difficulties. First of all, ADHD means difficulties in regulation. ADHD has two components: neurodynamic one means low brain activity and the second component is the lack of regulation. It is necessary to teach the child to regulate himself/herself by psychological methods and not by pharmacological means."

N. A. Khokhlov made his comment on the topic raised, explaining that "ADHD does not have a completely correct translation, three forms have been identified: hyperactivity, hyperactivity with attention deficit, attention deficit without hyperactivity. The neurologist's picture of ADHD is often not the same as the neuropsychologist's picture." "ADHD is well treated by psychological methods: games with stop-signal," added J. M. Glozman. Consequently, parental education and early psychological and neuropsychological assistance are necessary in modern conditions.

In the report of A. V. Plotnikova *The Brigade Method in the Correction of Learning Difficulties in a Comprehensive Primary School*, the brigade method unites the interaction of all specialists of the general secondary school in one approach, in this case, the neuropsychological approach by L. S. Vygotsky — A. R. Luria. The team, under the guidance of a neuropsychologist, carries out diagnostics and design of correctional and developmental programs for children and educational programs for teachers. The introduction of the category and position of a neuropsychologist in general education is a significant contribution to solving the learning difficulties that are increasingly encountered in schools. The report showed the possibilities of a neuropsychologist at school. But also, it showed a wide range of individual differences among children, which were confirmed by the data of N. A. Khokhlov. This wide range of individual differences, which is especially pronounced in preschool age, must be taken into account when developing various training and correction programs. By older school age, the range of individual differences narrows, which creates new opportunities for using new methods, for the most part, group methods in work.

In the report *The Ratio of the Types of Generalizations by Children and Adolescents Aged 4–17* N. A. Khokhlov raised the problem of the accuracy of psychological diagnostics of thinking, on the basis of which those other conclusions about difficulties in learning or mental development are made. As an example of an incorrect diagnostic procedure, he cited cases when, relying on incorrect conclusions drawn from an inadequate understanding of L. S. Vygotsky, a conclusion is made about the development of thinking. "L. S. Vygotsky repeatedly pointed out that full-fledged conceptual thinking occurs in children from the age of 12. On the basis of these statements, psychologists drew conclusions: in preschoolers, conceptual thinking is absent, in elementary school it develops rapidly, and in adolescence, true concepts finally replace other types

of generalizations. The vagueness of the wording does not make it possible to understand whether this is only a theoretical model (accepted with a number of clarifications and exceptions) or it directly follows from the empirical data at his disposal. L. S. Vygotsky himself left opportunities for speculation." Citing various examples of opportunities for speculation from the works of L. S. Vygotsky, N. A. Khokhlov raised the question of studying the development of thinking from preschool to senior school age. He revealed, with the help of testing by the method Exclusion of Objects, that in conceptual thinking "already at 4–5 years old a child has more than 50 % of conceptual notions, more than a third of concepts reaching the level of abstraction, i. e. true concepts, and fewer concepts based on a specific situational or functional attribute. Thus, a preschooler has concepts, there are a lot of them. Older preschoolers have more than half of the true concepts, but not all. This allows us to make an important conclusion that preschoolers have conceptual thinking, while older schoolchildren do not have the entirely conceptual thinking. From preschool to senior school age, there is a slight increase in the development of conceptual thinking." Based on the data, N. A. Khokhlov reasonably assumes that the formation of true concepts is carried out earlier than 4–5 years, since at this age already 30 % of these concepts are in the operation of a child. The data obtained do not confirm the ideas of L. S. Vygotsky, which is largely due to cultural differences. In modern teaching, conceptual thinking is taught in kindergarten. The results obtained indicate that it is impossible to focus on the presence of non-conceptual types of thinking in adolescents as a sign of thinking pathology. J. M. Glozman added that a child at 3 years old is able to perform this test under conditions of verbalization (it is necessary to follow the correspondence between the method and the student).

Age Problems

(1) The problem of age is associated with the laws of development.

