

The Conflict between Chinese Cultural and Environmental Values in Wildlife Consumption

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I. Introduction

A common way of looking at environmental problems suggests that they are almost exclusively the result of bad things people do. Solutions to these problems begin with philosophers, conservation activists and policy advocates articulating a moral vision that explains what is wrong with people polluting an area or (over-)using a resource, and, especially in the case of non-human animals, what is wrong in even viewing them as a resource to be used for human ends. Environmentalists work to communicate a set of values, which provides the basis for rules and policies that will protect environmental goods by discouraging or preventing people from doing the bad things. In other words, they *apply ethics*. They attempt to make things *right*.

Contrast this approach to environmental problems with one that says they arise out of conflict, disagreement or, more generally, a failure of interested parties to coordinate with each other. David Schmidtz has identified three such sources of environmental conflict (Schmidtz 2002a: 417-8). A conflict in *use* occurs when my consumption of an environmental good interferes with yours, producing an externality or a commons tragedy. A perhaps more fundamental source of environmental conflict is conflict in *values*. Again, many deny that environmental goods are appropriately seen as merely resources to be used, even at sustainable levels. For example, many environmentalists advance a moral vision requiring a non-instrumental, bio-centric or eco-centric approach to environmental goods – a preservationist ethic – and attempt to undermine instrumental, anthropocentric approaches – a conservationist ethic (Varner 1998). Anthropocentric theorists locate the value of environmental goods in the value they have to human beings. According to this view, there is no value in nature without conscious, human valuers. Eco-centric theorists argue that environmental goods have value apart from their value or usefulness to human beings. On preservationist views, we are subject to a standing obligation to justify our use of environmental goods. Preservationists may disagree about how stringent the justificatory burden is, but they will typically affirm that the mere fact that some use satisfies a desire or is relatively commonplace in some culture isn't sufficiently weighty to render that use legitimate. Accordingly, at least sometimes, and probably more often than people think, human ends should be sacrificed in order to preserve

environmental goods. Therefore, preservationism conflicts with a tradition common in Chinese-influenced culture areas that sees consumption of wild fauna as basic and necessary to a 3,000 year-old set of systematized medicine practices and related cosmological beliefs (Coggins 2003). In this sort of environmental conflict everyone sees themselves as taking a principled stand against the injustice of the other side. On one hand environmentalists are working to protect vulnerable species from a global network of poachers and traffickers. On the other hand practitioners of traditional medicines in Asian countries reject the authority of Western environmentalists to impose alien values that interfere with their conception of a balanced and healthy life. Finally, Schmidtz shows that a conflict in *priorities* can also lead to environmental problems. If rules and policies designed to regulate wildlife consumption are imposed without regard for the values and commitments of people at the local level who are to be bound by them, then the moralism of environmental advocates may be at cross-purposes with the legitimate aim of protecting environmental goods.

In this essay, we apply this understanding of environmental conflicts to wildlife protection policy debates in China and other Chinese-influenced culture areas in Asia, like Vietnam, Laos and Cambodia, where attitudes towards wildlife consumption are more permissive and several key species are utilized in a variety of cultural practices. Ben Davies quotes TRAFFIC's James Compton as saying, "China is like a vacuum cleaner. It is the single greatest threat to wildlife in the whole of Asia" (Davies 2005: 34). According to Susan Shen, "The single most important fact hampering wildlife conservation in China is the traditional use of wild animals for medicinal purposes, meat and skins" (Shen, et al. 1982: 340). The tiger policy debate in China is especially instructive. China joined the Convention on International Trade in Endangered Species (CITES) in 1981 and in 1993 banned domestic trade in tiger derivatives to bring itself into compliance. In the same year the Chinese government also removed tiger from the official ingredients list of medicines, some of which are used in Traditional Chinese Medicine (TCM). Poaching, however, continues to deplete the wild tiger population world-wide under the ban. Its supporters continue to press positive arguments that the consequences for tigers would be disastrous if the ban is lifted, but environmental philosophers in the West provide much of the normative justification for it and similar trade restrictions. Yet the values they invoke are not universally accepted. Many TCM practitioners support the use of substitute products for tiger derivatives based on their endorsement of a vaguely Taoist and/or Buddhist value of living in harmony with nature, but, so far, this has failed to translate into a broad-based acknowledgement of the moral status of tigers among Asian consumers of TCM and there is ample evidence of instrumentalist approaches to the value of tigers, and other environmental goods,

in Chinese culture. A great deal of attention is directed towards the tiger in debates about wildlife consumption because of its status as a charismatic mega-fauna species. Yet the rhinoceros, the Asiatic black bear and the snow leopard are also included in the CITES Appendix I list of species in which commercial trade is prohibited. With the Siberian musk deer, an Appendix II species, all are utilized in TCM and other culturally-based practices, luxuries, novelties and charms in various parts of Asia.

