

ARTICLES

WHY “MANAGING” BIODIVERSITY WILL FAIL: AN ALTERNATIVE APPROACH TO SUSTAINABLE EXPLOITATION FOR INTERNATIONAL LAW

By
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The role of humans in mass extinctions necessitates an assessment of the collective human psychology responsible for the degradation of Earth’s life support systems. In this paper, the Author will cite instruments and discourse relevant to international environmental law to illustrate how an antiquated conception of biological hierarchies is condoned whenever other species are mentioned. As reflected in the law, humans do not just believe we are existentially unconnected with the rest of life, but that we have more right to live on the planet. This, ironically, allows us to rationalize activities that destroy the planet, even for ourselves. Nature is biodiversity. Reason and instinct implore reverence for nature. We cannot possibly retain respect and humility for the interdependent ecologic elements allowing for the appearance and continued existence of Homo sapiens when we consider those elements subordinate to us. It is therefore necessary to discuss legal and practical possibilities for maximizing the interests of humanity now and forever by not ignoring and rebuking the interests of all other life. Despite the absent roots in customary international law, recent legal developments and basic principles of law may be the seed for realizing a novel framework for international environmental law based on a principle of interspecies equity.

I. INTRODUCTION	210
II. PREMISES AND DEFINITIONS	212

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III. THE CURRENT INTERNATIONAL LEGAL APPROACH TO OTHER SPECIES	215
A. <i>Principles of Anthropocentrism and Sustainable Exploitation</i>	215
1. <i>Other Species Are Inconsequential</i>	217
2. <i>Other Species Are Property or a Resource</i>	218
B. <i>The Human God-Complex of "Planetary Management"</i> ...	223
IV. THE ALTERNATIVE TO INTERNATIONAL LEGAL ANTHRARCHY	228
A. <i>Introducing the Logic of Interspecies Equity</i>	228
B. <i>Looking for Synergy between Law and Biology</i>	233
1. <i>Interspecies Equity in Domestic Law</i>	234
2. <i>Interspecies Equity in International Law</i>	236
C. <i>Practical and Legal Obstacles to Applying Interspecies Equity</i>	238
1. <i>The Law Must Be Practical</i>	239
2. <i>Rights as Tools of the Law</i>	240
D. <i>A Paradigm of Equity</i>	242
1. <i>Drawing upon Existing Legal Principles</i>	244
2. <i>Interspecies Law: Defining Community Effectively and Consciously</i>	247
V. CONCLUSION	249

To chart our destiny means that we must shift from automatic control based on our biological properties to precise steering based on biological knowledge.¹

E.O. Wilson

I. INTRODUCTION

By endeavoring toward "responsible exploitation," international environmental law may be quickening our demise. While it may be said that all species exploit others in order to survive, it may otherwise be said without euphemism that all species cooperate with one another. Human sciences have overly focused on the competitive and exploitive perspective of nature.

It is clear that current approaches to environmental law, which emphasize the exploitive mindset of human sciences, are not working.² Law may be viewed as restricting exploitation between humans and

¹ Edward O. Wilson, *On Human Nature* 6 (Harvard U. Press 1978).

² Worldwatch Inst., *State of the World 2005: A Worldwatch Institute Report on Progress Toward a Sustainable Society* xvii–xviii (Linda Starke ed., W.W. Norton & Co. 2005); see James Gustave Speth, *Red Sky at Morning: America and the Crisis of the Global Environment* xii, 23–42 (Yale U. Press 2004) (discussing the variety of global environmental problems and a transition to a more sustainable global governance to minimize the adverse environmental effects that humans currently suffer); see also U.N. Env. Program, *Global Environment Outlook 2000: UNEP's Millenium Report on the Environment* 338 (Earthscan Publ. Ltd. 1999) (available at <http://www.unep.org/geo2000/english/index.htm>) (discussing major over-riding global trends: productivity and distribution imbalances for goods and services and the accelerating globalization changes with environmental stewardship lagging).

other species or among humans themselves, or law may be viewed as encouraging cooperation with the rest of life. This article argues that, because of millennia of a human “superiority complex,” the law must adopt a conscious effort to focus more on humility and cooperation.

Part III(a)(2) will show that, in addition to its fallacious justification based on disproved Cartesian and Aristotelian postulates of nature,³ exploitation-based environmental law is myopic and self-defeating. The exploitive mindset is present in international instruments whose subjects are nonhuman species, such as the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES) and the *Convention on Biological Diversity* (CBD),⁴ and it is manifested in international law generally. The best way to describe how the exploitive psychology is both evident and self-defeating is through scrutiny of the global environmental strategy it has engendered. Biospheric management⁵ is a stultifying delusion. It is the globalization of a strategy that has failed already many times over,⁶ and its failure this time is infinitely more serious. Attempting to manage the planet is exactly the opposite strategy necessary to achieve sustainable human behavior, given that our dilemma derives from the dilapidation of natural humility and subsequent disrespect for nature—whether viewed as divine creation or the brilliant chaos from whence humanity has come and will return.

Part III(b) discusses how to integrate a principle of interspecies equity into international law.⁷ This article argues in favor of equitable respect for all species—not simply animals. An argument for interspecies equity implies neither legal rights nor personhood for other species; rather, it is premised on the realization that rights-based approaches to other species could feed archaic notions of metaphysical

³ Kyle Ash, *International Animal Rights: Speciesism and Exclusionary Human Dignity*, 11 *Animal L.* 195, 203 (2005).

⁴ *Convention on International Trade in Endangered Species of Flora and Fauna* (Mar. 3, 1973), 27 U.S.T. 1087 [hereinafter CITES]; *Convention on Biological Diversity*, 1760 U.N.T.S. 79 (June 5, 1992) (available at <http://www.biodiv.org/convention/convention.shtml>) [hereinafter CBD].

⁵ See Barbara Ward & Renee Dubos, *Only One Earth: The Care and Maintenance of a Small Planet* 9 (Norton 1972) (In the background report commissioned for the Stockholm Conference, the authors state that “[n]ow that mankind is in the process of completing the colonization of the planet, learning to manage it intelligently is an urgent imperative. Man must accept responsibility for the stewardship of the earth. The word stewardship implies, of course, management for . . . human life not only now, but also for future generations.”).

⁶ See generally Clive Ponting, *A Green History of the World: The Environment and the Collapse of Great Civilizations* (Penguin Bks. 1991) (discussing various civilization collapses and the modern globalization potential collapse because of the link to the environment); see also J. Donald Hughes, *An Environmental History of the World: Humankind's Changing Role in the Community Life* (Routledge 2001) (discussing the changes in the environment and its effects upon human's role in community).

⁷ Gwendellyn Io Earnshaw, *Equity as a Paradigm for Sustainability: Evolving the Process toward Interspecies Equity*, 5 *Animal L.* 113, 121–24 (1999).

hierarchies of beings.⁸ Discussions of rights development suggest that species would be protected only if they possess humanlike attributes. Whether those attributes are morphology, cognizance, or sentience, this is problematic, both philosophically and logically, because such approaches are still human chauvinistic. Legally, anthropophilic protections may jeopardize biodiversity in their effectual exclusion of other life. Part IV is devoted to discussing how the principle of inter-species equity might be incorporated into international environmental law through an analysis of legal developments and general principles, as well as how such a legal principle might be applied outside the realm of theory.

II. PREMISES AND DEFINITIONS

This article will use interchangeably the terms “speciesism,” “human chauvinism,” and “human supremacism.” Contrarily, anthropocentrism should never be regarded simply as a synonym of speciesism. Speciesism indicates that the perspective is at least in part the result of a value judgment by the agent; whereas, anthropocentrism indicates only a limitation in perspective resulting from the vantage point. It is at times difficult to construe the distinction because speciesism can derive from anthropocentrism in the same way that racism can derive from considering only the perspective of one’s own ethnic group. This distinction is important because racism and speciesism may be only an effect of immediate ignorance caused by limited perspective. On the other hand, a long history of ignorance, or other reasons discussed below, may have led to the institutionalization of chauvinism. Overcoming ignorance takes education, but sociologists and biologists have been both racists and speciesists, respectively. Overcoming institutionalized chauvinism also requires retrofitting law to reflect new knowledge, as well as new legal measures to overcome the effectually deeper sociopsychological rooting of chauvinistic bigotry.⁹

The institutionalization of speciesism in international law requires a new term to delineate it, like patriarchy did for sexism. “Anthrarchy” is the homo-sociological organization of norms and values that systematically suppresses or discounts the importance and influence of other forms of life. The Author prefers to use a prefix hybrid of the possible “anthropo” (human) and “andro” (male). Patriarchy is better called andrarchy because the prefix “patria” refers to only fathers or elder males. Anthrarchy probably found its inception at the same time as patriarchy. Today, for all intents and purposes, it is collective human chauvinism, rather than only male chauvinism, that pervades legal systems. Nonetheless, anthrarchy is still marked profoundly by a

⁸ Ash, *supra* n. 3, at 195–96.

⁹ Joan Dunayer, *Sexist Words, Speciesist Roots*, in *Animals and Women: Feminist Theoretical Explorations* 11, 21–23 (Carol J. Adams & Josephine Donovan eds., Duke U. Press 1995).

historical suppression of female influence on norms and values in human society.¹⁰ Thus, the prefix "anthro" may indicate human and predominantly male, and the term "anthrarchy" by definition implies an influence of patriarchy.

Referring to E.O. Wilson's sociobiological argument that much of human culture derives from genetic propensities,¹¹ it could be misconstrued that "exclusionary human dignity" is human nature.¹² Wilson refers to our closest genetic relatives, chimpanzees, as "little-brother species,"¹³ albeit with apparently good intentions. On the other hand, Wilson acknowledged that "no intellectual vice is more crippling than defiantly self-indulgent anthropocentrism,"¹⁴ and perhaps unwittingly argued that the precedent in our species is actually an egalitarian animism represented somewhat by surviving food foraging societies.¹⁵ Using our social history as evidence, neither anthrarchy nor patriarchy appears genetically wired in humans.

Why anthrarchy evolved as a sociocultural system may hark back to the beginning of the agricultural revolution, when increased resource scarcity forced humans to develop new ways to obtain sustenance from smaller areas of land.¹⁶ Immediate survival required rationalizing activities toward nature that were instinctively discomfiting, like being sedentary, working longer for less food, and exploiting other species in a manner that, because of the scale of exploitation, was both disrespectful and unsustainable.¹⁷ Such behavior needed a value system for justification in light of its missing sociobiological foundation, especially as sedentism thwarted the population control inherent in nomadism. This value system expedited exponential population growth, resource exploitation, and a trend of increasing intensity in the spikes and collapses of human settlements. Around ten thousand years later, anthrarchy continues to validate behavior toward nature that is unsustainable and disrespectful, and the global human population is headed toward the first global collapse of civilization.

¹⁰ Leonard Schlain, *The Alphabet Versus the Goddess: The Conflict between Word and Image* 2, 3, 7 (Viking Penguin 1998) (The thesis of Schlain's book is that the suppression of the feminine coincided with the rise of the alphabetization of human language. The book gives a general account, however, of the systematic de-legitimization of female influence in society across human history.); *see also* Dunayer, *supra* n. 9, at 21–23 (discussing society's suppression of the female influence).

¹¹ Wilson, *supra* n. 1, at 32.

¹² Ash, *supra* n. 3, at 207.

¹³ Wilson, *supra* n. 1, at 6, 31. Wilson also uses the misnomer "lower primates."

¹⁴ *Id.* at 17.

¹⁵ *Id.* at 34; *see also* Hughes, *supra* n. 6, at ch. 2 (discussing the application in the context of Aboriginal Australians).

¹⁶ *See* Ponting, *supra* n. 6, at 88. (Ponting states that agriculture was "adopted by human societies around the globe mainly because rising population meant that more intensive ways of obtaining food were necessary." Most of humanity has nonetheless lived "on the edge of starvation" until around two hundred years ago.)

¹⁷ *Id.* at 89–91; *see generally* Hughes, *supra* n. 6 (discussing the changes in the environment and its effects upon humans' role in community).

Anthrarchy as a value system facilitates intuitive reactions that automatically suppress nonhuman species to avoid those species gaining relative influence over what humans consider normal or desirable—just as patriarchy suppresses the possibility of feminine influence.¹⁸ The sociocultural system fiercely defends itself and the values by which it is defined, possibly because the sociobiological foundation is still missing. This is why simply endowing animals with rights will not be sufficient to protect them, and why it is unlikely that animal rights will ever be considered legitimate within a system of anthrarchy. Protecting biodiversity requires addressing anthrarchy head on and the exclusionary ethic it sustains, which is speciesism.

Although anthrarchy as a social system may not be inherent, the purported “selfish gene,”¹⁹ which could be responsible for cooperative traits,²⁰ also may encourage a propensity in individuals to favor their own species through favoring the genotype as represented in themselves as one organism. In effect, the tendency for individualistic competition may suppress the tendency for socially oriented cooperation, but the propensity for both traits is rooted in the genes. Furthermore, humans evolved to balance these gene expressions socially, with males being more individualistic and females being socially oriented. There is physiological, neurological, linguistic, and historical evidence that these nearly universal gender roles may be influenced by sex (biology).²¹

For the purposes of this argument, it can be generalized that males exhibit masculine behavior and females exhibit feminine behavior. If males are more likely to be competitive, the selfish gene theory correlates well with the rise of social domination of males over females in human populations. Again, patriarchy and anthrarchy probably find their beginnings at the agricultural revolution.²² In fact, some scholars argue that the degree of male cultural dominance is proportional to the socially perverse relationship with other species.²³ Another perspective could be that patriarchy begot anthrarchy, or vice versa. This im-

¹⁸ John Stuart Mill, *The Subjection of Women* 154–56 (D. Appleton & Co. 1869).

¹⁹ Richard Dawkins, *The Selfish Gene* (Oxford U. Press 1976).

²⁰ See Steven Pinker, *The Blank Slate: The Modern Denial of Human Nature* 53, 191 (Penguin Group 2002) (discussing the possible effects of humans favoring the human species because of the inherent cooperative trait and the resulting harm to other humans and species).

²¹ See Schlain, *supra* n. 10, at ch. 3 (Schlain, a neurologist, illustrates how different sides of the brain are responsible for different behavioral traits and how human history has suppressed the talents exuded by the right hemisphere, those traits being considered more feminine. Women have between ten and thirty-three percent more connecting neurons between the left and right hemispheres.)