N. N. Veresov, in his lecture *Vygotsky's Legacy at the Beginning of the 21st Century: New Discoveries and New Questions*, substantiated that in his theory L. S. Vygotsky did not disclose three or four laws, but nine. This new look at the laws of development disclosed by L. S. Vygotsky, opens up new perspectives for the study of age, including the modern psychological age of children and adults. N. N. Veresov related the following to the laws of development:

"The Law of Four Stages in the Development of Higher Psychological Functions (Vygotsky, vol. 5, pp. 138–139).

The Law of Transition from Natural Forms of Behavior to Higher Mental Functions (Vygotsky, vol. 4, p. 221).

The Law of the Emergence of Higher Mental Functions from Social Forms of Behavior (Vygotsky, vol. 4, p. 222).

General Genetic Law of Cultural Development (from Inter […] to Intra […]) (Vygotsky, vol. 3, p. 145).

The Law of Uneven Development of Higher Psychological Functions (Turn-Based Differentiation of HMF) (Vygotsky, 2001, pp. 101–102).

The Law of Dominance of Functions (Consciousness is Built Hierarchically) (Vygotsky, 2001, p. 102).

The Law of Optimal Periods of Development (Vygotsky, 2001, p. 103).

The Law of Differentiation through Subordination and Re-Subordination — the Restructuring of the Old System and its Growth into a New one (Vygotsky, 2001, p. 109)."

(2) The problem of age is revealed in the study of readiness for schooling.

In the report of R. I. Aizman *The Problem of Children's Readiness for Schooling from the Standpoint of the Cultural-Historical Theory of L. S. Vygotsky* shows the existing approaches: (a) pedagogical approach — diagnostics of the development of educational skills; (b) psychological approach — the concept of leading activity, the concept of social readiness, the concept of personal readiness; (c) psychological and pedagogical approach — assessment of educational skills and development of psychological functions. All these approaches have one common drawback, they do not take into account the school conditions (curriculum, school environment and teacher skills) and they do not take into account a comprehensive understanding of health, which is influenced by environmental and social factors at all levels: physical, mental, social. He proposed a medical-psychological-pedagogical approach of readiness for learning, including a medical and biological component (state of physical and mental health, physiological readiness of the organism, its ontogenetic maturity), a psychological component (level of development of cognitive sphere, level of development of emotional-volitional sphere) and social component (personal readiness, communicative readiness). "Only healthy children with sufficient physical, mental, social and functional readiness (school maturity) can start systematic education at school." R. I. Eisman insisted and continued "the modern social situation has made a great contribution to the discrepancy between the calendar age of the child and his mental, social development (age). These conditions include: home-education; early education; limited contact with peers; replacement of communication with adult technical means, restriction of communication; disappearance of a game as a leading type of activity; inadequate requirements of adults (parents, educators, teachers)." He offered health monitoring — "electronic health passport" — a comprehensive, rather than symptomatic assessment of health, taking into account the basic patterns of ontogenetic development of preschool age: continuity and unevenness of growth and development, critical and sensitive periods, heterochronism of growth and development, acceleration and retardation of development (individual rates of development and maturation), biological reliability, organism adaptability (biological, social).

M. K. Kabardov focused attention on the need to implement the proposed complex of health assessment in general and not in parts in the context of overall digitalization.

(3) A new look at the problem of adolescence.

A step in the development of cultural-historical psychology is the proposed by V. S. Sobkin understanding of adolescence with the help of the psychology of art