We argue that policymakers in these countries, and the non-governmental agencies that advise them, should take local cultural values into account. The argument will proceed in three stages. In section II, we present an overview of distinctive ways that environmental values conflict with many cultural values and practices in Asia. In section III, we provide an overview of the background and impact of the current approach to the problem of wildlife consumption in Asia through the implementation of CITES trade bans in the region. In section IV, we attempt to outline the sort of considerations we think are relevant to an environmental policy regime governing threatened and at-risk species in the region. We conclude our discussion in section V. A preservationist ‘no-use’ approach to policy might save wildlife if the relevant values are shared among a large enough percentage of the population, but such an approach goes predictably awry otherwise (Schmidtz 2002b: 321). Policy solutions to environmental problems, to be genuine solutions, have to be compatible with the cultural attitudes and practices of the time and place under consideration. Until and unless cultural attitudes towards wildlife consumption in Asia change, policymakers should rethink CITES-style trade bans.

II. Environmental and Asian cultural values in conflict

Identifying the sort of conflict we find ourselves in can help to mitigate or resolve it. A conflict in use might call for a relatively straightforward empirical or technical debate concerning the most efficient way to manage a resource. Usually, a set of rules, typically property rules, is sufficient to address this sort of conflict and induce a sufficient level of care and sustainable use. Matters are often more difficult if the conflict concerns whether or not nature or wildlife is even the sort of thing that is appropriately regarded as a resource or commodity. Some of these debates in value theory have become intractable and all are subject to irremediable disagreement. This fact subtly shifts the terms of the debate and what it will take to resolve the conflict and protect environmental goods. We will turn to this issue in section IV; this section makes the relatively uncontroversial point

that the immorality of wildlife consumption is not so clear to everyone concerned. Preservationist environmental values are in conflict with Asian cultural values.

Environmental ethics is an 'applied' branch of moral philosophy. Like other areas of applied ethics, environmental ethics involves applying philosophical analysis to practical moral controversies. But environmental ethicists are often involved in a different project in that they are not simply applying well-worn ethical theories and principles to some practical domain in the way, say, business and medical ethicists do. Many environmental ethicists instead find themselves wondering whether extant theories of moral value are adequate to speak to environmental problems. What sort of theory could ground the idea that the natural world is a direct object of moral consideration? Schmidtz suggests that environmental ethics is "more like highly theoretical meta-ethics, except with real world examples. So someone trots out his theory of value, and in environmental ethics, you get to bring the conversation down to earth (as it were) by saying things like, does that apply to trees?" (Leiter 2005). According to Ip Po-Keung, "the major task of environmental ethics is the construction of a system of normative guidelines governing man's attitudes, behavior, and action toward his natural environment. The central question to be asked is: how ought man, either as an individual or as a group, to behave, to act, toward nature?" (Ip 1983: 335). Investigating questions like these has led many environmental ethicists to engage a set of distinctions familiar in discussions of environmental philosophy between instrumental and non-instrumental value, anthropocentric and bio-centric value, conservationism and preservationism and individualism and holism (see, e.g., Katz 1991 and O'Neill 1992). Moreover, many philosophers take their conclusions about these theoretical matters to have straightforward practical implications. For example, Robert Elliot has argued that "wild nature has intrinsic value," because it is *natural*, "which gives rise to obligations both to preserve it and to restore it" (Elliot 1992: 138).

Such arguments invoke the ideals of Western environmentalists. Are there reasons to think that they are normative for people in Asian countries like China, Japan, South Korea, Malaysia and Vietnam where, according to Felix Cheung, TCM is deeply rooted and widespread (Cheung 2011: S82)? There is predictable Western skepticism and dismissiveness of TCM, which smacks of mysticism and pseudoscience to many medical professionals trained according to Western approaches to disease, illness and prevention. This even somewhat sugarcoats their attitudes, which more typically involves thinly veiled contempt, especially for remedies that contain animal products. If preservationists are right that the use of animal products must be justified with good reasons in order to be legitimate, then TCM practitioners would minimally have to show that the ban of animal

products would deprive them of significant health benefits. Scientifically backward beliefs aren't appropriate objects of toleration on this view. Richard Harris reports that after the US certified, in accordance with the Pelly Amendment, that China violated CITES protections in the 1990s, he had the sense that some of the indignation expressed was less about China failing to enforce trade restrictions and more about "issues of values: [...] what were those old-fashioned Chinese doing consuming tiger and rhinoceros products in the first place?" (Harris, R.B. 1996: 324). More recently, the online edition of *Nature Outlook* published an article on the conflict between wildlife preservation advocates and TCM, which elicited the following reader comment and illustrates the prevailing attitude: "Jean SmilingCoyote said: We have to change the cultures which include the idea that there is some medicinal value to various parts of rhinos, tigers, and other now-endangered [sic] animals. Where did these ideas come from? [...] Just because some practice is part of an ancient culture not our own, doesn't mean it's acceptable" (Graham-Rowe 2011).¹

According to Ramachandra Guha, much of Western environmentalism amounts to a kind of cultural imperialism that discounts the values and commitments of local communities (Guha 1989). To the extent that wildlife advocates acknowledge the importance of understanding Asian cultural attitudes and values, it is to demonstrate the error in their ways (Harris, R.B. 1996: 324). This proves to be an incredibly tough sell. The growing illicit market in animal products is a demand-driven phenomenon. The products are sought largely for medicinal products, but also for iconic cultural symbols of status and, especially in China and Asian Tiger economies, recently acquired wealth. Both of these markers of Asian culture are enabled by relatively accommodating values governing the permissible use of wildlife. Where Western preservationists endorse the intrinsic moral status and non-anthropocentric value of wildlife, Chinese-influenced culture areas manifest a distinctively instrumentalist and human-centered approach to such value.

