The Psychology of Preschool Children Zaporozhets and Elkonin, editors

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Translated by John Shybut and Seymore Simon

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J.S. S.S.

De Kalb, Illinois, October 1970

Preface to the English Translation

Urie Bronfenbrenner*

To English-speaking psychologists and specialists in child development, this volume is best described in terms of its closest counterpart in the Western world; namely, the handbook or manual in child psychology associated with such names as Carmichael, Mussen, and most recently, the Hoffmans. This Soviet volume is thinner only because it deals with perceptual processes from birth up to seven years of age. But within that sphere, this book is the standard reference among Soviet psychologists and educators on research in early child development. Edited and partly written by two of the leading Soviet workers in this field, the volume is also widely used as a text in intermediate courses in developmental psychology in universities and pedagogical institutes throughout the Soviet Union, as well as East European countries. Both men are Professors of Psychology at the University of Moscow. Dr. Zaporozhets is also Director of the Institute for the Study of Preschool Children, an independent research center under the aegis of the Academy of Pedagogical Sciences. His colleague, Dr. Elkonin, directs the Laboratory for the Study of School-Age Children at the Institute of Psychology in Moscow.

In making available an English translation of this book, Drs. Shybut and Simon have performed a double service. First, they have given Western specialists access to a systematic survey of the extensive Soviet research in this area. Particularly impressive both in volume and quality are the studies of sensation and perception (reviewed by Yendovitskaya), of language development (Elkonin), and of thinking (Zaporozhets). The remaining four chapters on attention, memory, imagination, and motor development round out the picture of contemporary Soviet work in the developmental psychology of sensory processes.

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In addition to substance, the reader of this book will gain an appreciation of a scientific approach to the process of development rather different from our own. Reflected less in cited references than in the actual formulation of research problems and way of thinking about them, is the pervasive influence of one of the seminal thinkers psychology has produced—Vygotsky. Whether the concern is with the development of movement, attention, language, thought, or social play—and especially the interrelations among these processes—the theoretical ideas which animate and guide the experiments reported in this volume are those of Vygotsky and of his former colleagues and students, now leading psychologists in the U.S.S.R.—Leontiev, Luria, and the two editors of this volume, Zaporozhets and Elkonin.

The hallmarks of this Soviet approach may be characterized briefly as follows:

- 1. The developing organism is seen not as a passive receptor of stimuli but as an active agent capable of voluntary movement, selective attention, and subsequently, the creative use of language and thought; in short, as Soviet psychologists like to express it, consciousness is conceived as an active rather than a purely receptive process. The infant's psychological capacities develop through his practical activity with the world of material objects, a world that becomes progressively more complex both in content and in structure.
- 2. The infant's psychological development is shaped primarily through the intervention of other persons as the mediators between the child and his environment; it is their action, or failure to act, that becomes the decisive element in determining the character and course of the child's psychological growth; in short, the child is seen as assimilating the environment presented to him through other people. This orientation has its roots in dialectic materialism. As the editors state in their foreword:

In contradiction to those Western European and American psychologists who assert either that psychological development of a child takes place seemingly as a result of the spontaneous

realizing or maturing of inborn abilities (Bühler, Stern, and others), or moves along the path of adaptation and individual adjustment to the surrounding environment (a line of reasoning generally espoused by Spencerite psychologists and "strict behaviorists," and in a more refined form represented in the latest works of Piaget), Soviet psychologists (Vygotsky, Leontiev, and Rubinshtein), having translated into concrete terms certain wellknown philosophical propositions of Marxism-Leninism, have shown convincingly that the psychological development of individuals follows a path of "social inheritance" (Engels) or a path of "appropriation" (Marx) of social experience.