by L. S. Vygotsky, in particular, through the prism of drama. In his presentation *Social Situation: Adolescence V. S.* Sobkin spoke about an adolescent's use of non-normative vocabulary: "Through abnormal, deviant forms of behavior, an adolescent is trying to prove to himself/herself that he/she is an adult" — this is an interesting form that requires special close study. The sense of adulthood, given through deviant forms of behavior, is associated with the appearance of neoplasms in adolescence. What are my attitudes and reactions to social deviations? An adolescent's experience of his/her relationship with his/her social environment changes dramatically. Profanity increases with age, and fights fall — one deviation complements the other in the system, dominants change with age, but the main motive is the motivator "insulted me, insulted my friend," a sensitivity to "I" is formed. It is important how the immediate environment reacts to deviation. Reactions of the environment change with age, if in the 7th grade the use of profanity is rare and the immediate environment notices it, and in the 9th grade 90 % of classmates do not pay attention to profanity. The reaction of the social situation to the deviant manifestations of adolescents, which has its own dynamics in adolescence, should be studied deeply, taking into account the criteria of gender, status and others. It is necessary to study the social life of the classroom in adolescence, single out the drama of education and the functions of regulation by the teacher. As a child grows up, the teacher's responsibility is more and more removed from him/her, because the teacher lacks authority and a social-role position, and he/she begins to use the social structures of the school, summon a child to the teacher's council, turn for help to the juvenile affairs commission (JAC). It causes drama. There are reasons for appearance, motivation for the appearance and reaction of the social environment. These three focuses set those points with the help of which it is necessary to read adolescent's experiences and semantic situation of adolescent's experiences. On the one hand, an interpretive scheme is set, on the other hand, it is necessary to highlight through which patterns the adolescent's adulthood is set, prohibitive patterns for certain deviant norms, removal or preservation of a norm, knowledge of the norm and maintenance and its overcoming. The social situation of development is the dominant concept for the study of age and it is important to compare incentive and prohibition (barriers), motives. This is the basis for the scenario of psychological and pedagogical work on the prevention of deviant behavior.

Issues of Creativity and Psychology of Art

D. B. Bogoyavlenskaya in her report *Life as Creativity: Vocation and Feat of L. S. Vygotsky* indicated that the study of creativity was one of the main things for L. S. Vygotsky. Game acted as a form and means of developing child's creativity, developing his/her imagination. "L. S. Vygotsky was convinced that 'The natural organism is naturally gifted,'" said D. B. Bogoyavlenskaya and this position is alternative to the position of the activity approach and, in particular, to the followers of B. M. Teplov. She indicated that "highlighting a unit of analysis by L. S. Vygotsky's allows us to consider giftedness as a systemic quality, where

intellect met affect. Only the unity of opposites forms an adequate quality that makes it possible to build a theory of the HMF. […] It was on the way of the appearance of the HMF theory that it became possible to reveal the mechanisms of creating the new […] the idea of the unity of affect and intellect is included in various studies on creativity, and the idea of the unit of analysis has not received its disclosure."

Revealing the questions of the psychology of art, V. S. Sobkin, indicated that "in the psychology of art there is design in psychology, the idea of signs and mediation, because a work of art is psychology, its text is psychology, you just need to be able to read it, read it as a special generating machine of those desires and meanings, which arise in a person […] he/she is an active participant in this process and of immersion in this artistic fabric […] we read a machine that generates experiences, and by studying the structure of this machine, we understand psychology, because if we understand how the generation of meanings occurs, through this tonality and through this machine, then we then understand the laws of the psyche."

Understanding the word is a key one in the psychology of art. In his report *Comments on Theatrical Reviews of L. S. Vygotsky*, V. S. Sobkin, relying on the new, archival early works of L. S. Vygotsky, emphasized that "L. S. Vygotsky believed that there is always a certain motivation behind the word, the theater in this respect is important for understanding the motivation behind the speech." V. S. Sobkin focused on using by L. S. Vygotsky the methodological principle of "the experience of reader's criticism" in theatrical reviews. He singled this principle out. "A lot has been written about Hamlet, I want to put all this aside in my analysis of Hamlet, and be left alone with the text in order to understand what experiences the text gives rise to when I read it" — this is an introspective analysis of the meanings that are generated in the course of reading this text. Emphasizing "significant elements of forms" and aesthetic reactions (aesthetic emotions, especially tragedy) are the main thing for L. S. Vygotsky in understanding the psychology of art. V. S. Sobkin indicated that "some psychologists, not understanding L. S. Vygotsky, reduce his psychology of art to the behavioral scheme 'stimulus-response'; there is a text as a stimulus and a person's response to it. They do not see the enormous semantic work that is carried out in a stimulus-responsive scheme. All cultural and historical psychology is hidden in this semantic work."