Paul Harris cites the Chinese government's approach to sustainable development as evidence of this, which mandates that environmental considerations take a backseat to economic growth (Harris, P.G. 2004: 147, 156). This was true under Mao as well as subsequent reformers (Kobayashi 2005). The way that Chinese and other governments in Asia have prioritized economic growth has contributed to an ecological nightmare (Harris, P.G. 2008). Richard Harris provides other evidence of instrumentalism in Chinese attitudes towards wildlife conservation. He describes a primary school reader that doubles as an environmental consciousness-raising tool for children. In the reader, Mr. Lin, an environmental engineer, addresses a group of children's concerns about wildlife:

“These animals can be dangerous, but they are also beneficial! Take the tiger, for example. People call it ‘King of the Mountain’, but one could also say it’s quite a treasure.” The children protest, “But tigers threaten people!” Wanting to appear reasonable, Mr. Lin responds, ‘Yes, that’s true, but the benefits to people from tigers are also great. [...] The entire body of a tiger is a treasure! Why, one could say that the tiger is a drug store capable of curing 100 ills!’” (Harris, R.B. 1996: 308).

This attitude is found even among Chinese who study wildlife. Harris relates his meeting with a mammalian taxonomist who “allowed that he would himself use tiger bone for medicinal purposes, given the chance” (Harris, R.B. 1996: 326, n. 30).

This evidence of anthropocentrism and instrumentalism in Asian thought stands in stark contrast to recent attempts of environmentalists to uncover in Eastern philosophy and religion normative principles more accommodating of preservationist goals. For example, philosophers have cited Taoist, Buddhist and Confucian traditions in support of prescriptions to live in balanced harmony with nature and to respect – revere – the interconnectedness of all living things (see Callicott 1987 and Tucker 1991). Perhaps the rapacious depletion of flora and fauna in Asian countries can be explained as a recent development antithetical to their cultural traditions. However, Guha claims this story is based on a selective reading of Eastern traditions and “does considerable violence to the historical record” (Guha 1989: 77). According to Heiner Roetz, anthropocentrism and instrumentalism in contemporary Chinese attitudes towards nature are nothing new and owe little to the influence of either Western Marxism or Western economic liberalism; both of these systems of thought are compatible with established cultural norms in Asia permitting the subjugation of nature for human purposes, which predate both (Roetz 2010). Roetz writes,

It was the typical occupation in pre-dynastic times of the early rulers and cultural heroes, who represent the self-understanding of Chinese civilization. Huang Di ‘deforested the mountains and dried out the swamps’ (*Guanzi* 84, p. 414). Shun ‘burned out the swamps and slew the wild animals (literally, the ‘numerous plagues’ *qun hai*)’ (ibid.), and Yi ‘burned down the mountains and the swamps, causing the animals to flee and hide themselves’ (*Mengzi* 3A4) (Roetz 2010: 201-2).

None of this should be surprising. As Roetz notes, “For more than three millennia China has been one of the most intensively cultivated regions of the world. It has gone the way of all highly advanced civilizations, a way that is marked by the constant expansion of agricultural and otherwise utilizable areas at the expense of the original flora and fauna” (Roetz 2010: 201). Being comfortable

with the aggressive utilization of natural resources to advance social goals has been a winning cultural strategy (whether it will continue to be so is another matter). It would be more remarkable if there were an ancient society with an aversion to it that survived.

However, even if the preservationist credentials of Eastern thought were vindicated, there may be little reason to expect much to come of it. As Holmes Rolston writes, “a test of the power of Eastern thought will be to see how environmental problems are resolved in industrialized Eastern nations” (Rolston 1987: 189). As we have observed, they tend to be resolved in the direction of enhanced economic growth or other human goals. Moreover, it is unclear what advice Eastern thought would give to deal with a specific problem if, say, Taoism were operationalized:

It may be right to say repeatedly “More *yin*; more *yin*” in making environmental decisions, but this is a little like saying “More love; more love” in making social decisions. The advice is sound enough, but unless one has a more sophisticated model to explain what adding *yin* or love means in the making of nitty-gritty decisions, and unless one can work the new attitude into either policy regulations or the moral calculus, nothing comes of it (Rolston 1987: 180-1).

In other words, a moral vision is not a decision-making procedure. An institutional approach that focuses on feasibility and conflict resolution is necessary, too. This is an especially important lesson in contexts where there is no univocal moral vision. This does not mean that Asian cultural attitudes towards wildlife consumption will prove recalcitrant in the long run, and there have been some changes. For example, many practitioners of TCM now encourage the development and use of alternative synthetic or non-endangered ingredients from the traditional lists of remedies (Animals Asia 2012). However, these attitudes have yet to fully trickle down into the preferences of consumers of TCM. So long as this is the case, even if Western preservationist convictions about the non-instrumental value of wildlife are correct, it may be a mistake to impose certain restrictions on wildlife use. Implementing a policy in the sense of passing legislation isn’t the same thing as implementing a policy in the sense of bringing it about that people act in the prescribed ways. Policymakers cannot always predict how people will react to their rules. As Schmidtz says, “People decide for themselves. We have to ask what their values are, what their priorities are, and what could lead people with such values and priorities to act in environmentally benign ways” (Schmidtz 2002a: 420).

