

have varied, whilst other parts of the organisation have remained unchanged; and it might be argued that these same characters now vary under domestication, or fail to be inherited, from their lesser antiquity. But variation in a state of nature seems to stand in some close relation with changed conditions of life, and characters which have already varied under such conditions would be apt to vary under the still greater changes consequent on domestication, independently of their greater or less antiquity.

Fixedness of character, or the strength of inheritance, has often been judged of by the preponderance of certain characters in the crossed offspring between distinct races; but prepotency of transmission here comes into play, and this, as we shall immediately see, is a very different consideration from the strength or weakness of inheritance.¹ It has often been observed that breeds of animals inhabiting wild and mountainous countries cannot be permanently modified by our improved breeds; and as these latter are of modern origin, it has been thought that the greater antiquity of the wilder breeds has been the cause of their resistance to improvement by crossing; but it is more probably due to their structure and constitution being better adapted to the surrounding conditions. When plants are first subjected to culture, it has been found that, during several generations, they transmit their characters truly, that is, do not vary, and this has been attributed to ancient characters being strongly inherited: but it may with equal or greater probability be consequent on changed conditions of life requiring a long time for their cumulative action. Notwithstanding these considerations, it would perhaps be rash to deny that characters become more strongly fixed the longer they are transmitted; but I believe that the proposition resolves itself into this,—that characters of all kinds, whether new or old, tend to be inherited, and that those which have already withstood all counteracting influences and been truly transmitted, will, as a general rule, continue to withstand them, and consequently be faithfully inherited.

¹ See Youatt on Cattle, pp. 92, 69, 78, 88, 163; and Youatt on Sheep, p. 325. Also Dr. Lucas, 'L'Héréd. Nat.,' tom. ii. p. 310.