

In Lieu of an Introduction

An Interview with Tatiana V. Akhutina

Nikolai Veresov: *Tatiana, in this volume of our journal we publish a selection of your articles. Two of your other articles were published in Soviet Psychology in the 1970s. Introducing you to the readers of that journal, James Wertsch (1978) wrote: “The author . . . is one of the leading young investigators from the Luria school of neurolinguistics. She has studied and conducted extensive research both with Luria and with A.A. Leontiev, a major figure in Soviet psycholinguistics. Her analysis of inner speech as a mechanism in speech production reveals the strong influence that L.S. Vygotsky has had on Soviet psychology.”¹ But first of all, I suppose our readers would be interested in learning more about your life, about events that preceded your scientific achievements. Could you please tell us briefly about your childhood and your family? How did your parents influence your course of life and your occupational choice? What did they do?*

Tatiana Akhutina: I think we were a typical Soviet family. My father, Vasilii Ryabov (1902–1993), became an active member of the Komsomol when he was sixteen years old. In 1937, during a “purge,” he was expelled from the Military Academy. In 1941 he was hired as military science instructor at the Experimental Institute for Defectology, where he met my mother, Elena Gruzintseva (1899–1970). The daughter of a worker, she graduated from a gymnasium in 1917 and worked as a teacher. In 1927 she left for Moscow and entered the Department of Defectology at the Pedagogical

University. Later she started working at the Experimental Institute for Defectology, and then returned to the Department of Defectology as a lecturer. Among my mother's teachers was L.S. Vygotsky. She told me about his lectures, which were always conducted in overcrowded lecture-halls. She carefully saved his books, as well as a photo of all her classmates in which L.S. Vygotsky also appears among the other lecturers. She also saved a copy of his presentation made December 23, 1933, at the meeting of the Chair of Defectology of the Bubnov Pedagogical Institute. The presentation was entitled "On the Dynamics of Mental Development of Children in the Process of Teaching." A curious detail: in accordance with the spirit of the times, a stenographer transcribed the word "dynamics" in the copy as "dialectics." My mom's name is also mentioned in this copy, as she had been elected to the presidium of this meeting. To her dying day my mother taught the course "Principles of Teaching Russian to Mentally Retarded Children" at the Department of Defectology.

N.V.: And what about you? How did your life begin? What were the first steps in mastering your profession?

T.A.: I was born in 1941. After finishing school and having barely refrained from leaving for Siberia "to build Communism" (in fact, for self-perfection!), I entered the Department of Defectology of the Pedagogical Institute, the division of logopaedics. In my final year of study, the members of A.R. Luria's lab proposed that the senior students of our department help with the speech therapy of aphasia patients. I was lucky to join this team working at the Burdenko Institute for Neurosurgery.

N.V.: Please tell us more about it. You must have met Luria himself there. You were his disciple, weren't you? How did you become acquainted with him?

T.A.: I am proud that I was his disciple and I hope that I still am. The first Luria book I read was *Essays on the Psychophysiology of Writing* (1950)², a book given to me by my mother. This book was engraved in my memory as a standard of scientific psychological

analysis of the structure of cognitive function. It was probably a kind of imprinting. Under the influence of this book my own scientific work started and continued. I saw A.R. Luria for the first time in September 1962 at the Institute for Neurosurgery. After the first public examination of a patient carried out by Luria I came home and told to my parents: “This is really interesting, this is what I am going to do with my life.”

N.V.: Your first well-known paper devoted to speech production (it opens the selection of your articles in this issue) was written in 1967. Could you tell us about its background?

T.A.: Not long before the Eighteenth International Congress of Psychology in Moscow (1966), A.R. Luria was asked by A.A. Leontiev to recommend one of his students to participate in investigations in the area of psycholinguistics. In 1966 the first psycholinguistic seminar in the Soviet Union took place, and A.A. Leontiev, a young but avowed leader of this discipline in Russia, was actively organizing professional psycholinguistic investigations. He headed two psycholinguistic research groups, one at the Institute for Linguistics of the Soviet Academy of Science, and another one attached to the Center of Russian Language at Moscow State University. Following A.R. Luria’s recommendation, he invited me to the second research group and offered to prepare an article devoted to inner speech. I remember that we discussed this topic when I was about to join the group. As a matter of fact, it was my third article, but the first two articles were published later. They were devoted to the analysis of planning and construction of the grammar structure of an utterance in patients with dynamic aphasia. The analysis of dynamic aphasia was the topic of my Ph.D. dissertation. This topic was proposed to me by L.S. Tsvetkova, one of Luria’s closest collaborators.

