

were not regarded as equally primordial and independent. In the history of Psychology the same attempts to derive one from the other have been made as are made at present by such Psychologists as Horwicz, Spencer, Münsterberg and Külpe.

Opposition to the theory of mental faculties developed chiefly along two lines :

(1) That followed by the Physiological explanation of mental life, which in its extreme form became a proposal for a psychology without a soul. Thought, Sense and Ideas were to be Physiological functions of certain organs within the nervous system.

(2) The searching criticism of the theory by Herbart and his followers who rejected it entire: not, however, in the interests of a scientific account of mental phenomena but of a Metaphysical doctrine of the soul's unity, reducing all its functions to the generic type of "ideation."

Psychology, if it is to justify its claim of being a science, must furnish us with two things: (a) Accurate description of its subject matter, and (b) theory. So far in the history of Psychology, it has been almost entirely taken up with mere description. The proper end of scientific investigation—*i.e.*, the uniformities of the relations to one another of the phenomena of mental life—has been scarcely more than hinted at. Külpe of Leipsic, attributes this lack of progress in Scientific Psychology to ignorance of the dependence of mental on bodily processes. It may be added that until the time of Fechner every inquiry in Psychology was, from the outset, bound up with some metaphysical hypothesis, spiritual or materialistic. The chief conditions of the rise of the Modern Science of Psychology (if we should call it modern.) may be conveniently summarized :

(1) The general effort of the sciences to throw off unnecessary metaphysical assumptions.

(2) The searching analysis of Herbart and his school of the doctrine of mental faculties, which discredited or greatly modified the earlier theory.

(3) The study of psychic facts in the light of the conception of development.

(4) The study of sensori-motor activities by Physiological Psychology.

A Scientific Psychology may be said to have begun with Fechner's (*i.e.*, about the middle of the present century) notion of the definite functional correlation of psychical with physical processes. Prof. James says it is in the same state of advancement as astronomy before Copernicus. Gradually, however, it is beginning to assume among the others *den sicheren gang der Wissenschaft*. To Biology is due the conception of development; the old doctrine of the disparateness of mind and body (Plato, Descartes, etc.) is being modified, and more and more is coming to be recognized the mental life as an organic unitary process which develops according to the laws of all life. The mind is no longer regarded as a mere stage for the play of so many independent faculties, nor yet a soulless rendezvous in which isolated atomic sensations and ideas gather, hold a sort of *external converse* and then, departing, leave naught behind.

The phenomena of mind resemble the phenomena of matter, in that they are ordinarily of a complex character and are necessarily and always connected. "Experiences" may be taken as the general designation of the facts about which all sciences busy themselves. Psychology as to its subject matter has this peculiarity and pre-eminence over the other sciences, that the experiences are those of experiencing individuals. The means are (1) observation (2) experiment. Observation in Psychology is termed Introspection.