

## **Liminal animals: exotic, endangered and transgenic creatures**

Notes for a talk given at a workshop on imagining the non-human other in Asian and continental philosophies, University of Alberta, 2010.

James Miller

I want to move into a slightly different register than we have been operating in. My talk isn't strictly about philosophy or religion, but is an attempt to excavate some of the broader cultural assumptions about nature in general and about animals in particular, that operate in China and the West. I find that this type of language - neither wholly abstract nor particularly specific - to be particularly difficult to wield effectively, but I think it's important nonetheless because it can reveal a set of socio-cultural issues that I think do play an important role in mediating values and behaviours. First of all a story.

### **1. Introduction: The Context of Modernity**

It was widely reported in the Western news media in the context of China's bid for the Olympic games that the Beijing authorities had used a chemical spray to paint the otherwise dried-out brown grass of Beijing a sparkling emerald green. Evidence of the popularity of this story, and the potential harm it did to China's image, can be found in the fact that the People's Daily had to publish a counter-story "Greening Liquid Does No Harm" pointing out that the chemical spray was developed by a US company and complied with all the relevant environmental and health standards. What this counter-story failed to appreciate, however, was why the original story had been so popular in the first place: namely, that it had traded on a fundamental difference in conceptions of nature between China and the West.

In the modern Western social imagination one of the key features of the concept of "nature" is that it should be "authentic." This means that any attempts to revise, improve or tamper with nature are seen as aesthetically and even morally suspect. To the exasperation of Monsanto and similar corporations and the scientist who work

for them, the genetic modification of foods and animals is fraught with moral uncertainty in the public imagination that goes well beyond the notion of whether or not the food is actually safe. Rather, it goes to the moral force behind the notion that food ought to be natural, where natural means authentic and not artificial. Similarly, the idea that one might paint grass green to make it look nicer seems at best risible to many Westerners whereas, clearly, it had seemed desirable to someone in China.

A more recent story appeared in *The Guardian* on February 15, 2007, which noted that £30,000 was spent in Yunnan province to paint the side of a mountain green. No explanation was offered for this action, except that perhaps it had something to do with “feng shui.” It would be easy to dismiss this case as one of those strange cultural misunderstandings whereby people view the Other as bizarre, exotic or otherwise inscrutable. I’m reminded here of a quotation from Borges that appears at the beginning of Foucault’s *Les mots et les choses / The order of things*. The quotation refers to quote “‘a certain Chinese encyclopedia’ in which it is written that ‘animals are divided into: (a) belonging to the Emperor, (b) embalmed, (c) tame, (d) sucking pigs, (e) sirens, (f) fabulous, (g) stray dogs, (h) included in the present classification, (i) frenzied, (j) innumerable, (k) drawn with a very fine camelhair brush, (l) et cetera, (m) having just broken the water pitcher, (n) that from a very long way off look like flies’” (Foucault 1984, xv).

I want to resist the notion that the case of the painted grass betokens the incommensurability and absolute othering of cultures. Rather I want to excavate the underlying cultural rationalities that lead to these seemingly strange cultural encounters. How is it that modern Westerners have come to regard painting the grass green as a violation of the natural order whereas a Chinese official might have no such aesthetic or moral qualms? Conversely, how is it that a Westerner might balk at purchasing GM foods whereas a Chinese person might regard such a food as an improvement over its “natural” version? And how is it that a Chinese person might regard products derived from an endangered species as even more desirable precisely because of its endangered status. To look at these questions, I want to focus on two cases of what I call liminal animals. The first, the so-called oncomouse, ge-

netically modified for the purposes of cancer research. The second, the location of endangered species in the Chinese cultural imagination.

Before considering these specific cases, I want to make a basic claim that the contemporary Western cultural context for thinking about nature is broadly speaking shaped by a historical sequence of Christian theological concepts, the final form of which we have come to know as “secular modernity.” This argument was drawn largely on the work of Bronislaw Szerszynski (2005) in his recent book *Nature, Technology and the Sacred*. Two points.

The first is that in the modern period, nature came to be viewed as a unity. This is the result of what he terms the “long arc of monotheism” whereby divinity (in the pagan form of ghosts and spirits came to be expelled from the natural world), and divinity came instead to be construed as a divine lawmaker whose absolute transcendent singularity guaranteed the universal applicability of the laws of nature. This theological transformation was condition for the possibility of construing nature as a universe held together by a single unbreakable thread of natural law (2005: 16-23).

The second salient feature he describes as constitutive of the modern view of nature is a process in which *episteme* (contemplation), or the rational knowledge of the laws of nature, became subordinated to *techne*, (craft), or the technological transformation of nature (52-53). This is Szerszynski’s way of characterizing instrumental rationality, generally viewed as the hallmark of the modern world view, which he traces through a much longer historical context.