N.V.: In this issue of our journal your papers dated from 1967 to 1996 are collected. Is there an idea that binds them all? How would you formulate this idea?

T.A.: Your journal is intended for various categories of readers;

therefore, the most general articles have been chosen for the publication. Five out of six articles are devoted to the analysis of speech, and the sixth—to some common issues of neuropsychology and to the cultural-historical and natural-scientific approaches to analysis of the human mind in general. In all my articles one can see the influence of Vygotsky's and Luria's ideas. M.M. Bakhtin wrote that "every meaning will someday have its homecoming festival."³ I tried to read and reread works by Vygotsky and Luria through the eyes of a present-day scientist and to test their ideas experimentally. It is not for me to judge whether I have succeeded or not.

N.V.: *What do you consider your most important achievement?*

T.A.: If we address the area of cognitive neuroscience, it is certainly a model of speech production based on the investigation of syntactic and semantic disorders in aphasia patients. In fact, I have worked on this model almost all my life.

N.V.: *Your model is presented in the article published in 1967, and in your books published in 1975 and 1989. Do these versions of the model differ from each other?*

T.A.: Of course they do, although not too drastically. Every subsequent publication of the model contains a development and a more convincing proof of two basic ideas going back to Vygotsky and Luria. The first idea is a phase structure of the pathway from the thought to the word (a motive—a thought—inner speech—semantic structure—outer speech) proposed by Vygotsky. The second one is "a principle of joint operating and mutual adaptation of the posterior (gnostic) and anterior (dynamic) system of the cortex" by A.R. Luria. As we combine these ideas, we can conclude that a future utterance, before it appears in outer speech, has at least five representations. In the transition from one level to another, from inner to outer speech operations, both the anterior and posterior regions of the brain are necessarily involved. This appeared to be a truly heuristic framework: a transition from one level to another is carried out due to the mechanism of the same type. Later, in

Western psycholinguistics, it was labeled a “frame and slots” mechanism, and a similar idea is implied in the “skeleton + constituent notion” proposed by Eve and Herbert Clark.⁴

N.V.: *But, as far as I know, you learned about these works of Western scientists after the publication of your own paper. In general, were you influenced mostly by your Russian teachers, or also by researchers working abroad?*

T.A.: I certainly could not limit myself only to Russian psychology. Both Vygotsky and Luria were highly erudite scientists and took into account achievements of science all over the world while developing their own theories. As for me, studying worldwide scientific literature led me to the formation of a framework or a context for understanding Vygotsky’s and Luria’s works.

N.V.: *And what foreign scientific schools and researchers were most important to your personal scientific development?*

T.A.: First of all, I should mention works belonging to the functional approach in linguistics and psycholinguistics, in particular to the investigations of the child’s speech. When I tried to integrate the variety of views on syntax and its development in children, the works by M. Bowerman,⁵ P. Greenfield,⁶ D. Slobin,⁷ and especially by E. Bates⁸ seemed to be the most helpful for me. Elizabeth Bates’s book, *Language and Context: Acquisition of Pragmatics*, helped me to compare and bring into correlation the general notion of three different types of syntax proposed by Vygotsky (the syntax of inner speech, semantic syntax, and the syntax of outer speech) with the types of syntactic structure discussed in the contemporary literature.

