numerous race modifications. My own provisional conclusion, based on the study of Palæozoic plants, is that the general law will be found to be the existence of distinct specific types, independent of each other, but liable in geological time to a great many modifications, which have often been regarded as distinct species.[1]

While this unity of successive faunæ at first sight presents an appearance of hereditary succession, it loses much of this character when we consider the number of new types introduced without apparent predecessors, the necessity that there should be similarity of type in successive faunæ on any hypothesis of a continuous plan; and above all, the fact that the recurrence of representative species or races in large proportion marks times of decadence rather than of expansion in the types to which they belong. To turn to another period, this is very manifest in that singular resemblance which obtains between the modern mammals of South America and Australia, and their immediate fossil predecessors—the phenomenon being here manifestly that of decadence of large and abundant species into a few depauperated representatives. This will be found to be a very general law, elevation being accompanied by the apparent abrupt appearance of new types and decadence by the apparent continuation of old species, or modifications of them.

This resemblance with difference in successive faunas also connects itself very directly with the successive elevations and depressions of our continental plateaus in geological time. Every great Palæozoic limestone, for example, indicates a depression with succeeding elevation. On each elevation marine animals were driven back into the ocean, and on each depression swarmed in over the land, reinforced by new species, either then introduced, or derived by migration from other localities. In like manner, on every depression, land

[1] "Geological History of Plants."