

Cognitive  
Development

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Its Cultural and  
Social Foundations

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HARVARD UNIVERSITY PRESS  
CAMBRIDGE, MASSACHUSETTS  
AND LONDON, ENGLAND

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## Foreword

MICHAEL COLE

In order to appreciate this remarkable book more fully, the reader may find it helpful to have some idea of the intellectual and social climate at the time when Alexander Luria, still a young man, set out for Central Asia. In 1921 he completed his undergraduate work at the university in his native town of Kazan. After graduating from the humanities faculty (there was still no psychology department as such at the time), Luria entered the Kazan medical school. His interest in psychology interrupted his medical studies, however, and in 1923 he accepted a position at the Institute of Psychology at Moscow University.

Luria arrived at the institute during a period of great ferment. In psychology, as in many areas of Russian intellectual life, there were many different ideas about how things should change following the revolution. The prerevolutionary director of the institute, G. T. Chelpanov, had been replaced by K. N. Kornilov, who undertook to remold psychology along Marxist lines. But there was no firm agreement on exactly what a Marxist psychology should look like.

Kornilov himself tried to set up guidelines for a Marxist psychology in his *Textbook of Psychology from the Standpoint of Materialism*, first published in 1926 and later reprinted several times. His major theme was the inadequacy of the phenomenological psychology then holding sway in Russia and in Europe generally. In his emphasis on

simple reactions, and the accurate measurement of their speed, form, and duration, his "reactological" school of psychology bore many similarities to American behaviorism, then coming into prominence. On his arrival in Moscow Luria himself had been more influenced by events in Germany than those in America. He had read the early work of the Gestalt psychologists, and had even written a small essay attempting to unify certain Freudian ideas with an objective research methodology. (The fruits of this work appeared much later in English under the title *The Nature of Human Conflicts*.)

In 1923 Luria met Lev Vygotsky at a conference in Leningrad. Vygotsky was invited to work in Moscow in 1924, and thus began the collaboration leading to the research described in this book. Vygotsky believed that psychology in the mid-1920s was in a state of crisis, which had, in effect, split the field into two disjoint subdisciplines. On the one hand, the work of Sechenov, Pavlov, and other natural scientists had succeeded in establishing a material basis for *elementary* psychological processes. But the reflex approach provided no adequate method for dealing with the *complex* psychological functions that traditionally formed another chief concern of psychology—voluntary memory, abstract problem solving, and creative imagination, for example. On the other hand, psychologists who took these complex functions as their subject matter found themselves confined to verbal description based solely on introspection, a procedure that did not satisfy Soviet scholars' desire for an objective, materialist psychology.

Both Vygotsky and Luria accepted the principle that all psychological processes have a basis in reflexes. However, they resisted the position, popular in America at the time (and accepted by Kornilov), that complex psychological processes can be *reduced* to chains of reflexes. Vygotsky sought the proper minimal unit of a new cognitive psychology which retained the basic characteristics of uniquely human psychological processes.

The elementary feature characteristic of human consciousness chosen by Vygotsky was *mediation*. According to this conception, first put forth by Vygotsky in the early 1920s, the behavior of both animals and man is built upon a reflex base. But man is not restricted to simple stimulus-response reflexes; he is able to make indirect connections between incoming stimulation and his responses through various mediating links. When man introduces a change in the envi-

ronment through his own behavior, these very changes influence his later behavior. The simple reflex is changed into a reflex system in which the tools a man uses to influence his environment become signs that he then uses to influence his own behavior as well. Vygotsky believed that this formulation allowed him to retain the principle of the material reflex as the basis of behavior, and also to analyze human psychological functions as instances of complex, mediated, mental acts.

This line of theorizing has become familiar in the United States through several publications by Vygotsky (1962) and Luria (1961). They apply the concept of mediation almost exclusively to the development of mental processes in children, especially to the role of language in development. Vygotsky and Luria stressed that mental development must be viewed as a historical process in which the child's social and nonsocial environment induces the development of mediating processes and the various higher mental functions. "Historical" in the context of child development has generally been interpreted as an individual phenomenon, although Luria has always emphasized that word meanings provide the child with the distilled results of the history of his society.

This book is concerned with the historical aspect of mental development in a quite different sense. In 1930, Luria and Vygotsky published a monograph entitled "Essays in the History of Behavior." This work raised the possibility that the principles they had been applying to individual development might have parallels in sociocultural development as well. Clear examples of external mediation were seen in such phenomena as the use of knotted ropes to aid memory among tribes in South America or the ritual sticks discovered among aborigines in Australia.

