that are observable in nature; or, at least, that any others that can be pointed out are only occasional accompaniments of some of these.

One other observation, entirely overlooked, I believe, by Mr. Swainson and his followers, is in my estimation of very high importance for attaining to a good and natural classification. It is that occasionally, perhaps frequently, under one general type of structure we may find not only the five tendencies of development as above explained, but these exhibited in connection with several different well-marked degrees of development. Thus in the highest class, that which peculiarly expresses power and elevation of structure, of the sub-kingdom or branch Vertebrata—the class Mammalia—we have four circles expressing degrees of development, in each of which—excepting the highest, which is occupied by man alone—we find manifestations of all the five tendencies of development in natural groups, which are here called Orders; and in the class Birds, which in the same sub-kingdom expresses the tendency to activity and grace, with prevailing adaptation to aerial or arboreal life, we obtain the clearest idea of the affinities, by placing in the centre the most especially typical groups of small birds forming the great families of the warblers and finches; surrounding these by a circle of five sub-orders of Insessorial birds; and again placing outside of them five more deviative forms exhibiting greater extremes of the tendencies of development already displayed in the inner circles. The great mass of birds forming the two inner circles, constitute the order Insessores, or perching birds, in technical systems; whilst the outer circle embraces Raptores, birds of prey; Scansores, climbing birds; Rasores, poultry and game birds, with which are connected the ostrich tribe, sometimes regarded, very needlessly, as a separate order; Grallatores, stilted or wading birds; and Natatores, swimming birds,—the latter being the lowest group of birds, and analogous with the Cetacea among mammalia.

With due attention to these concentric circles expressing varying degrees of development of the same type, I am disposed to maintain that the several tendencies pointed out will bring before us all really distinct families in every part of the animal kingdom excepting that in the lowest divisions, as might have been anticipated from reasoning, the lower forms can have no place, so that we recognise only three tendencies instead of five; and that in various parts of the general system there will be cases in which, from our ignorance of certain existing forms, or from the incompatibility of a certain tendency of