

L. S. VYGOTSKY

A. R. LURIA

Psychological Institute, Moscow

The scientific world of the Soviet Union has lost one of her brilliant men. Professor L. S. Vygotsky, leading Russian psychologist, died of consumption on June 11, 1934, at the age of thirty-eight.

He worked in the field of general, educational, and abnormal psychology, was an innovator and reformer, and created a new school with many followers all over the country. From his early years, in his native town, Gomel, and afterwards in Moscow, Vygotsky realized that psychology, as then generally practiced in the universities, did not really offer a satisfactory scientific explanation of human personality and of those complex activities of the brain which are specifically human. Even in his early works Vygotsky held that psychology was going through a crisis, being divided, in fact, into two isolated branches, viz., a purely naturalistic psychology, which by means of physiological methods could only explain the most simple phenomena, but could not tackle the more complex traits of the human mind; and the other, the "idealistic" (*geisteswissenschaftliche*) psychology, which studied the more complex phenomena, but did so in such a way as to exclude psychology from the field of the natural sciences.

Instead of following these two methods Vygotsky tried to explain consciousness from the developmental point of view, i.e., by tracing the higher mental functions to their origin. Modern psychology is particularly indebted to him for his work on the *genesis of the psychological functions of the child*. According to him, the determining factor in the psychological development of the child and in the creation of the complex mechanism of the psyche is the social development of the child. Vygotsky's experiments led him to the conclusion that during the child's educational period and in his contact with the world of adults he not only acquires new habits,

but that actually new mechanisms are formed which are social by nature. These mechanisms are the patterns of the child's behavior towards the adult, which, as time goes on, develop into the child's own mode of behavior. In a number of papers, which in his own country are now accepted as classics, he described some of those mechanisms. He showed that the development of the child's mental functions goes with a deep change in the mind and with the growth of new and complex inter-relations between the various mental functions, in other words, with the genesis of new functional systems.

In the light of this theory Vygotsky analyzed the origin of such complex mental functions as logical memory, active attention, will, speech, thought; being one of the first psychologists in his country to introduce the "developmental" method into the experimental study of these problems.

His attention was drawn to the fact that speech plays the most important part in the development of complex behavior; it is speech that creates new functions inter-connected through their meaning. He then studied the changing meaning of words in the course of the child's development showing that the meaning of a word is not constant through the various periods of childhood, and that, as speech develops, the correlation of mental processes is developed and new mental functions are formed to become finally the specific features of the adult mind. Starting with a study of the development of mental functions, Vygotsky arrived at his theory of the significant integration of human consciousness, which he conceives as the product of this development.

Vygotsky, however, did not confine himself to the study of theoretical problems, but devoted much of his work to the practical application of psychology. Unlike the psychologists of both the physiological and the idealistic (*geisteswissenschaftliche*) schools, Vygotsky tried to find a scientific solution of the practical problems of our daily life. Many of his studies are of great value for the improvement of our educational methods. His collaborators showed how children understand the ideas with which they are presented at school, how the child's development affects his training, and how, in turn, he is stimulated by this training. Vygotsky's laboratory work allowed him to predict the development of the child and to define its scope. The work which he carried out in the Institute for the Experimental Study of Mental Defectives in Moscow shows

how diagnostic and educational work should be based on the study of the development of mental functions.

The psychiatric and neurological clinics owe to him a number of valuable contributions. He has shown that the study of the disintegration of the complex mental functions plays an important part in the understanding of the mechanisms of nervous and mental diseases. In his work on the psychology of schizophrenia and aphasia he gave brilliant examples of how clinical problems can be solved with the aid of psychological methods. His posthumous paper to the Psychoneurological Congress deals with the problem of localization of mental functions in the cortex.

