

of natural selection—experience difficulties in arriving at a rational understanding of them, which are similar to those experienced by the uncivilized tribes of nature when contemplating the latest complicated productions of engineering. Savages who see a ship of the line, or a locomotive engine for the first time, look upon these objects as the productions of a supernatural being, and cannot understand how a man, an organism like themselves, could have produced such an engine. Even the uneducated classes of our own race cannot comprehend such an intricate apparatus in its actual workings, nor can they understand its purely mechanical nature. Most naturalists, however, as Darwin very justly remarks, stand in much the same position in regard to the forms of organisms as do savages to ships of the line and to locomotive engines. A rational understanding of the purely mechanical origin of organic forms can only be acquired by a thorough and general training in Biology, and by a special knowledge of comparative anatomy and the history of development.

Among the remaining objections to the Theory of Descent, I shall here finally refer to and refute but one more, as in the eyes of many unscientific men it seems to possess great weight. How are we, from the Theory of Descent, to conceive of the origin of the mental faculties of animals, and more especially their specific expressions—the so-called instincts? This difficult subject has been so minutely discussed by Darwin in a special chapter of his chief work (the seventh), that I must refer the reader to it. We must regard instincts as essentially the habits of the soul acquired by adaptation, and transmitted and fixed by inheritance through many generations. Instincts are, therefore, like all other habits,