

tending more and more to emphasize the all-sufficiency of natural selection operating upon spontaneous variations. To the main doctrine Darwin himself added his subsidiary theory of Sexual Selection, a particular case of Natural Selection, which his colleague Wallace refused to accept. To the latter, however, it seemed necessary to confess the inadequacy of Natural Selection to explain the higher qualities of man, and he postulated waves of spiritual influx to help the material world over this and other obstacles in its course, a position which, to Spencer for instance, seemed an unwarranted loss of faith in science. But Spencer again was no strict Darwinian, remaining, like Hæckel and others, a firm believer in Lamarckism. Most important, however, was an addition to the Selection theory, suggested by several naturalists, such as Wagner, but brought into prominence by Romanes and Gulick, the theory of "Isolation", without which the divergence of species from a common stock is inexplicable. Isolation is a general term for various processes which tend to restrict the range of intercrossing with a species, and to bring similar variants to pair together.

Another position is that of the Lamarckians and Buffonians, who emphasize the transforming power of function (use and disuse) and of changed environment (all manner of surrounding influences), and believe in the transmission of acquired characters or modifications. They are sometimes, though not elegantly, called "transmissionists". The school has found its chief supporters in France, where Lamarck in his lifetime got such scant justice, and in America, where it seems to be in the ascendant. It must be noted that not a few, *e.g.* Hæckel and Spencer, combine a belief in modification-inheritance with a selectionist position.

The doctrine of the Lamarckian and Buffonian school owes its strength to the fact that an individual organism is certainly influenced by what it does or does not do, and is plastic in the grip of its surroundings; its weakness is in the absence of evidence to show that the modifications or bodily changes so acquired are in any degree transmissible from parents to offspring. It was