

species happens to be in because its particular variation is the one which, to the exclusion of others, suits or fits into its surroundings. Such a view simply takes variation for granted, and stipulates it as a something *a priori*, without raising the further necessary question, why there should be any variations at all. Why, indeed, unless they are caused by external influences? Haeckel elucidated this by the conception of adaptation as explained in the foregoing pages.

These and kindred speculations have produced some rather curious discussions, which not infrequently end in conundrums. If we speak of a case of adaptation as a condition, a fact, we easily run the risk of getting into confusion about cause and effect. For example: Is the stag swift because he has long and slender legs, or are his legs long because he is swift? In reality, swiftness and length of legs are cause and effect in one. His legs have been so modified as to make him swift, because he has put them continuously to whatever was