

nitrogenous cell-substance, or protoplasm. In most genuine animals, on the other hand, the skeleton generally consists either of nitrogenous combinations (chitin, etc.) or of calcareous earth. In this respect some Protista are more like plants, others more like animals. In many of them the skeleton is principally or entirely formed of calcareous earth, which is met with both in animal and vegetable bodies. But the active vital substance in all cases is the mucous protoplasm.

In regard to the *form* of the Protista, it is to be remarked that the *individuality* of their body almost always remains at an extremely low stage of development. Very many Protista remain for life simple plastids or individuals of the first order. Others, indeed, form colonies or republics of plastids by the union of several individuals. But even these higher individuals of the second order, formed by the combination of simple plastids, for the most part remain at a very low stage of development. The members of such communities among the Protista remain very similar one to another, and never, or only in a slight degree, commence a division of labour, and are consequently as little able to render their community fit for higher functions as are, for example, the savages of Australia. The community of the plastids remains in most cases very loose, and each single plastid retains in a great measure its own individual independence.

A second structural characteristic, which next to their low stage of individuality especially distinguishes the Protista, is the low stage of development of their stereometrical fundamental forms. As I have shown in my theory of fundamental forms (in the fourth book of the General Morphology), a definite geometrical fundamental form can