The application of these principles in the context of child development is nicely illustrated in the following passage from Chapter II:

The main factor in the establishment and development of the reciprocal relation between the young child and his surrounding environment is the social interaction of the child with the socializing adult. The emergence of the two-sided interaction of the adult with the child is marked by the appearance in the child of two and three months of age of a characteristic arousal reaction evoked by the sight of the adult. During such interaction it is possible to capture the child's attention and to organize his familiarization with the surrounding environment by evoking sensory reactions to a given object. In the course of interaction the adult first begins to utilize indicatory gestures and then words to attract the child's attention. By doing so the adult seems to strengthen the object's direct influence and to divert the child from other things. Subsequently, the child begins to utilize first the indicatory gestures and later words. The timing in the use of words depends on the rate of mastering speech. As a result of utilizing gestures and words, the child learns to isolate objects from the surrounding environment and to attract the attention of another human being.

- 3. As illustrated in the foregoing passage, language soon becomes the principal avenue of interaction between child and adult. Thus, it is language which shapes and controls the behavior of the child, first from without and then internally, as he begins to use the concepts and instructions of others as tools for structuring and controlling his own behavior.
- 4. Given the preceding propositions, the development of thought is closely related to language development and to the context

from which the latter derives, namely social relationships and social structure.

5. Finally, given the power of the man-mediated environment in shaping the development of the child, training, especially in early life, becomes of critical significance. Hence, the concern in Soviet experimentation with the acceleration of psychological development through the process outlined in the quotation cited above; that is, by focusing the attention of the child on differentiated aspects of the environment chiefly through the medium of language, and by inducing activity which makes use of the new discrimination, the experimenter, or trainer, seeks and—as the experimental evidence shows—often succeeds in enhancing the child's competence in such diverse areas as auditory discrimination, visual perception, language usage, thought processes, and imaginative play.

The distinctive character of the Soviet approach to psychological development is perhaps reflected most sharply in the occasional glimpses that the volume affords of Soviet views of Western theory and research in this area. Especially in the chapters by Zaporozhets and Elkonin, the work of non-Soviet investigators, notably Piaget but also Isaacs, Russell, Bühler, Lashley, the "Gestalt" psychologists, and others, are examined from the Soviet theoretical perspective. Especially illuminating along these lines is the critique of Piaget for his failure to recognize the social basis of what he calls "egocentric speech."

Along with its merits, the volume has some shortcomings from the point of view of the English reader. The first of these is inherent in a work of this kind; the descriptions of any single study are necessarily brief, especially on matters of method and experimental detail, a circumstance that is especially frustrating when the original sources cited are in a foreign language.

A second deficiency is specific to this first American edition of Zaporozhets and Elkonin's work, since it covers only the first of two volumes they have published on the psychology of preschool children—that devoted to the development of sensory processes, which appeared in 1964. A second volume, entitled "The Psychology of Personality and of Activity in the Preschool Child," issued a year later, reviews Soviet research in such areas as the development of volition, emotions, motivation, and personality. In addition, it discusses Soviet investigations on different aspects of children's activity, including games, work, and learning. It is to be hoped that this second volume also will soon be published in English and, in the meantime, that the studies cited in the present edition will become familiar references in Western publications.

Ithaca, New York, June 1970

This book concerns the development of cognitive processes in early and preschool childhood. It represents the first part of a collective monograph Psychology of Preschool Children, prepared by the co-workers of the Laboratory of the Psychology of Preschool Children at the Institute of Psychology, APN RSFSR.* The volume summarizes and evaluates theoretically the results of years of investigations in our laboratory, the work of other Soviet authors, and the work of many foreign psychologists. While extensively utilizing a variety of factual material available in child psychology in the preparation of this monograph, we do not plan to limit the writing to a mere compendium of the available investigations in the area of the psychological development of the child. In addition to reconstructing a general picture of the formation of various cognitive processes in preschool childhood, we attempted, as much as possible, to expose conditions and principles of their formation, relying on established theoretical positions and taking into account those practical problems which are confronting Soviet planners of preschool upbringing today.

