THINK TANK

by Benjamin B. Beck

[Editor's Note: Although most *AnthroNotes* readers will never go into the field like Robert Sussman to study primates in the wild, a new exhibition at the Smithsonian's National Zoological Park invites visitors to better understand primates through cognitive research, including research on captive animals. In the following comments, Benjamin Beck, Associate Director for Biological Programs and one of Think Tank's chief developers, shares with our readers the concepts and goals of this extraordinary new exhibition.]

Think Tank is the first-ever zoo or museum exhibit about animal thinking, or animal cognition, a vital scientific subject of great interest both to scientists and the general public. In Think Tank we actually try to do sound, interesting, original scientific research--right in front of the public. We draw the public into a dialogue that helps them better understand a scientific approach to the topic, and lets them think critically about it.

If you visit Think Tank, you will see written texts with supporting photographs and animals on display that demonstrate the various points being made about animal, including human, cognition. But the linch-pin of the Think Tank Program is real-time research-on-exhibit.

The big challenge is the subject matter, since thinking is invisible. We can't measure it, weigh it, or time it directly, depriving us of some of our best scientific tools. So, we turn to the study of behavior by using experimentally controlled situations, and then make inferences about the animals' thinking. And, most importantly, we have real scientists, supported on Think Tank research fellowships, conducting research on the animals in the exhibition. We make clear to our visiting scientists that they not only have to conduct research, but conduct it on exhibit and interpret it for the public. And our visitors, particularly teachers and students from area high schools and colleges, have responded enthusiastically.

One of Think Tank's popular exhibits is the "O-Line" for the orang utans, who pass outside along

the "high wire" from one building to the other, morning and evening. This pioneering feature of the exhibit engages the visitor in a very empathetic way, as the visitors watch the graceful orang utans move across the O-Line from one part of the exhibition to the other.

The biggest problem we had to confront is that cognition, being invisible, complicates the exhibit. To understand cognition we must rely on inferences from behavior: hence our research on display, on self-recognition, spatial learning, object constancy, the discovery and spread of social traditions, and tool use among monkeys and orang utans. At any one time we and our visitors might watch those

primates cooperate to get a pan of choice food or observe an orang utan learning abstract symbols ("words") that represent objects and then try to make inferences about thinking from the observed behaviors.

The exhibition combines traditional panel displays and text, animal observation, and real-time scientific research with scientists interacting with the public. "Think Tank" puts "thinking" on the front burner, seen in the animals' behavior, the scientists' research, or the visitors' engagement in understanding the complex and fascinating realm created by the Think Tank environment.

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