

Chapter 5

A. R. LURIA AND THE CULTURAL- HISTORICAL APPROACH IN PSYCHOLOGY¹

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THE ESSENTIAL IDEAS: LURIA AS CULTURAL-HISTORICAL PSYCHOLOGIST

If one were to approach a professional psychologist at an international conference and ask, "Who was Alexander Luria and what was his contribution to psychology," it is overwhelmingly probable that you would be told that Alexander Luria was the "father of neuropsychology," who lived and worked in the Soviet Union in the middle of the twentieth century. There is no doubt that within the sub-discipline of neuropsychology, his methods and sometimes his theories have been widely cited. Even within neuropsychology, he remains a recognizably distinctive figure, as David Tupper has noted (Tupper, 1999). When his methods are actively used, they are also widely modified in ways which would be likely to evoke his disapproval.

David Tupper (1999) characterizes Luria's distinctiveness as follows:

Theoretically, Luria attempts to test an overriding metatheory; his approach is synthetic and his data are derived from clinical neurology whereas, *North American Neuropsychologists* have no overall theory, preferring instead to test specific hypotheses; their approach is analytic and their data are derived from psychometric tests.

In terms of assessment techniques, Luria's methods are qualitative and flexible; he seeks links in functional systems, his methods are clinical-theoretical and case oriented. By contrast, *North American Neuropsychologists* rely on psychometric, actuarial, quantitative, group studies.

¹ This article was published in Russian in 2002, titled: A. R. Luria i kulturno-istoricheskaya psikhologiya" In T. V. Akhutina and J. M. Glozman (Eds.), *Alexander Luria and the Psychology of the XXIst Century: Proceedings of the Second International Luria Memorial Conference* (pp. 10-17). Moscow: Department of Psychology at MSU.

These contrasts point squarely at the fact that Luria was, from the beginning, working in a different scientific paradigm than his North American (and many other) colleagues.

My own view is that Luria was an extraordinarily broad and ambitious psychological thinker for whom neuropsychology was one, but only one, of many sub-fields to which he made important contributions over a career that lasted more than 50 years. He identified himself as a cultural-historical psychologist, as a follower of Lev Semyonovich Vygotsky, and a colleague of Alexey Leontiev, with whom he set out as a young man to create a synthetic, all-embracing psychology. To understand who Luria was, even if one is only interested in his contributions to neuropsychology, it is necessary to understand him first and foremost as a cultural-historical psychologist, a distinctive paradigm that has gained many adherents world-wide since Luria's death a quarter of a century ago.

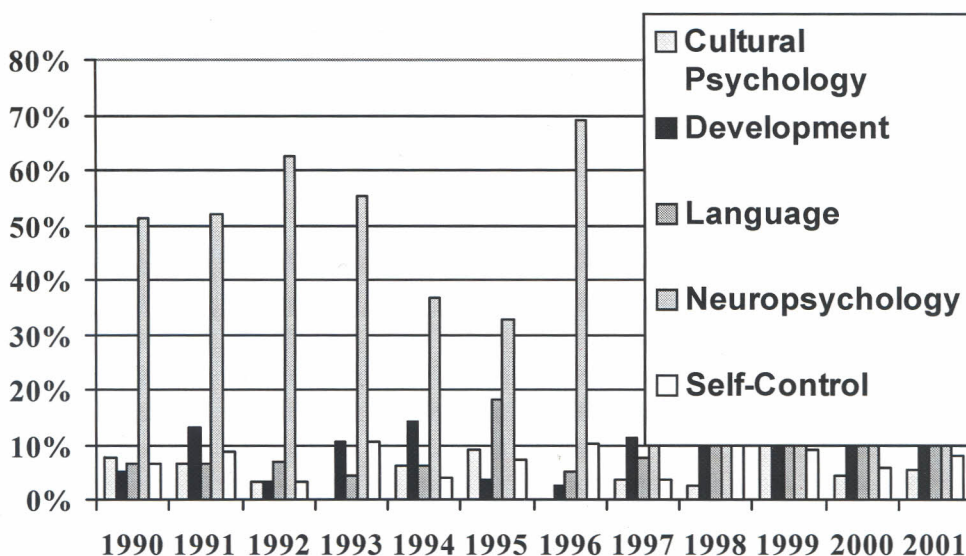


Figure 1. Summary comparison of Luria's work.

In the Figure, I present a statistical summary of references to Luria's work in several key areas of psychology during the past decade. This graph is an underestimate of the total number of articles by a large factor because it includes only cases where Luria's name appears either as a title word, subject, or key word. You will note that even many years after his death, he continued to be the subject of many articles and books, and continues to be widely cited. The predominance of neuropsychological references is self-evident, but so is the continued importance of work written more than half a century ago in several different areas of psychology. These data leave little doubt about Luria's broad influence on the field at the current time.

