

- [Home](#)
- [About the CVR](#)
- [News](#)
- [Members](#)
- [Seminar Series](#)
- [Conference](#)
- [Resources](#)
- [CVR Summer School](#)
- [Research Labs](#)
- [Training at the CVR](#)
- [Partnering with the CVR](#)
- [Contact Us](#)

- Friday, December 11, 1998
Global Processes in Higher Level Form Vision

The earliest stage of form vision in primary visual cortex (V1) involves extraction of local contour orientation. Our recent research provides evidence that subsequent levels of form vision analyze global concentric and radial configurations by pooling V1 orientation information. Neural models of this process fit psychophysical data on detection of structure in random dot Glass patterns, and they also provide a coordinate system for representing faces. In addition, these neural models accurately predict illusory perceptual oscillations generated by certain static dot patterns. These oscillations may reveal the properties of networks associated with spatial selective attention. Finally, fMRI evidence suggests that the extraction of concentric and radial information occurs in extra-striate area V4, a major intermediate level of the form vision pathway.

Hugh Wilson
University of Chicago