Within these broad parameters, two alternative views of nature emerged in the modern period. One has been the Romantic vision of nature as an Edenic paradise, free from human sin and imperfection. The other has been the vision of nature after the fall, a place of moral imperfection to be rectified through the application of *techne*. This latter view is most clearly associated with Baconian science. Szerszynski writes (2005: 55):

From Francis Bacon’s *Advancement of Learning* ([1605] 1960) onwards, technology became conceived as a project to liberate humankind from finitude and necessity, allowing it to share in the unconditionedness of a deity understood in increasingly sublime terms (Noble 1999; Song 2003).

Bacon viewed science and the concomitant technological perfection of nature as necessary not in and of itself but because of a moral obligation to bring about an Edenic perfection. The view that science and technology are meant to give humans dominion over nature has since then become a deep-seated view of the relationship between humans technology and nature (Smedes 2009).

The interesting point that Sz. makes is that he is quite sure that these theological developments do not in fact amount to what Weber termed the secularization or disenchantment of nature (*Entzauberung*); to the contrary he is quite clear that the ultimate absence of God from the modern view of nature does not strip it bare of meaning but rather enables the the natural world to be imbued once again with a new and vital profusion of sacral meanings. The disenchantment of nature is an illusion that takes the appearance of reality only from a certain perspective:

The illusion that the sacred has disappeared is arguably a feature of all historical transitions from one form of the sacred to the next in a given society. Each transition can seem like the eclipse of the sacred in the terms in which it was organized in the closing epoch; from a larger historical perspective, however, it can be seen as the emergence of a new sacral ordering. (Szerszynski 2005: 26).

The continued attribution of sacred qualities to the “natural” world is evident in the current debates surrounding biotechnology, and in particular the notion of “playing God” in the genetic modification of plants and animals. In an anthology on Technology, Trust and Religion, published in 2009, Smedes writes (2009: 41):

For many people, the influence of humanity in and upon nature is something that should be kept to a minimum as much as possible. Human influence on nature, especially involving technology, is somehow considered to be “unnatural.” The way many people speak about the relationship between humans and nature is as if humans are not part of nature, are somehow above or over against nature, so that human actions that affect nature are “interventions.”

Such a view of nature, common among the competing voices of the post-modern situation, clearly imbues nature with sacral meanings and views humans as being fundamentally different from nature precisely because of their ‘unnatural’ capacity to “interfere” in nature by means of “technology.” Such a vision regards nature as possessing a primal sacred quality. That is, it is to be clearly distinguished

from the profane realm of humanity whose self-interested, even sinful motivations are to be mistrusted.

In essence, this view appears to be the diametric opposite of the Baconian view that humans have a moral responsibility to improve nature. The more radical point to note, however, is that these views share precisely the same overarching framework for considering humans and “nature.” The view that we should not “interfere” with “nature” is identical with the Baconian view inasmuch as it regards humans as occupying some distinct position over and above “nature” and posits an absolute distinction between them. In both views humans are alienated from nature, and reify nature as some distinct ontological category. The modern environmentalist view differs from the Baconian scientist in locating the sacred not in the human technological project to redeem nature back into some prelapsarian paradise, but rather in regarding nature as already imbued with those pristine, Edenic qualities.

Thus when biotech companies argue that genetic modification can help developing nations feed themselves more efficiently or bring about cures for cancer, and when anti-GMO groups argue against human modifications of genes, they are both inhabiting the same modern Western worldview in which technology is seen as the means to mediate (and thereby distinguish) humans from nature. Both presuppose a radical discontinuity between the human world and the natural world. They differ in terms of the moral value of that discontinuity.

This implicitly theological discourse about nature and technology becomes explicit when people describe genetic modification as “playing God.” The meaning of this term can best be understood when one takes into account the fact that it is invoked frequently in the context of genetic modification and in particular in the context of the creation of transgenic organisms. Two points need to be made. The first is that the concept of God that is invoked in the term ‘playing God’ is God as creator. This vision of God is fully developed in the Jewish-Christian-Islamic religious system, which regards God as unique by virtue of his status as creator. This absolute disjunction between creator and creature is seen as an inviolable dividing line. In Islamic theology the arrogation of divine attributes by anything other than God is considered to be *shirk*, a theological crime bound up with notions of hubris and disobedience. But why in particular does genetic modification warrant the term “playing God”? After all the technological manipulation of nature is nothing new. It has been going on for years through well-established principles of animal hus-

bandry such as hybridization. The answer to this question lies in the fact that genes are not considered to be attributes of nature that are being modified or manipulated by human artifice. Rather genes are considered in the popular imagination to be essential determinators of biological life, and relatively little emphasis is given to the fact that environmental factors are key to how genes are expressed.

