

Social categories as ‘excluders’: Explaining stereotyping with connectionist modeling

Andre Klapper

Radboud University Nijmegen, Behavioural Science Institute

Ron Dotsch

Utrecht University & Radboud University Nijmegen, Behavioural Science Institute

Iris van Rooij

Radboud University Nijmegen, Donders Institute for Brain, Cognition and Behaviour

Daniel Wigboldus

Radboud University Nijmegen, Behavioural Science Institute

Abstract: A central idea in social psychology is that people can construe other people in terms of two types of mental representations: social categories (e.g. male) and attributes (e.g. intelligent). It is assumed that assigning a person to a social category (i.e. social categorization) is one of the most important causes of stereotyping. However, no theory has yet successfully explained the properties that distinguish social categories from attributes and how those distinct properties may cause stereotyping. We show that an interpretation of social categories as mental representations that strongly exclude other mental representations (i.e. ‘excluders’) can explain how social categories may cause stereotyping. In addition, we present computer simulations that implement the assumed principles in a connectionist model where social categories are interpreted as nodes with strong inhibitory links. We argue that our model solves fundamental ambiguities in social categorization theories and unifies these theories with connectionist models of person perception.