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Center for **IMAGING** SCIENCE

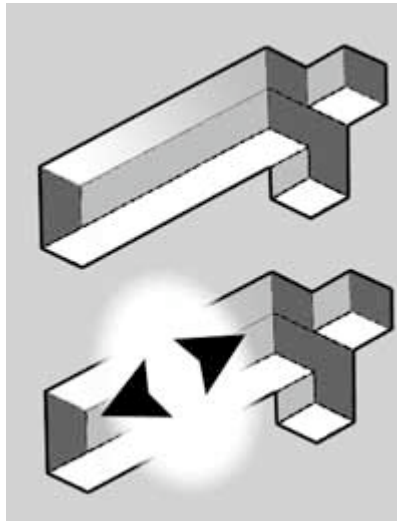
Seminar Series

Reading Images vs Reading Text: An Advantage for Dyslexia

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In primates, the visual system is organized concentrically about a high-resolution center, and this geometric arrangement acts to effectively segregate the functionalities of the center and periphery. The center is capable of resolving fine detail, but information about a scene obtained via the center must be processed sequentially in time. On the other hand information about a scene that comes from the periphery, while sparse in detail, covers an entire scene at once, processing spatially distributed inputs concurrently, in parallel. Attention gives weight to only one at a time, so those who have impairments in the center may show advantages for the periphery. We would expect those with dyslexia, whose ability for reading text is impaired, may show advantages for peripheral processing important in scientific image analysis. We present preliminary evidence from a study underway that appears to support this suggestion.

4pm, Wed, Feb. 11, 2009

Auditorium of the Center for Imaging Science

www.cis.rit.edu/seminar

for up-to-date seminar schedule, video archives and abstracts.