Note, that V. S. Sobkin clearly points out the difference between the activity and cultural-historical approach. "Questions of meaning were not the key ones for the approach of A. N. Leontiev. The activity-based approach met the needs of its time, was built into the existing socio-economic system and ideological guidelines. The works of L. S. Vygotsky were burned in the fire, since neither personality (its development), nor meaning were in demand, and, moreover, they were feared. They began to speak and study personality and meaning in psychology, most of all in comparison with other categories, only in the present century. We will add that neither the behavioral-cognitive, nor the modern meta-cognitive approach, as well as others, can cover and answer questions about the psychology of meaning, personality and development using their methodological

base. And the answers are in demand by modernity and so far only the development of a cultural-historical approach can give them."

Defectology Issues

Specifying the contribution of geneticists to the issues of defectology, Yu. V. Maksimova in her report *Modern Genetics on the Problems of Defectology in the Light of the Teachings of L. S. Vygotsky* showed the possibilities of modern genetics. Thus, considering chromosomal abnormalities, she cited data that a secondary defect — the underdevelopment of mediated memory and logical thinking in the mentally retarded — has connections with the frequency of chromosomal abnormalities, especially in spontaneous abortions, giving more than 50 % of chromosomal abnormalities. 17 % is the frequency of chromosomal abnormalities in premature babies. Questions about how a child was born, will help a teacher, psychologist and others pay attention to the presence of chromosomal pathology.

Chromosomes form the general genetic program (for example, the absence of a whole chromosome is Down's disease, and a partial violation, the absence of a part of the chromosome, gives birth defects and mental retardation (deletion that came from the mother is Engelmann's syndrome, deletion from the father is Prader — Willi syndrome). The absence of a chromosome responsible for gender is Shereshevsky — Turner syndrome, and for a long time it was believed that this also gives mental retardation, but later it was determined that this was not a lag, but a peculiar, not typical perception of the world. Yu. V. Maksimova believes that in defectology it is necessary to do chromosomal analysis, which is done according to a single standard all over the world. Syndromes of violation of telomeric sides of chromosomes are now being investigated for their connection with mental retardation. The fragility of the X chromosome (Martin — Bell syndrome) gives mental retardation and impaired intelligence. Mutation of a single gene (the catalog of monogenic diseases is 50 years old) causes many disorders, both physical and mental retardation. Yu. V. Maksimova focused on a unified approach of geneticists, pedagogues and others, in order to see the whole multifaceted nature of the problem for the rehabilitation of children with disabilities.

Cultural-Historical Psychology and Digitalization Issues

It is relevant to consider the possibilities of cultural-historical psychology in providing assistance in raising problems of the development of society and personality in the context of digitalization. Then, it helps to determine a degree and quality of the impact of digitalization on psycho-social development. Besides, it facilitates the search for solutions to the identified problems and the development of methods, ways of differentiation, regulation, reduction/increase in the digitalization impact. Humanity is currently catching up with rapidly developing technical means, which are not the result of creative developments and

the embodiment of one person or a small group of people, but of the collectively distributed activity of a large group of people covering more than one territory, one state and one culture. Due to this fact we believe that it is necessary to investigate the very creation of a technical means, highlighting not only technical, political, production components, but semantic and value orientations of the creators, social and cultural side along with the economic one. For this, it is necessary to unite different specialists of technical and humanitarian profiles on a single methodological basis not in order to get the introduction of an expert assessment of the finished product, but of the process of creation (development and implementation) of a technical means by these specialists.

