

CENTER FOR COGNITIVE SCIENCE
University at Buffalo, State University of New York

Wednesday, March 24, 2004

280 Park Hall
North Campus
2:00 pm –4:00 pm

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**“Discrete Thoughts:
Why cognition must use discrete representations”**

Advocates of dynamic systems have suggested that higher mental processes are based on continuous representations. In order to evaluate this claim, we first define the concept of representation, and rigorously distinguish between discrete representations and continuous representations. We also explore two important bases of representational content. Then, we present seven arguments that discrete representations are necessary for any system that must discriminate between two or more states. It follows that higher mental processes require discrete representations. We also argue that discrete representations are more influenced by conceptual role than continuous representations. We end by arguing that the presence of discrete representations in cognitive systems entails that computationalism (i.e., the view that the mind is a computational device) is true, and that cognitive science should embrace representational pluralism.

Refreshments will be available

Everyone is welcome to attend!

For information please call the Cognitive Science Office at (716) 645-3794 or check <http://www.cogsci.buffalo.edu/Activities/Colloquium/CLLOs04/2004spring.htm>

The Center for Cognitive Science Colloquium Speaker Series is sponsored by the Office of the Vice President for Research, UB