the *embryo pre-existed* in the mother, before any union of the sexes.[11] It is easy to see that this doctrine is accompanied with great difficulties;[12] for if the mother, at the beginning of life, contain in her the embryos of all her future children; these embryos again must contain the children which they are capable of producing; and so on indefinitely; and thus each female of each species contains in herself the germs of infinite future generations. The perplexity which is involved in this notion of an endless series of creatures, thus encased one within another, has naturally driven inquirers to attempt other suppositions. The microscopic researches of Leeuwenhoek and others led them to the belief that there are certain animalcules contained in the seed of the male, which are the main agents in the work of reproduction. This system ascribes almost everything to the male, as the one last mentioned does to the female. Finally, we have the system of Buffon;—the famous hypothesis of *organic molecules*. That philosopher asserted that he found, by the aid of the microscope, all nature full of moving globules, which he conceived to be, not animals as Leeuwenhoek imagined, but bodies capable of producing, by their combination, either animals or vegetables, in short, all organized bodies. These globules he called *organic molecules*.[13] And if we inquire how these organic molecules, proceeding from all parts of the two parents, unite into a whole, as perfect as either of the progenitors, Buffon answers, that this is the effect of the *interior mould;* that is, of a system of internal laws and tendencies which determine the form of the result as an external mould determines the shape of the cast.

An admirer of Buffon, who has well shown the untenable character of this system, has urged, as a kind of apology for the promulgation of the hypothesis,[14] that at the period when its author wrote, he could not present his facts with any hope of being attended to, if he did not connect them by some common tie, some dominant idea which might gratify the mind; and that, acting under this necessity, he did well to substitute for the extant theories, already superannuated and confessedly imperfect, conjectures more original and more probable. Without dissenting from this view, we may observe, that Buffon's theory, like those which preceded it, is excusable, and even deserving of admiration, so far as it groups the facts consistently; because in doing this, it exhibits the necessity, which the physiological speculator ought to feel, of aspiring to definite and solid general principles; and that thus, though

[11] Bourdon, p. 204. [12] Ib. p. 209. [13] Ib. p. 219. [14] Ib. p. 221.