N.V.: *Could you specify the terminological relations you have managed to establish?*

T.A.: For instance, the first type of structure of utterance in children described in Western psycholinguistics, referred to as the pragmatic “topic-comment” type, can be correlated with the syntax of

inner speech—a chain of predicates or comments on the implied topic. This syntax functions on the “message level,” as Garrett called it in 1982.⁹ It allows the Speaker to organize information first for him- or herself: that is to put the most important information in the first place, less important in the second place, and so on. Then, if necessary, he or she would rearrange the information for the Listener, similarly distinguishing between its given and its new aspects. The second type of structure of utterance in children is semantic syntax, that is, a functionally understood case grammar or role and reference grammar that concerns the relationships between an agent and object, and an action. It can be correlated with “living” categories of a semantic phase by L.S. Vygotsky. Finally, the third type, surface syntax, corresponds to the syntax of outer speech by Vygotsky. Not all children demonstrate all three types of utterance in their outer speech. I observed all three types of utterance in patients with anterior agrammatism and described them in my book published in 1989.¹⁰

N.V.: *But are there data beyond the results of studying aphasia patients that confirm your theoretical considerations?*

T.A.: Yes, there are such data. They are also described in my book. These data belong to such domains as the child’s speech, spoken language, and so forth. Let me mention just one example. In the work of Bates, Burani, and their colleagues,¹¹ it has been shown that the best predictor of a number of characteristics of word processing is the time of its acquisition. This fact is in accordance with my idea (based on Vygotsky’s works) that “the history of the semantic field determines its structure.” For a detailed elaboration of this idea, see the fourth article in this issue of the journal.

N.V.: *But was it possible to find foreign literature in the Soviet Union? How did you get the necessary papers? There was no Internet at that time, and it has always been difficult to obtain foreign literature in the USSR.*

T.A.: I was lucky. At first, I was allowed to use the home library

of A.R. Luria, who maintained an extensive scientific correspondence and to whom a lot of researchers all over the world mailed their papers and books. Thanks to his library I learned about the works of R. Jakobson, H. Clark, T. Sebeok, and many other authors. For example, A. Caramazza, only a beginner at that time, sent Luria his first articles. A.A. Leontiev carried on an extensive correspondence, and I acquired this useful habit as well. My correspondence became especially intensive after I had spent three months (in 1981–82) in the United States, where I had a chance to meet many colleagues. I consider this publication of a selection of my articles to be an appropriate occasion to thank Anna Basso, Elizabeth Bates, Rita Berndt, Melissa Bowerman, Alfonso Caramazza, Katerina Clark, Michael Cole, William Dingwall, Harold Goodglass, Patricia Greenfield, Michael Holquist, Judith Johnston, Claudio Luzzatti, Malcolm McNeill, Lise Menn, Jon Miller, John Rosenbek, Martha Schwartz, Dan Slobin, Robert Van Valin, James Wertsch, Harry Whitaker for giving their support, for presenting me their books, for sharing their results, and participating in discussions. I would also like to express my gratitude to the anonymous donors who sent me the library that belonged to the late Richard Cromer.

N.V.: You head the Laboratory of Neuropsychology at Moscow State University. Would you please tell us about your lab? What are its trends now?

T.A.: The lab was opened in 1970, founded by A.R. Luria, and first headed by L.S. Tsvetkova. The lab's main line of investigation was the study of aphasia and the elaboration of remediation techniques. Now our research covers a variety of issues, but our main area is child neuropsychology. Here we find a broad field of activity, first of all, adapting Luria's battery of assessment tests for children, along with elaborating quantitative parameters of assessment that enable us to carry out qualitative analysis. Second, we develop ecologically valid methods of child observation at school and techniques of analyzing their school "products": for

example, how writing differentially suffers in children with various neuropsychological profiles. These “first” and “second” activities refer to analysis of both individual differences in normal children and deviations in development. The third and probably the most important direction of our work in the area of child neuropsychology is the elaboration of methods of development and remediation of higher psychological functions. This work is beyond the scope of the articles selected for this issue of the journal, but it is based on the principles I discuss in the articles.

Acknowledgments

I thank Dorothy Robbins, who initiated this publication and revised some translations, and Henryk Baran also for revision and useful discussion of English translations of some of my papers. Then, I thank Katya Kashirskaya and Masha Falikman for their help in translating some articles. Finally, I am grateful to those who have made this publication a reality: I mean people working on this issue of the journal, and first of all, Nikolai Veresov, Therese Malhame, and Irina Burns.

Notes

1. James Wertsch, Introduction to T.V. Akhutina, “The Role of Inner Speech in the Construction of an Utterance,” *Soviet Psychology*, 1978, vol. 16, no. 3, pp. 3–5.

