

**SOLID ROCK AND SHIFTING SANDS:
THE MORAL PARADOX OF SAVING A SOCIALLY-CONSTRUCTED NATURE**

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I am strong, I am frail
I am love, I am fear
I'm emotion, I'm a wall
I belong, I don't fit
I am clumsy, I am grace,
I'm a paradox; aren't we all?

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Introduction

This morning I got up and—creature of the Internet that I am—pointed my web browser to the Environmental News Network online (www.enn.com). Their headline daily news story (see figure 1, manuscript p. 23), based on a paper just published in Conservation Biology (Ricciardi and Rasmussen 1999), is titled “Freshwater species in peril, study finds”; the first paragraph reads “Some freshwater species in North America are becoming extinct at a rate as fast or faster than rain forest species, but their plight is largely ignored, according to a recent study out of Canada.” This particular ENN story is but one of countless examples of the environmentalist call to action based on the compelling evidence of scientific fact and shared values.

Yet some interpretations of the social construction of nature thesis cast serious doubt on the moral logic—the rationale for why we should care—underlying this and similar environmental concerns. I agree and disagree, and hope to suggest why in this essay. I believe that taking social constructivism seriously necessitates a fundamental revision of environmental ethics as it has generally been construed. Yet I would be gravely concerned if this revision were to rob the authors of the Conservation Biology article of their ability to speak about freshwater species extinction in North America. As with perhaps most contributors to this volume, I am both convinced that people with

environmental concerns must embrace social constructivism, and worried that this implies they must flip-flop from moral certainty to moral aphasia.

My argument will be that taking social constructivism seriously leads not so much to some moral flip-flop as a willingness to accept the paradoxical truths that nature is, so to speak, both autonomous and socially constructed, that our knowledge of nature speaks to both secure objectivity and slippery subjectivity, that our caring for nature is based on values fully arising from our particular and hence limited perspectives yet also fully aspiring to some claim of universality—that, in short, we must found our environmental ethics in a dual spirit of confidence and humility, with one leg standing surely on solid rock and the other perched tentatively on shifting sands. Though these oppositional categories are themselves problematic (Proctor 1998a), they speak to certain inescapable tensions and ambiguities social constructivism poses for environmental ethics, which must be embraced if our environmental concerns are to be well grounded philosophically.

Environmental Ethics on Solid Rock

What is ethics? Formally, ethics involves analyzing the basis and justification of morality, that full assortment of significant should/should not, right/wrong, better/worse, and similar value-based distinctions we make as a part of living our lives. Another way to think of ethics is that it involves thinking about caring. We all care deeply about some things and not others, and we care or don't care about these things in particular ways and for particular reasons. Ethics involves sorting out why people care as they do and to what extent these ways of caring are philosophically justified. To me, thinking-about-caring does not privilege thinking over caring, because one must care about thinking-about-caring in order to even bother doing so. Caring is an

exemplary gesture, and even those of us who wriggle at the word morality nonetheless care about something. The perspective of ethics simply reminds us to care carefully.

The history of humankind is strewn with examples—some merely unfortunate, others utterly cataclysmic for particular humans or nonhumans—of how dangerous unreflective morality can be. To believe that one is right, that one fights the good fight or the noble cause, puts one in a very dangerous position of potentially doing great harm in the name of good. Ethics, as I see it, is the way we stand on guard against such atrocities, knowing that the only way to do so is to care carefully; such is the spirit in which I here approach ethics. I will also in this essay use the term in the singular as a descriptive summary of a particular moral approach. To me, then, environmental ethics can imply analysis of the ways in which we care about nonhuman nature (and here and throughout I will roughly conflate environment with nonhuman nature, though their meanings can legitimately diverge), and it can also imply some attempt to encapsulate the prevailing moral bases upon which people care about nonhuman nature.

Environmental ethics is a relatively recent field of philosophical study, though it has grown by leaps and bounds from its humble origins dating roughly back to the 1970s; there are numerous anthologies one can consult to get a sense of the field (e.g., Botzler and Armstrong 1998; Pojman 1998). My focus here, however, will be less on the principal academic discussions in environmental ethics than on what we could call popular or conventional environmental ethics, the often implicit moral justifications invoked in contemporary environmental concern. What I propose to do in this essay, then, is focus on our taken-for-granted ways of caring about nature that surface in the context of these contemporary concerns.