²² See Ponting, *supra* n. 6, at 152–53 (discussing the agricultural revolution’s effects on the way humans view and dominate other species solely for human benefit, the basic beginning of the anthrarchy mindset); see also William A. Haviland, *Cultural Anthropology* 173 (9th ed., Harcourt College Publ. 1999) (discussing the role of human dominance over other species that emerged during the agricultural revolution).

²³ *Animals and Women: Feminist Theoretical Explorations*, *supra* n. 9.

plies that increasing women's rights will correlate with an increase in environmentally sensible policy, which appears to be corroborated by human development indicators.²⁴ The logical conclusion is that naturally harmonious policy will entail balancing the view of nature as a world of competition with the view that nature is a world of cooperation, and that this will happen by rebalancing the influence of masculine and feminine politics. Egalitarian and food foraging societies that exist today are remarkably peaceful and internally cooperative. What little aggressiveness modern foraging societies exhibit against other humans is mostly the result of being threatened by surrounding expansionist states.²⁵

International law found its inception at a time of widespread state imperialism, but the state-oriented system has changed, and now a fundamental concept of international law is that all states are equal.²⁶ Through human rights development, this egalitarianism has come to propose that non-state nations and even human individuals are equal.²⁷ International law has undergone an evolution due to changing perceptions of social hierarchies.

III. THE CURRENT INTERNATIONAL LEGAL APPROACH TO OTHER SPECIES

A. *Principles of Anthropocentrism and Sustainable Exploitation*

International environmental law need not be anthracic in order to specialize in the needs of human society. At the same time, the rules that govern any group are most cogent if they reflect that group's specific needs, whether the group be doctors, women, or an ethnicity. The law is simply one way of organizing a society's norms and values.²⁸

²⁴ See U.N. Dev. Programme, *Human Development Report 2006* 363–66 (Palgrave Macmillan 2006) (available at <http://hdr.undp.org/hdr2006/pdfs/report/HDR06-complete.pdf>). One illustration that women's rights leads to responsible use of economic resources is subtracting the Human Development Index (HDI) rank from the Gender-Related Development Index (GDI) rank. HDI assesses economic, social, and individual health and well-being. GDI is an indicator of women's civil and political equality. According to the 2006 reports posted on the U.N. Development Programme website, the highest discrepancy in any country was 10 out of a possible 136. This was based on the GDI of 144 countries. *Id.*

²⁵ Ponting, *supra* n. 6, at 166–70; see Dorane L. Fredland, *Empowering Women in Rural India: A Model for Development*, in Jill M. Bystydzienski, *Women Transforming Politics: World Strategies for Empowerment* 195 (Ind. U. Press 1992) (discussing women's political role for transforming women's empowerment strategies to overcome humans' past and current behavior in regard to human interactions); see also Kelly-Kate S. Pease, *International Organizations: Perspectives on Governance in the Twenty-First Century* 99 (Prentice-Hall 2000) (noting that the true balances of power have deterred aggression, but a balance of power is prone to failure).

²⁶ U.N. Charter art. 2, ¶ 1.

²⁷ *International Convention Civil & Political Rights* Preamble, art. 1, ¶ 1 (entered into force Mar. 23, 1976), 999 U.N.T.S. 171.

²⁸ Harold J. Berman, *Law and Revolution: The Formation of the Western Legal Tradition* 3 (Harvard U. Press 1983).

The ways in which socially oriented nonhumans govern themselves will entail the nuances and particular needs of their species just as laws do in human culture. The law is much easier to scrutinize than unwritten mechanisms of social organization, such as culture or morality, and scrutiny reveals that international environmental law regards biodiversity as if it was a can of peaches in winter—stressing that it be “conserved and used sustainably.”²⁹ Legal instruments and discourse tend to ignore the fact that humans are a part of biodiversity because they are too anthropocentric.

Avoiding anthropocentrism means that, as a matter of course, human laws acknowledge the basic needs of other species. Our ubiquity and relative impact demand that we consider the needs of other species more than they consider our needs, and humans absolutely must respect the requirements of biodiversity if we want to continue to exist.³⁰

Legal discourse, declarations, and treaty texts define sustainable development as a method of interminably exploiting nature.³¹ This extends to everything from minerals to animals. Legal scholar Gwendolyn Io Earnshaw calls this “exploitation-based sustainability.”³² The anthropocentric nature of international environmental law reinforces this perspective. Paradoxically, explicit reference to anthropocentrism may not derive from anthrarchy but from an attempt to avoid exploitation of people by the state.³³ A progressive adaptation of perspective in environmental law will be from state-centric, to human-centric, to biocentric.

International environmental law’s emphasis on the exploitation of nature coupled with its emphasis on anthropocentrism make it solipsistic. The law does not recognize humanity as coming from and remaining a part of biodiversity. The anthrarchic misconception persists that *Homo sapiens* are above nonhuman species to such a degree that we are not animals.³⁴ This perceptual filter causes international environmental law to regard nonhuman species in three different ways. First, nonhuman species are inconsequential. Second, nonhuman species are property. Third, every nonhuman species on the planet, as in-

²⁹ See CITES, *supra* n. 4, at Preamble (The Preamble to CITES expresses the contracting parties’ determination “to conserve and sustainably use biological diversity for the benefit of present and future generations.”).

³⁰ David Hunter et al., *International Law and Environmental Policy: Treaty Supplement* 920 (Found. Press 1998).

³¹ Earnshaw, *supra* n. 7, at 115–16.

³² *Id.* at 116.

³³ Rainer Arnold, *Constitutional Courts of Central and Eastern European Countries as a Dynamic Source of Modern Legal Ideas*, 18 Tul. Eur. & Civ. L. Forum 99, 100 (2003).

³⁴ Frans de Waal, *The Ape and the Sushi Master: Cultural Reflections by a Primateologist* 69 (Basic Bks. 2001) (De Waal calls this “anthropodenial.”).

dividuals and as groups, is considered a non-sentient resource to be “collect[ed],”³⁵ “harvested,”³⁶ or otherwise used for human benefit.³⁷

1. *Other Species Are Inconsequential*

Neglecting to consider other species constitutes myopic anthropocentrism—ignoring the canary in the coal mine, to use the inappropriate but illustrative idiom. One result of this myopia is that protection of other species (or all biodiversity) is usually addressed as separate from all other environmental issues. When new legislation is proposed for reducing air pollution, water pollution, and so on, the emphasis of benefits is usually limited to its effects on human health. Unless the legislation pertains to a species that humans exploit, policy risk assessments usually ignore the impact on nonhuman species and only predict effects on humans.³⁸ Rather than bring into the debate the health effects on nonhuman species, free or captive, critics of quantitative environmental impact assessments³⁹ have targeted controversies like the monetization of human life. The monetization of life that is not human has received little criticism.⁴⁰

Treating life and quality of life as inconsequential is one problem with free market economic models. Environmental disasters caused by deforestation, aquifer depletion, and species extinction are by definition market “externalities,” and are not regarded in the primary equation of development.⁴¹ The costs of these disasters actually augment macroeconomic indices by contributing to gross national product. In reality, failing to address the needs of nonhuman species can be disastrous for humans and is arguably the number one generator of economic refugees.⁴²

³⁵ CBD, *supra* n. 4, at art. 9(d).

³⁶ *United Nations Convention on the Law of the Sea* art. 119 (entered into force Nov. 16, 1994), http://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf [hereinafter UNCLOS].

³⁷ CBD, *supra* n. 4, at Preamble (“Reaffirming that States have sovereign rights over their own biological resources. . . . Determined to conserve and sustainably use biological diversity for the benefit of present and future generations.”); *World Charter for Nature* Preamble, U.N. Doc. A/RES/37/7 (Oct. 28, 1982) (available at <http://www.un.org/documents/ga/res/37/a37r007.htm>) (“Reaffirming that man must acquire the knowledge to maintain and enhance his ability to use natural resources in a manner which ensures the preservation of the species and ecosystems for the benefit of present and future generations.”).

³⁸ David E. Adelman, *Scientific Activism and Restraint: The Interplay of Statistics, Judgment, and Procedure in Environmental Law*, 79 *Notre Dame L. Rev.* 497, 515–16 (2004).

³⁹ Andreas F. Lowenfeld, *International Economic Law* 333 (Oxford U. Press 2002) (discussing requirements of the Maastricht Treaty of the European Union).

⁴⁰ CBD, *supra* n. 4, at Preamble.

⁴¹ Eban S. Goodstein, *Economics and the Environment* 176–86 (2d ed., John Wiley & Sons, Inc. 1999).

⁴² See David Hunter, James Salzman & Durwood Zaelke, *International Environmental Law and Policy* 21 (2d ed., Found. Press 2002) (Quoting Hal Kane’s observation that environmental degradation is a significant source of refugee flows in *The Hour of De-*

Healthy biodiversity and healthy human habitat go hand-in-hand in ways we will never adequately understand.⁴³ Through hindsight we can see that the systematic destruction of the habitat of nonhuman species living in the forested hills of Haiti precipitated mudslides ending in massive human deaths.⁴⁴

While more politically complicated, if India, Nepal, and China had upheld the health of biodiversity in Himalayan forests, Bangladesh would not have become one big lake.⁴⁵ These consequences arose by viewing forests as useful only for trees and regarding trees as useful only for wood.⁴⁶ Principle three of the Rio Declaration on Environment and Development (Rio Declaration) reflected this sentiment by condemning trade barriers that deter non-ecologically viable forest exploitations even going so far as to say such trade barriers impede long run “sustainable management” of the forests.⁴⁷ By considering inconsequential any species of the forest that is not a tree, the Rio Declaration in this instance epitomizes the general neglect of non-exploitable or unexploited species in international legal instruments. Another effect is the unwarranted assumption that young tree farms are more efficient carbon sinks than biodiverse old growth forests.⁴⁸ This assumption is quite helpful to the tree cutting industry, but certainly not to other plants and animals that comprise those forests.

2. *Other Species Are Property or a Resource*

Some scholars argue that privatizing common goods leads to better protection of those goods because an owner will responsibly man-

parture: Forces that Create Refugees and Migrants, Worldwatch Paper 125, 10–14 (1995).

⁴³ See *Id.* (citing the observation that conserving ecosystem services is inherently difficult in *Nature's Services: Societal Dependence on Natural Ecosystems* 3–4 (G. Daily ed., Is. Press 1997)).

⁴⁴ Jane Regan, *Forest Land in Haiti Fading Fast: Natural Resource Nudged to the Brink*, 67 *Miami Herald* A1 (Aug. 5, 2003) (available at <http://www.latinamericanstudies.org/haiti/haiti-deforestation.htm>) (the entire forest cover in Haiti has dropped from seventy-five percent in 1492 to one percent in 2002); Socialist Worker Online, *Haiti's Disaster of the Free Market*, http://socialistworker.org/2004-1/502/502_03_Haiti.shtml (June 4, 2004) (May 2004 mudslide killed over two thousand Haitians).

⁴⁵ Associated Press, *Deforestation, Urbanisation Magnify Bangladesh Floods*, <http://nishorga.com/news/2004/08/australian-deforestation-urbanisation.html> (Aug. 1, 2004); Associated Press, *Death Toll from S. Asia Floods Tops 1,500*, http://www.usatoday.com/news/world/2004-08-01-asia-floods_x.htm (Aug. 1, 2004).

⁴⁶ See generally Report of the United Nations Conference on Environment and Development, UN Doc. A/CONF.151/26 (Vol. III), Annex III (1992) (discussing desirable forest management practices in Rio Declaration Principle 2(b)).

⁴⁷ *Id.* at Principles 8(f), 13, 14.

⁴⁸ See Hunter et al., *supra* n. 42, at 601 (noting that carbon sequestration may decline as trees mature); see also Richard G. Newel & Robert N. Stavins, *Climate Change and Forest Sinks: Factors Affecting the Costs of Carbon Sequestration*, 40 *J. Envtl. Econ. & Mgt.* 211 (2000) (reflecting the misconception represented by Kyoto); but contrast Kyaw Tha Paw U et al., *Carbon Dioxide Exchange Between an Old-growth Forest and the Atmosphere*, 7 *Ecosystems* 513 (2004) (contradicting the interpretation that old-growth forests are not efficient carbon sinks).

age them if she controls the benefits.⁴⁹ Ironically, this perspective is used as an argument both *for* protection of free nonhuman species⁵⁰ and *against* legal personhood for captive species.⁵¹

Despite age old appeals to responsibility and stewardship over nonhuman species,⁵² the opposite is clearly the norm. Viewing other species as property has incited neither conservation nor compassion.⁵³ Discourse and international legal instruments are fraught with Cartesian verbiage that describes other species as commodities and automatons. Thus, humans do not suppose ourselves to kill other conscious beings, but to destroy,⁵⁴ take,⁵⁵ harvest,⁵⁶ and export stocks⁵⁷ and specimens.⁵⁸ The past enslavement and commodification of groups of humans employed similarly degrading verbiage.⁵⁹

⁴⁹ Robert Garner, *Political Ideology and the Legal Status of Animals*, 8 Animal L. 77, 79 (2002).

⁵⁰ Ponting, *supra* n. 6, at 174–75.

⁵¹ Garner, *supra* n. 49, at 79.

⁵² See Ponting, *supra* n. 6, at 142 (noting the minority view in the early Christian church); but see Intl. Vegetarian Union, *History of Vegetarianism—Mohandas K. Gandhi (1961-1948)*, <http://www.ivu.org/history/gandhi/> (last updated Dec. 22, 2006) (quoting Mohandas K. Gandhi: “The greatness of a nation and its moral progress can be judged by the way its animals are treated.”).

⁵³ Daniel M. Warner, *Environmental Endgame: Destruction for Amusement and a Sustainable Civilization*, 9 S.C. Env'tl. L.J. 1, 3–5 (2000).

⁵⁴ See Endangered Species Act of 1973, 16 U.S.C. § 1536(9)(2)(b) (2006) (providing that prohibited acts include a number of actions that could destroy a species' population).

⁵⁵ *Id.* at § 1532(19) (“Take” means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”); see also *Convention on the Conservation of Migratory Species of Wild Animals* art. I (June 23, 1979), 19 I.L.M. 15 (Art. I(1)(i) interprets “[t]aking” to mean “taking, hunting, fishing, capturing, harassing, deliberate killing, or attempting to engage in any such conduct.”).

