Introduction

figure-ground organization and border-ownership (BOWN)

contrast sensitivity of BOWN

consistency of surface properties and figure-ground

Images from Peterson & Salvagio (2008)

Results

necessity of concavity weight?

Implementation

interaction

normalization [mutual inhibition]

condition dependent weight

surface properties

colinearity: \( W_{\text{colinear}} \)

concentric: \( W_{\text{concentric}} \)

otherwise: \( W_{\text{other}} = 0 \)

BOWN sensitive neurons

Summary

- Implementation of consistency detection of ownership AND surface properties.
- Robust responses.
- Differential responses to heterogeneous/homogeneous convex/concave combinations of regions.
- Occlusion by concave edge creates inconsistent BOWN signals.


