

## THE RIDDLE OF THE UNIVERSE

feelings of like and dislike, revealing themselves in what are called their *tropisms*, in the striving after light and darkness, heat or cold, and in their different relations to positive and negative electricity. On the other hand, we find at the highest stage of psychic life, in civilized man, those finer shades of emotion, of delight and disgust, of love and hatred, which are the main-springs of civilization and the inexhaustible sources of poetry. Yet a connecting chain of all conceivable gradations unites the most primitive elements of feeling in the psychoplasm of the unicellular protist with the highest forms of passion that rule in the ganglionic cells of the cortex of the human brain. That the latter are absolutely amenable to physical laws was proved long ago by the great Spinoza in his famous *Statics of Emotion*.

The notion of *will* has as many different meanings and definitions as most other psychological notions—presentation, soul, mind, and so forth. Sometimes will is taken in the widest sense as a *cosmic attribute*, as in the "World as will and presentation" of Schopenhauer; sometimes it is taken in its narrowest sense as an *anthropological attribute*, the exclusive prerogative of man—as Descartes taught, for instance, who considered the brute to be a mere machine, without will or sensation. In the ordinary use of the term, *will* is derived from the phenomenon of voluntary movement, and is thus regarded as a psychic attribute of most animals. But when we examine the will in the light of comparative physiology and evolution, we find—as we do in the case of sensation—that it is a universal property of living psychoplasm. The automatic and the reflex movements which we observe everywhere, even in the unicellular protists, seem to be the outcome of inclinations