

the *Geography of Plants*, and of *Animals*, and the *History of their change and diffusion*; intending by the latter subject, of course, *palætiological History*,—the examination of the causes of what has occurred, and the inference of past events, from what we know of causes.

It is unnecessary for me to give at any length a statement of the problems which are included in these branches of science, or of the progress which has been made in them; since Mr. Lyell, in his *Principles of Geology*, has treated these subjects in a very able manner, and in the same point of view in which I am thus led to consider them. I will only briefly refer to some points, availing myself of his labors and his ideas.

*Sect. 2.—Geography of Plants and Animals.*

WITH regard both to plants and animals, it appears,<sup>1</sup> that besides such differences in the products of different regions as we may naturally suppose to be occasioned by climate and other external causes; an examination of the whole organic population of the globe leads us to consider the earth as divided into *provinces*, each province being occupied by its own group of species, and these groups not being mixed or interfused among each other to any great extent. And thus, as the earth is occupied by various nations of men, each appearing at first sight to be of a different stock, so each other tribe of living things is scattered over the ground in a similar manner, and distributed into its separate *nations* in distant countries. The places where species are thus peculiarly found, are, in the case of plants, called their *stations*. Yet each species in its own region loves and selects some peculiar conditions of shade or exposure, soil or moisture: its place, defined by the general description of such conditions, is called its *habitation*.

Not only each species thus placed in its own province, has its position further fixed by its own habits, but more general groups and assemblages are found to be determined in their situation by more general conditions. Thus it is the character of the *flora* of a collection of islands, scattered through a wide ocean in a tropical and humid climate, to contain an immense preponderance of tree-ferns. In the same way, the situation and depth at which certain genera of shells are found have been tabulated<sup>2</sup> by Mr. Broderip. Such general inferences, if

<sup>1</sup> Lyell, *Principles*, B. iii. c. v.

<sup>2</sup> Greenough, *Add.* 1835, p. 20.