

to be found in different Families. There was, in fact, no practical advantage to be derived from its adoption; and though the names of some of the subordinate groups are occasionally employed, it has not, so far as I am aware, been accepted as a whole by any subsequent writer.

In the years 1861–2, practically simultaneously, appeared the memoirs containing the outlines of the two systems of classification which have been adopted, one or other of them, by the present generation of Rhizopodists. That Professor von Reuss,<sup>1</sup> from researches conducted almost exclusively upon fossil specimens, and Dr. Carpenter with Professors Parker and Rupert Jones,<sup>2</sup> from the broader lines of the comparative study of living and fossil types, should have arrived independently at conclusions identical in their more important particulars, affords satisfactory assurance, so far as it goes, that the results in either case have some foundation in natural laws. As these memoirs remain the standpoint from which the discussion of the subject must be commenced, it will be convenient at the outset to state the general features of the schemes they embody, and by comparison, side by side, to show how far they agree in their details, and wherein they differ.

The primary divisions are based upon the minute structure of the shelly skeleton—a ground of distinction hardly recognised by previous authors. In both systems the Foraminifera are divided into two Sub-orders, one of which comprises those forms which have non-porous or imperforate tests, the other those with porous or perforate investment.

The former of these two Sub-orders (*Imperforata*) is in both cases subdivided into two sections, one including the types which have composite tests, that is, built up of sand-grains or similar extraneous bodies more or less embedded in inorganic cement, the other those with calcareous shells of homogeneous porcellanous texture.

In the division comprising the perforate or porous-shelled forms the agreement is less complete than amongst the *Imperforata*, owing to the larger number of types to be accommodated and their greater diversity of structure; nevertheless the arrangement has still to some extent a common basis.

The general relationship of the two schemes will be readily understood by the following comparative table:—

VON REUSS, 1861.	CARPENTER, PARKER, AND JONES, 1862.
A. Foraminifera with non-porous tests	Sub-order— <i>Imperforata</i> .
A. WITH ARENACEOUS TESTS.	Family—GROMIDA.
1. <i>Lituolidea</i> .	Family—LITUOLIDA.
2. <i>Uvellaidea</i> .	

<sup>1</sup> Entwurf einer systematischen Zusammenstellung der Foraminiferen, *Sitzungsb. d. k. Ak. Wiss. Wien.*, vol. xlv. p. 355. (The volume for the year 1861, probably not actually issued till 1862.)

<sup>2</sup> Introduction to the Study of the Foraminifera, London, 1862.