

—*i.e.*, from the province of mechanics and astronomy—two different roads lead into those extensive domains in which, not simplicity and regularity, but endless variety and complication, seem to be the order and the rule of Life. Even a century ago the contrast must have been striking between the ‘Principia’ of Newton and the ‘Exposition du Système du Monde’ of Laplace on the one side, and the great array of volumes of Linnæus, Buffon, Jussieu, Cuvier, and Lacépède on the other; though these after all embraced only a small portion of the living forms of nature which they attempted to classify or to describe.¹ I have pointed out how the new and especially the French methods of chemistry and crystallography conquered a large portion of intermediate ground, subjected many tangled phenomena to exact treatment, and pushed the mathematical method far into the dominion of natural history. It is that other history, not natural, but human and often unnatural, which presents the opposite extreme of the great panorama of world-life. It is significant that almost at the same time that mathematical reasoning found its way into natural history, conquering an extensive province of its vast territory, an entirely different method was invented with the aim of dealing in a still more vigorous manner with the phenomena of human life and society. This was the science of statistics, and

¹ Cuvier gives some figures as to the increase of the known species during his own lifetime. Lacépède had described about 1200 or 1300 distinct species of fishes; but when Cuvier pronounced his Éloge in 1826, the Cabinet du Roi contained already more than 5000 species (‘Éloges historiques,’ vol. iii. p. 317).

Linnæus had counted in 1778 about 8000 species of plants. Cuvier in 1824 estimates the number as 50,000 or more (see ‘Éloges,’ vol. iii. p. 469, &c., where he also gives some idea of the numbers of known species in the different classes of animals).