

have empirical impact and those that do not: "Consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object."<sup>22</sup> I may be wrong in my judgment—if the CH proves empirically false—but I am clearly using Peirce's criterion when I say that the idea of intrinsic value in nature fails the pragmatic test. If adding the idea of intrinsic value to that of enlightened human interest creates no difference in mandated behaviors, and indicates no real changes in behavior from following "broad anthropocentrism," then the CH is a classic case of pragmatic reasoning. The "metaphysical" idea that nature has "intrinsic value" is shown to have at best only ideological and rhetorical use. Our "conception of it has no conceivable bearings."

So, I proudly state that I am a pragmatist. This also means, of course, that I am a fallibilist, and I may be proved wrong eventually. Even if I am proved wrong about the CH, however, by the discovery of important divergences between human well-being and the interests of nature, this would only make me a *mistaken* pragmatist, not a *nonpragmatist*.

### *Some Proposed Counterexamples to the CH*

I found Holmes Rolston III's thoughtful discussion and analysis both interesting and challenging and I am not sure I have convincing answers to all of his points. First, let me say that I do not disagree that motives are important in many situations—motives do matter in courts of law, for example; intent and motive can be definitive in separating accidental harms from assaults. My point is not, then, that motives never matter. Again, it is very important to remember that the CH is a hypothesis about policies; my point is that motives ought not to divide possible allies who seek similar policies for different reasons.

Having clarified that point, I must also say that Rolston mentions some of the most difficult cases for the CH. The first type of case he mentions are cases where protection of a species has very high human costs, and he mentions the problem of protecting Bengal tigers in Nepal and the needle-mouthed fly in California. A first step in gaining clarity in cases like these is to ask exactly what *policy* is being proposed. Since 1987, the general policy criterion I have advocated is to apply the safe minimum standard (SMS) of conservation, which says: "Always save the resource (in this case, the species in question), provided the (human) costs are bearable." Furthermore, I have argued that the SMS rule is consistent with and supports the current legal status of the Endangered Species Act, which mandates protection of a species unless the protection conflicts with important regional or national interests. In that context, the issue shifts to determining, in particular cases, what level of costs become unbearable.

In the case of the flies, we are talking about where to locate development for human habitation, in a wealthy community where developers and some home buyers are demanding expansion into the habitat of an endangered species in a context where the possibility of building elsewhere or of increasing the density of human habitation elsewhere exists. Giving up those economic opportunities and fulfillment of preferences for more sprawl seem not to be unbearable costs for developers (who can build elsewhere) or for potential dwellers (who can buy a house elsewhere). In this case, the endangered species clearly wins—the costs are bearable.

The tiger case, however, involves choosing between a species and fulfillment of basic human needs including food and access to resources that are necessary for human life. I have always found the tiger case one of the most difficult cases to resolve, as Rolston does, and anyone who has a simple answer to it invites suspicion. In such cases, both the anthropocentrist and the nonanthropocentrist face serious dilemmas, depending on the situation. Nonanthropocentrists such as Steverson (this volume) seem to believe that accepting the intrinsic value of all species means a species should be saved no matter what the costs—that there should be no exceptions to endangered species legislation, period. This sounds reasonable, but imagine that a huge asteroid, large enough to wipe out all human life and most other complex life forms if it strikes Earth, is hurtling earthward. Suppose also that the technology is available that could probably explode or divert the asteroid, but the chances of success will be greatly increased, because of the angle of the approach, if the rocket launcher and the equipment needed to service it is placed on the habitat of the needle-mouthed fly. Saving most of life on Earth thus depends on the likely extinction—by our act—of a species. Our obligation is stronger than the SMS, he thinks, as he believes that we should save “as many species as possible.” Would Steverson then consider it “possible” to save species if the cost is most of life on Earth? I hope not; but if not, he, just like the rest of us, is on a slippery slope represented by having to decide, with no clear criterion, when it is “possible to pay the costs” in order to save a species. Or, he could bite the bullet and say that it is “possible” to use other sites (so the fly must be saved for the two years before the asteroid actually hits), and it seems that he favors the fly over most of life on Earth. I would give the rockets their best chance. What would Rolston and other nonanthropocentrists do? I would like to think they would (regretfully) impinge on the habitat of the fly—implying that even if all species have intrinsic value, that value is not nonnegotiable, even though a strict deontology based on the intrinsic value of all species would demand forbearance from intentionally damaging the fly’s habitat. One can also, by varying the case, create a dilemma for anthropocentrists: Suppose occupying the fly’s habitat for the rocket attempt, rather than another space, would increase the likelihood of success, but only by .001

percent. Would *that* be a bearable cost? If the anthropocentrist thinks not, then we could change the case to increase that percentage gradually until the anthropocentrist feels the dilemma.

My main point, here, is that whatever the motive or the rule that guides one's policy with respect to species, there will be difficult cases and dilemmas that cause anguish. I find the strong, Kantian interpretation of Steverson's "possibility" test—never act so as to knowingly cause an extinction—too inflexible. My rule, SMS, seems to me a pretty good one, no matter what one's motives. If, however, nonanthropocentrists want a more restrictive basis for determining individual cases, this will require that they provide an alternative criterion, and provide a philosophical justification for it. In the end, we will either have to follow an inflexible rule like Steverson's or we will have to argue about what costs are bearable to save any particular species. If Steverson admits that "possibility" assessments count costs to determine what is feasible, then it is hard to distinguish this rule from SMS. It involves an assessment of costs. I do not think, therefore, that Steverson has provided a clear counterexample *in policies advocated*. This same answer applies directly to at least some of the four cases of Stenmark (this volume), who cites human population policies.

