

at first sight some seeming exceptions to the regularity of gradation, the apparent anomalies vanish when put to the test of a philosophical examination. Should it be said, for instance, that the bee or the ant shews greater indications of intelligence than many species much higher in the scale of animal creation, it may be answered that those indications are manifested in actions which are referable to instinct, rather than intelligence; actions namely, which being essential to the existence of the individuals, and the preservation of the species, are apparently determined by some internal impulse which animals unconsciously obey. Nor does it militate against such a notion of instinct, that when accidental impediments prevent the regular evolution of the comb, taking that as an instance, the bee accommodates the arrangement of its fabric to the impediment which is placed in its way: for such a modification of instinct is as clearly necessary in the case of an occasional impediment, as instinct itself is necessary for the general purpose.

In speaking of instinct I purposely avoid a formal definition of the term: for any attempt to define with accuracy a principle, of the real nature of which we are ignorant, usually leaves us in a state of greater darkness than we were before; of which the following extraordinary attempt, with reference to the very principle now