

connected. The parthenogenesis of Insects must probably be regarded as a *relapse* from the sexual mode of propagation (possessed by the original parents of the insects) to the earlier condition of non-sexual propagation. In any case, however, sexual reproduction, both in plants and animals, which seems such a wonderful process, has only arisen at a later date out of the more ancient process of non-sexual reproduction. In both cases heredity is a necessary part of the phenomenon.

Moreover, the parthenogenesis of insects is not an original, primary phenomenon, but a secondary one, which has arisen from a diminution of the male sex; for some reason or another the males became superfluous!

At all events, both in plants as well as in animals, sexual propagation—which appears so wonderful a process—arose only at a later period from the earlier form of non-sexual propagation. In both cases inheritance forms a necessary part in the phenomenon of reproduction. The commingling of two homogeneous cells, which in the case of numerous Protista leads to non-sexual propagation by self-division or the formation of spores (sometimes as temporary conjugation, sometimes as permanent copulation), is the first step towards Amphigony. The second step is the heterogeneous development or divergence of the two cells, their division of labour and of form. The smaller and more agile cell becomes the male sperm-cell, the larger and less agile cell the female egg-cell. Both of them, on commingling, transmit their own peculiarities to the common product. This transmission becomes quite intelligible when we examine the whole series of phenomena in connection.