

groups of one-celled and many-celled organisms show certain specific differences; the same will be found also in their activity in the struggle for existence, in the interaction of inheritance and adaptation which thereby acts selectively. The one-celled organisms, or Protista, show a simple (or trophic) growth, by cell-enlargement; they increase, for the most part, in a non-sexual manner (by division or the formation of spores). Inheritance is, therefore, accomplished by the kernel of the *one* cell, which at the same time constitutes the whole organism. The many-celled organisms, or histons, on the other hand, show a composite (or numerical) growth, by cell-increase; they reproduce themselves in a sexual manner (by the commingling of egg-cell and sperm-cell). Inheritance is, therefore, effected only by the kernels of the *two* sexual cells, whereas the other tissue-cells take no part in it. But within the tissue there is also a continual increase of the cells of which it is composed; and the formation of the tissue itself is determined by the cellular selection, which we have just spoken of as a highly important principle. The sturdiest cells in each tissue, those that perform their work best, seek and obtain, as a return, the best portion of the nutritive juice; they withdraw it from the weaker and less sturdy cells: the former grow and increase by division, whereas the latter must sooner or later die off.

The struggle for existence between the tissue-cells of the many-celled organisms must, accordingly, be regarded as the most important stimulus towards the progressive development and differentiation of their tissues and organs. In the case of one-celled organisms, on the other hand, the struggle for existence, and the natural selection occasioned