

They have barely risen above the lowest stage of transition from man-like apes to ape-like men, a stage which the progenitors of the higher human species had already passed through thousands of years ago.⁴⁴

Now consider, on the other hand, the highest stages of development of mental life in the higher vertebrate animals, especially birds and mammals. If, as is usually done, we divide the different emotions of the soul into three principal groups—sensation, will, and thought—we shall find in regard to every one of them, that the most highly developed birds and mammals are on a level with the lowest human beings, or even decidedly surpass them. The *will* is as distinctly and strongly developed in higher animals as in men of character. In both cases it is never actually free, but always determined by a causal chain of ideas. (Compare vol. i. p. 237.) In like manner, the different degrees of will, energy, and passion are as variously graduated in higher animals as in man. The *affections* of the higher animals are not less tender and warm than those of man. The fidelity and devotion of the dog, the maternal love of the lioness, the conjugal love and connubial fidelity of doves and love-birds are proverbial, and might serve as examples to many men. If these virtues are to be called “instincts,” then they deserve the same name in mankind. Lastly, with regard to *thought*, the comparative consideration of which doubtless presents the most difficulties, this much may with certainty be inferred—especially from an examination of the comparative psychology of cultivated domestic animals—that the processes of thinking, here follow the same laws as in ourselves. Experiences everywhere form the foundation of conceptions, and lead to the