

acquired ; but to this subject I shall presently recur. Again, in many groups of animals the males alone are furnished with weapons, or are ornamented with gay colours ; and these characters manifestly stand in some sort of correlation with the male reproductive organs, for when the latter are destroyed these characters disappear. But it was shown in the twelfth chapter that the very same peculiarity may become attached at any age to either sex, and afterwards be exclusively transmitted to the same sex at a corresponding age. In these cases we have inheritance limited by both sex and age ; but we have no reason for supposing that the original cause of the variation was necessarily connected with the reproductive organs, or with the age of the affected being.

In cases of true correlated variation, we are sometimes able to see the nature of the connection ; but in most cases it is hidden from us, and certainly differs in different cases. We can seldom say which of two correlated parts first varies, and induces a change in the other ; or whether the two are the effects of some common cause. Correlated variation is an important subject for us ; for when one part is modified through continued selection, either by man or under nature, other parts of the organisation will be unavoidably modified. From this correlation it apparently follows that with our domesticated animals and plants, varieties rarely or never differ from one another by a single character alone.

One of the simplest cases of correlation is that a modification which arises during an early stage of growth tends to influence the subsequent development of the same part, as well as of other and intimately connected parts. Isidore Geoffroy Saint-Hilaire states¹ that this may constantly be observed with monstrosities in the animal kingdom ; and Moquin-Tandon² remarks, that, as with plants the axis cannot become monstrous without in some way affecting the organs subsequently produced from it, so axial anomalies are almost always

¹ 'Hist. des Anomalies,' tom. iii. p. 392. Prof. Huxley applies the same principle in accounting for the remarkable, though normal, differences in the arrangement of the nervous system in the Mollusca, in his paper

on the Morphology of the Cephalous Mollusca, in 'Phil. Transact.,' 1853, p. 56.

² 'Éléments de Tératologie Vég.,' 1841, p. 13.