

once be seen how all arrangements which are based upon these three conceptions — viz., probability, co-operation, and equitable distribution — lead us away from the study of individual cases to that of totals and averages; how they merge the interests of single persons and the peculiarities of single cases in those of the aggregate of a large number and the properties of the average event or the “mean” man. Their value and success depend on the consideration and participation of large numbers, and they have accordingly only arisen during the latter days which have witnessed the steady growth of modern populations and the bewildering complication of modern business. The moral or social aspect which has simultaneously been evolved during our period does not for the moment concern us. We are concerned at present only with the fact that statistics as the science of large numbers and of averages has been increasingly drawn into use. In fact, we might call our century — in distinction from former centuries — the statistical century.

The necessity of having recourse to elaborate countings, to registrations of births, deaths, and marriages, to lists of exports and imports, to records of consumption and production of food-stuffs and many other items, forced upon those who were entrusted with the gathering and using of these data the observation that all such knowledge is incomplete and inaccurate. Owing to the variability, within certain limits, of recurring events and the errors of counting and registration, we have to content ourselves always with approximation instead of certainty. Error bulks