N. N. Veresov rightly noted that not every social situation is a developmental situation and identified three problems that can be designated as positions in relation to digitalization: "(1) The hope that new digital means can become a powerful source of development — a classic example of fetishization. (2) Criticism of digital media and digital childhood in general (modern version of Luddism). (3) The middle position — on the one hand, it is impossible not to admit, on the other hand, it is impossible not to agree — a pseudo-contradiction, as Ilyenkov has put it." The fourth, different one is the position proposed by N. N. Veresov, indicated by him in the question: "What can we do relying on cultural-historical theory?" (report *Who Needs Vygotsky Now?*). N. N. Veresov proposed two working ideas of cultural-historical psychology to answer this question: "(1) Sign and tool as cultural means of development. (2) The interaction of the ideal and real forms as the most important feature of child development." Within the framework of the first idea, he emphasized, referring to the works of L. S. Vygotsky, that in mediation, the active intervention of a man, his/her active role, "his/her behavior, which consisted in the introduction of new stimuli" is overlooked "behind the play of stimuli," as L. S. Vygotsky pointed out "To say that the stimulus determined the behavior in this case is like saying that the stick got the fruit for the chimpanzee (in Kohler's experiments). The very emergence of new stimuli was the result of vigorous human activity. The man has been forgotten; this is your mistake. It was a person who established in advance the role and function of the stimulus, which by itself could not determine the behavior just as a stick by itself could not knock the fruit off (Vygotsky L. S. vol. 3, p. 72)." N. N. Veresov said that "for L. S. Vygotsky the question is not whether the sign mediates or something else does, but who mediates. A person, an adult or a child, actively intervenes in the situation and begins to use the means that he/she has to change the situation. From this, L. S. Vygotsky deduces two types of activity: signaling, based on the work of two hemispheres and characteristic of both humans and animals, and the second type — signification, which distinguishes, first of all, a person from an animal, from a psychological point of view. 'Signification is the creation and use of signs, that is, artificial signals (Vygotsky L. S. vol. 3, p. 79–80).' Mediating activity is the use of tools and the use of signs." N. N. Veresov, referring to the translation of the word mediation into English, emphasizes that "there is a mediating activity and an activity mediated by someone; L. S. Vygotsky was interested in mediating activity as 'the use of external signs as a means of further development of behavior (Vygotsky L. S., vol. 3, p. 148).' Once having mastered the sign, the child gets the oppor-

tunity to use it as a means of further development. The child gets some freedom to use these signs for his further development, or not to use them for development, or use them for degradation."

N. N. Veresov, regarding the second idea and moving from the analysis of the first, indicated that L. S. Vygotsky's "mediation exists between something and something, on the one hand, people, on the other hand, there is an 'ideal form.' Therefore, the main question is 'What cultural ideal forms does a person discover when he/she starts using cultural means?' [N. N. Veresov, the plenary lecture *Who Needs Vygotsky Now?*]. For L. S. Vygotsky an ideal form is simply a more developed form of HMF, to which a child must come in the future, but which interacts with the form that he/she gives in the present." N. N. Veresov believes that if a person discovers developed forms for himself, then he has the prospect of development, and if he discovers destroyed social and cultural forms, then development will be aimed at self-destruction. "Social environment is the source of the emergence of all the specific human personality traits acquired by the child, the source of his cultural development, which takes place in the process of real interaction of 'ideal' and available forms (Vygotsky L. S. Collected Works. Vol. 4. p. 265)." "The form of interaction is very important," N. N. Veresov said and gave an example of L. S. Vygotsky: "Mother talks to a child, she uses developed speech and for the child this speech is an ideal form; he/she cannot reproduce it, but from the very moment of interaction with the mother and with this form, he/she develops his/her speech. If there is no conversation with the mother, then the child will not develop speech or it will be very limited. 'Ideal form' is developed behavior, speech and more. The greatest feature of child development is the interaction of real and ideal forms."

Based on the above said, N. N. Veresov sums up that there are at least two theoretical tools for studying the digital environment as a source of the cultural development of a child. Another tool was suggested by S. A. Smirnov in his report *Anthropological Turn in the XXth Century and the Place of Lev Vygotsky's Project: Lessons and a Step of Development in it*. He believes that "digitalization plunges a person into a naturalistic reduction, a paradigm of action only in a natural field, a person's semantic space is flattened," in this regard, special work is needed to expand and develop the semantic field of both a child and an adult.