III. Wildlife consumption in Asia

The conflict between preservationists and conservationists is more than theoretical. In this section we cite evidence of its impact on the practice of wildlife protection. The gap between a policy's intent and design, on the one hand, and its results, on the other, highlights the importance of a policy's fit with local cultural values. We provide some background and examples of this gap generated by the prevailing wildlife policy approach, which largely ignores cultural values. We focus on the principal international wildlife treaty, CITES, and its level of effectiveness in protecting five species: tiger, rhinoceros, Siberian musk deer, Asiatic black bear and snow leopard. We then examine in more detail some of the traditional cultural uses of wildlife and their importance to people in the region.

CITES is an international trade agreement among signatory countries (called Parties). The purpose is to protect wild species of plants and animals from unsustainable international trade. The treaty was drafted in 1963 by the International Union for Conservation of Nature (IUCN), the world's largest global conservation network, and eighty countries adopted it in 1973. CITES went into force in 1975 and to date has been adopted by 176 Parties. A fundamental assumption of CITES is that excessive, unregulated commercial trade is harmful to wild species.

CITES operates by placing a species on one of three Appendices, or lists, depending on the degree of protection two-thirds of voting Parties deem necessary. Species that are considered to be at risk of extinction in the wild are listed on Appendix I. This listing amounts to a trade ban in wild-caught specimens and these species can only be traded for educational or scientific purposes (Swanson 2000: 136). In these cases, the treaty requires export and import permits certifying that the species will not be used for commercial purposes. Species listed on Appendix II are not necessarily threatened, but Parties judge that trade in specimens must be controlled in order to ensure that use does not threaten the survival of the species in the wild. A Party may ask for assistance from CITES in regulating trade in any species under its jurisdiction that it considers at risk by requesting that the species be listed on Appendix III. Parties will also sometimes protest a listing by entering a reservation, where they refuse to comply with the restrictions attached to that listing. CITES relies on the Parties to fund, manage, monitor and issue reports regarding implementation of the Convention. Each Party is obligated to designate independent CITES Management and Scientific Authorities within its government. Any import, export, or re-export of species listed on an Appendix requires a license.

The teeth in CITES comes through trade sanctions and wildlife trade bans. For example, the United States threatened to impose trade sanctions on South Korea and China for failing to police

trade in rhino horn and tiger parts and on Japan for registering a reservation to a CITES listing. It imposed trade sanctions on Taiwan in 1994, which were lifted in 1996 (Ellis 2005: 221). CITES has suspended wildlife trade for countries which fail to enact requisite legislation or engage in significant levels of trade in banned species. Currently, in East Asia suspensions are in effect for Laos and Vietnam (CITES 2012).

The underlying assumption behind CITES restrictions appears to be that when trade is prohibited, demand for that particular species will abate, shift to a substitute, or be eliminated through enforcement. But international trade regulation policies only work when they take account of characteristics of both producer and consumer countries. The populations must embrace implementation on ideological, moral, or economic grounds, or disincentives to trade must be effective. Some claim that CITES is somewhat paternalistic and was implemented without considering how developing countries could maintain their wildlife or how people who depend on wildlife for their livelihoods would fare (Swanson 2000: 136). At the time countries adopted CITES, unregulated commercial trade was seen as a problem; few saw trade as a potential tool for conserving wild species. The experience of time, however, shows that within Asia many populations of species, despite the protection afforded by CITES, are in general decline. The IUCN has singled out poaching as either the predominant or a contributing factor.

No consensus exists about whether trade bans have helped or hindered protection of wildlife. Defenders of CITES claim that the situation today would be worse had the Convention not been implemented. Much of the current debate is about whether trade bans are likely to produce positive conservation results. Since CITES was adopted, several countries in Asia have undergone significant economic development. In China and Vietnam, the new middle and upper income classes have become driving forces behind trade in endangered species. They constitute a new market seeking derivatives of elephants, tigers, bears and rhinos as collectables to signal status and prestige (Mongabay 2012). The common wisdom is that, to combat this market force and protect species threatened with extinction, Parties need to enhance the effectiveness of trade bans through better enforcement and greater political will. Others argue that trade bans have made matters worse by restricting supply, rendering trade more profitable. In these circumstances, species are essentially converted into a non-renewable resource, thereby removing economic incentives to develop them (Conrad 2012: 245). Additionally, from a TCM perspective, less access to animal products contributes to diminished public health. Meanwhile, arguments continue concerning whether commerce can be a potentially positive tool for wildlife protection, rather than the chief threat.

The tiger, *Panthera tigris*, illustrates the complexity of the dilemma. Most subspecies were listed on Appendix I in 1977, so international trade has been illegal since the inception of CITES (t' Sas-Rolfes 2000).² Tigers occur only in Asia and the species is classified as endangered by the IUCN. Three of the nine subspecies have gone extinct in the last 100 years and a fourth, the South China tiger, *P.t. amoyensis*, is possibly extinct in the wild. Tiger census figures are very controversial and have only recently become rigorously undertaken, but IUCN reports about 2,200 breeding adults, down from an estimated total population of 100,000 in 1900. During that same period of time, tiger habitat has also declined by fifty percent. The overall population has declined by over fifty percent in the last three tiger generations (or, twenty-one to twenty-seven years; the IUCN uses species generation to measure trends). Although habitat loss poses a serious long-term threat to the continued existence of wild tigers, illegal trade in high-value tiger body parts poses the more immediate threat. Both wild-caught and captive-bred tigers are traded throughout East Asia. Among other range states, tigers are smuggled into East Asia from India and several Project Tiger reserves have been "poached out". While some argue that without the trade ban wild tigers would be even worse off, clearly the CITES trade ban has been far from universally successful in eliminating demand and protecting the tiger.