In the tiger case, Rolston raises one of the most difficult cases possible, and makes a very perceptive point: In many cases where human actions threaten species, they do so as a result of a long series of choices that have been bad for humans as well as bad for nature. Often, bad choices affecting population, lack of land reform, and so forth create dilemmas in which there are no good choices. In cases like the Bengal tiger, Rolston wonders why the tiger species should be extinguished for our failures, and suggests we mend our ways on our own terms. This is a courageous choice, but I would make this point: Since the dilemma of the tiger resulted from choices that *can be easily criticized on purely human grounds*, we cannot think of the tiger case as a clear counterexample to the CH, which expects that decisions made for the actual good of humans will converge with decisions made to advance nonhuman interests. It says nothing about the case in which humans horribly mismanage their own affairs, mistreat each other, fail to provide fair access to resources, and so forth. So, when Stenmark (this volume), mentions "human population policies" as a counterexample to the CH, I need only point out that human population policies have caused famine, destruction of human and natural habitats for species valued by humans, and untold human misery to show that this is clearly *not* a case where the full range of human values have been protected for the present and the future *at the expense of nature*. These terrible policies were pursued *at the expense of human beings* as well, creating havoc in the natural world, so this policy does not conflict with multigenerational anthropocentrism.

In the tiger case, growing populations regulated only by each family's choice, failure of land reform, and so forth created terrible *human problems*. If they had been effectively addressed, then both humans and nonhuman species would be better off. That judgment is certainly consistent with the CH. So I do not know what to say except to try to create a win-win situation; if we fail—and we probably are failing—I doubt that declaring the tiger to have intrinsic value will create a more just system, or save the tiger in the face of human folly.

In other words, I think the tiger case may, at this point, be a case on which it is impossible for *anyone—anthropocentrists and nonanthropocentrists alike, to have a compelling position*, however one comes down on the continuum of invasive management of human cultures in order to achieve a world-scaled goal. One eventually has to count the costs of protection, as I argue above, and I think reasonable people can disagree about what the costs are, who suffers them, and at what point the human costs become unbearable, even as we agree that there is a strong obligation to act to protect all species. I cannot fault Rolston for drawing the line perhaps somewhere nearer protection of the tiger; indeed, I find the tiger dilemma virtually paralyzing in its difficulty, so I would have to study the situation a lot more deeply to make specific recommendations in this complex case. However, the existence of cases in which, as a result of long-standing failure of humans to act in their own interests, we now face only bad choices, does not represent a failure of the CH, but rather a failure of human-oriented management.

I also must react to Rolston's discussion of regrettable and unacceptable experiments that have terribly mistreated animals in order to advance human medicine or other human ends. I abhor the mistreatment of animals and have spent years of my life working with zoos, aquaria, and other facilities that keep wild animals in captivity. What I learned in that work is that ethics of human-animal relations are fascinating and very difficult. With respect to individual animals, I do believe that individuals of many species have moral standing. I am not sure how I would characterize the obligations I feel to individual animals, except to say that I strongly endorse norms for human actions that affect morally considerable animals. I would say that, if I knew a clear and compelling theory and explanation of human rights and justifiable interests, I believe a similar or analogous theory of ethics would apply to many animals. What I do not know is whether or not that makes me a nonanthropocentrist. In any case, I have concentrated on environmental, not animal, ethics and I have argued since 1982 that I do not think distinctively environmental values, such as the value we place on ecosystems and species, are well explained using an individualistic ethic, whether human or biocentric.<sup>23</sup> I have thus devoted quite a few pages to explaining a special kind of values, which I call "communal values," such as landscape and ecological integrity,

and healthy and fair institutions.<sup>24</sup> So I remain an anthropocentrist in environmental ethics (in the sense, explained above, that I reject the theoretical apparatus developed to characterize one kind of environmental values). Since my professional concern has been with environmental values and environmental policies in this area, I choose to accept the CH as a working hypothesis.

Finally, while it often seems that Rolston and I are very far apart in environmental ethics, I think these disagreements about whether we should posit values independent of human beings, capable at least in some cases of "trumping" human values, have more to do with our theories of epistemology than with any differences about policies and problem solutions. He seems comfortable with theoretical terms for which I can see no operational meaning, so I believe that Rolston's attributions of intrinsic value to species and ecosystems cannot be justified epistemologically; they are ideology, not verifiable. I fear, therefore, that they cannot form the basis of strong arguments for protecting species or other policies unless people are already convinced species and ecosystems have that intrinsic value. Again, full treatment of this topic would be beyond the topic of convergence.<sup>25</sup>

### *Legal Standing and an Incorrect Interpretation*

J. Baird Callicott develops a complex argument that the Endangered Species Act, together with judicial interpretations of it, have "objectified" intrinsic values in species, by which I think he means that passing legislation protecting species creates legal rights, which include the possibility of anyone bringing suit on behalf of an endangered species. Since the suit can be brought in the name of a species itself, Callicott interprets this legal gambit as attributing "intrinsic value" to the object. By coupling this argument with another argument that anthropocentrists would not accept the same policies regarding species, he concludes that the CH is false. To put the argument in his own words: "If we can identify a public policy that is clearly based on non-anthropocentric intrinsic values, and it would not be the same policy had it been based exclusively on anthropocentric instrumental values, then the convergence hypothesis will be unequivocally falsified. There is one such public policy—the U.S. Endangered Species Act of 1973. Therefore, the convergence hypothesis is false."<sup>26</sup>

It might be fun to try to figure out how Callicott can claim his first premise as, thanks to the legislature and the courts, "the ESA is 'clearly' (my emphasis) based on non-anthropocentric intrinsic values." In fact, his argument is so confusing that space available here is inadequate to address the confusions piled on ambiguities as he constructs his legalistic argument. Here is a sampling of his "clear" reasons that the ESA "objectifies" intrinsic