This special status given to genetic modification can be seen in particular in the work of Francis Collins, the director of the Human Genome Project, who famously described the project as “the most important and the most significant project that humankind has ever mounted” (quoted in Noble 1997: 191) and then went on to write a recent book on this subject is entitled *The Language of God* (Collins 2006). It is perhaps no surprise that Francis Collins is himself an evangelical Christian, and a champion of the use of theological language to describe genetic research. While he may be comfortable with his role as divine co-creator, many popular critics of genetic modifications are not—but for precisely the same reasons. They both hold the view that genes are to do with the fundamental laws of life and therefore genetic modification is not simply one more incremental advance, but in fact requires new theology of nature.

I'd like to refer now to the work of the sculptor, Bryan Crockett, who is famous for his six-foot tall sculpture *Ecce Homo the OncoMouse*, a Christ-like marble depiction of the transgenic mouse patented and trademarked by Harvard University. Crockett describes this sculpture in explicitly theological terms. Quote

Science has taken over the authority that religion once held. In this body of work, I am exploring the sacredness of the flesh and soul in a time when we have acquired the knowledge and tools to play God. (Crockett 2001)

These terms become explicitly Christian when he goes on to describe the Christ-like form in which the mouse is portrayed. Quote

That is why I have chosen to reinterpret the ultimate figure of salvation, Christ, through the ultimate actor of contemporary science, the Oncomouse. This sculpture is intended to be a monument to the test object of modern science, human kind's symbolic and literal stand-in personified. This human-scale, fleshy mouse, sculpted with the pathos of classical sculpture, stands in a gesture reminiscent of Christ revealing his wounds. (Crockett 2001)

According to Ellen ter Gast, Crockett's work clearly symbolizes the way in which technology has become part and parcel of our modern belief system, a system that builds on Christian motifs, albeit whose theological DNA has been itself "genetically modified." She concludes that the explicit use of theological language by advocates and detractors of genetic engineering alike is not a matter of rhetoric or strategizing but something altogether deeper (see Nelkin 2004). She sees technology as a contemporary religious form. Or as David Nye puts it, technology has become a new form of the sublime, awesome and fascinating, enchanting and enthralling, betokening either salvific or demonic power, depending on one's perspective (Nye 1994).

So far I have tried to have depict the ways in which popular cultural debate about biotechnology research in the West is shaped by particular theological and cultural factors that do not necessarily apply in other contexts. The quintessential liminal animal in the modern Western cultural imagination is the genetically modified creature, precisely because it transgresses the cultural taxonomy of what is natural and what is artificial.

### 3. Chinese Cultural Factors

I want now to turn to China and lay out a broad metaphysical picture of the interaction between heaven, earth and humans, (the main alternative we see in China to the concept of creator and created). There has never been a strong concept of a singular creator God in Chinese religion and culture. The alternative metaphysical construct has been that of humans, earth, and heaven. The proper mode of relationship among these three has been that of harmonious integration, humans “forming one body with heaven and earth.” Generally this entails an ultimately monistic metaphysical picture in which humans work with creative spiritual forces symbolized by heaven and biophysical nature symbolized by earth (include plants and animals) to promote the continuing evolution of the Dao. In this regard humans are already cocreators. There is no absolute disjunction between the heavenly realm and the earthly realm, between humans and God, or between humans and nature. In this regard traditional Chinese metaphysics seems more closely allied with a kind of process metaphysics rather than the atomic materialism of the Western enlightenment or Jewish-Christian-Islamic understandings of a divine creator. From this is no cultural impetus to describe genetic modification positively as “decoding the language of God” or negatively as “playing God.” There is simply no threshold between divinely created and humanly created such that there could be a liminal cultural crisis about transgenic animals. Similarly there is no concept that painting your mountain green is unaesthetic or immoral.

So where are these liminal spaces to be found in the Chinese cultural imagination? To answer this question I want to look at some Daoist theories of nature.

First we have the notion that certain environmental contexts have a special status in Daoism as revealing more fully the cosmic power of the Dao. This is the concept of sacred landscapes, *shengtian fudi*, From the cosmic perspective of the Dao, biophysical nature is not simply a flat or democratic space, but a context in which sacred power is unevenly and hierarchically distributed. Ordinary nature is relatively lacking in sacred power; marvellous nature is relatively plentiful in sacred power, that is the power to reveal the creative capacities of the Dao, extend life and vitality, and engender spiritual transformation. For Daoists, the religious quest lies in locating and inhabiting these places of sacred transformation.



Tell story of how many mountains.