⁵⁶ 16 U.S.C. § 1532(19).

⁵⁷ See *International Convention for the Regulation of Whaling* Sec. A, 1716 (Dec. 2, 1946), T.I.A.S. No. 1849 (preamble to treaty discusses regulation of whaling in terms of whale stock).

⁵⁸ CITES, *supra* n. 4, at art. V (CITES considers regulation in the trade of “specimens” of species.).

⁵⁹ Charles P.M. Outwin, *Securing the Leg Irons: Restriction of Legal Rights for Slaves in Virginia and Maryland, 1625-1791, Slavery in Early America's Colonies – Seeds of Servitude Rooted in the Civil Law of Rome*, 1 Early Am. Rev. 3 (Winter 1996) (Slaves in ancient Rome were referred to as *res*, or movable property, which is similar in translation to the use of “boy” for male slaves of all ages in eighteenth century England. This classification is also common to other slave systems in ancient Mesopotamia, Egypt, India, and China.); compare *Blackstone's International Human Rights Documents* 3 (P.R. Ghandhi ed., 3d ed., Oxford U. Press 2002) (Art. 1 § 2 of the 1926 Slavery Convention refers to the “slave trade” as “all acts involved in the capture, acquisition, or disposal of a person with the intent to reduce him to slavery.”) with the 2000 *Protocol to Convention against Transnational Organized Crime*, Annex II at art. 3(a) (which considers human trafficking as the “recruitment, transportation, transfer, [harboring], or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of deception, of the abuse of power or of a position of vulnerability” and the use of this verbiage is clearly different from that of the *Slavery Convention*) (available at http://www.unodc.org/pdf/crime/a_res_55/res5525e.pdf).

The biosphere has plenty of experience with human slavery and ownership of nonhuman species.⁶⁰ Property generally can be bought and sold, traded, and otherwise manipulated as the owner sees fit. Because of anthroparchy, by and large, ownership has not led to the protection of nonhuman species. Ownership of nonhuman species has evolved from pastoralism to sedentary animal farming to industrialized commodification that denigrates nonhumans, making commonplace today's methods whereby billions of sentient nonhumans live only a fraction of their natural lives, suffering miserable torment.⁶¹

The industrial commodification of nonhuman species is the main culprit of environmental destruction and is significantly responsible for freshwater depletion, obliteration of forests, loss of topsoil, water and air pollution, and loss of biodiversity.⁶² Animal farming is the number one anthropogenic source of greenhouse gases causing global warming.⁶³ Industrial animal farming is rapidly becoming a worrisome source of some of the most fatal new diseases,⁶⁴ and is almost entirely responsible for food-borne illness in seventy-six million Americans each year, five thousand of whom die.⁶⁵ Instead of addressing the inevitable sanitation dilemma of Concentrated Animal Feeding Operations (CAFOs), domestic legal policies have focused instead on irradiating food products and giving preventative doses of antibiotics to

⁶⁰ Ponting, *supra* n. 6, at 270 (Slavery has been common in human societies since humans became sedentary.).

⁶¹ Charles Blackorby & David Donaldson, *Pigs and Guinea Pigs: A Note on the Ethics of Animal Exploitation* 102 *Econ. J. Royal Econ. Socy.* 1345 (1992).

⁶² Hunter et al., *supra* n. 42, at 15; Earnshaw, *supra* n. 7, at 131.

⁶³ See Food and Agriculture Organization of the United Nations (FAO), *Livestock's Long Shadow: Environmental Issues and Options* (FAO Publications, 2006) (FAO recently estimated that about twenty percent of global greenhouse gas emissions are from animal farming. The United States alone is responsible for twenty-five percent of the world total emission of greenhouse gases); see also Hunter et al., *supra* n. 42, at 600 (animal agriculture is estimated to create ten times more carbon dioxide than plant agriculture); see also David Pimentel & Marcia Pimentel, *Sustainability of Meat-Based and Plant-Based Diets*, 78 *Am. J. Clin. Nutr.* 3, 660 (2003) (Worldwide deforestation and conversion of rangeland to create cropland, much of which was to grow food for cows in wealthy countries, has reduced the world carbon sinks.); Dina Kruger, U.S. EPA, *The Role of 'Other Gases' in Addressing Climate Change*, <http://www.rff.org/rff/Events/USJapanClimate/loader.cfm?url=/commonspot/security/getfile.cfm&PageID=11639> (Feb. 12, 2004) (Although carbon dioxide is the primary greenhouse gas, comprising fifty percent of all greenhouse gases, methane is perhaps more worrisome, since it is fifty-six times more potent in causing global warming and is an ozone-depleting substance.).

⁶⁴ Danielle Nierenberg & Brian Halweil, *State of the World 2005: Redefining Global Security* 67–70 (Worldwatch Inst. 2005) (available at <http://www.worldwatch.org/node/1044>).

⁶⁵ P.S. Mead et al., *Food-Related Illness and Death in the United States*, 5 *Emerging Infectious Diseases* 607 (1999).

nonhumans in such crowded conditions that epidemic disease is normal.⁶⁶ Neither method has proven particularly effective.⁶⁷

Together with the view that nonhuman species are property, human preference for a few traditionally exploited species—especially cows, chickens, and pigs—is causing thousands more species to disappear and destroying entire ecosystems.⁶⁸ Economists Blackorby and Donaldson argue that the United States loses economic utility by treating farmed animals so horribly.⁶⁹ Much criticism has focused on how the World Trade Organization (WTO) supports industrial farming by virtue of reducing trade barriers for large farms. On the other hand, it is profoundly ironic that the branch of international law most amenable to commodification and property rights may prove a friend to nonhuman species to the extent that the WTO is focused on the eventual eradication of subsidies that make these horrific factory farms competitive with traditional animal farming, or indeed enable factory farms to continue operating at all.⁷⁰

Related to the concept of nonhuman species as property is the legal orthodoxy of state sovereignty over natural resources.⁷¹ It is uncommon for states to conserve biodiversity when it is not obviously

⁶⁶ See Michael Greger, *Bird Flu: A Virus of Our Own Hatching* (Lantern Bks. 2006) (also arguing that all epidemic human diseases, even the common cold, arose from animal agriculture).

⁶⁷ See Michael T. Osterholm & Andrew P. Norgan, *The Role of Irradiation in Food Safety*, 350 *New Eng. J. Med.* 1898, 1899-1900 (2004) (irradiation would reduce the impact of food-borne illness in the United States by less than 2%); see generally World Health Org., *Impacts of Antimicrobial Growth Promoter Termination in Denmark* 32, 45 (WHO Intl. Rev. Panel, Nov. 6-9, 2002) ("WHO convened an independent, multidisciplinary, international expert panel to review the potential consequences to human health, animal health and welfare, environmental impact, animal production, and national economy resulting from Denmark's program for termination of the use of antimicrobial growth promoters in food animal production, particularly swine and broiler chicken[s]. . . . We conclude that under conditions similar to those found in Denmark, the use of antimicrobials for the sole purpose of growth promotion can be discontinued.") (available at <http://www.who.int/salmsurv/en/Expertsreportgrowthpromoterdenmark.pdf>).

⁶⁸ FAO, *supra* n. 63, at 214-15 (2006); Earnshaw, *supra* n. 7, at 131.

⁶⁹ See Blackorby & Donaldson, *supra* n. 61, at 1357-69 (Their argument includes studies and observations that techniques used to speed the "production" of animal products, such as chemicals, antibiotics, and slaughtering practices that induce fear-related hormones, cause significant damage to the health of people who consume such products. They discuss economic utility lost because of poor nutrition, pollution, and destruction of the environment, as well as feeding farm animals instead of humans. In addition, they analyze how utility can be lost by humans degrading and demoralizing obviously sentient animals, which in turn affects how we view other humans.)

⁷⁰ See *id.* (Blackorby & Donaldson noted that these "industrial farms" are uneconomic. This argument may be strengthened by the fact that they require more energy as inputs than they generate in outputs.); Ponting, *supra* n. 6, at 292.

⁷¹ See e.g. *Stockholm Declaration of the United Nations Convention on the Human Environment*, (June 16, 1992) 11 I.L.M. 1416 (Principal 21 says "States have, in accordance with the charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or con-

profitable to do so.⁷² A few examples exist where, absent the economic incentive, protection for certain species has emerged or is emerging in international environmental law.⁷³ It is testament to the anthracic mindset that these laws involve nonhuman species we consider most like us, based on respective cognitive abilities or morphology. The most protected species are whales, dolphins, elephants, and nonhuman primates.⁷⁴

Aristotle certainly would have agreed with protecting these species first since, as mammals with a cognitive capacity similar to humans, they must have souls of higher “rank” in the *scala naturae*.⁷⁵ But efforts to protect these species are hampered by humans’ exploitation of their sustenance—e.g., exploitation of species like fish, which are also considered property, but have not yet received similar protection. Attempts to protect elephants while regarding them as a tradable resource are also dead in the water and probably explain why immediately after the implementation of CITES, the killing of elephants actually flourished.⁷⁶ This consequence did not stop the CBD from focusing, nineteen years later, primarily on the importance of bio-prospecting to find species particularly valuable for the augmentation of trade and technology, which has nothing to do with conservation per se.⁷⁷

Instruments that address transboundary migratory species that are profitable to exploit include the *United Nations Convention on the Law of the Sea* (UNCLOS),⁷⁸ the *International Convention for the Regulation of Whaling* (ICRW),⁷⁹ and the *General Agreement on Tariffs*

trol do not cause damage to the environment of other states or of areas beyond the limits of national jurisdiction.”).

⁷² Speth, *supra* n. 2, at 38–41.

⁷³ See CITES *supra* n. 4, at Preamble (“Recognizing that wild fauna and flora in their many beautiful and varied forms are an irreplaceable part of the natural systems of the earth which must be protected for this and the generations to come.”); CBD, *supra* n. 4, at Preamble (“Reaffirming that States have sovereign rights over their own biological resources . . . Determined to conserve and sustainably use biological diversity for the benefit of present and future generations.”).

⁷⁴ Protection for dolphins and whales has been undermined by killing and taking fish. Hunter et al., *supra* n. 42, at 941–53; Anthony D’amato & Sudhir K. Chopra, *Whales: Their Emerging Right to Life*, 85 Am. J. Intl. L. 21, 50 (1991); Michael J. Glennon, *Has International Law Failed the Elephant?* 84 Am. J. Intl. L. 1, 10–17 (1990).

⁷⁵ Aristotle: *Selections* 169-205 (Terence Irwin & Gail Fine trans., Hackett Publ. Co., Inc. 1995); see also Lori Marino, *Convergence of Complex Cognitive Abilities in Cetaceans and Primates* 59 Brain, Behavior & Evolution 21 (2002) (examples of convergence in higher-level complex cognitive characteristics that exist in the animal kingdom, especially in whales, dolphins and primates) (available at http://www.emory.edu/LIVING_LINKS/pdf_attachments/Marino_convergence.pdf).

⁷⁶ Glennon, *supra* n. 74, at 18–22.

⁷⁷ Hunter et al., *supra* n. 42, at 949.

⁷⁸ UNCLOS, *supra* n. 36, at Arts. 62–67.

⁷⁹ See ICRW Preamble (Dec. 2, 1946), T.I.A.S. No. 1849 (“[r]ecognizing that the whale stocks are susceptible of natural increases if whaling is properly regulated, and that increases in the size of whale stocks will permit increases in the number of whales which may be captured without endangering these natural resources”).

and Trade (GATT).⁸⁰ These species are considered shared resources, or *res communis*. Synonyms in international law include "public trust,"⁸¹ "common heritage,"⁸² and, indirectly, "common concern."⁸³ International environmental law regards the exploitation of nonhuman species as a form of usufruct, especially in light of recent legal focus on the principle of intergenerational equity.⁸⁴ Regarding "unprofitable" species simultaneously as *res communis* and the property of the sovereign states in which they live creates a contradiction in the case of migratory species.

There is also debate as to whether migratory species are a renewable or an exhaustible resource. For example, during the Tuna/Dolphin cases in 1991 and 1994, the United States justified an alleged trade barrier protecting dolphins by citing Article XX(g) of the GATT, which allows for protection of exhaustible resources.⁸⁵ Although the United States lost the case, neither the original GATT panels nor the later WTO panel and appellate body declared the reference to Article XX(g) as inapplicable. Furthermore, in the 1998 Shrimp/Turtle case, the WTO appellate body, referring to the report of the World Commission on Environment and Development which stated "[l]iving resources are just as 'finite' as petroleum, iron ore, and other non-living resources," rejected the view of the panel that "exhaustible natural resources" do not include nonhuman species.⁸⁶ There are no accepted guidelines under international environmental law to distinguish a particular species as renewable or exhaustible, nor are there accepted guidelines to distinguish species as sovereign property or a shared global resource.

B. *The Human God-Complex of "Planetary Management"*

The law is all about semantics, and the word "management" implies mastery or, at the very least, an understanding sufficient for will-

⁸⁰ See *General Agreement on Tariffs and Trade* art. XXXVI (Oct. 30, 1947) (available at <http://pacific.commerce.ubc.ca/trade/GATT.html>) (Before GATT eventually turned into the World Trade Organization, GATT's purpose was to raise the standard of living and economies around the world by fostering and promoting trade environments.) [hereinafter GATT].

⁸¹ Glennon, *supra* n. 74, at 33.

⁸² Hunter et al., *supra* n. 42, at 389–96.

⁸³ *Id.* at 396–98.

⁸⁴ *Id.* at 399–400 (citing Edith Brown Weiss, *In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity*, in *International Environmental Law and Policy*, Transnatl. Publ. 1989).

⁸⁵ Lowenfeld, *supra* n. 39, at 314–19; *United States Restrictions on Imports of Tuna* (Mexico v. U.S.), GATT Doc. DS21/R (Sept. 3, 1991), 30 I.L.M. 1594; *United States Restrictions on Imports of Tuna* (EEC v.U.S.), GATT Doc. DS29/R (Jan. 16, 1994), 33 I.L.M. 839.

