

states that the close affinity existing among animals can only be explained by a community of descent, and he goes so far as to represent these affinities as evidence of such a genealogical relationship; but I apprehend that the meaning of the words he uses has misled him into the belief that he had found the clue to phenomena which he does not even seem correctly to understand. There is nothing parallel between the relations of animals belonging to the same genus or the same family, and the relations between the progeny of common ancestors. In the one case we have the result of a physiological law regulating reproduction, and in the other, affinities which no observation has thus far shown to be in any way connected with reproduction. The most closely allied species of the same genus or the different species of closely allied genera, or the different genera of one and the same natural family, embrace representatives, which, at some period or other of their growth, resemble one another more closely than the nearest blood relations; and yet we know that they are only stages of development of different species distinct from one another at every period of their life. The embryo of our common fresh-water turtle (*Chrysemis picta*) and the embryo of our snapping turtle (*Chelydra serpentina*) resemble one another far more than the different species of *Chrysemis* in their adult state; and yet not a single fact can be adduced to show that any one egg of an animal has ever produced an individual of any species but its own. A young snake resembles a young turtle or a young bird much more than any two species of snakes resemble one another; and yet they go on reproducing their kinds, and nothing but their kinds. So that no degree of affinity, however close, can, in the present state of our science, be urged as

nature. To call these influences "natural selection," is a misnomer which will not alter the conditions under which they may produce the desired results. Selection implies design; the powers to which Darwin refers the origin of species can design nothing. Selection is no doubt the essential principle on which the raising of breeds is founded; and the subject of breeds is presented in its true light by Darwin; but this process of raising breeds by the selection of favorable subjects is in no way similar to that which regulates specific differences. Nothing is more remote from the truth than the attempted parallelism between the breeds of domesticated animals and the species of wild ones. Did there exist such a parallelism as Darwin maintains, the differences among the domesticated breeds should be akin to the differences among wild species; and

afford a clue to determine their relative degree of affinity by a comparison with the pedigrees of well-known domesticated races. Again, if there were any such parallelism, the distinctive characteristics of different breeds should be akin to the differences which exist between fossil species of earlier periods, and those of the same genera now living. Now, let any one familiar with the fossil species of the the genera *Bos* and *Canis* compare them with the races of our dogs and of our cattle, and he will find no correspondence whatever between them; for the simple reason, that they do not owe their existence to the same causes. It must therefore be distinctly stated, that Darwin has failed to establish a connection between the mode of raising domesticated breeds and the cause or causes to which wild animals owe their specific differences.