We have lost a scholarly pioneer who has shown new ways to Soviet psychology, education, and psychiatry. His pupils are now working in various laboratories in Moscow, Leningrad, and Kharkov. He has left a considerable number of books, among which *Pædology of the School Age*, *Pædology of the Juvenile*, and *Thought and Speech* are the most important. A philosophical work of his, *Spinoza's Theory of Emotions—Prolegomena to the Psychology of Man*, is yet to be published.

We have lost a man who has been closely connected with Soviet public life, and whose manifold activities have, to a considerable extent, marked out the ways by which scientific work will be carried on in schools and in subsidiary institutions.

He was a man whose great intellect and personal charm will be ever remembered by those who had the privilege of coming into contact with him.

MAJOR WORKS OF PROFESSOR VYGOTSKY

1. *Educational Psychology* (Russian). Moscow, 1926.
2. *Pædology of the School Age* (Russian). Moscow, 1928.
3. *Outlines of the Development of Behavior* (with Luria, Russian). Moscow, 1930.
4. *Pædology of the Juvenile* (Russian). Moscow, 1931.
5. *The Principles of Pædology*. Lectures (Russian). Moscow, 1934.
6. *Thought and Speech* (Russian). Moscow, 1934.
7. *The Meaning of the Present Psychological Crisis* (In print).
8. *Spinoza and His Theory of Emotions—Prolegomena to the Psychology of Man* (In print).
9. "The Problem of the Cultural Development of the Child," *Journal of Genetic Psychology*, 1929, XXXVI, 415-434.
10. "Thought in Schizophrenia," *Archives of Neurology and Psychiatry*, 31, 1934, 1063-1077.

NEWS AND NOTES

U. S. A.

American Association for the Advancement of Science

The annual meeting of the American Association for the Advancement of Science was held at Pittsburgh, December 27 to 29, 1934. Psychology was notably represented in the opening session in the person of Dr. Edward L. Thorndike, the presiding president. In the special sections of psychology and education a problem of special emphasis was theories of learning, the topic of a symposium held in a joint session of the two sections. Dr. M. Sherman discussed the problem of sub-cortical and cortical dominance. Dr. R. M. Ogden emphasized the significance of integrated behavior patterns in a Gestalt theory of learning. One way of meeting the present situation of conflicting learning theories was presented by Dr. J. F. Dashiell, in a formulation of ten principles presumed to be common to trial and error, conditioned response, and Gestalt accounts of learning—an attempt to synthesize divergent theories by finding common ground. Another way out of the present unsatisfactory situation, which was enthusiastically indicated by Dr. Clark L. Hull, is the framing of sufficiently clear hypotheses to make experimental checks of logically necessary deductions easier. Several significant special papers on learning were presented. Dr. Margaret Mead described early conditioning of social attitudes in a primitive New Guinea tribe, and its effect upon adult behavior. Dr. W. H. Gantt and J. S. Light reported the formation of a conditioned reflex

after experimental division of the peripheral efferent nerve, thus excluding the effector from the reflex circuit during conditioning. Dr. T. L. McCulloch further shortened the gap between the learning abilities of the white rat and man in his analysis of the learned capacity of his rats to choose consistently the intermediate of a series of three weights, when only two were presented for choice at any one time.

The process of development was treated in three papers. Dr. L. Carmichael reported on the origin and development during fetal life of certain specific responses in the guinea-pig. Dr. W. F. Dearborn presented a summary of some of the results of the Harvard study of the mental and physical growth of school children. Dr. W. R. Miles, retiring vice-president of the psychological section, gave an address on Training, Practice, and Mental Longevity, in which he interpreted some of his own work on later maturity. He concluded that persons of advanced years are often able to perform various tests as well, if not better, than many young people, and that much of the current appreciation of the abilities of the middle aged is unwarranted. The practical implication of these findings is particularly significant in view of the present economic situation with its vocational discrimination against the older person.

In the field of attitude and personality measurement Dr. N. L. Hoopingarner reported on a method of personality analysis more than usually predictive of vocational success. Dr. H. H. Remmers described experiments with generalized social