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When do types induce the same belief hierarchy? (English) Zbl 1406.91065

Summary: Type structures are a simple device to describe higher-order beliefs. However, how can we check whether two types generate the same belief hierarchy? This paper generalizes the concept of a type morphism and shows that one type structure is contained in another if and only if the former can be mapped into the other using a generalized type morphism. Hence, every generalized type morphism is a hierarchy morphism and vice versa. Importantly, generalized type morphisms do not make reference to belief hierarchies. We use our results to characterize the conditions under which types generate the same belief hierarchy.

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