In perhaps his last published article before his death, Luria himself tried to distinguish basic psychological approaches in order to establish what he considered characteristic of his own approach (Luria, 1977):

Approach 1: Human characteristics derive from genotypical codes and are essentially physiological processes deriving from reflexes.

Approach 2: Human consciousness develops from the nature of social processes, so the content of consciousness reflects social relations.

Approach 3: Psychology is a biosocial science relating some human properties to biological processes and others to social processes.

Approach 4: Psychology is a unique science that studies how new functional systems reflecting higher levels of conscious activity emerge from the interpenetration of the social, cultural, and biological. Note that approach 4 is a rephrasing of the idea of cultural-historical psychology.

HOW THE BASIC IDEAS GREW AND CONTINUE TO GROW OVER TIME

It is conventional, following the format of Luria's autobiography (Luria, 1979) and Homskaya's biography (Homskaya, 2001), to divide Luria's career chronologically, as if he changed topics at approximately 10 year intervals. While this is a convenient way to organize the narrative of Luria's work, it is my conviction that the topics never changed, even when the circumstances and particular content and corresponding analytic strategies did change. If we trace his ideas chronologically, but remember that early stages are modified and taken up in later stages, it is possible to understand the continuing relevance of Luria's ideas for contemporary psychology.

BASIC PRINCIPLES OF CULTURAL-HISTORICAL PSYCHOLOGY

1. Cultural Mediation:

- a. The species-specific characteristic of humans is to live in the medium of culture, the residue of past human activity preserved in artifacts/tools/stimuli, broadly conceived.
- b. Distinctively human (voluntary) behavior arises from the ability to create stimuli and to subordinate oneself to them in order to attain goals.
- c. The idea of unmediated, "free" will power is a myth: "the human cannot by direct force control his behavior any more than a shadow can carry stones" (Luria, 1932, page 6-7). In development, children come to learn to control themselves "from the outside." This new synthetic form is called the "cultural form of behavior."

2. Historical Development:

- a. In addition to using and making tools, human beings arrange for the rediscovery of the already-created tools in each succeeding generation.
- b. Becoming a cultural being and arranging for others to become cultural beings are intimately linked parts of a single process called enculturation.
- c. Methodologically, mind must be studied in the process of change at different levels of history (microgenesis, ontogenesis, cultural history, and phylogenesis), all of which are intertwined.

3. Practical Activity:

- a. The analysis of human psychological functions must be grounded in everyday activities because (following Marx) it is in practice that the duality of materialism versus idealism could be superseded, and the representativeness of principles observed in artificial circumstances can be evaluated.
- b. Such activity must be studied *both* in terms of generalizing principles and in terms of individual lives: no generalization from individual cases, no generalization without individual cases.

LURIA'S INITIAL STEPS: KNOWING OTHERS' THOUGHTS THROUGH SELECTIVE DISCOORDINATION IN A CULTURAL MEDIUM

Luria's first major publication, *The Nature of Human Conflicts*, was published in the United States in 1932. The major portion of the book is devoted to his attempts to formulate a method for discovering what other people are thinking, objectively. In this work he applied a major, overarching principle and a realization of this principle in a specific method.

The principles can be termed *the principle of systemic holism*: "The structure of the organism presupposes not an accidental mosaic, but a complex organization of separate systems . . . [that] unite as very definite parts into an integrated functional structure." (Luria, 1932, pp. 6-7).

He referred to the corresponding method as *The Combined Motor Method*: "We should on the one hand, produce the central process of the disorganization of behavior; on the other hand, we should try to reflect this process in some [other] system accessible and suitable for examination. The motor function is such a systematic, objectively reflected structure of the neurodynamic processes concealed from immediate examination. And there lies before us the use of the motor function as a system of reflected structure of hidden psychological processes. Thus we proceed along the path we call the combined motor method." (Luria, 1932, p. 18)

The initial motivation for the Combined Motor Method was to find an objective approach to "hidden psychological processes" unavailable using Freud or Jung's methods. Luria used the method in field experiments with criminals or suspected criminals, students waiting to take an examination, whose right to study at the university was suspect, and experimental analyses using hypnotism. Without recognizing Luria's contribution, others have adopted this method which is widely used in the study of infancy. For example, Jerome Bruner used it when he identified the "signature" sucking response of newborns, and they used various stimulus conditions that might or might not disrupt it to determine the nature of their visual experience (cf. Kalnins & Bruner, 1973).

Many infancy researchers following Bruner, using selective disinhibition as a measure of cognitive processing, were also following Luria's methodological prescriptions without realizing it.

Luria also used the Combined Motor Method in later work but because the work was not deemed acceptable for publication in Russia until 2002, there is little acknowledgement of it. Luria and Leontiev met Vygotsky while engaged in research on the combined motor method. The most obvious linkage with the early work in *The Nature of Human Conflicts* is to Luria's work with mentally retarded children in the 1950's. The major issue in this later period was

when word meaning came to dominate stimulus strength in controlling responses. Under the rubric of self-regulation this work continues to have a broad influence on developmental psychologists and has led to extensive study of the role of parental verbal behavior in promoting or retarding mental development.