Refer to Ziyang Zhenren.

An important feature of these spaces is that they are inhabited by rare and exotic beings (immortals); rare and exotic plants (food); rare and exotic animals. Within the traditional Chinese imagination, the sacred quality of these spaces is expressed in numinous plants and animals that inhabit them. In terms of plants, we have the concept of superfoods, Sesame, asparagus root, ginger, pine sap, locust tree, poke root(ref Shawn). These don't live in backyard.

To the elite urbane Daoists who sought these substances to prolong their lives, mountains were sacred precisely because they provided the environments in which these plants could be sought. But mountains were also dangerous because they contained wild undomesticated, predatory animals. These animals functioned as guardians of the sacred powers contained in the plants in these liminal spaces between heaven and earth. They were not to be killed, but defended against by the possession of sacred talismans exerted a higher spiritual authority over these dangerous untamed beasts, enabling the urban alchemist to collect his herbs and minerals and return safely to his home. And the particularly realized or spiritually perfected person was distinguished by his ability to dwell for long periods of time in these untamed spaces, eating wild herbs, and not fearing the attacks of predatory beasts.

In the modern period, of course, this view of sacred power of mountains was explicitly challenged by Maoist voluntarism in the struggle against nature. Judith Shapiro's book *Mao's War Against Nature* begins with a quotation from a revolutionary song: "Let's drive away the mountain gods to bring out these 200 million tons of coal. In so doing China attempted to destroy not only the gods but the habitats for exotic flora and fauna.

But in contemporary China, mountains, and their animals, have become contested sites that reveal the continuing cultural battle over the location of sacred power. Mountains are the once again the focal point of religious pilgrimages, but they are also ecotourism theme parks, drivers of local economic development and sites of patriotic "red" tourism. Describe Maoshan.

In all of this uncertain and contested space, it is possible to gain a glimpse of what I would call liminal animals in liminal spaces, and this is in the location of exotic animal sanctuaries in areas associated with traditional religious power. For instance, in May this year, I visited an exotic species animal sanctuary, located at

Louguantai, a famous Daoist sacred site, where Laozi is supposed to have transmitted the Daode jing. To a non-Chinese observer, it might seem strange that endangered species and sacred spaces should possess some kind of affinity. But in the Chinese imagination, both the exotic animals and the Daoist immortals occupy the same strange, liminal space, somewhere between heaven and earth, disclosing the rare, marvellous cosmic powers that are lost in the abstract, democratic and featureless space of disenchanted modernity. Perhaps it is just the case that traditional religious culture and exotic species are connected because they were nearly extinguished by modernity. But I think it is more the case that animals and religion are drawn together by this concept of the sacred space lying between heaven and earth. Such liminal spaces provide the context for wild animals and provide the context for sacred power.

Despite the encroachment of secular modernity and western biomedicine, Chinese people continue to regard exotic plant and animal products as bearers of vital and virile power, extending the lifespan, lengthening the erection, prolonging the orgasm of those who take them. The quintessential liminal animal in China is not the transgenic mouse, but the exotic species, the species on the verge of becoming extinct, the species on the verge of becoming a mythical being. Such liminal animals are prized because they disclose the sacred power of nature, power that increases in value and prestige precisely as it is being extinguished.

### **List of Works Cited**

Crockett, David B. 2001.

<http://www.decordova.org/decordova/exhibit/2001/terrors/crockett.htm>

ter Gast, Ellen. 2006. "Ecce homo, the transgenic mouse and the Christ metaphor." Paper presented at the conference on *Religion, Science, and Public Concern: Discourses on Ethics, Ecology, and Genomics*, Leiden University, Netherlands, October 26-27, 2006.

Nelkin, Dorothy. 2004. "God Talk: confusion between science and religion." *Science, Technology and Human Values* 29.2: 139-152.

- Noble, David F. 1997. *The Religion of Technology : The Divinity of Man and the Spirit of Invention*. New York: Random House.
- Nye, David E. 1994. *American Technological Sublime*. Cambridge, MA: MIT Press.
- Oakley, Kenneth. P. 1972. *Man the Toolmaker*. Sixth Edition. London: The British Museum (Natural History).
- Ruse, M. 1986. *Taking Darwin Seriously: A Naturalistic Approach to Philosophy*. Oxford: Blackwell.
- Smedes, Taede A. 2009. "Technology and What It Means to Be Human." Pp. 41-54 in Willem B. Drees, ed., *Technology, Trust, and Religion: Roles of Religions in Controversies on Ecology and the Modification of Life*. Leiden: Leiden University Press, 2009.
- Szerszynski, Bronislaw. 2005. *Nature, Technology and the Sacred*. Oxford: Blackwell.