

obtained. To attain such results, the palingenetic and the kainogenetic phenomena must be sifted apart—an operation that requires more than one critical *granum salis*. On what ground shall this critique be based? Assuredly not by way of a *circulus vitiosus* on the ontogeny again; for if kainogenetic characters are present in one case, who will guarantee that a second case, used for a comparison with the first, does not likewise appear in a kainogenetic disguise? If it be once admitted that not everything in development is palingenetic, that not every ontogenetic fact can be accepted, so to speak, on its face value, it follows that nothing in ontogeny is immediately available for the critique of embryological development. This conclusion cannot be escaped. The necessary critique must be drawn from another source”—namely, the results of comparative anatomy.

In some cases, however, the embryological verdict is clear and unambiguous, and there can be little doubt that the whole embryological story will become significant, and reliably so, when the progress of physiological embryology has made it possible to give a real and not a fanciful content to the terms palingenetic and kainogenetic.

It is difficult to find a proper term for the distinctively modern movement which inquires into the nature of Physiological Morphology. growth-conditions. The Germans, among whom it originated and has made most headway, call it *Entwicklungsmechanik* or developmental mechanics (in Kant's sense), but we are at present a far cry from any vital mechanics in the English sense. Perhaps, therefore, the term physiological morphology is preferable.

Dr. Wilhelm Roux, who has the credit of setting this new department of science upon its feet, defines “developmental mechanics”, or “causal morphology”, as “the doctrine of the causes of organic forms, and hence the doctrine of the causes of the origin, maintenance, and degeneration of these forms”.

One of the earliest exponents of this point of view was Prof. W. His, whose thoughtful work *Unsere Kör-*