On the Neural Enrichment of Economic Models: Recasting the Challenge

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Abstract:

In a recent critique of neuroeconomics, Fumagalli (2011) argues that economists are provisionally justified in resisting the incorporation of neural findings and constructs into their models of choice. In subsequent articles, some authors criticize Fumagalli's argument and use it as a foil to support two main claims concerning neuroeconomic modelling. Firstly, the benefits derivable from neurally-informing some economic models of choice do not involve significant tractability costs. And secondly, neuroeconomic modelling is best understood within Marr's three-level of analysis framework and in light of a co-evolutionary research ideology.

In this paper, I critically examine these two claims and rebut the related critiques of Fumagalli's argument. Moreover, I draw on the philosophical literature on scientific modelling and recent neuro-biological research to question the relevance of current neuroeconomic contributions for the economic modelling of choice.

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