

A Computational Model of Conceptual Heterogeneity and Categorization with Conceptual Spaces

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I will present the rationale followed for the conceptualization and the following development the Dual PECCS system that relies on the cognitively grounded heterogeneous proxytypes representational hypothesis [Lieto 2014]. Such hypothesis allows integrating exemplars and prototype theories of categorization as well as theory-theory [Lieto 2019] and has provided useful insights in the context of cognitive modelling for what concerns the typicality effects in categorization [Lieto, 2021]. As argued in [Lieto et al., 2018b] a pivotal role in this respect is played by the use of the conceptual spaces framework and by its integration with a symbolic knowledge representation layer.

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