The enormous growth of nurseries and kindergartens requires a quality of medical services and pedagogical training that insures optimal physical and mental development of all children and that increases their level of preparation for schooling. The role of preschool training is extremely important in the general process of personality formation. In the course of the first seven years of life the child undergoes extensive physical and mental development. The classical writers of Soviet pedagogy, Krupskaya and Makarenko, indicate correctly that not only does an intensive accumulation of various knowledge and skills occur in preschool age, but also that different abilities are constructed, bases of character are established, and certain moral qualities of personality are formed. In order to make this process manageable and to *APN-RSFSR-Academy of Pedagogical Sciences, Russian Soviet Federated Socialist Republic.

provide optimal conditions for the multilateral development of the child's personality, preschool pedagogy must rely on a knowledge of psychological principles in this development and the characteristics of their manifestations at various developmental stages. While highly praising Soviet psychological attainments in the solution of actual pedagogical problems, Krupskaya wrote as early as 1932: "For many years methods of influencing children rested on empiricism on the one hand and on idealistic psychology on the other. The scientific approach was either lacking in the old methods or was inaccurate. Now scientific materialistic psychology, relying on the accomplishments of contemporary neurology, presents a more valid scientific base on which scientific methods may be constructed."**

Since 1932, Soviet investigations in the area of general and child psychology have advanced markedly, and the utilization of psychological data in theory and practice of pedagogical training of children has become indispensable. Furthermore, the number of studies in child and pedagogical psychology during the past years has increased considerably. Many of these studies are printed in various journals of limited edition and are presently considered bibliographical rarities. In spite of this, a large number of these articles addressed themselves to specific questions of child psychology, and the reader interested in constructing a total picture concerning the development of certain psychological aspects of child behavior must perform the enormous task of comparing and evaluating data obtained from various sources. Under these conditions, utilization of psychological data presents difficulty not only for educators but also for scientists in the areas of pedagogy and psychology. In addition, a need exists for the preparation of synopses and abstracts of works in child psychology that would systematize for the reader the essentials of investigations conducted in a given area.

Similar works published abroad (e.g., in the U.S.A., Child

^{*}N. K. Krupskaya. Selected pedagogical works. M. Pub. by APN RSFSR, 1948, p. 177.

Psychology and Methods of Psychological Investigations of Children, edited by Murchison, Carmichael, Mussen, and others) undoubtedly are of definite interest to the specialist-psychologist. However, due to unfamiliar methodological approaches and onesided selection of factual material, these investigations are less suitable for a wider circle of readers, especially for those with a pedagogical orientation. The existing gap in summarized studies on child psychology has to be narrowed to some extent by relying on such Soviet books as Zaporozhets's Psychology; Elkonin's Child Psychology; and Lyublinskaya's Outline of the Psychological Development of a Child; or those published in other democratic countries, Piryov's Child Psychology with Defectology (Bulgaria); Klauss and Gibsh's Child Psychology (East Germany), and others. However, being written as texts or study guides, they can only in part fulfill the indicated function, since the volume of the attractive material and the thoroughness of its examination are limited by the scope of the given course and the didactic problems confronting the authors. Consequently, the preparation of a summary of studies concerning problems of child psychology pertaining to psychological development in early and preschool childhood remains indispensable for theory and practice of Soviet preschool training.

In preparing this book we relied upon theories proposed in Soviet psychology concerning motivational causes and upon basic principles of the ontogeny of human psychology. Propositions applying to psychological development in early childhood have been under study for many years in our laboratory. In contradiction to those Western European and American psychologists who assert either that psychological development of a child takes place seemingly as a result of the spontaneous realizing or maturing of inborn abilities (Bühler, Stern, and others), or moves along the path of adaptation and individual adjustment to the surrounding environment (a line of reasoning generally espoused by Spencerite psychologists and "strict behaviorists," and in a more refined form represented in the latest works of Piaget), Soviet psycholo-

gists (Vygotsky, Leontiev, and Rubinshtein), having translated into concrete terms certain well-known philosophical propositions of Marxism-Leninism, have shown convincingly that the psychological development of individuals follows a path of "social inheritance" (Engels) or a path of "appropriation" (Marx) of social experience. Recent theoretical and experimental genetic investigations by Leontiev and his co-workers revealed a deeply embedded uniqueness in the ontogeny of the psyche of man in contrast with that of animals. If in animals two forms of experience play a decisive role, generic, fixed in the inherited nervous organization of separate individuals, and individual, acquired via the path of adaptation of inborn abilities to the present environmental conditions, then in human development the dominant role is assumed by a third form of experience, completely lacking in animals. This experience, called socialization, is fixed in the products of material and nonmaterial culture created by humanity and acquired individually during childhood.

