

Crotalomorphism: A Metaphor to Understand Anthropomorphism by Omission **Jesús Rivas and Gordon M. Burghardt**

The Story of Country Blue

When foreign students come to study at the University of Tennessee, the Center for International Education at the university presents them with a story, paraphrased as follows, to help them understand and deal with their new culture.

People from a country called Blue normally wear blue clothes, blue hats, and blue sunglasses. Houses are blue and so are the cars and streets. Country Blue borders country Yellow where people wear yellow clothes, yellow hats, and yellow sunglasses. Houses as well as cars and street are yellow in country Yellow. These two countries are internally peaceful, but have conflicts with each other. They view the customs and policies of the other country as bizarre and evil. One day, a diplomat from Blue decided to visit Yellow, learn about their customs and traditions, and write an extensive article to his fellow Blue citizens explaining how people in Yellow view the world. He was convinced that they were not evil, they just saw the world in a different way. Therefore, the Blue diplomat put on yellow clothes, a yellow hat, and yellow sunglasses. After three months living in Yellow, the Blue diplomat returned to his country and reported that the citizens in Yellow were not bad, bizarre, or stupid. His article claimed that in country Yellow life was actually very nice and Green!

This tale characterizes somebody trying to understand another culture who neglected to consider a basic limitation: his own colored glasses. These he did not, or perhaps could not, remove. In an even more profound way, our human glasses are ingrained in us, and are very hard to remove (if possible at all). Nevertheless, if we are aware of having biased spectacles, we can attempt to address their effects upon us. In order to understand the cognitive accomplishments of a bee or beetle, squid or chimpanzee, we need to evaluate how they perceive *their* world. In doing so, technology can assist us, but we need to constantly remind ourselves that we are using our human senses and human-based technology, and are processing the information with a human brain.

Like the Poor, Anthropomorphism will always be with Us

Anthropomorphism is defined as attributing human properties to nonhuman entities. Such entities can be supernatural (gods) or animate or inanimate nature. The problem with anthropomorphism is that it often leads to the attribution to nonhumans of properties that they do not possess. It is but an extension of the problems facing anyone trying to understand another human culture, as in the Blue/Yellow example, or actually, the experiences of any person other than yourself. The problems inherent in inferring what other people or animals experience from their overt behavior was recognized by Romanes and the early comparative psychologists (Burghardt 1985a), but they sought ways of surmounting the problem. After several decades, however, psychologists and ethologists came to regard anthropomorphism as a serious error that must be avoided no matter the cost. When Griffin's writings, *as a scientist* (Griffin 1978) seemed to be encouraging unfettered and untestable speculation about consciousness and awareness in nonhuman animals, the critical reaction was swift. It reached its zenith in the book by Kennedy (1992), who, nevertheless admitted that the tendency to be anthropomorphic seems endemic to human beings and can never be eliminated.

Some recent attempts look more closely at what anthropomorphism really is and how it operates. Lockwood (1989) argued that not all anthropomorphic attributions were equal. For example, two kinds of anthropomorphism are restricted to non-scientific writing and therefore not a problem in science ("allegorical" and "personification"). Two others, that Lockwood called "superficial" and "explanatory" have potentially harmful consequences in science and these