

birds and mammalia, and the *Cetacea*, between fishes and warm-blooded quadrupeds; for these are but detached links of a broken chain, tending, indeed, to prove the unity of the designs of Nature, but showing also the specific character of each of her creative efforts. The pursuit of remote and often fanciful analogies has, by many of the continental physiologists, been carried to an unwarrantable and extravagant length; for the scope which is given to the imagination in these seductive speculations, by leading us far away from the path of philosophical induction, tends rather to obstruct than to advance the progress of real knowledge. By confining our inquiries to more legitimate objects, we shall avoid the delusion into which one of the disciples of this transcendental school appears to have fallen, when he announces, with exultation, that the simple laws he has discovered have now explained the universe;\* nor shall we be disposed to lend a patient ear to the more presumptuous reveries of another system-builder, who, by assuming that there exists in organized matter an inherent tendency to perfectibility, fancies that he can supersede the operations of Divine agency.†

Very different was the humble spirit of the great Newton, who, struck with the immensity of nature, compared our knowledge of her operations, into which he had himself penetrated so deeply, to that of a child gathering pebbles on

\* "L'univers est expliqué, et nous le voyons; c'est un petit nombre de principes généraux et féconds qui nous en ont donné la clef." Serres, Ann. des Sc. Nat. xi. 50.

† Allusion is here made to the celebrated theory of Lamarck, as exposed in his "Philosophia Zoologique." He conceives that there was originally no distinction of species, but that each race has, in the course of ages, been derived from some other, less perfect than itself, by a spontaneous effort at improvement; and he supposes that infusorial animalcules, spontaneously formed out of organic molecules, gave birth, by successive transformations, to all other animals now existing on the globe. He believes that tribes, originally aquatic, acquired by their own efforts, prompted by their desire to walk, both feet and legs, fitting them for progression on the ground; and that these members, by the long continued operation of the wish to fly, were transformed into wings, adapted to gratify that desire. If this be philosophy, it is such as might have emanated from the college of Laputa.