

Articulate, and Radiate); but perhaps his greatest contribution to morphology was his conception of the correlation of parts.

This fruitful idea is the morphological aspect of the unity of the organism. It suggests that an organism is not a hap-hazard aggregate of characters, but a unified integrate. Part is bound to part, so that if the one varies the other varies with it. In short, "there are many members which are members one of another, in one body". An animal with a cud-chewing habit or ruminant stomach has always "a cloven hoof"; the presence of gills implies the absence of the foetal membrane known as the allantois. To Cuvier's mind the "correlation of parts" was simply a morphological fact; to us it suggests two ideas: that related forms have sprung from a common stock, and that the characters of each organism are unified in some unknown way in the constitution of the fertilized ovum, and in the progress of its development.

There is no doubt, moreover, that Cuvier exaggerated the truth of his guiding principle. In his famous *Discourse on the Revolutions of the Surface of the Globe* (1812-1813) he says, "a claw, a shoulder-blade, a condyle, a leg or arm bone, or any other bone separately considered, enables us to discover the description of teeth to which they have belonged; so also, reciprocally, we may determine the form of the other bones from the teeth. Thus, commencing our investigation by a careful survey of any one bone by itself, a person who is sufficiently master of the laws of organic structure may, as it were, reconstruct the whole animal to which that bone had belonged." There is no living morphologist who would accept so exaggerated a statement.

To understand Cuvier's stern opposition to theoretical speculation, and his insistence on the fundamental importance of anatomical analysis, we must remember the saturating influence of the "Naturphilosophie" of Schelling and his school, with all its vague ideas as to the unity of nature and Platonic archetypes. With this transcendental

Cuvier's
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poraries.