

these, such as Sir John Herschel, William Whewell, George Peacock, A. de Morgan, belonged to the Cambridge school: they not only aimed at enlarging and deepening the mathematical sciences by introducing the French methods, but they also strove to understand more clearly the logical foundations of the mathematical or exact sciences. They felt the necessity of rewriting the *Novum Organum* of Bacon. Each of them worked in an independent way at the same task. Herschel published in 1831 his "Preliminary Discourse on the Study of Natural Philosophy," where in a number of examples he showed how the generalisations and discoveries of science were actually arrived at. William Whewell published in 1837 his "History of the Inductive Sciences" as Prolegomena to a "Philosophy of the Inductive Sciences founded upon their History" (1840). Peacock was one of the first who expounded the logical premises of general arithmetic. De Morgan's publications begin in the year 1831 with an essay "On the Study and Difficulties of Mathematics," which was followed by a series of writings dealing with the borderland of Logic and Mathematics, such as his essay "On Probabilities" (1838) and his "Logic" (1839). Some of these writings helped to stimulate Mill to the composition of his Logic, the first edition of which appeared in 1843. But there were two other influences which combined to give to Mill's work its representative character, both of which came from his father, James Mill. The first was the Association-psychology to which I referred in the last chapter; the other was the strong political bias which Mill inherited from his father, as well as from his father's friend,