

The Ontological Autonomy of the Chemical World

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Abstract

In the problem of the relationship between chemistry and physics, many authors take for granted the ontological reduction of the chemical world to the world of physics. The autonomy of chemistry is usually defended on the basis of the failure of epistemological reduction: not all chemical concepts and laws can be derived from the theoretical framework of physics. The main aim of this paper is to argue that this line of argumentation is not strong enough for eliminate the idea of a hierarchical dependence of chemistry with respect to physics. The rejection of the secondary position of chemistry and the defense of the legitimacy of the philosophy of chemistry require a radically different philosophical perspective that denies not only epistemological reduction but also ontological reduction. Only on the basis of a philosophically grounded ontological pluralism it is possible to accept the ontological autonomy of the chemical world and, with this, to reverse the traditional idea of the 'superiority' of physics in the context of natural sciences.

Keywords: Autonomy of Chemistry, Reductionism, Ontological Pluralism

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