Abstract:

This paper aims to argue for the necessity of the necessary spatiotemporal relations among properties, by proving that Lewis' Humean ontology is threatened by a problem I name as category-reduction. The category-reduction problem, briefly speaking, means that the worlds that are accordant with Lewis' Humean ontology (namely, the worlds on which the necessary spatiotemporal relations are denied), can have no more than one category of property. That is to say, it is impossible to ground the categorical identities of properties within the scope of Lewis' ontology, which further entails that the necessary spatiotemporal relations are the necessary prerequisites for the properties to have categorical identities.

The foundation of Lewis' ontology is the Humean supervene, which holds that in every possible world, all the facts are supervened on a mosaic pattern constituted by the spatiotemporal arrangements of particulars on which the fundamental properties are instantiated. (Lewis, 1983, p. 343, 358-359; 1986b, p. ix). On this mosaic pattern, there are neither any necessary spatiotemporal relations among the fundamental properties nor among the particulars (Lewis, 1983, p. 346, 366; 1986a, p. 51).

This paper argues that the denial of the necessary spatiotemporal relations among the properties has an unacceptable consequence that Lewis' ontology cannot ground the meta-distinctions among the categories of the properties, which further entails that the worlds that are accordant with Lewis' ontology can have no more than one category of property.

Before proving the lack of meta-distinction among the categories of properties in Lewis' ontology, first of all, I need to preclude a possible account which can be elicited from Lewis' theory of properties (Lewis, 1983, p. 343-355; 1986a, p. 50-69). This account suggests that the meta-distinctions among the categories of properties can be grounded on the particulars, but I argue that this suggestion does not agree with Lewis' anti-Haecceitism of particulars (Lewis,

1 The meta-distinction indicates the distinction of two distinctions. The meta-distinction among the categories of properties indicates the distinction between the distinction among the properties from one category and the distinction among the properties from multiple categories (e.g. The distinction between the distinction of the green light-red light and the distinction of mass1(g)-red light)
In addition, Lewis' anti-Haecceitism of particulars induces him to endorse a view that there are no Haecceitistic differences between worlds (Lewis, 1986a, p. 221), which entails that the spatiotemporal instantiation of the properties is the only ground of the meta-distinctions among properties and hence the only ground of the meta-distinctions among the categories of properties. This conclusion forms the base for the subsequent proofs of the lack of meta-distinctions among the categories of properties in Lewis' ontology. In the proof of the lack of meta-distinction among the categories of properties, the individual instantiations of the properties and the spatiotemporal arrangements of the properties are inspected separately.

Regarding the individual instantiations of the properties, first of all, the lack of the meta-distinctions among the categories of properties is substantiated, for the reason that the distinction between the different individual instantiations is contentless. As for the spatiotemporal arrangements of the properties, the lack of the meta-distinction among the categories of properties is validated by an "isomorphism proof". The proof shows that the Humean world with one category of property instantiated and the one with multiple categories of properties instantiated, are isomorphic. Therefore, no more than one category of property can be grounded in a Lewis-Humean-style world.

The category-reduction problem of Lewis' Humean ontology validates the fact that the necessary spatiotemporal relations among properties are the necessary condition for the meta-distinctions among the categories of properties. Two reasons are given: First, the fundamental condition for the isomorphism proof above is the denial of any necessary spatiotemporal relation among the properties. The revocation of this condition can invalidate the proof. Second, because the only ground of the meta-distinctions among the categories of the properties is the spatiotemporal instantiation of them, and because the individual instantiation and the contingent spatiotemporal relation have already been excluded by the proof above, the only possible ground of the meta-distinctions among the categories of the properties can only be the necessary spatiotemporal relations among the properties.

Bibliography:


