Is the Ontology of Homologous Traits a Matter of Pragmatics?

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Abstract

Homologous traits are analogous to species in philosophically interesting ways. Homologous traits and species are units of evolution, for example. Not surprisingly, metaphysical questions that are well known for species can also be seen as salient for homologies. Species are classically viewed as classes wherein individual organisms are members of a class. But ever since Ghiselin (1974) and Hull (1978), many theoreticians have defended the view that species are individuals, whereby organisms stand in a part-whole relation to species. In the case of homologous traits, it now common to see defended the position that homologies are homeostatic property cluster (HPC) kinds (Wagner 2001, Rieppel and Kearney 2007). Alternatively, and as one might expect, the evolutionary change/anti-essentialist rationale underlying the species as individuals view would appear to apply no less to homologies. Between the kind and individualist views, there is also a third way, one that contends that the ontology of species, and homologies as well, is not metaphysically determined (Brigand 2009). This third way maintains that the recognition of species and homologies as either classes or individuals is a matter of pragmatics. The present paper is an attempt to further advance this pragmatic approach to thinking about the ontological character of homologous traits. In particular, the paper aims to articulate the comparative practical advantages of the respective kinds and individualist view of homologous traits. For the kinds perspective, I point to developmentally derived inductive inferences about homologies, and for the individualist perspective I cite the practice of circumscribing clades via what I term associative identification.

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