

PREFACE

In the present book we have gathered together three psychological studies, one on the behavior of anthropoid apes, a second on the behavior of primitive man, and a third on the behavior of the child. All three studies are united by a common theme, the theme of development. They all have as their goal a schematic representation of the path of psychological evolution from the ape to civilized man.

In each study, therefore, we have considered not the entire range of behavior (of the anthropoid apes, primitive man, or the child), but *only a single dominant feature or single aspect of behavior*, basically that feature which, like the arrow of a compass, points in the direction and path of development of behavior from its given starting point. Our goal has been to outline the *three principal lines* in the development of behavior – the evolutionary, the historical, and the ontogenetic – and to show that the behavior of civilized man is a product of *all three lines* of development and may be understood and explained scientifically only by means of the *three distinct paths out of which the history of human behavior has been formed*.

We have also not sought to trace out each of these three processes of development in any sort of comprehensive way, nor have we endeavored to encompass all aspects of the behavior of the ape, primitive man, and the child in any sort of comprehensive or detailed fashion. We have everywhere attempted not so much to represent the entire process as a whole, as to take note of the principal landmarks of the path along which psychological evolution has passed each time from one turning point to the next. In each study, therefore, we have identified a single essential component that has served as a link connecting a given stage in the development of behavior with the very next new stage of development. We have deliberately limited the content of these studies exclusively to a discussion of the evolution of *forms of behavior*.

The schema we have followed in these studies may be represented in the following way: the use and "invention" of implements by the anthropoid apes crowned the organic development of behavior in the evolutionary series and prepared the way for a transition of the entire process of development to new paths, creating the *fundamental premise of the historical development of behavior*;

work and the associated development of human speech and other psychological symbols, by means of which primitive man attempted to control behavior, denotes the beginning of the cultural or historical development of behavior in the proper sense of the term; finally, in child development, in addition to processes of organic growth and maturation, there is also a second line of development which may be identified quite clearly, one involving the cultural growth of behavior based on the mastery of ways and means of civilized behavior and thinking.

These three steps are all symptoms of new epochs in the evolution of behavior, and symbols of *changes in the very mode of development*. Thus, we have everywhere considered turning points in the development of behavior. We will consider as such turning points in the behavior of the apes the use of implements, or tools; in the behavior of primitive man, work and the use of psychological symbols; and in the behavior of the child, the splitting of its line of development into psycho-physiological and psycho-cultural development. Each critical turning point, or stage, is considered here principally from the standpoint of what *new* aspect it brings to the process of development. Thus, we have considered each stage as a starting point for the subsequent processes of evolution.

In the first study we have been guided by results found in well-known studies by Wolfgang Köhler, in the second we have sought to make use of results on ethnic psychology collected by Lévy-Bruhl, Thurnwald, Max Wertheimer, Lerois, Dantsel, and many others; finally, in the third study we have been guided principally by our own results, obtained in experimental investigations into the behavior of the child.

We have attempted to illuminate and encompass all the factual material through a unified viewpoint, a unified approach to the processes of psycho-cultural development, and the unified theoretical understanding developed in L.S. Vygotsky's monograph, *Pedagogical Psychology of Schoolchildren*.

What is new in the present volume is (in addition to some of the research results) both the attempt to point to a link uniting all three lines of development, and an attempt to define in the most general terms the nature and type of this link. Our view of relations between the different lines of development of behavior is, to some extent, the opposite of that which has been developed by the various theories of *biogenetic parallelism*. As to the relationship between ontogenesis and phylogenesis, these theories hold that one process *repeats* another more or less completely, it reestablishes it, and that this relationship may best be defined as a parallelism between the two processes.

The inadequacy of the principle of genetic parallelism has been made clear both in the works of bourgeois researches as well as, chiefly, in those of Marxist writers. We have sought to reveal, first, the profound distinctiveness of each of the three paths of development of behavior, and the difference in the mode and type of development. We were interested in identifying the distinctive, and not the analogous features of these processes. In opposition to the theory of parallelism we have believed that the investigation of the principal distinguish-

ing features of each process of development, features that distinguish it within the general concept of evolution, may lead directly to an evaluation of the mode and specific laws of each of the three processes we are considering. Our main objective has been to demonstrate the independent, specific patterns and essential nature of each specific mode of development. This does not in the least mean that we rejected the existence of any conformity between ontogenesis and phylogenesis. On the contrary, in the form in which this theory has been developed and critically illuminated by numerous modern authors, it may serve as an excellent heuristic principle, which we also utilized to reveal the formal correspondence between individual points in the different planes of development. However, we have sought to comprehend the actual connection between the three paths of development in an entirely different manner.

From our approach, this connection means that one developmental process prepares the way dialectically for the next and is transformed into a new mode of development. We do not believe that all three processes may be placed along a single straight line, but we believe that each higher mode of development begins wherever the preceding mode ends, and serves as its continuation in a new direction. This change in direction and in mode of development is no way precludes the possibility of a link between one process and another, rather it presupposes such a link.

The basic theme of our studies has been expressed most clearly and completely in the epigraph. We have sought to show that something occurs in the sphere of psychological development similar to what has long been established in the sphere of organic development. Just as in the process of man's historical development, man changes not his natural organs, but his tools, so also in the process of his psychological development man has enhanced the workings of his intellect through the development of the special technical "auxiliaries" of thinking and behavior. It is impossible to understand the history of human memory without history of writing, just as the history of human thinking cannot be understood without a history of speech. One need only recall the social nature and origin of all cultural symbols in order to understand that psychological development, considered from this standpoint, is a form of social development conditioned by the environment. It is firmly embedded into the context of all social development, of which it is manifestly an organic part.

We believe that by introducing the psychological development of behavior into the framework of the historical development of mankind, we are taking the first steps toward the formulation of the most important problems of a *new* genetic psychology. In Thurnwald's expression, we are thereby introducing a historical perspective into psychological research. We are well aware that any step in a new direction involves risks and responsibilities, but we see this path as the only possibility for genetic psychology as a science.

The first and second chapters were written by L.S. Vygotsky, the third chapter by A.R. Luria. The experiments that are at the basis of our study of the child's behavior were conducted by us together with our colleagues at the

Psychological Laboratory of the Academy of Communist Education. Figures 1, 2, 4, 5, 6, 7, 8, 9, 10, and 11 were borrowed from a book by Wolfgang Köhler, entitled *Intelligenzprüfungen an Menschenaffen*, 1921 (translated, with omissions of some figures, by Ella Winter, as *The Intelligence of Apes*). Figures 13, 14, 15, and 18 were borrowed from a book by R. Thurnwald, entitled *Psychologie des primitiven Menschen* (translated as *Psychology of Primitive Man*). Figure 11 was taken from a book by H. Volkelt, entitled *Fortschritte der experimentellen Kinderpsychologie*, translated as *Experimental Child Psychology*). Figures 16 and 17 were borrowed from Klodd; Figure 19 was taken from a book by Khoroshii, entitled *Birki irkutskikh buryat* [Notched Sticks of the Irkutsk Buryats People]; Figures 21 and 22 were borrowed from Shtrats; and Figures 3, 12, 26, 27, 28, 29, 30, and 31 were created by us or taken from studies and works by our colleagues. [References to quotations are to the English translations, where these exist.]

A.R. Luria

L.S. Vygotsky