⁸⁶ Lowenfeld, *supra* n. 39, at 322; *United States-Import Prohibition of Certain Shrimp and Shrimp Products* (India v. U.S.), Report of the Panel WTO Doc. WT/DS58/R (May 15, 1998), 37 I.L.M. 832.

ful control.⁸⁷ However, humanity has neither mastery nor an understanding of the biosphere sufficient to healthfully design, create, or control global biology. One retort could be that “management” has a different connotation when applied to watersheds, forests, or entire planets. If such is the case, the term is aberrant and inappropriate given our historic lack of respect for nature. The word “management” assumes that, if not now, one day humans will have sufficient knowledge to control and manipulate nature, and it plays directly into human chauvinism. The management approach to nature and its philosophical justification are not new,⁸⁸ and neither is its comprehensive failure.⁸⁹ The goal of nature management today continues to emphasize *effective* exploitation,⁹⁰ albeit now with a growing comprehension that the components of nature that interest humans are not infinite.

Economists and ecologists have partnered, first, to suggest privatization or otherwise increased “ownership” of nature (common goods)⁹¹ to engender “responsible” exploitation and, second, to increase information gathering and dissemination.⁹² In keeping with the millennia-old, anthrarchic view of nature,⁹³ most scholars still refute that nature’s complexities are too recondite for humans to control and manipulate in a sustainable or healthful way.

Biologist David Ehrenfeld succinctly states that “[i]n no important instance have we been able to demonstrate comprehensive successful management of the world, nor do we understand it well enough to manage it *even in theory*.”⁹⁴ Because of the continuing eradication of species, destruction of ecosystems, and devastation of indigenous foraging cultures, humans are certainly losing knowledge about the environment faster than we are gaining it.⁹⁵ International legal regimes commodify nature and restrict the diffusion of knowledge about biology and ecosystems.⁹⁶ Planetary management would require a satisfactorily complete understanding of how species are interconnected, a

⁸⁷ Synonyms of the word “management” include “supervise,” “control,” “administer,” “regulate,” or “superintend.” *Illustrated Reverse Dictionary* 327 (John Ellison Kahn ed., Reader’s Digest Assn. 1990).

⁸⁸ Ponting, *supra* n. 6, at 141–60.

⁸⁹ *See generally*, Ponting, *supra* n. 6 (discussing that past human attempts to manage nature have a history of failure); Hughes, *supra* n. 6 (discussing the changing environment and humans’ failure to manage the environment).

⁹⁰ Ponting, *supra* n. 6, at 175.

⁹¹ *Id.* at 155–57; Hunter et al., *supra* n. 42, at 126, 131–32.

⁹² CBD, *supra* n. 5, at art. 7; Hunter et al., *supra* n. 42, at 941–53.

⁹³ *See* Ponting, *supra* n. 6, at 142 (describing a view with cultural roots going back at least to ancient Greece, bolstered by the traditions of Rome and Judeo-Christianity).

⁹⁴ G. Tyler Miller Jr., *Environmental Science* 35 (6th ed., Wadsworth Publ. Co. 1997).

⁹⁵ *Id.*

⁹⁶ Vandana Shiva, *Biopiracy: The Plunder of Nature and Knowledge* 2-5 (South End Press 1997) (Whether binding or not, environmental instruments like Agenda 21, the Brundtland Report, or CBD art. 16, simply encourage transfer of technology appropriate to fulfilling environmental obligations, whereas international patent protections on such technology are binding through the Trade-Related Intellectual Property Rights

"divine" formula that designates which species to protect and which to eradicate. In the real world, humans are failing to prevent extinctions even when international politics does not inhibit efforts.

Attempts to save threatened species in captivity, or conservation *ex situ*, are illustrative of our actual ignorance. Optimism about zoos' role in conservation is common. Such optimism is baseless, evidenced by the difficulty in finding information about the success rates of zoo conservation, such as a sample ratio of mortality to fertility in rare species.⁹⁷ Per Article Nine of the CBD, since 1992 zoos have been required to focus more on conservation, but less than ten percent of the approximately ten thousand zoos around the world are involved with the World Zoo Conservation Strategy.⁹⁸

As of 1995, only eleven percent (16 of 145) of documented attempts to reintroduce species into their natural habitat had succeeded.⁹⁹ Most of these efforts did not involve zoos, but rather the "translocation" of individuals from populations in other wild areas, which is not *ex situ* conservation.¹⁰⁰ The World Resources Institute reports that of 274 rare mammal species in captivity, only 26 have succeeded in achieving self-sustaining populations.¹⁰¹ Only a small percentage of all invertebrate and vertebrate species have ever bred in captivity, which can be explained by the fact that we simply do not have enough information and expertise to provide the necessities that these species obtain in their natural habitats.¹⁰²

News about specific failures to care for species in captivity is easy to find. The Humane Society of the United States castigated the United States National Zoo for its widespread failure to care for non-human species in 2004.¹⁰³ The Bangkok Zoo police discovered unethi-

(TRIPs) regime of the WTO); Hunter et al., *supra* n. 42, at 78, 183, 947; Lowenfeld, *supra* n. 39, at 105-08.

⁹⁷ Rob Laidlaw, *Re-introduction of Captive Bred Animals to the Wild: Is the Modern Ark Afloat? in Who Cares for Planet Earth? The CON in Conservation* 64 (Bill Jordan ed., Alpha Press 2001).

⁹⁸ *Id.*; see also Intl. Union Dirs. Zoological Gardens, *The World Zoo Conservation Strategy: The Role of the Zoos and Aquaria in the World in Global Conservation*, <http://www.waza.org/conservation/wczs.php> (Sept. 1993) (the first report from 1993 created by the initiative of The World Zoo Organization and the Captive Breeding Specialist Group (CBSG) of the International Union for the Conservation of Nature and Natural Resources, formerly the World Conservation Union).

⁹⁹ Benjamin Beck, *Re-introduction, Zoos, Conservation, and Animal Welfare in Ethics on the Ark* 156 (Bryan G. Norton et al. eds., Smithsonian Inst. Press 1995).

¹⁰⁰ Rob Laidlaw, *supra* n. 97, at 67.

¹⁰¹ World Resources Inst., *Ex Situ Conservation*, http://newsroom.wri.org/wrifeatures_text.cfm?ContentID=596 (accessed Apr. 13, 2007).

¹⁰² See Noel F.R. Snyder et al., *Limitations of Captive Breeding in Endangered Species Recovery* 10 *Conserv. Biology* Vol. 2, 338, 339 (1996) (Captive breeding failures are blamed on "lack of psychological, physiological, or environmental requirements, inadequate diet, effects of hand-rearing, behavioral incompatibility, and inbreeding depression.").

¹⁰³ Richard Farinato, *The National Zoo: Good Intentions Aren't Enough*, http://www.hsus.org/wildlife/wildlife_news/the_national_zoo_good_intentions_arent_enough.html (Mar. 5, 2004).

cal treatment of orangutans and evidence of a breach of CITES.¹⁰⁴ International environmental law has failed to enforce regulations on how zoos obtain endangered species, which, coupled with the abysmal record of reintroductions, indicates that, overall, zoos are harmful to the protection of biodiversity. Zoos exist essentially for human entertainment. Any role zoos play in educating the general public about biodiversity has been insufficient to create the political will for adequate habitat conservation of even the so-called charismatic mega-fauna, such as pandas, leopards, and elephants. The most appropriate role for zoos is probably as sanctuaries for species that cannot be rehabilitated or reintroduced, and they should be supported to this degree.

Zoos demonstrate that humans are incapable of caring for a fraction of the world's biodiversity in an environment mostly safe from human exploitation, predation, and natural disasters. This reality is reinforced by the failure of a \$200 million attempt in 1991 to simulate and manage a 3.15 acre enclosed "biosphere" in Arizona.¹⁰⁵ In *Biosphere Two*, over seventy-five percent of the vertebrates died, and after less than two years, the climate became uninhabitable for the eight humans inside.¹⁰⁶ Managing the planet is akin to the strategy of zoo conservation, with the additional confounding elements of unregulated human exploitation, exponential population growth, human-induced and other natural resource limitations, and an infinite number of other factors.

After realizing that protecting species one by one does not work,¹⁰⁷ strategies have shifted to attempt protection of entire habitats.¹⁰⁸ *In situ* conservation, or conservation in the species' natural habitat, typically has followed such rhetoric as maximum sustainable yield (MSY),¹⁰⁹ enshrined in Article 119(1)(a) of UNCLOS.¹¹⁰ In application, this method fails as well.¹¹¹ After employing MSY, the United

¹⁰⁴ Utusan Express, *Thai Cops See Monkey Business in Monkey Business*, <http://www.jphpk.gov.my/English/Aug04%2011a.htm> (Aug. 11, 2004).

¹⁰⁵ Paul Hawken et al., *Natural Capitalism: Creating the Next Industrial Revolution* 146 (Little, Brown & Co. 1999).

¹⁰⁶ *Id.* at 147.

¹⁰⁷ William M. Flevaris, *Ecosystems, Economics, and Ethics: Protecting Biological Diversity at Home and Abroad*, 65 S. Cal. L. Rev. 2039, 2041 (1992).

¹⁰⁸ Albert C. Lin, *Participants' Experiences with Habitat Conservation Plans and Suggestions for Streamlining the Process*, 23 Ecol. L.Q. 369, 394 (1996).

¹⁰⁹ Earnshaw, *supra* n. 7, at 124–25.

¹¹⁰ UNCLOS, *supra* n. 36, at art. 119(1)(a) ("take measures which are designed on the best scientific evidence available to the states concerned to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield as qualified by relevant environmental and economic factors, including the special requirements of developing states, and taking into account fishing patterns, the interdependence of stocks and generally recommended international minimum standards, whether subregional, regional, or global.").

¹¹¹ Hunter et al., *supra* n. 30, at 924.

States was forced to accept the impossibility of ecosystem management within federal marine reserves.¹¹²

Planetary management requires technology, experience, and knowledge to create "stewardship plans" to manage more than just zoos or reserves.¹¹³ This requires predicting biospheric conditions centuries from now.¹¹⁴ Currently, supercomputers construct tentative models on climate change over a hundred or so years, but they are hotly debated. Regardless, a planetary stewardship plan requires climate models infinitely more sophisticated than those available. Such a plan requires predicting not just the global climate, but the entire globe's microclimates. It may require understanding the basic biology of millions of species and countless other impossibly complicated, yet essential, pieces of information about natural processes.¹¹⁵

In 2004, the United States government lifted the Endangered Species Act (ESA) requirement to assess the impacts of commercial chemicals such as pesticides on twelve hundred species listed as threatened and endangered, citing the "complexity"¹¹⁶ of the program. So began the evisceration of the most comprehensive domestic protection of endangered species in the world—which failed to help most species recover when it was at its best.¹¹⁷ Species we exploit intensively may be renewable because they reproduce, but between eighteen thousand and seventy-three thousand nonhuman species go extinct each year because of human activity.¹¹⁸

For the sake of argument, consider if humans had enough knowledge to design a biospheric management plan. Implementing the plan would require international cooperation on an unobtainable scale. Negotiations are often grief stricken when the issue is as straightforward as protecting whales and elephants from willful killing or as dire as global warming. It is unlikely that such a plan could be utilized in international legal negotiations, since perceptions of the importance of the Earth's "resources" differ between disparate cultures, economies, and domestic polities. The difficulties of achieving international cooperation to protect the environment are created by, among other factors, state immunity, lack of central enforcement mechanisms, free riding, fragmentation and weaknesses of intergovernmental organizations,

¹¹² Donna R. Christie, *Marine Reserves, the Public Trust Doctrine and Intergenerational Equity*, 19 J. Land Use & Envtl. L. 427, 427 (2004).

¹¹³ Flevares, *supra* n. 107, at 2060.

¹¹⁴ *Id.*

¹¹⁵ Speth, *supra* n. 2, at 152.

¹¹⁶ John Heilprin, *Bush Administration Eases Pesticide Reviews for Endangered Species*, S.F. Chron. 2 (July 29, 2004) (available at <http://www.biologicaldiversity.org/swcbd/programs/science/pesticides/media/7-29-SFChron.pdf>).

¹¹⁷ Juliet Eilperin, *Rewrite of Endangered Species Law Approved*, Wash. Post A2 (Sept. 23, 2005) (available at <http://www.washingtonpost.com/wp-dyn/content/article/2005/09/22/AR2005092202099.html>).

¹¹⁸ G. Tyler Miller, Jr., *Environmental Science* 433 (6th ed., Wadsworth Publg. Co. 1997).

and the expectation that power leads to exploitation (in this case by one state of another).¹¹⁹

The founder of the World Resources Institute, James Gustave Speth, cited three contributing factors as to why the international community is failing to address global ecosystem collapse.¹²⁰ First, environmental destruction continues to gather momentum because of the human population's exponential increase, the habitual use of destructive technology, and the ubiquitous incentive to accumulate unlimited wealth. The second factor is the complexity and profundity of solutions required. Thus, the third factor is that the political will to solve these problems is "weak and scattered."¹²¹

Speth's list of factors is sound, but it must include two other issues. To add to his list, the fourth factor is the obscuring effect of international trade on local resource scarcity and global resource exhaustion. The fifth factor, and the most important because it facilitates the first four, is anthrarchy. The prevailing attitude that other species must be protected only for human benefit creates psychological and practical impediments to a coherent evolution of a principle of sustainability in international environmental law.¹²² Political and economic diversities deter agreement on the utility of biodiversity when it is regarded as property of sovereign states, all of which have different historical patterns of exploitation. If humanity wishes to preserve life even solely for our own species' benefit, a more respectful attitude toward nonhuman species is necessary. An attempt to manage the biosphere is not a more respectful attitude, it is megalomania.

IV. THE ALTERNATIVE TO INTERNATIONAL LEGAL ANTHRARCHY

A. *Introducing the Logic of Interspecies Equity*

While interspecies exploitation may be part of nature, the scale of humanity's effect on the planet requires that we reconsider our natural tendencies. If ninety-nine percent of human history is a guideline, our global population is between one and six thousand times too large, and we have been developing technology for the last ten thousand years that allows each human to exploit and create waste to an exponentially larger degree.¹²³ A societal shift from exploiting nature sustainably, effectively, or even responsibly to cooperating healthfully

¹¹⁹ Christopher Stone, *Common but Differentiated Responsibilities in International Law*, 98 Am. J. Intl. L. 276, 300 (2004).

¹²⁰ Speth, *supra* n. 2, at 102.

¹²¹ *Id.* at 98–99.

¹²² See Ian Brownlie, *Principles of International Law* 276–77 (6th ed., Oxford U. Press 2003) (Despite attention the principle of sustainability has received in international agreements and discourse, the aggregate incoherence of varying definitions lead Ian Brownlie to call sustainability a "protean legal concept.").