Rhinoceros present a similar situation. All five species were listed on Appendix I by 1977, but limited trade is allowed as some African sub-populations were subsequently moved to Appendix II (t' Sas-Rolfes 2000). Three of the five species occur in Asia, and the other two in Africa. According to IUCN estimates, the Sumatran rhino, *Dicerorhinus sumatrensis*, numbers less than 250 individuals, and the Javan population, *Rhinoceros sondaicus*, is at less than fifty. Both species are classified as critically endangered as populations have either shrunk by more than eighty percent over the last three generations (twenty years) or survive only in isolated areas. The primary threat to these two rhino species is excessive poaching for its horn. The Indian One-horned rhinoceros, *Rhinoceros unicornis*, is vulnerable. Habitat loss and poaching threaten its survival. In Africa, the white rhino, *Ceratotherium simum*, is near threatened and the black rhino, *Diceros bicornis*, is critically endangered. Both inhabit private and public land, and both are suffering heavy and increasing poaching losses. In 2011, 448 rhinos were illegally killed in South Africa, and 668 more in 2012 (Mongabay 2013). Vietnam is thought to be the major destination for African rhino horn (Milliken and Shaw 2012). The demand for rhino horn is such that over the last ten years sixty-five horns have been stolen from museums, zoos and game ranches, sometimes by armed robbery (Milliken and Shaw 2012: 65). Here, too, the protection afforded by CITES seems not to be working.

Despite being listed on Appendix I since 1979, populations of Asiatic Black Bear, *Ursus thibetanus*, are declining throughout Asia, with the possible exception of Japan. Actual population data are not available, but the IUCN estimates that the world population has declined by thirty to forty-nine percent over the last thirty years and that this rate will continue. It is listed as vulnerable. Habitat loss for the species is most severe in the southern portions of its range. According to the IUCN, however, the major threat to bears in China and Southeast Asia is trade. Bears are valued for their bile, which has medicinal properties. Captive breeding of bears occurs in China, South Korea, Laos, and Vietnam so that bile can be removed on a regular basis. The IUCN has reported that bears and bear cubs are taken from the wild to establish or supplement captive populations. Here, too, CITES has not stopped illegal poaching and trade.

Listed on Appendix I in 1975, the snow leopard, *Panthera unica*, is classified by the IUCN as endangered because populations have declined by at least twenty percent over the last sixteen years, or two generations. Due to their extensive ranges, thin density and hard-to-reach habitat, snow leopards are extremely difficult to census; their total population is currently estimated to be between 3,500 and 7,000 (International Snow Leopard Trust 2012). The reasons for their decline are habitat loss, loss of prey species, and poaching. Snow leopard pelts, stoles and hats are sold in markets in China and Mongolia, including even government-owned department stores and official historical sites. Its meat, nails, and bone are traded; the latter are valued for their medicinal properties that some consumers substitute for tiger bone. Despite legal protection, poaching is considered a major threat to the snow leopard.

Musk is among the most important ingredients in traditional medicines and is found only in the genus *Moschus spp.*, or musk deer. There are at least seven recognized species, five of which are distributed in China and listed on Appendix II. Other animals produce a musky odor, but the musk deer alone produces true musk. Synthetic alternatives are available and used in the perfume industry, but there is no official substitute on traditional medicine ingredients lists. There are 398 patented Chinese medicines using musk and it is also an ingredient in 165 prescription medicines (Parry-Jones and Wu 2001: 4). The Siberian musk deer, *Moschus moschiferus*, is classified as vulnerable because wild population densities appear to have decreased throughout its range. According to the IUCN, a population in Mongolia declined by eighty-four percent between 1990 and 2000. In China, estimates put the decline from three million in the 1950's to between 200,000 and 300,000 in the 1990's. The principal threat to musk deer is illegal hunting, which continues despite the protection afforded by CITES and China's Wild Animal Protection Law. Only male musk deer have the "musk pod", but

since most hunters cannot discriminate, about three to five musk deer are killed to obtain a single adult male (Parry-Jones and Wu 2001: iv).

Existing CITES regulations to protect wildlife in Asia have not reversed these worrying population trends. We have offered the explanation that such policies ignore the values of those who are expected to implement and follow the rules. Yet conservation practices compatible with Asian cultural values exist. Indeed, some practices developed alongside those values. Asian peoples implemented measures to address issues of scarcity and protection of natural resources long before CITES came into effect. These include rules restricting hunting and designating protected areas, as well as institutional capacity building, and captive breeding. In Mongolia, hunting seasons were designated by the time of Marco Polo, and in 1778 the first protected area was established. China's first nature reserve was established in 1956 (Coggins 2003: 14). Japan started setting up protected areas in the 1930's (Japan Ministry of Environment 2012).

