

oats, peas, beans, lentils, poppies,—cultivated for their seed by the ancient Lake-inhabitants of Switzerland, were all smaller than the seeds of our existing varieties. Rütimeyer has shown that the sheep and cattle which were kept by the earlier Lake-inhabitants were likewise smaller than our present breeds. In the middens of Denmark, the earliest dog of which the remains have been found was the weakest; this was succeeded during the Bronze age by a stronger kind, and this again during the Iron age by one still stronger. The sheep of Denmark during the Bronze period had extraordinarily slender limbs, and the horse was smaller than our present animal.<sup>9</sup> No doubt in most of these cases the new and larger breeds were introduced from foreign lands by the immigration of new hordes of men. But it is not probable that each larger breed, which in the course of time has supplanted a previous and smaller breed, was the descendant of a distinct and larger species; it is far more probable that the domestic races of our various animals were gradually improved in different parts of the great Europæo-Asiatic continent, and thence spread to other countries. This fact of the gradual increase in size of our domestic animals is all the more striking as certain wild or half-wild animals, such as red-deer, aurochs, park-cattle, and boars,<sup>10</sup> have within nearly the same period decreased in size.

The conditions favourable to selection by man are,—the closest attention to every character,—long-continued perseverance,—facility in matching or separating animals,—and especially a large number being kept, so that the inferior individuals may be freely rejected or destroyed, and the better ones preserved. When many are kept there will also be a greater chance of the occurrence of well-marked deviations of structure. Length of time is all-important; for as each character, in order to become strongly pronounced, has to be augmented by the selection of successive variations of the same kind, this can be effected only during a long series of generations. Length of time will, also, allow any new feature to become fixed by the continued rejection of those

<sup>9</sup> Morlot, 'Soc. Vaud. des Scien. Nat.' Mars, 1860, p. 298.

<sup>10</sup> Rütimeyer, 'Die Fauna der Pfahlbauten,' 1861, s. 30.