¹²³ Massimo Livi-Bacci, *A Concise History of World Population: An Introduction to Population Processes* 2, 31 (3d ed., Blackwell Publishers 2001).

with nature would trigger a significantly different policy path. Exploitive sustainability is not novel; it focuses on the negative, and it sets up humans for failure.

Environmental law could alternately be viewed as interspecies law, the success of which may be measured by how the law fosters naturally harmonious human behavior. Aspects of law that deal with non-living things may be a part of the economic branch of law, since they are true "natural capital."

The first step to updating the law is to eliminate anthropocentric legal verbiage. By definition, lawmaking necessitates linguistic scrutiny, and focusing on how to "best" exploit the environment violates the spirit of interspecies law—more so if lawmakers recognize interspecies equity. Human rights law does not focus on how a government can best exploit its citizens; it is about healthy human relationships.

Environmental law must avoid the word "management," as the word connotes mastery, a meaning which is both legalistically inappropriate and also creates a conceptual slippery slope feeding into anthrarchy. Because "language isolates the subject from the real, confining it forever to the realm of signification,"¹²⁴ incorrect terminology must be eliminated in law.

In addition, the law should distinguish sentient life by avoiding the use of words such as "import," "export," "harvest," or "destroy" when referring to species that are obviously feeling and conscious.¹²⁵ It is reasonable to harmonize law with etymology and biology, the goal being to exclude as much as possible alternate meanings of words that may undermine the purpose of the law.¹²⁶ For clarity, and in keeping with the general definitions of economics, the terms "resource" and "capital" should apply only to inanimate, nonliving objects like money, minerals, air, and water. These terms can also refer to intangible, inanimate objects—hence natural, human, and social capital—that are also a part of economic law. Contrarily, biodiversity should be viewed as *other life* that is not human.¹²⁷ Nonhuman species are not capital, but persons.

The purpose of environmental law may be viewed as seeking harmony between humans and the rest of nature. Modern and effective environmental law should not be privy to verbiage that is speciesist or otherwise sanctions subjugating or destructive behavior. More fundamentally, legal verbiage should apply the correct usage of vocabulary rather than relying on euphemisms that retain antiquated anthrarchic knowledge structures. For example, "grow" and "develop" should re-

¹²⁴ See Kaja Silverman, *The Subject of Semiotics* 166 (Oxford U. Press 1983) (explaining the linguist Lacan's theory of signification).

¹²⁵ Joan Dunayer, *Animal Equality: Language and Liberation* (Royce Publ. 2001).

¹²⁶ Lung-Chu Chen, *An Introduction to Contemporary International Law: A Policy-Oriented Perspective* 267–70 (2d ed., Yale U. Press 2000).

¹²⁷ *Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests*, U.N. Doc. A/CONF. 151/26 (Vol. III) (1992).

main intransitive verbs as applied to nonhuman species and ecosystems. Forests develop themselves. Humans do not develop forests unless the term is used as a euphemism for cutting forests for human use (to build houses, for example), in which case the word violates the purpose of conservation. The emergence of “scientific rationalization”¹²⁸ may signify the beginning of a strategy to overcome metaphysical, arbitrary, and varying conceptions of international environmental law’s foundations by emphasizing the evolutive, interdisciplinary, and collectively reinforced nature of the sciences.¹²⁹

A second step to updating the law is to replace explicit reference to anthropocentrism in environmental agreements with explicit reference to biocentrism. Overcoming anthrarchical norms requires more than simply omitting anthropocentrism from the legal texts. It must be replaced by explicit reference to biocentrism. Future versions of the Rio Declaration and the CBD should state that *all life* is at the center of concerns for sustainable development,¹³⁰ and international environmental agreements should focus on the health of biodiversity as the primary indicator of successful implementation.¹³¹ Such explicit reference would compel international environmental law to consider the importance of nonhuman species in a healthy human habitat. Biocentrism would reconcile incoherence between the implementation of different treaty regimes.

John Rawls’ *Theory of Justice* describes an approach to overcoming the challenges of equity and distributive justice in an anthropocentric framework of environmental law.¹³² This mechanism entails enshrouding a “veil of ignorance” over individual positions and desires that derive from differences of culture, politics, and economics.¹³³ Under this veil, “all rational actors would choose principles that ensured the fair and equitable allocation of rights, duties, and opportunities among everyone in the society.”¹³⁴ Accordingly, to control for anthropocentric bias deriving when developing agreements that affect other species, the rational actors (humans) should include under the “veil of ignorance” those positions that derive also from the differences of species.¹³⁵ Although Rawls does not include other species in his suggestion, applying his objectivity measure to include species subjectivity

¹²⁸ John Meyer et al., *The Structuring of a World Environmental Regime: 1870-1990*, 51 *Intl. Org.* 4, 638 (1997).

¹²⁹ Ash, *supra* n. 3, at 204.

¹³⁰ See *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF. 151/26 (1992). (Principle 1 currently states that “[h]uman beings are at the centre of concerns for sustainable development.”).

¹³¹ See David Suzuki, *Simplistic Views Threaten Diversity*, http://www.davidsuzuki.org/about_us/dr_david_suzuki/article_archives/weekly07130101.asp (July 13, 2001) (noting that studies have shown that the productivity and stability of ecosystems increases with greater diversity of plants and animals).

¹³² Hunter et al., *supra* n. 42, at 107.

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ *Id.*

would ensure "that no one [no species] is advantaged or disadvantaged in the choice of principles by the outcome of natural chance or the contingency of social circumstances," an anthrarchic value system.¹³⁶

The third step to updating the law entails incorporating a new legal principle—interspecies equity. Incorporating the principle of interspecies equity is the best way to instill a legal requirement to consider the needs of nonhuman species.¹³⁷ Daniel Quinn's novel, *Ishmael*, portrays a gorilla who explains by drawing from history how humanity acts as if *Homo sapiens* were the "purpose" of biological evolution.¹³⁸ Many social scientists have embraced the fallacy that through natural selection, the speciation of *Homo sapiens* has exhausted human genetic variability such that any speciation of *Homo sapiens* will now be cultural.¹³⁹ Human culture is the evidence of humans' existential superiority. This conclusion arises in part because extreme anthropocentrism has disabled humans' ability to appreciate cultural behavior in other species. Human chauvinism degrades the idea that other species have culture with the circular logic that human culture is superior based on the standards of human culture.¹⁴⁰

The world's dominant religions, Aristotle's *scala naturae*, human language, and international environmental law also proffer a teleological explication of life.¹⁴¹ Virtually every type of science still refers incorrectly to humans as "higher primates,"¹⁴² as if either living nonhuman primates have "deficiently" evolved from our common ancestor, or our ancestors were somehow inferior to us. Many scientists use these presumptions to justify cruel laboratory experiments, arguing that the similarities between humans and other species are sufficient enough to predict human outcomes but not sufficient enough for the experiments to be called torture.

This Aristotelian-Darwinian paradox keeps most human sciences in the dark ages with respect to the perspectives of other species. This phenomenon has been dubbed "Darwistotle"¹⁴³ and is the reason many behaviorists criticize the use of Cartesian terms to describe the behavior of nonhuman species typically thought not to have souls. The irrational fear of anthropomorphism stems not from concerns over scientific objectivity, but from "a desire to keep [other] animals at arm's length."¹⁴⁴ The legal approach toward nonhuman species is both

¹³⁶ *Id.*

¹³⁷ Earnshaw, *supra* n. 7, at 145.

¹³⁸ Daniel Quinn, *Ishmael* (Bantam 1992).

¹³⁹ Wilson, *supra* n. 1, at ch. 2.

¹⁴⁰ See generally de Waal, *supra* n. 34 (correcting the assumption that humans are the only form of intelligent life to have made the leap from the natural to the cultural).

¹⁴¹ *Id.* at 81–84.

¹⁴² See *id.* (noting that "via philosophy, this way of thinking permeat[es] all of the social sciences and humanities, where it still lingers even though biology has made it clear that the idea of a linear progression among life forms is mistaken").

¹⁴³ *Id.* at 81–82.

¹⁴⁴ *Id.* at 82.

schizophrenic¹⁴⁵ and megalomaniacal. According to international environmental law, nature is both our mother and our property. We were born from nature and we must mold it to do our bidding forever.

It is important not to confuse a legal principle of interspecies equity with bequeathing rights to nonhuman species—though the subjects are intimately related. Legal arguments regarding nonhuman rights are mostly confined to a “circle of human rights” created with only humans in mind.¹⁴⁶ Applying anthropocentric law to all of nature may belittle the needs of other species, all the more with anthrarchic law. Anthropocentric law fundamentally excludes nonhumans, so nonhuman rights will be difficult to obtain until anthropocentric environmental law becomes biocentric. Legal rights for other species ideally will come not only after instituting biocentrism, but after a recognition of interspecies equity.

It may be argued that rights cannot exist before equity. It is difficult to conceive that international conventions upholding universal human rights might have come before the 1926 Slavery Convention. One might contend that human rights law cannot function without a basis in human (intraspecies) equity.¹⁴⁷ Human rights law arose to address human beings’ relations with each other,¹⁴⁸ and international law has gradually become more egalitarian with the recognition of human equality. Likewise, environmental law may be viewed as addressing humans’ relations with other species, and it cannot function without interspecies equity.

Of course, many civilizations simply established a slave class, and in many societies, caste systems are still at work today.¹⁴⁹ As once was with certain groups of humans, nonhumans today are considered slaves or savages (wildlife). Lawyers have also referred to the logic of Aristotle’s great chain of being to justify the enslavement of humans.¹⁵⁰ Today, however, a more egalitarian, social democratic form of government is becoming commonplace, arguably in large part

¹⁴⁵ See *id.* (explaining how the conception that humans exist atop a species hierarchy makes humans’ “relation with nature fundamentally schizophrenic”).

¹⁴⁶ Ash, *supra* n. 3, at 213.

¹⁴⁷ See Henry J. Steiner & Philip Alston, *International Human Rights in Context: Law, Politics, Morals*, 439–44 (2nd ed., Oxford U. Press 2000) (“commentators have considered reservations to [A]rticle 2 [of the *Convention on the Eradication of All Forms of Discrimination against Women*] to be ‘manifestly incompatible’ with the object and purpose of the convention . . . [and] several state parties have objected to these reservations on the grounds that they threaten the integrity of the convention and the human rights regime in general”).

¹⁴⁸ See Universal Declaration of Human Rights, GA Res. 217(III), UN GAOR, 3d Sess., Supp. No. 13, UN Doc. A/RES/217 (1948) (according to Article I, “all human beings . . . should act towards one another in a spirit of brotherhood”).

¹⁴⁹ Ponting, *supra* n. 6, at 270.

¹⁵⁰ Thomas D. Morris, *Southern Slavery and the Law, 1619–1860* (U.N.C. Press 1996).

because, better than other systems, it involves checks and balances that engender societal stability.¹⁵¹

Egalitarian democracies are also less likely to engage in violent conflict with one another,¹⁵² probably because the aspiration to engage all stakeholders in governance affects external relations. The movement from state-centric to human-centric government has created better international human relations. Likewise, a movement from human-centric to life-centric environmental law will create better relations between humans and other species.

The rational step is simply to reject in law the odd notion of a biological hierarchy of beings—this is all the principle of interspecies equity entails. The law must acknowledge that "[e]very organism fits on the phylogenetic tree without being above or below anything else."¹⁵³

B. Looking for Synergy between Law and Biology

The hierarchical view of nature fails the test of logic and science,¹⁵⁴ and it is beneficial to scrutinize law and legal discourse as such.¹⁵⁵ Anthrarchy is sustained and compounded through the development of human language, humor, moralities, economy, infrastructure, and law. It will indeed be a difficult task to overcome tens of millennia of evolving linguistic and cultural matrimony, but human culture has succumbed swiftly to enlightenment in the past. A 1994 Texas appellate court decision gives a small degree of hope:

The law must be informed by evolving knowledge and attitudes. Otherwise, it risks becoming irrelevant as a means of resolving conflicts. Society has long since moved beyond the untenable Cartesian view that animals are unfeeling automatons and, hence society's recognition that animals are sentient and emotive beings that are capable of providing companionship to the humans with whom they live.¹⁵⁶

Discourse on the legal status of nonhuman animals has been increasing in the United States.¹⁵⁷ Encouragingly, in 1993 an international group of academics and scientists issued a symbolic "Declaration on Great Apes."¹⁵⁸ However, discourse in international legal journals

¹⁵¹ Berman, *supra* n. 28, at vii.

¹⁵² *Id.*

¹⁵³ de Waal, *supra* n. 34, at 82.

¹⁵⁴ Ash, *supra* n. 3, at 207.

¹⁵⁵ See Chen, *supra* n. 126, at ix ("Law is a continuing process of authoritative decision for clarifying and securing the common interest of community members.").

¹⁵⁶ *Bueckner v. Hame*, 886 S.W.2d 368, 377-78 (Tex. App. 1st Dist. 1994).

¹⁵⁷ Animal Law, *Animal Law Review: The Nation's First Law Review Devoted Exclusively to Animal Issues: About Animal Law Review*, <http://www.animallawreview.org> (accessed Apr. 8, 2007); Animal Legal & Historical Ctr., *Journal of Animal Law*, <http://www.animallaw.info/policy/pojouranimlawinfo.htm> (accessed Mar. 11, 2007); J. Animal L. & Ethics, *Journal of Animal Law & Ethics*, <http://www.law.upenn.edu/groups/jale/> (accessed Mar. 11, 2007).

¹⁵⁸ Robert E. Goodin et al., *Simian Sovereignty*, 25 *Political Theory* 821, 821 (1997).

is scant and typically limited to the emerging basic rights of only pachyderms, primates, and cetaceans.¹⁵⁹ International discussion of legal personhood for nonhumans has been virtually nonexistent. That nonhuman species lack *locus standi* (standing) is not to be lamented much. *Homo sapiens* are in the same boat. International law was created for and continues to recognize only States as legal persons.¹⁶⁰ Regardless, we may expand legal egalitarianism to all species in the same way that it has been expanded for other members of society whose interests must be represented vicariously, such as human children and the mentally handicapped.¹⁶¹

1. *Interspecies Equity in Domestic Law*

Legal developments that address nonhumans in wealthy nations are significant for two reasons. First, such nations could easily afford protection of much of the world's biodiversity.¹⁶² Second, these nations are largely responsible for the failure of multilateral environmental agreements.¹⁶³

U.S. jurisprudence may reflect a progressive segment of the worldwide animal rights movement. U.S. law also influences international environmental legal norms,¹⁶⁴ some of which indicate, if not equity among species, a possible precursor to equity in the form of basic protections for particular species. And yet, rarely do courts in the United

¹⁵⁹ See e.g. D'amato & Chopra, *supra* n. 74 (noting that despite overwhelming international opposition to whaling, whales still lack legal entitlement to survive); Glennon, *supra* n. 74 (noting that customary norms regarding elephants will be unlikely to play a significant role in their protection).