Turning to practice, in a joint study with N. I. Veraksa, N. N. Veresov poses the question: "How can digital games for preschoolers become a means of cultural development?" (N. N. Veresov, report *Who Needs Vygotsky Now?*), and suggests using a tool of assessing the developmental potential of digital games (DPDG), which includes joint play of a child and an adult, as well as a normative situation.

The importance of the role of interaction between a child and an adult, the influence of the social environment on the development of a child was studied by D. A. Bukhalenkova. By assessing the quality of the relationship between the educational environment in a preschool institution and the development of children, she proposed the ECERS-R and CLASS methods. She carried out a comparative analysis of the methods and revealed contradictions between them, which were not properly

explained in the report, but significant characteristics were identified: the structural and procedural qualities of the environment are more fully assessed by the ECERS-R methodology, the procedural qualities in a more extended version are assessed by the CLASS methodology. The use of two methods and correct analysis, taking into account the identified contradictions in preschool institutions, allow for revealing the developmental potential of the educational environment in the best way, including the environment in which digitalization is used to one degree or another.

In the report *The Connection of Screen Time with the Understanding of Emotions and Phonological Hearing in Preschool Age M. N.* Gavrilova emphasized the connection between the use of screen time and the emotional development of a child. More than 1000 children aged 5–6 years took part in the experiment. As a result, it was shown that children who devote screen time less than an hour a day better understand emotions in general and their individual components; children who devote screen time more than 1 hour better understand emotions from facial expression and have a high level of anxiety.

The whole rather than individual components of a child's cognitive development in the context of digitalization were disclosed in the report *The Relationship between the Use of Digital Devices by Modern Preschoolers and their Cognitive Development* by E. A. Chichinina. The conducted experiments took into account (independent variables) screen time, content and types of activities when using the gadget. Dependent variables: speech development, school readiness and the development of academic skills, regulatory functions, and other things were investigated. A significant contribution to the research is to draw attention to how an adult relates to the use of a gadget by a child and with whom the child uses a gadget in the interaction. This factor of mediation affects the results of a child's cognitive development. From the side of an adult, control of the child's use of a gadget is necessary, E. A. Chichinina believes, it affects the frequency of screen time use and the content through which the child learns cultural values. The obtained results of the experiment indicate that "the use of a gadget as a 'cultural tool' (searching for information, listening to music, taking photos and videos, viewing photographs, as a means of obtaining education, orientation in space and time, as well as drawing) contributes to development of the child's regulatory functions." An adult should teach a child to use a gadget for development.

Thoughts about the meaning of content and the role of an adult as influencing factors when using a gadget are consonant with the thoughts of M. K. Kabardov. In the report *Digitalization: 'For,'* M. K. Kabardov formulated the question "How to determine if a child is an object for influence and manipulation? How safe is the safety of children?" and called on pedagogy and psychology to resist the "enslavement of children's souls" with digital technologies. He told about the necessary "to separate the technical means for performing certain tasks and the subject, which should not be an object for manipulation of information, because it is possible to harm by information."

Close attention should be paid to the gadget as a "natural remedy." E. A. Chichinina referred the game, watching cartoons and watching videos to the independent actions of a child with a gadget. "Independent actions of a child without the guidance of an adult

are natural and do not reveal the cultural properties of the object," while the cultural properties are latent. In the report *Anthropological Turn in the XX Century and the Place of Lev Vygotsky's Project in it: Lessons and a Step of Development S. A.* Smirnov pointed out that the gadget as a "natural remedy" works in the natural field of a child and, in his opinion, narrows, folds a child's semantic field.

This statement is controversial and allows for deepening future research in the direction of defining the role of content attractive to a child, and the meaning prompted by "hidden cultural properties" affecting a child while watching a cartoon, playing, etc.

A significant result that determines the future for cultural-historical psychology is the substantiation and development of training programs for parents and teachers that will teach children how to use a gadget as a "cultural tool" for development. In this regard, it is necessary to pay close attention to the training of technical specialists who develop software and the possibility of implementing the foundations of cultural-historical psychology in educational and game contents. In the future, in connection with the development and spread of artificial intelligence in the spheres of human life, this question will be the most acute and cultural-historical psychology will have to find answers to it.

