of statistics as well as a statistical method. It is true that a few books were published between 1830 and 1850 in which the politico-geographical description of a country is spoken of as “statistics,” which is thus distinguished from “ political arithmetic.” The title of Knies’s great work, *Die Statistik als selbständige Wissenschaft* (Cassel, 1850), is especially noteworthy as showing that the nature of the controversy was changing. The opponents of Süssmilch maintained that “political arithmetic” ought not to be spoken of as statistics at all. They clung to the concep­tions of Conring and Achenwall, to whom “ statistics ” represented “ Staatenkunde ” or “ Staatszustandskunde,” or, as Herzberg, one of Achenwall's followers, called it, “die Kenntniss von der politischen Verfassung der Staaten.” Knies claimed that the really “scientific” portion of statistics consisted of the figures employed. As Haushofer says, “ his starting point is political arithmetic.”

Some eminent statisticians of the latter half of the present century agree with Knies, but the majority of the modern writers on the theory of statistics have adopted a slightly different view, according to which statistics is at once a *science* relating to the social life of man and a *method of investigation* applicable to all sciences. This view is ably maintained by Mayr, Haushofer, Gabaglio, and Block, who may be taken to represent the opinions held by the majority of statisticians on the Continent.

Having dealt as far as was possible, within the limits of this article, with the history of statistics, we may here enter a little more minutely into the views of the existing Continental school. This is all the more necessary because, singular to say, there has been no systematic exposition of the subject in England. Isolated dicta have been furnished by high authorities, such as the late Dr W. A. Guy, Prof. Ingram, Sir Rawson W. Rawson, Mr Robert Giffen, and to some extent also by John Stuart Mill, Buckle, Sir George Cornewall Lewis, and other historical and economic writers. There are also monographs on particular points connected with the *technique* of statistical investigation, such as the contribution made by Mr F. Y. Edgeworth to the discussions at the jubilee of the Statistical Society in 1885, and some of the observations contained in a paper by Mr Patrick Geddes, entitled *An Analysis of the Principles of Economics,* read before the Royal Society of Edinburgh in 1884. Prof. Foxwell has also lectured on the subject of statistics in his capacity of Newmarch lecturer at University College, London. But there has been no attempt to deal with the subject in a systematic way. The practice of statistical inquiry, on the other hand, has been carried on in England with a high degree of success.

With regard to the few invasions of the domain of theory attempted by English writers, it may be observed that the authorities above mentioned are not unanimous. Dr Guy as well as Sir Rawson Rawson, who handled the subject with great ability at the jubilee meeting of the London Statistical Society in June 1885, both claim that statistics is to be regarded as an independent science, apart from sociology, while Prof. Ingram, who presided over Section F at the Dublin meeting of the British Association in 1878, maintained that statistics cannot occupy a position co-ordinate with that of sociology, and went on to say that they “ constitute only one of the aids or adminicula of science.” Mr Giffen has also expressed himself adversely to the Continental doctrine that there is an independent science of statistics, and this opinion appears to be the correct one, but, as Dr Guy and Sir Rawson Rawson have the support of the great body of systematic teaching emanating from distinguished Con­tinental statisticians in support of their view, while their opponents have so far only the *obiter dicta* of a few eminent men to rely upon, it appears needful to examine closely

the views held by the Continental authorities, and the grounds on which they are based.

The clearest and shortest definition of the science of statistics as thus conceived is that of M. Block, who describes it as “ la science de l’homme vivant en société en tant qu’elle peut être exprimée par les chiffres.” He proposes to give a new name to the branch of study thus defined, namely, “ Demography.” Mayr’s definition is longer. He defines the statistical science as “ die systema­tische Darlegung und Erörterung der thatsächlichen Vor­gänge und der aus diesen sich ergebenden Gesetze des gesellschaftlichen menschlichen Lebens auf Grundlage quantitativer Massenbeobachtungen” (the systematic state­ment and explanation of actual events, and of the laws of man’s social life that may be deduced from these, on the basis of the quantitative observation of aggregates). Gabaglio’s view is practically identical with those adopted by Mayr and Block, though it is differently expressed. He says “ statistics may be interpreted in an extended and in a restricted sense. In the former sense it is a method, in the latter a science. As a science it studies the actual social-political order by means of mathematical induction.”

This discussion regarding the nature of statistics is to a large extent a discussion about names. There is really no difference of opinion among statistical experts as to the subject-matter of statistics, the only question being— Shall statistics be termed a science as well as a method ? That there are some investigations in which statistical procedure is employed which certainly do not belong to the domain of the supposed statistical science is generally admitted. But, as already shown, an attempt has been made to claim that the phenomena of human society, or some part of those phenomena, constitute the subject- matter of an independent statistical science. It is not easy to see why this claim should be admitted. There is no reason either of convenience or logic why the use of a certain scientific method should be held to have created a science in one department of inquiry, while in others the said method is regarded merely as an aid in investigation carried on under the superintendence of a science already in existence. It is impossible to get over the fact that in meteorology, medicine, and other physical sciences statist­ical inquiries are plainly and obviously examples of the employment of a method, like microscopy, spectrum analysis, or the use of the telescope. Why should the fact of their employment in sociology be considered as authorizing the classification of the phenomena thus dealt with to form a new science ?

The most effective argument put forward by the advo­cates of this view is the assertion that statistics are merely a convenient aid to investigation in the majority of sciences, but are the sole method of inquiry in the case of sociology. Dr Mayr especially *(Gesetzmässigkeit,* Ac., p. 14 *sq.)* makes use of this argument, and illustrates it with his usual ability ; but his reasoning is very far from being conclusive. When, indeed, it is tested by reference to the important class of social facts which are named economic, it becomes obvious that the argument breaks down. Economics is a branch—the only scienti­fically organized branch—of sociology, and statistics are largely used in it, but no one, so far as we are aware, has proposed to call economics a department of statistical science. Sir Rawson W. Rawson, it is true, has boldly proposed to throw over the term “ sociology ” altogether, and to describe the study of man in the social state as “ statistics,” but common usage is too firmly fixed to make this alteration of nomenclature practicable even if it were desirable. The existence of the works of Mr Herbert Spencer and Dr Schäffle alone would render the attempted alteration abortive.