¹⁶⁰ Hugh Thirlway, *The International Court of Justice in International Law* 559, 573 (Malcolm D. Evans ed., Oxford U. Press 2003).

¹⁶¹ See e.g. *Convention on the Rights of the Child*, (entered into force Sept. 2, 1990) <http://www.unhcr.ch/html/menu3/b/k2crc.htm> (setting forth rights of children); *Declaration on the Rights of Mentally Retarded Persons*, GA Res. 2856, UN GAOR, 26th Sess., 2027th Plenary Meeting, UN Doc. A/8429 (Dec. 20, 1971) (available at http://www.unhcr.ch/html/menu3/b/m_mental.htm) (declaring mentally retarded persons to have the same rights as other human beings to the extent possible); *Declaration on the Rights of Disabled Persons*, GA Res. 3447, UN GAOR, 30th Sess., 2433d Plenary Meeting, UN Doc. A/10034 (Dec. 9, 1975) (available at <http://www.unhcr.ch/html/menu3/b/72.htm>) (declaring that disabled persons "have the inherent right to respect for their human dignity" and "have the same fundamental rights as their fellow citizens").

¹⁶² See Speth, *supra* n. 2, at 42 (Estimates indicate that it would take only as much money as the Organization for Economic Cooperation and Development (OECD) member countries spend on food for companion animals to buy and establish nature reserves comprising fifteen percent of the Earth's surface.).

¹⁶³ *Id.* at 116.

¹⁶⁴ See Hunter et al., *supra* n. 42, at 995 (asserting that legal protections of dolphins in the Pacific Ocean are a "powerful example of how extraterritorial application of U.S. law can drive the creation of binding international law"); see generally *United States Hegemony and the Foundations of International Law* (Michael Byers & Georg Nolte eds., Cambridge U. Press 2003) (examining whether U.S. influence leads to changes in international legal systems).

States regard nonhuman species as ends in themselves.¹⁶⁵ When courts consider nonhumans, they aim to determine the "legal status of nonhuman animals [as] somewhere between property and legal personhood."¹⁶⁶ Nevertheless, U.S. courts have increasingly ruled that nonhuman animals are not property, and in some cases, the standing of a nonhuman plaintiff has gone unchallenged.¹⁶⁷ Judges are increasingly allowing evidence of nonhuman animal abuse to indicate domestic or child abuse.¹⁶⁸

The ESA is the most well-known American law intended to protect nonhuman species.¹⁶⁹ Nonetheless, the ESA reaffirms anthrarchy because protection for nonhuman species is arbitrary and species valuation is based on a cost-benefit analysis formulated to favor politically generated economic concerns.¹⁷⁰ The ESA also limits critical habitat to that which is needed for "bare species survival."¹⁷¹

One of the most significant pieces of domestic legislation protecting nonhuman species exists in New Zealand. Although the New Zealand Animal Welfare Act (NZAWA) does not endorse equity of nonhuman primates,¹⁷² the Act is a breakthrough in several ways. First, it effectively bans all testing on nonhuman primates.¹⁷³ Second, it does not allow the interest of humans to trump those of this nonhuman species.¹⁷⁴

NZAWA recognizes apes as part of the family of hominids in which humans are included, a phenomenal development not just for law, but for human society in general. The media and art historically have demonstrated a "hominid cringe," using comparisons to other primates as a method of belittling humans for humor or satire.¹⁷⁵ The hominid cringe illustrates how humans go to "great and even extreme lengths to keep other humans out of [our] moral and legal tribes."¹⁷⁶ An example of the hominid cringe is the international attempt in 1980 to ban

¹⁶⁵ See Joy Gordon, *A Peaceful, Silent, Deadly Remedy: The Ethics of Economic Sanctions*, 13 *Ethics & Intl. Affairs* 123, 128 (1999) (referencing Immanuel Kant's theory that "it is a categorical imperative, an unconditional moral mandate binding on all rational beings, 'to act in such a way that you treat humanity whether in your own person or in the person of another, always as an end and never simply as a means'").

¹⁶⁶ Steven J. Bartlett, *Roots of Human Resistance to Animal Rights: Psychological and Conceptual Blocks*, 8 *Animal L.* 143, 146 (2002).

¹⁶⁷ *Id.*

¹⁶⁸ Angela Campbell, Student Author, *The Admissibility of Evidence of Animal Abuse in Criminal Trials for Child and Domestic Abuse*, 43 *B.C. L. Rev.* 463, 483–84 (2001–2002).

¹⁶⁹ 16 U.S.C. §§ 1531–1544.

¹⁷⁰ Earnshaw, *supra* n. 7, at 135.

¹⁷¹ *Id.*

¹⁷² Animal Welfare Act, 1999 (N.Z.) No. 142 (available at http://www.legislation.govt.nz/browse_vw.asp?content-set=pal_statutes).

¹⁷³ Rowan Taylor, *A Step at a Time: New Zealand's Progress Toward Hominid Rights*, 7 *Animal L.* 35, 38 (2001).

¹⁷⁴ *Id.* at 39.

¹⁷⁵ *Id.* at 41–43.

¹⁷⁶ *Id.* at 41.

research on the language of other animals, which can be explained as a defensive anthrarchic reaction.¹⁷⁷

While NZAWA may be considered a breakthrough in some ways, it may also indicate an implied reluctance to recognize legal entitlement to other nonhuman animals. NZAWA may have passed because it represents an expansion of legal entitlement “only to beings like us and not as the ‘thin end of the wedge’ for the entire Animal Kingdom.”¹⁷⁸ The Great Ape Project New Zealand, one of the strongest lobbyists for the NZAWA, viewed it as “strategic error” to align the debate on hominid rights with that of other nonhuman species.¹⁷⁹ One might argue that New Zealand was not conducting laboratory tests on primates anyway.¹⁸⁰ Conversely, this may be due to New Zealanders’ prevailing attitudes, and could have been reflected in the courts of their common law system had a relevant case been brought forth. If the NZAWA reflects long standing practice, New Zealand may be the only state where *opinio juris* is relevant to legal entitlement of another species. In domestic legal systems, few species other than primates have received protection that comes close to establishing legal personhood or a basic right to life.

2. *Interspecies Equity in International Law*

Several broad environmental declarations and instruments espousing responsible exploitation are laying the groundwork for acknowledging interspecies equity in international law. For example, the Second World Conservation Strategy Project suggests nine principles to guide sustainable development, including “respecting and caring for the community of life . . . conserving the earth’s vitality and diversity . . . [and] changing personal attitudes and practices.”¹⁸¹ Such treaties provide a genesis for discussion on how interspecies equity could be integrated into a more lucid legal definition of the principle of sustainability.¹⁸²

Legal instruments protecting dolphins also supply evidence that international law may be poised to accept the principle of interspecies equity. These instruments arose in part from public concern over the welfare of dolphins, notwithstanding the fact that protecting dolphins

¹⁷⁷ de Waal, *supra* n. 34, at 32. In 1866, the Linguistic Society of Paris, possibly the most significant linguistic institution at the time, barred communications on the origin of language. The London Philological Society banned such research in 1872, effectively quelling the study of language origins for another a century. Jean Aitchison, *The Seeds of Speech: Language Origin and Evolution* 5 (Cambridge U. Press 2000); Virginia Volterra, Maria Cristina Caselli, Olga Capirci, & Elena Pizzuto, *Gesture and the Emergence and Development of Language*, http://email.eva.mpg.de/~liebal/gesture_workshop/pdf/Volterra.pdf (accessed Apr. 13, 2007).

¹⁷⁸ Taylor, *supra* n. 173, at 39.

¹⁷⁹ *Id.* at 41.

¹⁸⁰ Symposium, *The Evolving Legal Status of Chimpanzees*, 9 *Animal L.* 1, 51 (2003).

¹⁸¹ Earnshaw, *supra* n. 7, at 120.

¹⁸² *Id.* at 121.

did not involve protecting their sustenance and had the unintended consequence of greater killings of other threatened species.¹⁸³

The rationale for protecting dolphins may be unique among the protection schemes for nonhuman animals because it is unlikely that humans protect dolphins merely to "conserve" them for future exploitation, underscored by the fact that the dolphins protected typically have not been perceived as a species threatened with extinction. There are few historical examples of humans killing dolphins with the view that dolphins are property or a resource, "extractable" at will, and recent jurisprudence providing protection supersedes that which addresses dolphins as an exploitable commodity.¹⁸⁴ The same cannot be said for any other species, as even those species with the greatest protections in international law—other cetaceans, elephants, and nonhuman primates—are systematically exploited in the wild or in laboratories, which the law sanctions.

Legal protection of dolphins also indicates progress in jurisprudence by implicitly referencing the psychological trauma of another species. For example, U.S. legislation includes protection not just against the "incidental" killing of dolphins by fishers, but also the dolphins' harassment and stress.¹⁸⁵ Although protection of dolphins may not have arisen from the view that dolphins are equally privileged to exist, and although such protection does not reflect a biocentric perspective of law, the protection of dolphins at least indicates a mindset beyond stark anthropocentrism.

Furthermore, international law is malleable. It took one case in the International Criminal Tribunal for the former Yugoslavia (ICTY) to legitimize giving priority to individual citizens, despite the contrary tradition in customary international law.¹⁸⁶ The ICTY may have found justification in the recent explicit references to anthropocentrism in the law.¹⁸⁷ Considering the state's abuse of the people throughout history, it is arguably proper that international humanitarian law progress away from state-centrism. Similarly, given humanity's abuses of

¹⁸³ See Hunter et al., *supra* n. 42, at 1002 (noting that the different fishing methods used other than purse seine nets resulted in the deaths of a "staggeringly" greater number of sharks, billfish and sea turtles).

¹⁸⁴ See Dolphin Protection Consumer Information Act, 16 U.S.C. § 1385 (2006) (prohibiting false labeling or claiming a tuna product to be dolphin safe).

¹⁸⁵ See e.g. 16 U.S.C. §1532(19) (including "harass" as part of the definition of "take"); see also Marine Mammal Protection Act of 1972, 16 U.S.C. §§ 1362(13), (18)(A)(ii) (2006) (including "harass" as part of the definition of "take" specifically in relation to marine mammals, and defining "harassment" as "any act of pursuit, torment, or annoyance which has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns").

¹⁸⁶ See Antonio Casesse, *International Criminal Law in International Law*, 739 (Malcolm D. Evans ed., Oxford U. Press 2003) (stating that after the *Tadic* case, "it is now widely accepted that serious infringements of customary or applicable treaty law on internal armed conflicts may also be regarded as amounting to war crimes").

¹⁸⁷ Rainer Arnold, *European Constitutional Law: Some Reflections on a Concept that Emerged in the Second Half of the Twentieth Century*, 14 Tul. Eur. & Civ. L. Forum 49, 61 (1999); Arnold, *supra* n. 33, at 114.

other life, it is proper that anthropocentrism give way to biocentrism within the context of international environmental law.

Protections for nonhuman species in the international legal system have not improved much since 1893 when the U.S. government attempted to halt the trapping of seals by British fur traders.¹⁸⁸ The U.S. government argued in an international arbitral tribunal that the seals were in danger of extinction, but the tribunal found there to be no basis for a claim in international law because the United States was applying its own standards of conservation outside U.S. territory.¹⁸⁹ If the same situation were to occur today, the United States' case might benefit if the seal population was migratory and spent part of its life in U.S. territory. In such a case, the United States could refer to international treaties, such as UNCLOS¹⁹⁰ or Article XX(g) of GATT,¹⁹¹ to promote a ban on the sale of seal furs within the United States.

Nonetheless, even if it could be proven that seals were going extinct, and even if trade of products made with the bodies of seals were banned under CITES, the legal question would be one of property protection, and it would not matter how sentient, intelligent, or human-like the species. Illustrating this property-minded approach, in 2002 the International Law Commission determined for the first time that "shared natural resources," *res communis*, would be a topic on the agenda.¹⁹² This approach to biodiversity only reaffirms the American/British approach to seals in 1893.

C. *Practical and Legal Obstacles to Applying Interspecies Equity*

Obstacles deterring application of interspecies equity are largely perceptual. One might begin by considering the application of interspecies equity in a practical sense. Steven Wise identifies two obvious dilemmas with universal nonhuman legal rights. The first is a physical dilemma.¹⁹³ It may be difficult for human law to recognize rights of all the mice, ants, roaches, squirrels, and pigeons living in the city. Interspecies equity appears even more difficult to achieve than basic animal rights. Interspecies equity also could be understood to imply political suffrage for trees and ferns, algae and bread mould, and infectious bacteria. The second dilemma is economic: bequeathing rights to even just

¹⁸⁸ See Paul Schiff Berman, *The Globalization of Jurisdiction*, 151 U. Pa. L. Rev. 311, 366 (2002) (discussing the Pacific fur seal arbitration).

¹⁸⁹ *Id.*

¹⁹⁰ UNCLOS, *supra* n. 36.

¹⁹¹ GATT, *supra* n. 80, at art. XX(g) (providing a general exception that "nothing in this agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions in domestic production or consumption").

¹⁹² Michael J. Matheson & Sara Bickler, *The Fifty-Fifth Session of the International Law Commission*, 98 Am. J. Intl. L. 317, 323 (2004).

¹⁹³ Steven M. Wise, Panel Remarks, *The Evolving Legal Status of Chimpanzees*, 9 Animal L. 1, 26 (2003).

warm-blooded vertebrates may require the enormous task of economic restructuring.¹⁹⁴ There are entire industries based on the exploitation of other species, not to mention the costs that such rights would impose on industries like mining, petroleum, and shipping, to name a small fraction.

