

Typical groups, or, more properly, the groups above the degradational, may be of several grades. Thus, under Vertebrates, the classes of Mammals, Birds and Reptiles, represent different grades of Vertebrate types, and the grades may be designated, in order, *Alphatypic*, *Betatypic*, *Gammatypic* (from the first three Greek letters α , β , γ). Under Mammals, also, there are three grades, those of Man, Megasthenes, and Microsthenes; then, below these, the hemitypic or degradational Oötocoids. Under tribes, families and genera, the number of grades may be large.

Degradational subdivisions are strictly *hypotypic*, or *below* the typical range.

Typical subdivisions, or those above the degradational, are not, in all cases, *true typical*, as well exemplified by the orders of Fishes; the Teliosts alone being true typical, and the Ganoids and Selachians, called *hemitypic* above, being properly *hypertypic*, or *above* the typical range. Another example of this is afforded by the subdivisions of Megasthenes. Carnivores and Herbivores are different grades of the *true typical*, the former the more perfect, or *eotypic*; while the Quadrumanes or Monkeys are *hypertypic*, being an *intermediate* type between the typical Megasthenes and Man; and the Mutilates (Cetaceans, etc.) are *hypotypic*. Among the Microsthenes, the Chiropters or Bats are *hypertypic*, the Insectivores and Rodents *true typical* of two grades, and the Edentates *hypotypic*.

Among the subdivisions of Mammals there are *three* grades of true typical; and, of them, Man is *archetypic*, as he has been styled, being the *one perfect* type.

Degradational forms may be classed under three heads, as follows:

1. *Degenerative*; in which the forms are thoroughly animal in type. The methods of decephalization which lead most commonly to degenerative forms are the analytic, multiplicative, elliptic and defunctionative.

2. *Hemiphytoid*; when, without an *internal* radiate structure, the species are (a) attached to a support, like plants (see *defunctionative* method, p. 324); b, budding (*gemmative*, p. 329); c, radiate externally (*phytozoic*, case a, p. 327).

The externally radiate structure is a lower grade of hemiphytoid degradation than either being attached, or gemmate.

3. *Phytoid* (from $\phi\upsilon\tau\omicron\nu\iota$, a plant); when the structural arrangements are *internally*, as well as externally, radiate (*Phytozoic*, case b).

As Radiates have no limbs and but imperfect senses, the higher grades among them are manifested most prominently in the conditions of the nutritive system. Some of them (the Echinoderms) are superior, as animals, to the lower *hemiphytoid* species such as the Bryozoans.