

THE POINT OF VIEW OF GENETIC PSYCHOLOGY

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The word genetic has been used in connection with psychology for a number of years but its exact significance has not been well defined. The word genesis means, "an account or explanation of the source or origin of anything," and the word genetic, "of, pertaining to, dealing with, or based on genesis." This is the meaning to be associated with the word genetic, when it is applied to psychology.

The old time introspective psychologist did not produce a genetic psychology so long as he simply looked into his own consciousness and reported what he found, with classification and generalization as to the nature of mental states and their relation to each other. The experimental psychologist who observes mental states under definite conditions, and finds, so far as possible, objective indications or measures of those states does not produce genetic psychology. The application of statistics to introspective and experimental facts changes the nature of the psychology only in the way of making it more universal and exact. The physiological psychologist who attempts to determine the character of the physical structure and processes concerned in mental operations, produces a non-genetic psychology.

As soon, however, as the introspective psychologist begins to inquire how his present mental states originated and to trace them back to their beginnings, his psychology becomes genetic. When the experimental psychologist begins to investigate the processes of development by which, under given conditions, present degrees of mental activity have been reached, his psychology also becomes genetic. The physiological psychologist in like manner takes

the genetic point of view when he begins to inquire how the various sense and nerve structures came to have their present form and their present relation to each other.

The comparative psychologist has not the genetic point of view so long as he simply compares different species of animals with each other and with human beings of different races in respect to the nature and degree of their intelligence. Nor does the social psychologist belong to the genetic type, so long as he considers social phenomena as they are now manifested, without reference to their beginnings. Psychology of every type becomes genetic in proportion to the degree to which the search for origins is made prominent and carried back farther and farther toward ultimate beginnings. The old introspective psychology, which recognized perceptions as having their origin in repeated sense experiences, and concepts as resulting from many percepts, could scarcely be called genetic, because the study of the process of change was not emphasized and the resulting higher mental activities were considered as of much greater importance than the beginnings of mental life, and the stages of development by which these activities were reached.

The recent careful and extended studies of learning processes are, to a limited extent, genetic in character, for the *changes* that take place with practice under definite conditions are made prominent, rather than the *results* of the learning processes. Yet the search for the beginnings of the process is not carried back very far, since it usually extends only to the conditions found at the beginning of the experiment. In some of the biographical and individual studies, the development is traced very much farther back in the life of the individual, and the explanation of present conditions is found in early predispositions or in environing influences and special experiences.

In child psychology, or as it is more commonly called, child study, the search for beginnings is carried back still farther to the reflex and instinctive tendencies that are the race inheritance of all human beings, and the attempt is made to trace the development of these tendencies from the earliest years to maturity under the various conditions to which children are subjected.

When the attempt is made to go still farther back in the search for origins and find how the various characteristics of human beings arose, by studying similar characteristics in creatures of a lower type, we have a psychology that is genetic, in the special sense now beginning to be recognized as indicated by the name.

There is good reason to believe that the laws governing the changes from a lower to a higher type of mental activity are to a considerable extent similar, whether the process is one of learning by adults, of development in children or of evolution of racial characteristics. Hence the study of any form of developmental change throws light on all other forms of genesis. It appears, therefore, that every variety of psychology that concerns itself especially with changes from a lower to a higher type of activity is genetic in character, but that the special body of knowledge designated by the term genetic psychology is concerned particularly with the more ultimate and evolutionary study of the beginnings of mind in the lower organisms, and in tracing the development of consciousness from lower to higher forms in the race.

There is really, however, not much more occasion for using the term 'genetic' psychology, than there is for using the term 'genetic' botany, or 'genetic' zoölogy. We do in those sciences sometimes use the term 'evolutionary' botany or zoology, with practically the same significance as we use the term 'genetic' psychology. In botany and zoölogy, however, the term is used not so much to indicate a separate body of knowledge, as to indicate a point of view and a method of studying the phenomena in question. This is also to some extent true of the term genetic psychology and in this more general sense it will probably continue to be used as long as is necessary. It seems to the writer, however, that all psychology must ere long become genetic in point of view and in ways of interpreting facts. Psychology will then be regarded as the apex of the biological sciences and, as in other cases, the biological point of view will naturally be assumed. If this should be the case, there will be no occasion for using the term genetic psychology in a general sense, but only in the special sense to indicate the body of knowledge concerned with the evolution of mind in the race.

It is not, however, simply from the study of biology, that we are led to believe that all psychology must become genetic in character. The more we study the nature and functions of consciousness the more are we impressed with the truth that consciousness is most prominent and useful when changes are taking place. It has little or nothing to do with fixed reflexes and well established habits. It becomes prominent in connection with all new activities and gradually disappears from those activities as they become uniform in character. Any given state of consciousness, viewed by the psychologist, can only be the result of a long series of processes in which one phase or kind of activity after another came into consciousness and then dropped out of consciousness. No study of consciousness as such can, therefore, be scientific which does not regard it as a phenomenon of change and which does not seek to find the explanation of present conditions and future changes in the changes that have previously taken place.