The legal obstacle to applying the principle of interspecies equity arises from a view of the law as inorganic, inflexible, or literal. With the principle of equity, it could be argued that nonhumans then have claim to the same rights currently reserved for humans. It would no longer be a matter of separating "two competing pro-animal ideologies" into "intrinsic value theorists" and "homocentric theorists."¹⁹⁵ Were a treaty to enshrine interspecies equity, the principle *lex posterior derogat priori* (most recent law supersedes) would enable lawyers to regard the intrinsic value theory as authoritative by drawing from the previously anthrarchic Universal Declaration of Human Rights and successive legal instruments.¹⁹⁶

1. *The Law Must Be Practical*

The solution to the practical and legal problems begins with referring to the purpose of the law. In some cases, limiting legal rights to humans is anthrarchic, while in other cases, the rights are simply species-specific. The rights of nonhuman species may not be germane to international human rights (*intraspecies*) law and should instead develop within the sphere of environmental (*interspecies*) law. However, correlaries exist for rights development irrespective of the species.

If legal rights are impractical to our legal system and society at large, the point of law ceases to exist. Wise's physical dilemma can be solved in a number of ways. Law is supposed to be suited to our societies. It should be suited to the needs of those within our society, whether human or not, as well as to our environment. We should not therefore promote unhealthily large populations of rats, bacterial disease, or the wanton growth of any species' populations such that it would destroy the environment for everyone.

Ecologist Andrew McLaughlin argues that working with dynamics in nature can promote a sustainable human society.¹⁹⁷ Going further, to ensure the health of the entire society, opposing interests of individuals must be balanced with the needs of the community, or the community will disintegrate. It is important to balance the interests of competing individuals with social cooperation. One goal of law may be to judge when society is jeopardized by individual freedoms or privi-

¹⁹⁴ *Id.* at 27.

¹⁹⁵ Bartlett, *supra* n. 166, at 152.

¹⁹⁶ Universal Declaration on Human Rights, *supra* n. 148 (Article I states that "all human beings are born free and equal in dignity and rights.")

¹⁹⁷ See generally Andrew McLaughlin, *Regarding Nature: Industrialism and Deep Ecology* (St. U. N.Y. Press 1993) (discussing paradigms for a sustainable human society).

leges of persons deemed higher in constructed hierarchies, as their consumption may be unfair, unsustainable, and self-defeating. International law addresses citizens jeopardized by despotic leaders and it must also address the biosphere jeopardized by one species.

Wise's economic dilemma can be solved only by radically changing the human perspective of healthy economies so that humans do not senselessly exploit nonhuman species. Industrial economic growth threatens the health of societies in the same way that steroids threaten human health: by triggering unnaturally rapid growth and compromising system functioning as a whole.

If international economic law were to acknowledge the principle of interspecies equity, the legal conception of a resource would become more literal by ceasing to apply to nonhuman species at least considered sentient. Accordingly, international environmental law might be much less submissive to the language of trade and commodities. Nonhuman species would have less *de facto* protection under the GATT, since a state could no longer cite Article XX(g) as a reason for erecting a trade barrier to protect nonhuman species.¹⁹⁸ Nevertheless, Article XX(b),¹⁹⁹ which is also present under the General Agreement on Trade in Services (GATS) as Article XIV(b), will become more significant.²⁰⁰ This provision safeguards the health of a state's inhabitants.

2. *Rights as Tools of the Law*

It is difficult to consider rights within the context of natural law, or "rules of nature," since ascribing legal rights reflects a more positivist legal perspective.²⁰¹ In nature, the concepts "right" and "wrong" are irrelevant.²⁰² What should guide our actions are the physical consequences.²⁰³ Environmental law may require tools—in the form of manufactured rights—such as law addressing human-specific concerns, and those rights will be most effective if they refer to biological realities.

A principle of interspecies equity may engender group rights—for example, a group right to life. Reaffirming the clear relationship between environmental protection and particular human rights, the right to life obviously does not limit itself to the most base of circum-

¹⁹⁸ See GATT, *supra* n. 80, at art. XX(g) ("nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting parties of measures relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption").

¹⁹⁹ See *id.* at art. XX(b) ("nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting parties of measures necessary to protect human, animal or plant life or health").

²⁰⁰ GATS pt. II, art. XIV(b) (Jan. 1995), http://www.wto.org/English/docs_e/legal_e/26-gats.pdf.

²⁰¹ Alan M. Dershowitz, Panel Remarks, *The Evolving Legal Status of Chimpanzees*, 9 *Animal L.* 1, 56–62 (2003).

²⁰² *Id.* at 59.

²⁰³ *Id.*

stances.²⁰⁴ The prohibition of ecocide provides a possible foundation of a basic right to life for nonhuman species. Although the prohibition of ecocide in international law is so weak as to allow even willful extinctions, ecocide constitutes a violation of both state sovereignty and human rights—so the law is more likely to be enforced.²⁰⁵ A United Nations General Assembly resolution declared such an “entitlement” in 1991, stating that “all individuals are entitled to live in an environment adequate for their health and well-being.”²⁰⁶ However, the resolution may have been a meager attempt to encourage the emerging human right to a livable environment.²⁰⁷ For nonhumans in U.S. domestic law, the ESA may provide legal impetus in this direction.

Ultimately, however, it may prove legally impossible to use human rights machinery to protect nonhuman species’ right to life²⁰⁸ because the legal foundation of human rights may be so speciesist as to require a completely different avenue for developing species protection.²⁰⁹ It is true that the meaning of “human” has changed. Human rights documents refer only to “man”—not woman,²¹⁰ a situation that has been remedied by subsequent legislation, and there has been an obvious expansion of the sphere of rights to include new types of persons. Such expansion has overcome traditional approaches of law and *travaux préparatoires* (preparatory work)²¹¹ indicating a clear purpose to protect only specific persons from the beginning—commonly white, property owning men.

However, the fundamentally speciesist nature of human rights may not allow for proper development of species protections. One way of attempting to expand the meaning of human to include other species is to incorporate “common but differentiated responsibilities” (CDR), a developing principle widely present in environmental legal instru-

²⁰⁴ Sumude Atapattu, *The Right to a Healthy Life or the Right to Die Polluted? The Emergence of a Human Right to a Healthy Environment Under International Law*, 16 Tul. Envtl. L.J. 65, 69 (2002).

²⁰⁵ See Mark Allan Gray, *The International Crime of Ecocide*, 26 Cal. W. Intl. L.J. 215, 216 (1996) (“Ecocide is identified on the basis of the deliberate or negligent violation of key state and human rights and according to the following criteria: (1) serious, and extensive or lasting, ecological damage, (2) international consequences, and (3) waste. Thus defined, the seemingly radical concept of ecocide is in fact derivable from principles of international law. Its parameters allow for expansion and refinement as environmental awareness engenders further international consensus and legal development.”).

²⁰⁶ Need to Ensure a Healthy Environment for the Well-being of Individuals, GA Res. 45/94, UN GAOR, 45th Sess., UN Doc. A/RES/45/94 (1990) (available at <http://www1.un.org/documents/ga/res/45/a45r94.htm>).

²⁰⁷ Atapattu, *supra* n. 204, at 103.

²⁰⁸ *Id.* at 70-71; Ash *supra* n. 3, at 195.

²⁰⁹ Ash, *supra* n. 3, at 196.

²¹⁰ Hillary Charlesworth, *What Are “Women’s International Human Rights”?* in *Rights of Women: National and International Perspectives* 70 (Rebecca J. Cook, ed., U. Pa. Press 1994).

²¹¹ Malgosia Fitzmaurice, *The Practical Working of the Law of Treaties in International Law*, *supra* n. 160, at 173, 188.

ments.²¹² A positive effect of negotiating treaties while referring to CDR is that the wording of conventions is sometimes so vague that reservations and exceptions are not allowed any state a party to the treaty.²¹³ Conventions on torture and genocide could be argued to include other species. Ultimately, however, legal protections for other species may need to develop within international environmental law.

Legal protection could be developed with a framework appropriate to the species' basic emotional and physical needs while at the same time considering species survival in a holistic manner as a species' needs relate to and contrast with those of other species. As a rudimentary example, we would consider if other primates, cetaceans, and pachyderms possess emotional and physical needs similar to those of human primates. We could consider, as well, that most species still living in their natural habitats are endangered because of human activity. Consequently, the type of legal entitlement afforded to other primates, cetaceans, and pachyderms will be quite different than legal entitlement afforded to prolific opossums in New Zealand who were brought by humans and now are impacting endemic species negatively. In such a case, and probably most of the time, legal protection would be much more extensive for species living in an environment in which they coevolved with their neighbors.²¹⁴ Such a situation requires discussion over what we consider the most ethical attempt to reconcile our meddling with natural processes.

Whatever the circumstances, the principle of interspecies equity requires that we assess the good of the whole (biodiversity) as well as the individual species, native or not (kiwis as well as opossums).

D. A Paradigm of Equity

At a Harvard symposium entitled "The Evolving Legal Status of Chimpanzees," psychologist Roger Fouts described the current state of law: "[T]he legal system today, even though the laws are beginning to move in proper directions, still adheres to a delusional vertical system. It has not embraced the empirical reality of the horizontal view of nature."²¹⁵ Legal scholar Daniel Warner advocates a more constitutive approach to law, which considers not just its instrumental effectiveness, but regards law as something that "manifest[s] internally," which not only acts upon and regulates society, but shapes society's norms, ideas, and behavior.²¹⁶ Thus, the law would contribute to social

²¹² See generally Stone, *supra* n. 119.

²¹³ *Id.* at 282.

²¹⁴ See Speth, *supra* n. 2, at 32 (In the United States, forty percent of species listed as threatened or endangered are so listed because of threats from species introduced into the ecosystem by human activity. Humans have also severely altered population balances by eradicating natural predators).

²¹⁵ Roger Fouts, Panel Remarks, *The Evolving Legal Status of Chimpanzees*, 9 *Animal L.* 1, 18 (2003).

²¹⁶ Warner, *supra* n. 53, at 55.

life by realizing what makes society natural, cohesive, and harmonious.

Legal scholar Paul Schiff Berman recalls the work of pioneering scholars at the New Haven School of International Law who claimed that an international legal regime is a matter not of rules that are set in stone, but of "procedures for interaction."²¹⁷ International law itself is not composed of coercive orders but of a "constitutive process of authoritative decision."²¹⁸ Accordingly, the New Haven scholars tended to analyze society's conception of jurisdiction in such a comprehensive fashion as to include uninhabitable places like Antarctica and outer space.²¹⁹ With jurisdiction, the scholars gave emphasis to the role of community and of members making legal decisions based on the expectation of the community itself.²²⁰ Their analysis also recognized that what we call community is actually a matrix of interconnected communities bound by individuals with multiple connections and that "[t]he individual should be able to become a member of, and to participate in the value processes of, as many bodies politic as his capabilities will permit."²²¹

The New Haven scholars proposed a "cosmopolitan pluralist framework" that acknowledges the importance of interaction between disparate "norm-generating communities."²²² This framework accounts for the breadth of overlapping affiliations and attachments experienced in daily life, including local, global, and non-territorial affiliations.²²³ The inclusion of nonhuman species is in keeping with the logic and purpose of the cosmopolitan pluralist framework of international jurisdiction.

However, society must address the reality that neither the law nor social sciences defines "community" to include other species.²²⁴ Berman notes that all communities other than what he calls "primordial villages" are imagined.²²⁵ Thus, there is no intrinsic reason to prioritize communities in the form of states over other types of communities, such as a community of primates or a community of life. Berman says that cosmopolitan pluralism is "perhaps the strongest alternative vision to the territorially bounded sovereignty of the nation-

²¹⁷ Berman, *supra* n. 188, at 494.

²¹⁸ *Id.* (quoting Myres S. McDougal et al., *The World Constitutive Process of Authoritative Decisions*, 19 J. Leg. Educ. 253, 255 (1967)).

²¹⁹ *Id.*

²²⁰ *Id.*

²²¹ *Id.* (quoting Myres S. McDougal et al., *Nationality and Human Rights: The Protection of the Individual in External Arenas*, 83 Yale L.J. 900, 903 (1974)).

²²² *Id.*

²²³ Berman, *supra* n. 188, at 494.

²²⁴ *Id.* at 460; *but see* Earnshaw, *supra* n. 7, at 117 (noting that the World Conservation Strategy does cite the "community of life").

²²⁵ Berman, *supra* n. 188, at 494 (Primordial villages, according to Berman's description, are communities that have always existed and may arise from biological propensities of humans as social animals.).

state,” since it attempts to find an appropriate compromise between a philosophy of strict state sovereignty and “expansive universalism.”²²⁶

While Berman discusses subnational, transnational, supranational, and cosmopolitan bases, he does not consider interspecies community.²²⁷ However, in a footnote, he suggests the possibility of including other species in the definition of communities, citing legal scholars as well as Charles Darwin and Peter Singer.²²⁸ Berman makes a strong argument for cosmopolitan pluralism, but as an international legal paradigm, cosmopolitan pluralism does not have to represent simply a compromise, or “middle ground,” between the preferences of insecure hegemony like China and the United States on one hand and the consensus ascription of universal jurisdiction in international courts on the other.

In practice, jurisdiction derived from a conception of cosmopolitan pluralism would involve a discussion of general principles of law. Jurisdiction would also include principles of equity—of states, species, peoples, and persons—as well as principles involving the reliance upon consensus knowledge, influenced by the natural and social sciences and history. An understanding of *opinio juris sive necessitates* (developing customary rules), or the notion that a state’s behavior is conditioned by the perception of legal obligation, could expand to include the source of obligation toward states and all legal entities, which derives not just from a basic understanding of international customary law, but from a basic understanding of ecosystems.

1. *Drawing upon Existing Legal Principles*

Anthropocentrism and exploitation are obstructive principles when it comes to the sustainable functionality of international environmental law. Integrating interspecies equity into law would require first that we cease defining human dignity as deriving from human supremacism and providing the basis for international human rights and for the rule of law.²²⁹ The basis instead might become human (intraspecies) equity and health. If legal scholar Chen is correct that law is an “ongoing process of authoritative decision,” then treaties and judgments need not refer to vague concepts, but to the legal justification of such concepts, which includes general principles of law.²³⁰

General principles of international law relevant to promoting interspecies equity include *pacta sunt servanda* (treaties must be honored), *par in parem non habet imperium* (equality of states), *lex*

²²⁶ *Id.* at 490.

²²⁷ *Id.* at 472.

²²⁸ *Id.* at 487–88 n. 758.