2. A.R. Luria, *Ocherki psikhofiziologii pis'ma* [Essays on the Psychophysiology of Writing] (Moscow: Izdatel'stvo Acad. Ped. Nauk, 1950).

3. M.M. Bakhtin, [*The Aesthetics of Verbal Creativity*] (Moscow: Iskusstvo, 1979), p. 318.

4. H.H. Clark and E.V. Clark, *Psychology and Language: An Introduction to Psycholinguistics* (New York: Harcourt Brace Jovanovich, 1977).

5. M. Bowerman, *Early Syntactic Development: A Cross-Linguistic Study with Special Reference to Finnish* (Cambridge: Cambridge University Press, 1973).

6. P.M. Greenfield and J.H. Smith, *The Structure of Communication in Early Language Development* (New York: Academic Press, 1976).

7. D.I. Slobin, “Universals of Grammatical Development in Children,” in *Advances in Psycholinguistics*, ed. G.B. Flores d'Arcais and W.C.M. Levelt (Amsterdam: North-Holland, 1970).

8. E. Bates, *Language and Context: Acquisition of Pragmatics* (New York: Academic Press, 1976).
9. M.F. Garrett, "Production of Speech: Observations from Normal and Pathological Language Use," in *Normality and Pathology in Cognitive Functions*, ed. A. Ellis (London: Academic Press, 1982).
10. T.V. Akhutina, *Porozhdenie rechi: neirolingvisticheskii analiz sintaksisa* [Speech Production: Neurolinguistic Analysis of Syntax] (Moscow: Moskovskii Gosudarstvennyi Universitet, 1989).
11. E. Bates, C. Burani, S. D'Amico, and L. Barca, "Word Reading and Picture Naming in Italian," *Memory and Cognition*, 2001, vol. 29, no. 7, pp. 986–99.

List of Tatiana Akhutina's (Ryabova's) selected publications in English (not included in this issue; in chronological order)

- Ryabova, T.V. "Collapse of the System of Word Meanings in Aphasia." *Soviet Psychology*, 1969, vol. 7, no. 3.
- Akhutina, T.V. (co-authors: Tsvetkova, L.S., Polonskaya, N.N., and Pilaeva, N.M.). "A Method for Evaluation Speech Dynamics in Aphasia." *Soviet Psychology*, 1979, vol. 17, no. 1, pp. 39–45.
- Akhutina, T.V. "Syntactic Deficits in Aphasia." *Papers in Linguistics*, 1983, pp. 263–74.
- Akhutina, T.V., and Tsvetkova, L.S. "Comments on a Standardized Version of Luria's Tests." *Brain and Cognition*, 1983, vol. 2, pp. 129–34.
- Akhutina, T.V., and Glozman, J.M. "Neurolinguistic Study of Semantics." *Aphasiology*, 1995, vol. 9, no. 2, pp. 143–52.
- Akhutina, T.V. "The Remediation of Executive Functions in Children with Cognitive Disorders: The Vygotsky-Luria Neuropsychological Approach." *Journal of Intellectual Disability Research*, 1997 vol. 41, no. 2, pp. 144–51.
- Akhutina, T.; Kurgansky, A.; Polinsky, M.; and Bates, E. "Processing of Grammatical Gender in a Three-Gender System: Experimental Evidence from Russian." *Journal of Psycholinguistic Research*, vol. 28, no. 6, 1999, pp. 695–713.
- Akhutina, T.; Kurgansky, A.; Kurganskaya, M.; Polinsky, M.; Polonskaya, N., Larina, O.; Bates, E.; and Appelbaum, M. "Processing of Grammatical Gender in Normal and Aphasic Speakers of Russian." *Cortex*, 2001, vol. 37, pp. 295–326.
- Akhutina, T.; Foreman, N.; Krichevets, A.; Matikka, L.; Narhi, V.; Pylaeva, N.; and Vahakuopus, J. "Improving Spatial Functioning in Children with Cerebral Palsy Using Computerized and Traditional Game Tasks." *Disability and Rehabilitation* (forthcoming).

Copyright of Journal of Russian & East European Psychology is the property of M.E. Sharpe Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.