
On the Status of the Debate About Biological Individuality

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Abstract

Several philosophers of biology have recently argued that some biological systems composed of heterogeneous entities that hail from independent lineages, such as biofilms and symbiotic consortia, can rightly be said to be biological individuals. Many arguments in this vein suggest that a version of David Hull's replicator/interactor framework is the best way of understanding the individuality of these kinds of systems. The replicator/interactor framework is often seen as an alternative to the classical view seen in Lewontin and developed in detail by Godfrey-Smith, which excludes biofilms and most symbiotic systems as Darwinian individuals. Here I investigate the status of the debate between these two views on biological individuality. A pragmatic or pluralistic view about evolutionary individuality is clearly an option, though nobody has developed such a view in any detail. There appear to be no decisive arguments against either the defender of the replicator/interactor framework or the Darwinian populationist. Moreover, each party in the debate advocates a substantively different and somewhat revisionist biological ontology. The entities that are cohesive with respect to the process of natural selection on each view are radically distinct. Hence, the two views each envision different kinds of causal processes at work in nature. I argue that this fact makes a pluralistic view about evolutionary individuality seem implausible. Nevertheless, I suggest that the debate as it is currently articulated is at a stalemate. I cautiously investigate some reasonable paths forward.

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