Based on the data presented in other reports, those directions that should be taken into account when developing educational programs and teaching adults to interact with children when using a gadget were the most accurately traced.

Thus, based on the analysis of literature on the influence of digital games and formative experiments conducted by V. A. Sukhikh, M. N. Gavrilova supported the conclusions of most scientists that digital games can be used to develop regulatory functions. The results of the experiments showed that there is an increase in the development of regulatory functions of children aged 5–6 years old when performing game tasks, including digital games, but the ability to transfer these skills to other activities does not develop. These data again point out the role of an adult who can help a child to carry out the necessary transfers.

In the report *The Role of Regulatory Functions of Preschool Children in the Digital Age*, A. A. Tvardovskaya and N. N. Novik presented a study on the influence of the time spent watching various material with a gadget on physical development of a 5–6-year-old child which showed that a critical time less than 180 minutes does not negatively affect the development of regulatory functions as well as physical development, if the child is given the opportunity for physical activity during the day. Time more than 180 minutes negatively affects the development of some components of regulatory functions, as well as physical development.

The highlighted regulations are fundamental in organizing training using a gadget in preschool organizations and parental control. The polemic over digitalization is incomplete and needs further development.

International Research Centers to Study Cultural-Historical Psychology

(1) Activities of the foreign research group of Brazilian scientists.

Research team consisting of Ana Ignez Belem, Cleo Alonso Costa, Izabel Hazin, Wagner Luiz Schmit Ishibashi, Edna Peters Kahhale, Priscila Nascimento Marques, Jeferson Montreozol, Ricardo Lana Pinheiro, and Gisele Toassa under the quidence of Carla Anukoate are doing studies on *Historical-Theoretical Foundations of Vygotsky's Psychology*. In session the reports: *Artistic Foundations of Vygotsky's Psychology*; *Neuropsychological Foundations of Vygotsky's Psychology*; *Historical and Cultural Psychology, Parents and Specific Conditions: Experience in Brazilian Context*; *Mental Health and Teacher Development: Learning Experience Confirmed by Vygotsky's Theory*; *Psychological Clinic: From an Alienating Tradition to Socio-Historical Strength of the Subject* represented different directions of research of L. S. Vygotsky's legacy with experimental confirmation by modern practice.

2. Research group "Revival of CHAT (Cultural-Historical Activity Theory) in Response to the Challenges of the 21st Century" led by Mike Cole (the USA).

Natalia Gaidamachko (Canada), Antti J Rajala (Finland), and James Wertsch (the USA) took part in the collective presentation and the following reports *Cultural Paradigms in Attention Management* by Beth Ferholt (the USA) and Barara Rogoff (the USA), *Applying Wordplay and Film Staging to the Study of Experiences* by Robert Lecusay (Sweden) and Anna Rainio (Finland), *Mobilizing for Justice: Focusing Young People's Inventiveness in Everyday Digital Practice* by Arturo Córtez (the USA), *Social Experiment: The Path to Equality* by Manuel Espinoza (the USA) and Kris Gutiérrez (the USA) were presented.

Conclusion

The aim of the symposium was fully achieved.

In modern conditions of digitalization, which is a completely new social environment for humanity, a person needs to preserve his/her freedom and develop his/her personality. The problems faced by education, psychological theory and practice can be solved on the methodological foundations of cultural-historical psychology.

In the plenary and session reports, it was shown that the broad boundaries of cultural-historical psychology allow it to develop. The application of the methodological foundations of cultural-historical psychology to solving the problems of learning and development of different age categories, with varying degrees of compliance with the norm of mental development and different cultures, was shown.

The participation of various specialists in the symposium indicated the necessary to institutionalize the form of the complex on a unified methodological basis of cultural-historical psychology, the interaction of different specialists in solving problems of learning

and development in preschool and school organizations, especially those of a defecto-
logical profile.

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