

Statistical Models of Linear and Non-linear Contextual Interactions in Early Visual Processing

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AECOM

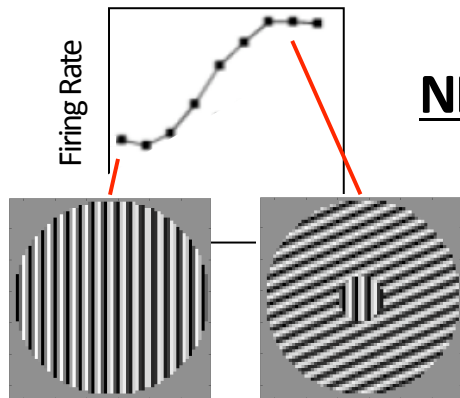
Peter Dayan

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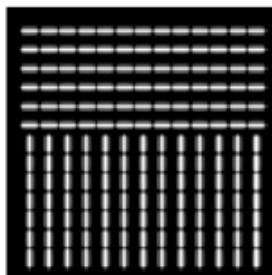
Odelia Schwartz

AECOM

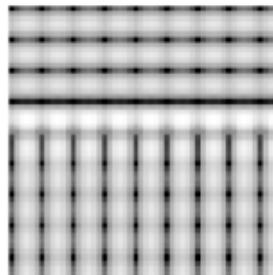
CORTICAL NEUROPHYSIOLOGY SIMULATIONS



SALIENCY AND COLLINEAR FACILITATION



STIMULUS

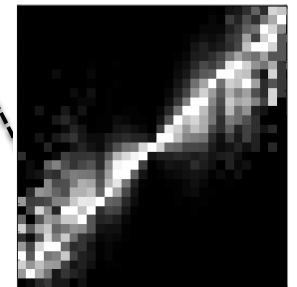
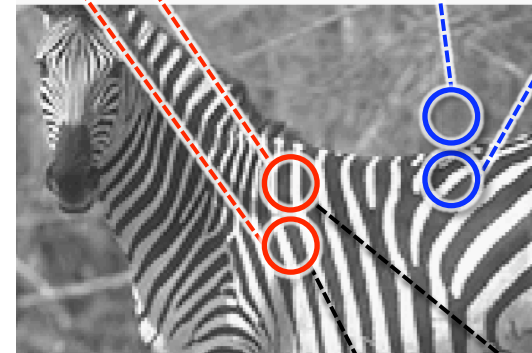
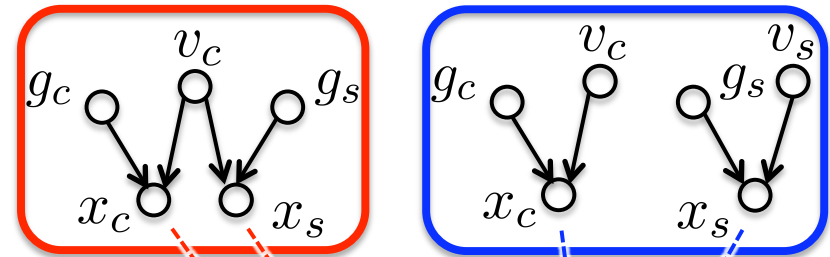


MODEL SALIENCY

TILT ILLUSION



GENERATIVE MODEL OF IMAGE STATISTICS



An extension of the GSM that learns

a) **non-homogeneity**

b) **linear correlations**

in a database of natural images