

exhibiting any evidence of community of descent; while the power that imparted all their peculiarities to the primitive eggs of all the species now living side by side, could also impart similar peculiarities with similar relations, and all degrees of relationship, to any number of other species that have existed previously. Until, therefore, it can be shown that any one species has the ability to delegate such specified peculiarities and relations to any other species or set of species, it is not logical to assume that such a power is inherent in any animal, or that it constitutes part of its nature.¹ We must look to the original power that imparted life to the first being for the origin of all other beings, however mysterious and inaccessible the modes by which all this diversity has been produced, may remain for us. A plausible explanation is no explanation at all, if it does not cover the whole ground.²

¹ The difficulty of ascertaining the natural limits of some species, and the mistakes made by naturalists when describing individual peculiarities as specific, have nothing to do with the question of the origin of species; and yet, Darwin places great weight, in support of his theory, upon the differences which exist among naturalists in their views of species. Some of the metals are difficult to distinguish, and have frequently been mistaken, and the specific differences of some may be questioned; but what could that have to do with the question of the origin of metals, in the minds of those who may doubt the original difference of metals? Nothing more than the blunders of some naturalists, in identifying species, with the origin of species of animals and plants. The great mischief in our science now lies in the self-complacent confidence with which certain zoölogists look upon a few insignificant lines, called diagnoses, which they have the presumption to offer as characteristics of species, or, what is still worse, as checks upon others to secure to themselves a nominal priority. Such a treatment of scientific subjects is unworthy of our age.

² All the attempts to explain the origin of species may be brought under two categories: some naturalists admitting that all organized beings are created (that is to say, endowed from the beginning of their existence with all their characteristics), while others assume that they arise spontaneously. This classification of the different theories of the origin

of species may appear objectionable to the supporters of the transmutation theory; but I can perceive no essential difference between their views and the old idea that animals may have arisen spontaneously. They differ only in the modes by which the spontaneous appearance is assumed to be effected. Some believe that physical agents may so influence organized beings as to modify them; this is the view of DeMaillet, and the *Vestiges of Creation*: others believe that the organized beings themselves change in consequence of their own acts, by changing their mode of life, etc.: this is the view of Lamarck: others still assume that animals and plants tend necessarily to improve, in consequence of the struggle for life, in which the favored races are supposed to survive; this is the view lately propounded by Darwin. I believe these theories will, in the end, all share the fate of the theory of spontaneous generations, so called, as the facts of nature shall be confronted more closely with the theoretical assumptions. The theories of DeMaillet, Oken, and Lamarck, are already abandoned by all those who have adopted the transmutation theory of Darwin; and unless Darwin and his followers succeed in showing that the struggle for life tends to something beyond favoring the existence of certain individuals over that of other individuals, they will soon find that they are following a shadow. The assertion of Darwin, which has crept into the title of his work, is, that favored