The most controversial conservation practice is captive breeding. In 1984, North Korea established bear farms, which were subsequently adopted by Vietnam, to guarantee a stable supply of bile. China, which has a long history of domesticating wildlife, has established farms or breeding bases for tiger, rhino, musk deer and bears. Chinese musk deer farms were started more than fifty years ago, but the animals are difficult to raise in captivity and musk farms have thus far not been profitable (Parry-Jones and Wu 2001: 19). Tigers are also bred commercially in Laos, Vietnam and Thailand. Captive breeding is controversial because farmed animals are often kept in poor living conditions. Additionally, some reject farming as a solution because they believe it puts further pressure on wild populations by increasing demand (Cameron 2009). Others have raised doubts about this concern (t Sas-Rolfes and Conrad 2010).

The long history of consumptive use of wildlife in Asia is directly at odds with strict trade bans. Consumptive use is connected with long-standing cultural beliefs and attitudes of people in the region. They value wildlife, not because it is wild or natural, but because it is useful. Asia has an immense richness of flora and fauna; within this environment humans and wildlife have co-existed for thousands of years. It should not be surprising that this long cultural association has resulted in deep-rooted dependency on, and ongoing demand for, animal products (Coggins 2003: 9). Wildlife consumption and use in the region has taken many forms: medicinal and therapeutic uses and symbolic uses to suggest attributes like strength, wealth or status. They have used animals to detect poison, for entertainment, talismans and even as a unit of value or currency. As one Chinese biologist put it:

Since the beginning of human history, man has exploited mammals for his own purposes, i.e. providing him with food, clothing, and medicine, as well as sport and recreation and even an outlet for human artistic expression. Today, mammals are exploited for the same purposes as in the past and will continue to be vitally important to man far into the future (Sheng 1999: 1).

Chinese culture has had a strong influence over Asia and the instrumentalist approach towards wildlife has been embraced throughout Indochina, Malaysia, Indonesia and the Philippines – wherever the Chinese diaspora has occurred, as well as Japan, Korea and Mongolia. And this, of course, is the typical approach – there is nothing particularly Chinese or Asian about it. Preservationist approaches are novel, even in the West, despite attempts to link these values to older traditions.

The most significant manifestation of the instrumentalist approach in Asia is TCM. TCM refers to a set of traditional medicines researched and practiced in Asia for at least 3,000 years (Ellis 2005: 34). Felix Cheung reports that sixty percent of the population of Hong Kong and mainland China has visited a TCM practitioner and “anywhere from 60% to 75% of the populations of Taiwan, Japan, South Korea and Singapore use traditional medicine at least once a year” (Cheung 2011: S83). Wildlife has been an essential ingredient. Chris Coggins writes that in China wildlife is widely believed “to be endowed with healing properties greater than the biochemical sum of its parts” (Coggins 2003: 13). Traditional medicinal practitioners use musk for diseases of the liver, loins and heart, as well as in the treatment of delirium, stroke, skin infection and sore throats (Parry-Jones and Wu 2001). Rhino horn is used to reduce fever, calm convulsions, stop nosebleeds and prevent strokes. The tiger is considered a “treasure trove” of medicinal substances. Every part of the tiger is considered to have some medicinal, therapeutic, protective, spiritual, or status-conferring benefit. Bear bile is used to treat diabetes and eye problems (Davies 2005, 74). The active ingredient in bear bile, ursodeoxycholic acid, has been shown to be effective in the treatment of liver disease (Angulo 2002).

After joining CITES, each Party developed and promulgated the requisite domestic legislation and designated management and scientific authorities. Officially, laws and regulations are in place to protect most species, as required by CITES, although “major prosecutions for wildlife crime are still rare” (Nowell 2012: 10). Much of this amounts to mere ‘paper embracement’ where Parties enact the requirements but do not prioritize enforcement, even when intelligence and documented evidence of ongoing trade is readily available. In many parts of Asia anti-trade laws are

mostly “aspirational” or symbolic (Harris, R.B. 2008: 94). Parties also have other ways to avoid interference with trade. For example, they lodge reservations – Japan did so regarding whales in the 1980s. Sometimes Parties have applied to CITES for permission to participate in one-off auctions of stock-piled animal products. In 2007, some African countries were authorized to sell ivory to China and Japan. In 2006, the Chinese government undertook an internal investigation into the legalization of domestic trade in farmed tiger derivatives. And, the September 2012 meeting of the IUCN World Conservation Congress in South Korea included a Chinese TCM contingent lobbying against a motion that would phase out farming of bears for their bile.

We conclude from these and countless other examples of resistance to CITES implementation, as well as its results, that ‘no-use’ trade bans suffer from a lack of cultural fit with Asian beliefs and values regarding wildlife. In the next section we argue that considering and incorporating these beliefs and attitudes may be essential for the survival of vulnerable and endangered species.