Such data were of course only anecdotal at best, but they received a good deal of attention in Soviet social science at the time. It is probably no coincidence that an edited version of two of Lévy-Bruhl's books on primitive thought processes appeared in 1930. Although the editors of the book expressed doubts about some of Lévy-Bruhl's formulations, in general they accepted his view that social changes were accompanied by fundamental changes in thought processes.

At this same time, as Luria tells us in his preface to this book, enormous social changes were taking place in all parts of the USSR.

The campaign to bring collectivized agricultural practices to the entire country was in full swing. For the peasants of central Asia, the new order indeed required monumental changes in age-old cultural patterns.

Thus, in search of support for their new psychological theory as well as evidence of the intellectual benefits of the new socialist order, Luria set out for central Asia. Vygotsky, already ill with tuberculosis (he died in 1934), could only learn of these journeys second hand.

After two expeditions during which the data in this book were gathered, Luria made some preliminary public descriptions of his results, but the intellectual climate in Moscow at the time was not at all friendly to his conclusions. Although Luria clearly emphasized the beneficial consequences of collectivization, critics pointed out that his data could be read as an insult to the people with whom he had been working (Razmyslov, 1934). The status of national minorities in the USSR has long been a sensitive issue (not unlike the issue of ethnic minorities in the United States). It was all well and good to show that uneducated, traditional peasants quickly learned the modes of thought characteristic of industrialized, socialist peoples, but it was definitely not acceptable to say anything that could be interpreted as negative about these people at a time when their participation in national life was still so tenuous.

By 1974, when this book was published in the USSR, there was greater readiness to consider the implications of different patterns of intellectual behavior characteristic of different social groups. L. I. Antsyferova, a leading Soviet theoretician, has summarized the contribution of the book: "A. Luria's book is an important and, it may be said without exaggeration, a unique contribution to the methodology and theory of psychological science and to the development of its basic principle of historicism" (Antsyferova, 1976, p. 256).

Part of the initial controversy over Luria's cross-cultural work may have arisen from the developmental orientation he brought to this topic. His general purpose was to show the sociohistorical roots of all basic cognitive processes; the structure of thought depends upon the structure of the dominant types of activity in different cultures. From this set of assumptions, it follows that practical thinking will predominate in societies that are characterized by practical manipulations of objects, and more "abstract" forms of "theoretical" activity in

technological societies will induce more abstract, theoretical thinking. The parallel between individual and social development produces a strong proclivity to interpret all behavioral differences in developmental terms. Paradoxically, it is exactly this orientation, together with Luria's genius at using what he calls the "clinical method," that makes this book so relevant today.

Luria conducted his research before cross-cultural psychology became an accepted discipline in Europe and America. There is now a rather large and growing literature on the questions raised in this book (see Berry and Dasen, 1974; Cole and Scribner, 1974; or Lloyd, 1972, for summaries). But we have yet to resolve ambiguities in the interpretation of cultural differences of the kind Luria so clearly documents.

Luria's style of interpreting these data is similar to the tradition that attributes performance differences between groups in two cultures to the same processes that give rise to performance differences between younger and older children within the same culture. This line of interpretation has an honorable history, as shown in the work of Greenfield and Bruner (1966) and work carried out in the Piagetian tradition (Dasen, 1972). Within this framework, Luria's data are unique in showing very sharp changes among adults exposed to different work contexts and to minimal levels of education (although some data of a similar nature have been obtained by Scribner, 1974).

My own interpretation of such data is somewhat different, since I am skeptical of the usefulness of applying developmental theories cross-culturally. Thus, what Luria interprets as the acquisition of new modes of thought, I am more inclined to interpret as changes in the application of previously available modes to the particular problems and contexts of discourse represented by the experimental setting. But the value of this book does not hinge on our interpretation of Luria's results. As he emphasizes at several points, this text represents an extended pilot project that can never be repeated. It will be for other investigators, working in those parts of the world where traditional societies still exist, to iron out the interpretation of such findings.

It is not only the uniqueness of the historical circumstances that makes this work of contemporary interest. To my knowledge, there is not one example in the cross-cultural literature of the application of the methods used here. Luria is simply a brilliant craftsman in his use of the clinical method to explore the reasoning processes that his sub-

jects bring to bear on the problems he poses. His carefully guided probing, his use of the hypothetical opponent ("but one man told me . . ."), the inclusion of several people whose arguments among themselves become his data, have no parallel in the psychological investigations of our century.

Enough said. Luria's informants say it better. Unless you have seen it for yourself, it is better not to comment.

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