Theory reduction by means of functional sub-types

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Abstract

The paper sets out a new strategy for theory reduction by means of functional sub-types. This strategy is intended to get around the multiple realization objection. We use Kim's argument for token identity (ontological reductionism) based on the causal exclusion problem as starting point. We then extend ontological reductionism to epistemological reductionism (theory reduction). We show how one can distinguish within any functional type between functional sub-types. Each of these sub-types is coextensive with one type of realizer. By this means, a conservative theory reduction is in principle possible despite multiple realization. We link this account with Nagelian reduction, as well as Kim's functional reduction.

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