

In such cases the affinities of species are often more readily discerned by reference to these imperfect structures than by others of much more physiological importance to the individuals themselves.

The same hypothesis would explain why there are no mammalia in islands far from continents, except bats, which can reach them by flying; and also why the birds, insects, plants, and other inhabitants of islands, even when specifically unlike, usually agree generically with those of the nearest continent, it being assumed that the original stock of such species came by migration from the nearest land.

Variation and natural selection would also afford a key to a multitude of geological facts otherwise wholly unaccounted for, as, for example, why there is generally an intimate connection between the living animals and plants of each great division of the globe and the extinct fauna and flora of the post-tertiary or tertiary formations of the same region; as, for example, in North America, where we not only find among the living mollusca peculiar forms foreign to Europe, such as *Gnathodon* and *Fulgur* (a subgenus of *Fusus*), but meet also with extinct species of those same genera in the tertiary fauna of the same part of the world. In like manner, among the mammalia we find in Australia not only living kangaroos and wombats, but fossil individuals of extinct species of the same genera. So also there are recent and fossil sloths, armadilloes, and other edentata in South America, and living and extinct species of elephant, rhinoceros, tiger, and bear in the great Europeo-Asiatic continent. The theory of the origin of new species by variation will also explain why a species which has once died out never reappears, and why the fossil fauna and flora recede farther and farther from the living type in proportion as we trace it back to remoter ages. It would also account for the fact, that when we have to intercalate a new set of fossiliferous strata between two groups previously