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20 Nov 2012

ANTH 1020

Signature Assignment – Ethical Issues in Biological Anthropology

### **In Support of Naturalistic Immersive Environments in Zoos**

Most people consider modern zoos to be just that: modern institutions applying the latest ethical and technological standards to their animals' enclosures. There are a variety of options available in zoo enclosures, each with their own ethical issues and supporters. The most widely accepted and preferred type of zoo enclosure design is known as "habitat immersion design" (Coe, 2004), and also called "landscape immersion exhibits" (Schaul, 2012). The goal of this type of design is to allow both the animals and zoo guests to roam in an extremely realistic natural environment; animals and guests remain separated by hidden barriers (Coe, 2004). This allows the guests to not only experience the creatures' habitats along with them, but it also gives them the chance to observe how the animals interact with their environments while feeling that they are a part of that environment. While the guests are enjoying their zoo experience they are also being educated through this observation of the animals, rather than simply being entertained by them.

Although the habitat immersion design is considered the preferred zoo enclosure design, most zoos do not employ this type of habitat style (Schaul, 2012). According to David Hancocks, a zoo historian and zoological park director for over 30 years, most zoos feel that their goal is to present the animals in a sparse enclosure containing as few distractions and hiding places as possible; the zookeepers (and many guests) feel that animals must be guaranteed to be on display for each and every guest to watch (Schaul, 2012). Hancocks feels that the guest areas of these zoos are chaotic and cartoon-like,

which do nothing to place the guests in a realistic natural environment where they can observe and feel connected to the animals and their ecosystem (Schaul, 2012). Hancocks claims that the animals are placed in settings that are designed to seem natural but actually consist of mostly plastic or wooden toys and tree-like structures, concrete or packed-dirt floors, and shallow cement pools (Schaul, 2012). There are ways to create an environment that can increase the quality of the animals' lives while also increasing the positive immersive experiences of the zoo guests.

Many argue that animals who are kept in captivity need environmental enrichment that goes beyond the provision of simple toys or cement troughs. In their article, "Improving the Welfare of Captive Macaques (*Macaca* sp.) Through the Use of Water as Enrichment," James G. Robins and Corri D. Waitt (2011) argue that captivity enclosures for primates should focus on the use of "biologically naturalistic" environments and relevant objects. These objects are much more effective than toy-like enrichment objects (such as mirrors or balls) because they are "based on natural stimuli that primates in the wild interact with in their daily lives" (Robins & Waitt, 2011). The authors base their beliefs on studies done on the affect of naturalistic water environments on captive Macaques. In the wild, both adult and young macaques spend much of their days foraging and playing in lakes and slow-moving rivers (Robins & Waitt, 2011). The authors found many benefits to creating a naturalistic environment for captive primates.

Studies have shown that macaques benefit behaviorally, culturally and possibly even physiologically from such water-based naturalistic enclosures (Robins & Waitt, 2011). Because of the amount of foraging that is possible in a water habitat (mostly due to the increased natural availability of insects) aggression levels between the Macaques

was lowered (Robins & Waite, 2011). Foraging activities increased the Macaques' use of tools, such as cup-like drinking vessels and sticks used for digging underwater (Robins & Waite, 2011). Play behaviors increased, especially among young macaques, which increased healthy socialization (Robins & Waite, 2011). All of these activities increase the display of healthy and natural cultural behaviors in these primates.

Overall, the research shows that zoos with naturalistic enclosures and environments increase the quality of life for their animals. With this increased quality of life and access to natural stimuli comes observable naturalistic behaviors, cultural displays and psychological states. I believe that the animals in zoos with habitat immersion design benefit greatly, but it also benefits the zoos (the enjoyment and satisfaction of the guests is assumed to rise) and the zoo guests (in their positive educational and sensory experiences with the animals). When a guest visits an immersive zoo to enjoy primates and other animals, they are doing more than watching a caged animal; they are able to learn about and experience an ecosystem that will hopefully forever alter the way they understand and interact with nature, for the better.

## Works Cited

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