From the point of view of practical application also the genetic feature must always be made prominent. The educator and the moralist are concerned ultimately, not with what is, but with what may be, and this can only be determined by considering what has been, and what laws govern all mental changes. The usefulness of every employee and public servant is to be determined, not simply by what he is, but by the consideration of how quickly and easily he may be made to progress toward what is desired. All standards or norms determined by experimental and statistical researches are of practical value only in so far as the norms have been determined for a group of people of the same general type, with equal opportunity for acquiring the characteristics that have been measured.

It appears from the preceding discussion that genetic psychology, the babe of the psychological family (for which the writer is now acting as god father), is likely to inherit all the accumulations of its parents and brethren and completely dominate, as babes sometimes do, the whole household.

Already the more distant relatives, such as ethics, pedagogy and logic, and even the hoary headed old grandfather philosophy, are beginning to feel the influence of this youngster, and ideas and

ideals of the absolute and unchangeable are giving place to ideas and ideals of the constantly changing, and the ever progressing genesis of the new and better.

The genetic idea will not be understood unless we realize very fully that the changes in the process of genesis are not merely the result of combining elements that remain the same. On the contrary the progress of genesis in organisms and in mind is one in which new characteristics are constantly appearing, so that both whole and parts that are called by the same name are really different in each stage of development. No mental state is the sum of the experiences giving rise to it, just as no vegetable is the sum of the chemical elements of which it is composed.

In this journal it may be worth while to point out more definitely the relation of genetic psychology to educational problems. The older psychologists in considering educational problems, if they did not take the extreme logical view that children should be taught in accordance with the modes of thinking and working suited to the highly developed logical procedure of the specialist, assumed at least that the child's mode of thinking and learning was like their own. This assumption genetic psychology shows to be far from the truth. All research concerning learning processes shows that, even in the case of adults, the beginner in any line does not continue to work in the same way, but that his mode of performing the task is constantly changing, until he has completely learned it. The process of learning is to a considerable extent a process of development and it is utterly impossible to use the methods of the expert in the earlier stage of learning. This has been clearly shown in penmanship, in typewriting and in telegraphy; and tests of arithmetical prodigies and their modes of working as compared with those of ordinary individuals indicate the same truth. When we come to compare the modes of thinking and solving problems used by an adult with those of a child who is trying to deal with the same question, the differences are still more marked. Not only does the adult know more of the particular problem but he has acquired sufficient experience and knowledge to enable him to use more economical methods of procedure than are possible for the child. This fact

that the developing mind cannot function successfully in the same way as do the minds of experts is one reason why the child in the period from two to three years makes, without any specific teaching whatever, more rapid progress in the acquisition of language than is ever made by college students who are taught according to the most approved theories of the older psychology.

The child differs from the adult not only in experience but also because he is in many respects different in his nature. In his early years many of his activities and mental states are more similar to those of higher animals than they are to those of adult human beings. A study of how a dog or cat or bird learns may, therefore, be more helpful in showing how a young child learns and should be taught, than the most careful study of the mental processes of adult human beings.

According to the genetic point of view the mind of the child and every idea in it goes through a process of development, and any attempt to quickly mold the mind or even a single idea of a child into the mature form is sure to fail. The teacher can only do what the gardener does, make the external conditions favorable, supply the proper material for development, and give the necessary stimuli to activity, which in the case of plants are chiefly thermal and in the case of human beings, social. Methods of teaching evolved in the minds of the old time psychologists are, therefore, usually worse than no method at all, since they distort and retard rather than hasten a more perfect development that would otherwise take place in good time.

Genetic psychology demands a complete change in educational theory, not only in ideals as to what a child should study at different stages of development, but also as to the methods by which both children and adults are taught. It demands that, instead of attempting to teach at once methods of working that are suited to the expert, a study of natural methods of learning shall be made and experiments carried on to determine what methods will be most effective in teaching the learner to pass from the crude efforts of the beginner to the accurate performance of the expert. It will be necessary to make a study of learning processes not only

in adults but in children at different stages of development, and also of animals of different grades of intelligence.

Genetic psychology must, inevitably therefore, not only change the point of view of the educator, but greatly increase and complicate the problems which he must meet in arranging courses of study and methods of teaching children of different ages. This change in point of view on the part of educators is now rapidly taking place, and would have proceeded much faster had it not been for the influence of non-genetic psychology, upon which educators tried to found the science and art of education, in spite of the fact that they were continually finding the results unsatisfactory.