Vygotsky was the first Soviet psychologist to introduce propositions concerning the leading role of training in the psychic development of the child. His theoretical and experimental investigations reveal that the socialization process not only enriches the knowledge and skills of the child; it precipitates essential changes in various psychic processes and engenders a genuine development of the child's psyche as well.

Furthermore, numerous investigations in psychology (Zaporozhets, Kostyuk, Leontiev, Elkonin, etc.) and in pedagogy (Usova, Leushina, Sakulina, Flyorina, and others) of preschool children confirmed this proposition and thus extended its application to areas of psychic development previously considered "naturalistic," i.e., moving along the path of the adaptation of an individual's biological abilities to existing environmental conditions. Studies of this kind led, for example, to a clarification of the decisive role of the mastery of social experience in the development of sensory processes and in the formation of a child's motor activity.

Clarification of specific aspects of the special type of the child's psychic development permits one to approach an old problem of psychology and pedagogy in a new way: the problem of the role of inheritance and environment in the formation of human identity. It is useless to argue, as has been done in the past, which of these is more important. The presence of specific natural predispositions in the form of hereditarily fixed features of the human nervous system, as well as their normal process of maturation in ontogeny, is an indispensable condition for the full psychic development of the child. One must be born with a human brain in order to become a man. Investigations which attempted to train in a humanlike fashion offspring of the highest organized animals-anthropoid monkeys (Ladygina-Kots, D. and K. Kellog, and others)-produced negative results and convincingly demonstrated that without the presence of corresponding natural predispositions the formation of human personality is impossible. In addition, data of neurological and defectological clinics indicate that substantial defects of a child's nervous system or disturbances in its maturation due to illness lead to more or less essential inadequacies of the psyche.

Finally, recent investigations of general and partial typological attributes of the human nervous system (Teplov, Leytes, and Merlin) permit one to assume that individual differences in innate dispositions create different opportunities for development and determine various paths for the attainment of similar results.

Thus, the presence of certain natural predispositions is not just merely important, but an absolutely indispensable condition in the ontogeny of the human psyche. However, these predispositions are not at all the motivational cause of the psychic development of the child.

In contrast to animal offspring, maturation of the child's nervous system is not in a position in and of itself to contribute to the development of any kind of species-specific form of activity, either practical or theoretical. This maturation merely provides certain opportunities for that development which might be real-

ized only in the presence of a definite social environment and training. Only through the acquisition of social musical culture can man's musical abilities develop, just as mastery of the knowledge and the ways of thinking accumulated by society may insure the development of man's intellect. Along with changes in our ideas concerning the role of predispositions in the psychic development of the child, the role of the environment in this process comes to be examined in a different light.

If for animal offspring environment is only the sum of conditions to which it has to adjust, then for the child his specific social environment is not merely an external condition, but a source of development. This environment contains the centuries-old experiences of mankind, defined in terms of tools of labor, means of communication, etc., which the child must master in order to become a man, i.e., a full-fledged participant in social achievements and social development. Mastery of this social experience is an unusually complex process and cannot be obtained through a passive approach, an approach of mere contemplation of the surrounding reality.

Theoretical and experimental investigations of Soviet psychologists (Vygotsky, Leontiev, and Rubinshtein) have shown that psychic development takes place in the process of activity and is dependent on the conditions and character of such activity.

At each qualitatively distinct level of development a dominant role is assumed by a specific type of leading activity, which determines the forms of mastery and to a large extent the character and extent of the acquired content. Such leading types of activity at an early age are object manipulations; for preschool-age children, games; and for school-age children, learning combined with various types of participation in mutally useful tasks.

The ongoing activities are not exclusive to a particular level of development, but rather comprise a dominant nucleus of the entire system of activities, on which depend the formation and mode of executing these activities at a given age. Thus, a preschooler not only plays, but learns and also takes part in simpler