PHYLOGENY AND ONTOGENY

The basic idea of cultural-historical psychology, that phylogeny and cultural-history merge with the onset of language at the end of infancy, was carried into research with Mironova and others on identical and fraternal twins (Luria & Mironova, 1936). This very large project was perhaps the first to use the comparison of identical and fraternal twins as a means of evaluating the role of phylogenetic factors in development, but most of it went unpublished.

This research depended critically on the belief that it is possible to create tasks that selectively tap lower and higher psychological functions, a distinction which has been difficult to maintain. Current Russian research does not appear to pursue this approach.

One positive result to come from this line of work was a further illustration of the role of speech in developing intellectual skills based on a case of two twins who developed a private language and then underwent different forms of training (Luria & Yudovich, 1956).

CULTURAL HISTORY AND COGNITIVE DEVELOPMENT

The expeditions to Central Asia adopted virtually the opposite strategy of the research with twins, seeking to determine if/how changes in culturally organized activity influenced differences in cognition with genetic endowment, at least at the group level, held constant. This work is widely cited in many fields and has remained in print for almost 30 years, but its theoretical interpretation is controversial: Two major interpretations of the results are widely debated:

1. Cultural-historical change causes development of shift from practical to theoretical thinking.
2. Cultural-historical change brings about activity-specific changes in modes of thought.

Luria himself favored the former conclusion in line with Marxist theories which posit close connections between general stages of historical change and general modes of cognition, and he is joined in this conclusion by such eminent scholars as Jerome Bruner (1996) and Jack Goody (1977). Others, such as myself (Cole, 1996) and Peeter Tulviste (1988), favor the latter interpretation. The issue has yet to be decided, but there is no question that Luria's cross-cultural research remains highly influential and generative of new research.

NEUROPSYCHOLOGY

The themes of earlier work became the foundation for a new kind of neuropsychology, which continues to have great influence. The key ideas familiar in a number of Luria's books on neuropsychology include:

1. The notion of three major "blocks" of brain function (energizing, coding, planning) and their organization into functional systems.
2. The idea that functional brain systems include the culturally organized environment as key constituents.
3. The absolute methodological requirement to combine theory and practice. In effect, successful re-mediation of brain injuries becomes the acid test of theory.

Theoretically, the idea that cultural organization enters directly into functional systems of brain organization have been given a huge boost by the work of Gerald Edelman on re-entrant mechanisms of cortical functioning (Edelman, 1995).

At present, the need for a cross-cultural neuropsychology is seen as crucial for developing countries (Nell, 2000). This enterprise draws heavily on Luria's cross-cultural work, but also faces almost insuperable interpretive problems.

ROMANTIC AND CLASSICAL SCIENCE

In his two short books about exceptional case studies, Luria gave voice to an entirely new genre of scientific research which combines the nomothetic and idiographic approaches that have split psychologists since the beginning of the discipline, providing his own resolution to what is generally referred to as "the crisis in psychology."

Classical scholars are those, he wrote, who look upon events in terms of their constituent parts. Step by step they single out important units and elements until they can formulate abstract, general laws. These laws are then seen as the governing agents of the phenomena in the field under study. One outcome of this approach is the reduction of living reality with all its richness of detail to abstract schemas. The properties of the living whole are lost, which provoked Goethe to pen, "Gray is every theory, but ever green is the tree of life."

Luria (1979) contrasted the classical approach with the romantic approach, which he characterized as just the opposite. According to Luria, "Romantic scholars do not follow the path of reductionism. Romantics in science want neither to split living reality into its elementary components nor to represent the wealth of life's concrete events in abstract models. It is of the utmost importance to romantics to preserve the wealth of living reality, and they aspire to a science that retains this richness" (p. 173). Neither approach, taken in isolation, is entirely satisfactory. While the classical scholar may "murder to dissect," "sometimes logical step-by-step analysis escapes romantic scholars who allow artistic preferences and intuition stake over. Often their descriptions not only precede explanation but replace it" (1979, p. 175). Luria sought to combine them in his work.

Luria believed that clinical and psychological observations should seek the primary basic factors having immediate consequences and then seek the secondary or "systemic" consequences of these basic underlying factors. Only after these basic factors and their

consequences have been identified can the entire picture become clear. The object of observation, he wrote is thus to ascertain a network of crucial relations. When done properly, observation accomplishes the classical aim of explaining facts, while retaining the romantic aim of preserving the manifold richness of the subject.

CONCLUSION

This very brief summary should be sufficient to indicate that Luria was, and remains, a psychologist for all seasons. His creative life represents the single most sustained and successful attempt to implement the basic tenets of a meta-psychology, which includes culture as a fundamental constituent of human nature, without in the least minimizing the role of biology and society.

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