

had observed the courtship of animals, and had concluded that the female often *chose* a mate from out of a number of rival suitors. Thus Bechstein concluded that the hen-bird often selected the best singer as her mate. (b) Darwin generalized the facts in his theory of sexual selection, according to which many secondary sex characters have been evolved through preferential mating, the females choosing one male rather than another, and that not whimsically, but in relation to definite qualities, without which the male tended to remain unmated. "If it be admitted", he said, "that the females prefer, or are unconsciously excited by, the more beautiful males, then the males would slowly but surely be rendered more and more attractive through sexual selection." As Lloyd Morgan tersely puts it, "the hypothesis of sexual selection, stripped of all its unnecessary æsthetic surplusage, suggests that the accepted mate is the one that most strongly evokes the pairing instinct". (c) Then followed what may be called the biological criticism of the theory of selection. Thus Wallace and others pointed out that there was insufficient evidence to show (a) that the females did really choose, or (b) that even the most unattractive males remained unmated,—the two most important postulates of the theory.

(d) Within recent years a more exact psychological study of mating has got under way, though it has not advanced far beyond the stage of asking questions. To what extent are the courtship activities instinctive? How far is their definiteness sustained by tradition? Is there any evidence of what might be called intention in the dances and songs, the parades and displays of the males, or is it all the expression of periodical fits of exuberant gladness and uncontrolled emotional ecstasy?

Here one needs to consider the modern theory of emotions as due to visceral changes, evoked by external or internal stimuli, which affect the brain through afferent nerves, and are associated with motor impulses which determine their external expression. If the dance, the song, and the like are regarded as expres-