

CENTER FOR COGNITIVE SCIENCE

University at Buffalo, State University of New York

Wednesday, October 9, 2002

280 Park Hall

North Campus

2:00 pm –4:00 pm

“Ape Language in a New Light”

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In recent years we have seen a dramatic shift, in several different areas of communication studies, from an information-theoretic to a dynamic systems paradigm. In an information-processing system, communication, whether between cells, mammals, apes, or humans, is said to occur when one organism encodes information into a signal that is transmitted to another organism that decodes the signal. In a dynamic system, all of the elements are continuously interacting with and changing in respect to one another, and an aggregate pattern emerges from this mutual co-action. Whereas the information-processing paradigm looks at communication as a linear, binary sequence of events, the dynamic systems paradigm looks at the relation between behaviors and how the whole configuration changes over time.

One of the most dramatic examples of the significance of shifting from an information-processing to a dynamic systems paradigm can be found in the debate over the interpretation of recent advances in ape language research (ALR). To some extent, many of the early ALR studies reinforced the stereotype that animal communication is functional and stimulus-bound, precisely because they were based on an information-processing paradigm that promoted a static model of communicative development. But Savage-Rumbaugh's recent results with bonobos has introduced an entirely new dimension into this debate. Shifting the terms of the discussion from an information-processing to a dynamic systems paradigm not only highlights the striking differences between Savage-Rumbaugh's research and earlier ALR studies, but further, it sheds illuminating light on the factors that underpin the development of communication skills in great apes and humans, and the relationship between communicative development and the development of language.

**Refreshments will be available
Everyone is welcome!**

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<http://www.cogsci.buffalo.edu/cogsci/html/2002fall.htm>