IV. Environmental policy, as if other people matter

Richard Harris outlines three wildlife protection strategies: legal, educational and economic. He concludes that “while aspects of all three are ultimately necessary for successful conservation, Westerners have tended to overemphasize the first, have unwarranted faith in the second, and have underutilized the potential of the third” (Harris, R.B. 1996: 306). Advocates of continued trade-ban enforcement have often invoked the ‘precautionary principle’ to motivate ruling out the third strategy: absent a scientific consensus and given high levels of uncertainty about the effects of a policy, in order to avoid significant and irreversible harm, advocates of the policy bear the burden of justification (Cooney and Dickinson 2005: 287). However, in light of the evidence adduced in section III, it is unclear that the precautionary principle favours CITES-style trade bans (‘t Sas-Rolfes and Conrad 2010: 22-3). Top-down legal rules that conflict with the values and cultural commitments of those who are expected to implement and follow them are likely to meet with resistance. In the context of wildlife protection, this means that poaching and illegal trade will continue and may increase.

Legislation of one-size-fits-all constraints, which follow from a preservationist theory of environmental value, plausibly violates the precautionary principle precisely because one size doesn’t fit all. As we have shown, Chinese-influenced culture areas in Asia generally reject the theory of environmental value from which these legal constraints are thought to follow. These laws, imposed

from above, require significant levels of interference, force and coercion in order to motivate conforming behaviour. Penalties for violating them must be such that violators' evaluations of the expected costs are greater than expected benefits. This evaluation includes their estimation of the likelihood of being caught, so the state must have significant police powers, and demonstrate the internal discipline to avoid corruption in using them, in order for poachers and users of illicit animal products to discern a credible commitment on the part of the state to rooting out violations. Therefore, enforcement is costly and potentially wasteful. Regulators usually have very little to go on to determine the optimal level of penalties and investment in protection measures. Whether a given level of enforcement costs is efficient ultimately depends on the value of the environmental good, and there is no market for the effective enforcement of trade bans. Determining the social costs and benefits of enforcing them with more or less stringency and severity is, therefore, a difficult matter and it is unsurprising that CITES regulations have a low rate of compliance.

The potential of the economic approach is based on the observation that the introduction of economic incentives helps align the interests of wildlife with the interests and values of the people whose decisions affect it most. This is done most effectively by integrating the valued aspects of wildlife into the day-to-day lives of these people. There are many examples of this approach outside the Asian context. In Kenya, a system of revenue sharing with local tribes by state wildlife parks has had positive conservationist consequences (Schmidtz 2002b: 323ff.) Zimbabwe's CAMPFIRE program has had similar success incentivizing conservation by granting local communities the autonomy to decide what it will do with surplus numbers of wildlife and empowering them to monitor poaching activity. In the Philippines, Amanda Vincent's efforts to make seahorse fishing near Handumon sustainable relied on devising fishing methods and incentive mechanisms that encourage fishermen to manage seahorses as a renewable resource (Hasnas 2009: 123ff.) These and other examples of community-based resource management represent alternatives to top-down statutory enforcement. They tap into the economic interests of local people and, in addition, are compatible with their culturally-based beliefs and values.

Ronald Coase's most important contribution to this general set of issues was to emphasize common law solutions to resolve disputes over resources (Coase 1960). Common law solutions are tied to cultural norms and so avoid many of the problems with enforcing statutory regulations devised by outsiders. The common law characteristically invokes customary rules. Customary rules are established and time-honoured, having evolved 'bottom-up' within a social and historical process, rather than imposed top-down. They have evolved through a long process of trial-and-error

in addressing actual, historical disputes. They reflect the negotiated practices of a people as they found ways to cooperate and live amongst each other in relative peace. Legal scholar John Hasnas summarizes the broad historical outlines of this process of endogenous social learning:

Conflicts frequently arose that would result in violence or otherwise disrupt communal life and undermine cooperative activities. This created strong social incentives to find nonviolent, nondisruptive methods of resolving such conflicts. The members of the community responded to disruptions by pressuring disputants to voluntarily negotiate settlements and by facilitating such negotiations by acting as mediators. As certain types of negotiated settlements (through trial and error) proved successful and were repeated, the members of the community came to expect that similar disputes would be resolved similarly, and they began to base their behavior on these expectations (Hasnas 2009: 111-2).

Rules governing the use of a resource, like wildlife, would have currency because they became acknowledged by all the relevant parties to be authoritative. Members of the group recognized the individual benefits of converging on a common set of rules that guide people's decisions and interactions with others – a social morality. It is a morality that is justified in the relevant sense to all who have a stake in the social enterprise. They will have internalized the rules and, therefore, are more likely to be guided into conformity with them, and even to help enforce them. Such a morality is the imprint of a people's history.

According to Elinor Ostrom, this is largely how communities have resolved conflicts in resource use that threatened to significantly undermine many of the benefits that people derive from living in society with others. The puzzling thing about social problems deriving from conflicts in use isn't that they occur; it's that they don't occur more often. Narratives explaining how norms governing resource use developed and became internalized addresses part of this puzzle. The process of devising legitimate rules is devolved to the local level. Even enforcement of these rules has historically relied on community monitoring and peer controls (Ostrom 1990). The examples of wildlife protection measures we cited above in section III that developed in the Asian cultural context to manage their natural resources fit the general description of customary practices that protected the interests of wildlife by integrating their valued aspects into the day-to-day lives of people at the local level.

But legislation imposed from above that clashes with these de facto norms introduces disruptions and impedes the on-going evolution of the social morality to deal with novel problems.

