flex action, begins with the cenobitic protists (*v.g.*, the volvox and the carchesium). The innumerable social cells, which make up this cell-community or cœnobium, are always more or less connected, often directly connected by filamentous bridges of protoplasm. A stimulus that alights on one or more cells of the community is communicated to the rest by means of the connecting fibres, and may produce a general contraction. This connection is found, also, in the tissues of the multicellular animals and plants. It was erroneously believed at one time that the cells of vegetal tissue were completely isolated from each other, but we have now discovered fine filaments of protoplasm throughout, which penetrate the thick membranes of the cells, and maintain a material and psychological communication between their living plasmic contents. That is the explanation of the mimosa: when the tread of the passer-by shakes the root of the plant, the stimulus is immediately conveyed to all the cells, and causes a general contraction of its tender leaves and a drooping of the stems.

An important and universal feature of all reflex phenomena is the absence of consciousness. For reasons which we shall give in the tenth chapter we only admit the presence of consciousness in man and the higher animals, not in plants, the lower animals, and the protists; consequently all stimulated movements in the latter must be regarded as reflex — that is, all movements which are not *spontaneous*, not the outcome of internal causes (impulsive and automatic movements).* It is different with the higher animals which have developed a centralized nervous system and

*Cf. Max Verworn, *Psychophysiologische Protisten-Studien*, pp. 135, 140.