

Authors' Response

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For the authors' responses to comments similar to those expressed here by **Balsam & Drew**, please see: M. Domjan, B. Cusato, & R. Villarreal (2000). Extensions, elaborations, and explanations of the role of evolution and learning in the control of social behavior. *BBS* 23(2):269–82. [Authors' Response to first round of commentary.]

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Commentary on Mike Page (2000). Connectionist modelling in psychology: A localist manifesto. *BBS* 23(4):443–512.

Abstract of the original article: Over the last decade, fully distributed models have become dominant in connectionist psychological modelling, whereas the virtues of localist models have been underestimated. This target article illustrates some of the benefits of localist modelling. Localist models are characterized by the presence of localist representations rather than the absence of distributed representations. A generalized localist model is proposed that exhibits many of the properties of fully distributed models. It can be applied to a number of problems that are difficult for fully distributed models and its applicability can be extended through comparisons with a number of classic mathematical models of behaviour. There are reasons why localist models have been underused, though these often misconstrue the localist position. In particular, many conclusions about connectionist representation, based on neuroscientific observation, can be called into question. There are still some problems inherent in the application of fully distributed systems and some inadequacies in proposed solutions to these problems. In the domain of psychological modelling, localist modelling is to be preferred.