²²⁹ *Id.*; Ash, *supra* n. 3, at 207; see also Makau Mutua, *The Banjul Charter: The Case for an African Cultural Fingerprint in Cultural Transformation and Human Rights in Africa* 79 (A.A. An Na’im ed., Zed Bks. 2002) (asserting that “humans deserve special protections for the simple reason that we are not ‘animals’”); Arnold, *supra* n. 33, at 100.

²³⁰ Chen, *supra* n. 126, at 14.

posterior derogat priori (most recent law prevails), and *lex specialis derogat generali* (more specific law prevails).²³¹ If applied correctly, these principles connect and integrate the different branches of law, keep the laws from moving in different directions and contradicting each other, and ultimately provide that international law retain as much coherence as possible. Put differently, general principles of law are logical, practical, and intended to maintain the functionality of law.²³² The existence of general principles reflects societies' experience and knowledge with legal systems.²³³ The four general principles of international law mentioned above could therefore work to incorporate interspecies equity, especially with the help of *jus cogens*.

Jus cogens, the principle of peremptory norms, is said to have always existed, even if *opinio juris* often appears contradictory.²³⁴ Speciesism in international environmental law could be considered a violation of a peremptory norm, as is slavery or genocide.²³⁵ Slavery and genocide, have been found to violate *jus cogens*.²³⁶ Not only does *jus cogens* trump customary international and treaty law (because it is comprised of nonderogable norms), but *jus cogens* typically derives from a metaphysical perspective of law, which can be and has been evolutive based on new collective knowledge. Furthermore, *jus cogens* trumps state immunity.²³⁷

In this phase of international law's maturation, *jus cogens* may be only indirectly useful for addressing speciesism, such as through non-human rights development. *Jus cogens* must represent the collective will of the community of states.²³⁸ Furthermore, its metaphysical nature renders it open to incessant debate. Nonetheless, the importance of *jus cogens*, and the implication of obligations *erga omnes* (applicable to all), is underscored by the possibility that, without *jus cogens*, existing treaties that are effectively speciesist could supersede reference to *opinio juris sive necessitates*. This distinction is referred to as *jus dispositivum*, which means simply that progressive lawmaking need not be trumped by a precedent of conservative approaches.²³⁹

²³¹ Hugh Thirlway, *supra* n. 160, at 136.

²³² *Id.* at 131–32.

²³³ See *id.* at 131 n. 27 (Article 21(1)(c) of the Rome Statute of the International Criminal Court states that general principles are "derived by the Court from national laws of legal systems of the word").

²³⁴ *Id.* at 142.

²³⁵ See Dinah Shelton, *International Law and 'Relative Normativity' in International Law* 145, 160 (Malcolm D. Evans ed., Oxford U. Press 2003) (stating that "most international rights texts establish a hierarchy of human rights norms" and slavery and genocide are considered non-derogable rights).

²³⁶ Steiner & Alston, *supra* n. 147, at 649–53.

²³⁷ See Lee M. Caplan, *State Immunity, Human Rights, and Jus Cogens: A Critique of the Normative Hierarchy Theory*, 97 *Am. J. Int. L.* 741, 771 (Oct. 2003) (stating that "the superior norm of *jus cogens* is capable of striking down the inferior norm of state immunity").

²³⁸ *Id.* at 772.

²³⁹ See generally Thirlway, *supra* n. 231.

The principle of interspecies equity cannot be applied in international environmental law without reference to three underlying principles: comity, community, and biocentrism. Brownlie describes comity, or *comitas gentium*, as “a [type] of accommodation not unrelated to morality but to be distinguished from it nevertheless. [Neighborliness], mutual respect, and the friendly waiver of technicalities are involved”²⁴⁰ Comity may be considered “the reason for and source of a rule of international law.”²⁴¹ An evolution of international law implies that *comitas gentium* could be expanded rationally to include not just states, but individuals, corporations, and other relevant entities. The inclusion of other species, as populations or individuals, would also be rational and in keeping with the elements of neighborliness and mutual respect to include other species, depending on the circumstances.

Implied by comity is community—in this case not simply a community of states but a community of all species affected by law, although *par in parem non habet imperium* (equality of states) continues to be a useful maxim in a more appropriate form, insofar as the members of the community are regarded as equal in the eyes of the law. In ancient Greece and medieval Europe, nonhuman species deemed to have caused a tort to humans often were put on trial.²⁴² Though such practices seem estranged from modern jurisdictional rules, Berman argues that these practices underscore how such rules are symbolic and contrived.²⁴³ In medieval Europe, nonhuman species trials soothed a fear that the world was not a lawful territory by placing individuals who were otherwise considered “uncontrollable natural forces belonging to the outside world” within the community governed by that community’s laws.²⁴⁴

A perspective of community and “who should be within its dominion continues to define jurisdiction today.”²⁴⁵ Local jurisdiction has gained dominion over foreign corporations, foreign leaders,²⁴⁶ as well as those persecuted in foreign countries as globalizing societies have changed legal perspectives regarding who is included in the community.²⁴⁷ Legal perspectives of who is included in the international biospheric community can also change.

²⁴⁰ Brownlie, *supra* n. 122, at 28.

²⁴¹ *Id.*

²⁴² Berman, *supra* n. 188, at 433.

²⁴³ *Id.*

²⁴⁴ *Id.*

²⁴⁵ *Id.*

²⁴⁶ Vaughan Lowe, *Jurisdiction*, in *International Law* 329, 343 (Malcolm D. Evans, ed., Oxford U. Press 2003); see also Shelton, *supra* n. 235, at 150–59 (discussing how *jus cogens* is used as a justification for the application of universal jurisdiction by courts in the U.K. and U.S.).

²⁴⁷ Berman, *supra* n. 188, at 434; see e.g. Torture Victim Protection Act of 1991, 28 U.S.C. §1350 (2006) (granting U.S. district courts original jurisdiction over any “civil action by an alien for a tort only, committed in violation of the law of nations of a treaty of the United States”).

Adopting a biocentric principle of international environmental law allows for a better understanding of both nonhuman needs and human needs by recognizing that humanity is a part of the environment.²⁴⁸ Biocentric law reflects cognition "within our bodies, within society, within nature."²⁴⁹ When it is acknowledged that human societies are inherently part of a broader natural community, evolution of the law will more likely take account of our dependence on this community. A spirit of biocentrism is apparent in the preamble of the World Charter for Nature in 1982, but quickly dissipates as the text progresses.²⁵⁰

2. *Interspecies Law: Defining Community Effectively and Consciously*

Jurisdiction involves debate about the self definition of community, as jurisdiction bolsters and is wrought from societal conceptions about territory and identity.²⁵¹ Perspectives of the jurisdiction of international law often mistakenly take for granted that community allegiance is constrained by artificially fixed borders.²⁵² Consequently, legal scholars and policy makers rarely have addressed issues related to community and identity, and have ignored anthropology and other social sciences.²⁵³ If the borders of states and conceptions of territory are no longer assumed to define community of states, "an entirely new set of questions can be asked."²⁵⁴ What is the most appropriate way to define international—or terrestrial—community?²⁵⁵ If the nation-state was once a useful way to imagine community, which other useful communities might international law conceive? Upon realizing that perceptions of "place, 'community', 'member', 'nation', 'citizen', 'boundary', and 'stranger'" do not derive from nature, but rather are produced and at times imposed, one must ask: what does that mean for the evolution of law?²⁵⁶

The development of international law is made easiest by acknowledging and addressing cultural and political differences with a long run perspective that heads off social, legal, and political confusion. In addition, the application of international law is made easier by principles that avoid contradiction between branches of law (*lex specialis*)

²⁴⁸ Hughes, *supra* n. 6, at 5–6; McLaughlin, *supra* n. 197, at 143.

²⁴⁹ McLaughlin, *supra* n. 197, at 147.

²⁵⁰ *World Charter for Nature*, *supra* n. 37.

²⁵¹ Berman, *supra* n. 188, at 319–20.

²⁵² *Id.*; see also Philip Allott, *Eunomia: New Order for a New World*, xvi (Oxford U. Press 2001) (referring to the conceptual aspect as the "imaginary frontier between national and international").

²⁵³ Berman, *supra* n. 188, at 320.

²⁵⁴ *Id.*

²⁵⁵ See Martii Koskenniemi, *What is International Law For?* in *International Law*, 89–90 (Malcolm D. Evans ed., Oxford U. Press 2003) (explaining that "[i]f there is an 'international community,' it is not a teleological but a practical association, a system not designed to realize ultimate ends but to coordinate practical action to further the objectives of existing communities").

²⁵⁶ Berman, *supra* n. 188, at 320–21.

and over time (*lex posterior*), as well as by increasing cogence and legitimacy. The application of law also requires that we overcome historical obstacles, such as overspecialization and narrowness.²⁵⁷ International environmental law can accomplish these goals by better defining its target community.

French law can affect every person and object living within the boundaries of France and her territories, whereas international law can affect every person and object living within the boundaries of the planet Earth. That said, what are the substantive differences between French and international law? One difference is the scope of issues international law must address. Even if international law does not supersede state law,²⁵⁸ it reflects greater disparity of citizens' needs with regard to economics, culture, and local political realities.²⁵⁹ Compared with state law, finding consensus in the formulation of international law is, of course, much more difficult to achieve. Consensus will most likely be achieved with a fully integrative approach to legal negotiations that equitably considers, and thus balances, the interests or needs of all stakeholders.²⁶⁰

International law cannot be comprehensive if it addresses the needs of Americans but not the needs of the Chinese. It cannot address the needs of Brazilians without addressing also the needs of the Yanomami. International environmental law cannot be sustainable when addressing the needs of humans, but not the needs of nonhuman species. After all, the purpose of law is to provide stability, facilitate harmony, and protect quality of life.²⁶¹

²⁵⁷ See John H. Jackson, *Sovereignty-Modern: A New Approach to an Outdated Concept*, 97 *Am. J. Intl. L.* 782, 782 (2003) (asserting "We need to overcome. . . the fallacies of an exclusively political and analytical jurisprudence ('positivism'), or an exclusively philosophical and moral jurisprudence ('natural-law theory'), or an exclusively historical and social-economic jurisprudence ('the historical school,' 'the social theory of law'). We need a jurisprudence that integrates the three traditional schools and goes beyond them. [I]t involves not only reason and will but also emotion, intuition, and faith. It involves a total social commitment.").

²⁵⁸ *Id.* at 782–83 (State sovereignty implies there is no higher authority than the States. On the other hand, *jus cogens* norms, as reflections of the will of the community of States, could in theory supersede single State immunity.).

²⁵⁹ See John Maxcy Zane, *The Story of Law*, 2 (Liberty Fund 1998) (stating that "[t]he existence of laws presupposes human beings living in a social complex. The science of law, if there is such a science, is but one of the several sciences that are concerned with men living in a social state. Sociology, ethics, politics, political economy, as well as history, biology and psychology, all have a common ground . . . for they are all more or less related to each other, and all are necessary to a proper understanding of each science.").

²⁶⁰ Lawrence E. Susskind, *Environmental Diplomacy: Negotiating More Effective Global Agreements* 24–30 (Oxford U. Press 1994).

²⁶¹ See Zane, *supra* n. 259, at 10–11 (stating that "all communal socialism is based upon the jurisprudence of the ants in an attempt to apply that polity to human beings This means . . . the fundamental nature of the human mind as the ages have produced it, must be abolished.").

V. CONCLUSION

The world is experiencing a progression away from dominating, militaristic, balance of power politics. Phillip Allott says that “[o]ld international law, as we may call it, is the modest self-limiting of the potentially conflictual [behavior] of governments in relation to each other, . . . [whereas] [n]ew international law is universal legislation.”²⁶² For international environmental law, this means migrating from the mindset of competition to that of cooperation, from state-centric to anthropocentric to biocentric, and from embracing not just intraspecies equity, but interspecies equity. A new “pluralist framework” of law can mature to address the world’s complex and interrelated interests and communities.

John Stuart Mill said that “there ought either to be one fundamental principle or law, at the root of all morality, or if there be several, there should be a determinate order of precedence among them.”²⁶³ Equity is such a principle.²⁶⁴ Acknowledging equity of states is required for international law to function. Acknowledging equity of humans is required for human rights law to function. And acknowledging equity of species is required for environmental law to function.

Applying the principle of interspecies—as well as intraspecies—equity is possible in light of the purpose and sources of law, including general principles like *lex posterior derogat priori* and *lex specialis derogat generali*, and despite the precedents of patriarchy and anthrarchy. Underlying principles of comity, community, and biocentrism in international environmental law, and evading impractical interpretations of “rights” development, can help overcome the complexity of what Allott calls the “self-constituting of the international society of the twenty-first century. . . .”²⁶⁵ A rational and sustainable self-constituting of international law demands maturing beyond the ignorance of Aristotle’s biological hierarchy and the egotism of René Descartes’ exclusionary ethics. The Author acknowledges the political complexity of achieving action on global environmental is-

²⁶² Allott, *supra* n. 252, at xv.

²⁶³ J.S. Mill, *Utilitarianism* 7 (Kitchener 2001) (originally published in 1863).

²⁶⁴ See Brownlie, *supra* n. 122, at 25 (Brownlie refers to equity “in the sense of considerations of fairness, reasonableness, and policy often necessary for the sensible application of the more settled rules of law.” Speaking on judgments and opinions of the international courts, he says that, although it is not a source of international law, equity is used as a reference in decisions. Equity supplements law and plays a major role in judicial deliberation.); see also Thirlway, *supra* n. 231, at 140 (stating that equity is “one of the basic principles governing creation and performance of legal obligations, but “not in itself a source of obligation where none would otherwise exist”); Brownlie, *supra* n. 122, at 27 (nevertheless listing considerations of humanity and “legitimate interests” as sources of international law, citing ample precedent in treaty texts, U.N. General Assembly resolutions and diplomatic practice).

²⁶⁵ See Allott, *supra* n. 252, at xx (“The hypothesis proposed in *Eunomia* suggests that a society constitutes itself, not only in the form of law and legal institutions and not only in the real-world struggles, political and economic and personal, of everyday life, but also in society’s struggle about ideas.”).

sues, but such complexity exists nonetheless. A shift toward a more conscientious view of other species in international legal discourse may provide a better springboard from which to launch into negotiations of more reasonable and effective global environmental policy. International environmental law and legal scholars should integrate a more equitable and astute view of life on Earth.