

THE RIDDLE OF THE UNIVERSE

seem to me to be required before the unity of consciousness is possible.

III. *Animal theory of consciousness*.—All animals, and they alone, have consciousness. This theory would draw a sharp distinction between the psychic life of the animal and of the plant. Such a distinction was urged by many of the older writers, and was clearly formulated by Linné in his celebrated *Systema Naturae*; the two great kingdoms of the organic world are, in his opinion, divided by the fact that animals have sensation and consciousness, and the plants are devoid of them. Later on Schopenhauer laid stress on the same distinction: "Consciousness is only known to us as a feature of animal nature. Even though it extend upwards through the whole animal kingdom, even to man and his reason, the unconsciousness of the plant, from which it started, remains as the basic feature. In the lowest animals we have but the dawn of it." The inaccuracy of this view was obvious by about the middle of the present century, when a deeper study was made of the psychic activity of the lower animal forms, especially the coelenterates (sponges and cnidaria): they are undoubtedly animals, yet there is no more trace of a definite consciousness in them than in most of the plants. The distinction between the two kingdoms was still further obliterated when more careful research was made into their unicellular forms. There is no psychological difference between the plasmodious protozoa and the plasmodious protophyta, even in respect of their consciousness.

IV. *Biological theory of consciousness*.—It is found in all organisms, animal or vegetal, but not in lifeless bodies (such as crystals). This opinion is usually associated with the idea that all organisms (as distin-