What makes upright faces special? The role of parts and spacing information in face and object recognition

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Theories of face and object recognition suggest that object processing mechanisms primarily extract part-based information, whereas face perception mechanisms are special in that they primarily extract information about the spacing among parts. I will present behavioral and fMRI experiments in which we used group-based and individual differences approaches to examine whether processing of parts and spacing information are mediated by common or distinct mechanisms for faces and non-faces (i.e., houses). Our data from multiple methods converge to suggest that faces are special in that they engage a common mechanism for the processing of parts and spacing information. In contrast, object processing primarily relies on part-based information and engages distinct mechanisms to represent spacing and parts.