

another actively or passively. Every animal and every plant struggles directly with a number of enemies, beasts of prey, parasitic animals, etc. Plants standing together struggle with one another for the space of ground requisite for their roots, for the necessary amount of light, air, moisture, etc. In like manner, animals living together struggle with one another for their food, dwelling-place, etc. In this most active and complicated struggle, any personal superiority, however small, any individual advantage, may possibly decide the issue in favour of the one possessing it. This privileged individual remains the victor in the struggle, and propagates itself, while its fellow-competitors perish before they succeed in propagating themselves. The personal advantage which gave it the victory is transmitted by inheritance to its descendants, and by a further development may become so strongly marked as to cause us to consider the later generations as a new species.

The infinitely complicated correlations which exist between the organisms of every district, and which must be looked upon as the real conditions of the struggle for life, are mostly unknown to us, and are very difficult to discover. We have hitherto been able to trace them only to a certain point in individual cases, as in the example given by Darwin of the relations between cats and red clover in England. The red clover (*Trifolium pratense*), which in England is among the best fodder for cattle, requires the visit of humming-bees in order to attain the formation of seeds. These insects, while sucking the honey from the bottom of the flower, bring the pollen in contact with the stigma, and thus cause the fructification of the flower,