

various parts are to be adapted. Yet, amidst all these variations, we may perceive the same laws of analogy connecting the whole into one series, and assimilating all these multi-form structures to one common standard. The same organ, however modified in its shape and size, however stunted in one, or developed in another, is ever found in its appropriate place, and retains the same connexions with adjacent organs, whether we seek it in the carnivorous or the herbivorous quadruped, in the inhabitant of the land or of the water, of the frigid or of the torrid zone; or in animals of the most diminutive or most colossal statures.

As an example, we may take the vertebræ of the neck. It is a universal law, that this part of the spinal column shall, in every animal of the class mammalia, consist of neither more nor less than seven vertebræ. Whatever be the length or shortness of the neck, whether it be compressed into a small space, as in the elephant and the mole, whether it be lengthened to allow the head to reach the ground, as in the horse and the ox, or whether it be excessively prolonged to allow the animal to reach the tops of the trees, as in the *Camelopard*, still this same constant number is preserved in the vertebræ which it contains. When the neck is long, each individual vertebra must necessarily be lengthened in the same proportion. Thus, in the *Camelopard*, the vertebræ of the neck consist of seven very long tubes, joined together endwise, with scarcely any development of spinous processes, lest they should impede the bending of the neck. The greatest contrast to this structure is met with in the *Dolphin*, and other *Cetacea*, which present externally no appearance whatever of a neck, but whose skeleton exhibits cervical vertebræ, closely compressed together, and exceedingly thin, and most of them united together;\* every bone, thus formed, however, retains the marks of having originally consisted of separate vertebræ; and still, in this

\* In the *cachalot*, the whole of these seven vertebræ are usually ankylosed into one bone.