

The Self Model and the Conception of Biological Identity in Immunology

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Abstract

The self/non-self model, first proposed by F.M. Burnet, has dominated immunology for sixty years now. According to this model, any foreign element will trigger an immune reaction in an organism, whereas endogenous elements will not, in normal circumstances, induce an immune reaction. In this paper we show that the self/non-self model is no longer an appropriate explanation of experimental data in immunology, and that this inadequacy may be rooted in an excessively strong metaphysical conception of biological identity. We suggest that another hypothesis, one based on the notion of continuity, gives a better account of immune phenomena. Finally, we underscore the mapping between this metaphysical deflation from self to continuity in immunology and the philosophical debate between substantialism and empiricism about identity.

Keywords: Self, Identity, Immunology, Continuity, Organism and environment

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