Statutory regulations are usually fairly inflexible and difficult to change or revoke should they prove unsuccessful because they usually come with bureaucratic agencies with entrenched interests in the regulatory regime. Individuals within these agencies rationally aim to maximize their budgets and expand their regulatory reach (Niskanen 1971). Statutory regulations are also more likely to fail to take advantage of the history of a people and glean from their collective wisdom ways the group has settled on to address past disputes. Rather, the statutes are more likely to be devised by individuals further removed from the local situation and who do not know enough about matters peculiar to the local culture. Therefore, they are more likely to include provisions the community simply doesn't see the point of or which conflict with highly valued forms of life.

A further implication of this analysis is that top-down constraints will, as Harris says, take the form of *fa*, rather than *li*, in the motivational psychology of the affected populations (Harris, R.B. 1996: 312). That is, when they reject the values the statutory regulations are based on, their motivation to adhere to them will be tied to fear of detection and punishment rather than a genuine internalization of the relevant norms. CITES requirements, in effect, hold many people in Asia accountable to values that they don't acknowledge and to which they have no connection. This is plausibly morally illegitimate (Gaus 2011). It is presumptuous because it substitutes the judgments of Western environmentalists for their own considered views. And this seems oppressive and authoritarian because it disrespects their equal moral standing to settle on ways of living that answer to their own conception of what is good and right. The idea that all individuals are free and equal in moral status is central to modern moral and political theory. The claim is that (1) people are free in the sense that there are basic reasons to avoid coercing them and it requires special justification in order to be legitimate; and (2) people are equally capable moral reasoners in the sense that they have sufficient agency to reflect and reasonably determine questions of value for themselves. To coerce compliance with beliefs and values that people reasonably reject is disrespectful. The coercion has not been justified.

The environmentalist response at this point might be, "But the values of TCM practitioners who use animal products don't merit respect." We suspect many do harbour such attitudes, but this judgment implies that the use of animal products in TCM is beyond the limits of reasonable pluralism in values. This seems immoderate. One may have, given her own values and commitments, adequate reason to think that such use of animals is wrong, but it is another matter entirely to issue demands to others from that perspective about what they must not do. One's own values and commitments are not sufficient to justify interfering with those of others. Given the

importance all accord to living their lives in ways consistent with their deepest values, preservationists should be wary of resorting to moralistic legislation that interferes with the commitments of TCM practitioners (after all, TCM practitioners may feel that the views of preservationists don't merit respect). And, to suggest a connection with the arguments above, given the track-record of top-down legislation in protecting wildlife, it seems counter-productive to try.

The point here is that, as David Schmidtz puts it, "morality is more than one thing" (Schmidtz 2002b: 328). Preservationism may play an important role in *the morality of personal aspiration*. As a first-personal set of highly valued projects and ideals, it can order and structure an individual's choices, projects, decisions, and reasons for acting. But preservationism makes a poor basis for *the morality of interpersonal constraint*. This is the set of social rules that establishes limits to each individual's project pursuit such that all are legitimately held accountable to them. Schmidtz concludes, "Even given that preservationism is acceptable as a personal ideal, it remains a bad idea to create institutions that depend on people who do not share that ideal to take responsibility for realizing it" (Schmidtz 2002b: 328).

V. Conclusion

Western environmentalists continue to press familiar 'no-use' approaches to the problem of vulnerable species based largely on a commitment to preservationist ideals and the consequent notion that instrumentalist approaches are strictly impermissible. They generally trivialize or denounce the concerns of TCM consumers who, from the point of view of their own ideals, have decisive reason to reject the coercive policies required by CITES. No-use policies are legitimate, according to preservationists, because those who use and consume animal products must justify their use in order for it to be permissible, and the use of threatened, vulnerable and endangered species in traditional remedies for which there is little evidential support of their efficacy within modern medicine doesn't begin to meet the justificatory burden. Therefore, TCM consumers of remedies that contain such animal products are appropriately marginalized. Their views are false and they do bad things. But even if much of this is right – even if wildlife has non-instrumental value and TCM is largely bogus – the beliefs and values of TCM consumers should not be dismissed. Even those who share the preservationist morality of personal aspiration should worry about implementing it as a basis for interpersonal constraint in a global context where not everyone shares it. In light of this context, we have argued that the policies most environmentalists recommend based on their beliefs and values are authoritarian and counterproductive. First, we have, in effect,

argued that the justificatory burden should be reversed. In order for coercive policies to be legitimate – that is, unless it's a matter of simply bossing other people around – they must be justified in terms that all have sufficient reason to endorse. TCM consumers, though, have reason to reject the proposed restrictions on the use of animal products. To impose these restrictions anyway is authoritarian as it fails to treat them as moral equals. Second, we have argued that, given their reasons to reject no-use restrictions, it is little surprise that this approach has failed to stop or reverse declining numbers of target species. Without an appropriate cultural fit, preservationist approaches may be incompatible with realizing preservationist goals. Instrumental approaches that build on local and mutually acceptable rules are the basis for a more successful wildlife protection regime.

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CITES. Convention on International Trade in Endangered Species of Wild Fauna and Flora

IUCN. International Union for Conservation of Nature

TCM. Traditional Chinese Medicine

¹ The comment was submitted 22 December 2011 and is at http://www.nature.com/nature/journal/v480/n7378_supp/full/480S101a.html, accessed 30 August 2012.

² *P.t. altaica*, the Amur tiger, moved to Appendix I in 1987.