Let us return, then, to the story that appeared on my screen this morning. The story points out a number of facts underscoring the plight of freshwater snails, fish and

amphibians in North America; for instance, “Common freshwater species...are dying out five times faster than terrestrial animals and three times faster than marine mammals,” and “Since 1900, at least 123 species have been lost from fresh water habitat in North America, and hundreds of additional species of fish, crayfish and amphibians are considered imperiled.” It also presents an analysis of principal causes of freshwater species extinction, focusing on habitat modification (e.g., dams) and introduction of exotic species (e.g., zebra mussels) as the main culprits. The story notes that these extinctions will “greatly impact global biodiversity” due to the sheer abundance of North American freshwater species. The newswriter however concludes by emphasizing that “Ricciardi is confident that humans can modify their behavior to reverse the downward trend of freshwater species, ‘without ruining the economy,’” and provides several examples of how people could improve the situation with relatively painless changes.

A brief ethical analysis of the story notes as a point of departure that its moral is clear: people should strive to halt the rapid extinction of North American freshwater species. How is this moral justified? Certainly, the facts presented on the alarming rates of extinction, and the ways these facts are contextualized by comparing them to rain forest extinctions and noting their impact on global biodiversity, play a major role in buttressing concern. Also, the analysis of causes of these extinctions points to humans as the responsible agent; the lead author’s informed opinion that action can be taken without dire adverse economic impacts suggests that reasonable policies can be implemented to address these driving forces underlying extinctions. Further, this argument assumes that certain important values are reliably in place among the readers of the story and need not be defended here. For instance, the mere fact of extinction would not justify action unless biodiversity in general or freshwater species in

particular were seen as valuable, whether for instrumental services to humans, for their own sake, or some combination of both. This story, then, assumes and builds on the great value many North Americans would presumably place on conserving biodiversity.

Which of these moral foundations are presented as controversial or uncertain in the story? None of them. There is only one possible reading: biodiversity is important, people have drastically reduced biodiversity in North American freshwater ecosystems, and thus something can and must be done soon. In short, this story stands on the solid rock of apparently incontrovertible facts and values in prescribing corrective environmental policy. Surely, one would assume, such a clear case is morally indisputable. What I argue, however, is that this is not so, even when there seems to be little dispute over the facts and values that justify a moral imperative to protect the environment.

The Environmental News Network example I found on my screen this morning admittedly contains elements that would make some philosophers squirm. Perhaps the most significant of these is the almost-too-quick leap from description to prescription in citing rates of extinction to justify normative action: the is-ought distinction—that one cannot derive an “ought” exclusively from an “is”—serves as a basic premise in much moral philosophy, but ENN’s ought-based-on-is storyline is perhaps the most common in contemporary environmental rhetoric, testifying both to the powerful role of science in justifying concern and to the artificiality of separating facts from values in understanding environmental concern. Though these philosophical problems are important, I will not focus so much on them here as consider the challenges posed by a social constructivist perspective.

Enter Social Constructivism: Shifting Sands?

The social construction of nature thesis has been so horribly maligned by its opponents (based in part on relatively few clear defenses of the thesis) that I must try to correct some misinterpretations before I discuss its implications for environmental ethics. It is more than the relatively obvious notion that people have transformed nature in ways we often do not recognize: social constructivism does entail biophysical components in arguing that nature is often less “natural” than we would think, but its primary argument to me is an epistemological one, concerning knowledge propositions and related meanings we attribute to nature. It is decidedly not, however, simply a rehashing of classical idealism—the notion that nature does not exist except in our individual or collective minds—nor is social constructivism some notion that privileges ideas over action. Rather, social constructivism reminds us that any descriptive or normative pronouncement people make on nature is never innocent of its human origins. There certainly is a nature “out there,” but we cannot say anything more about it without relying on human modes of perception, invoking human conceptual apparatus, involving human needs and desires—in short, when we speak of nature we speak of culture as well (Williams 1980), of the meanings we attribute to nature.

The social constructivist perspective can enrich environmental ethics by reminding us that any human pronouncement on nature entails social as well as biophysical considerations, that there are, so to speak, important truths about the truths we invoke in our defense of certain normative positions. Thus, alarming biophysical facts and seemingly self-evident values concerning nature do not stand outside of a social context, and that context itself must be interrogated, even in what appears to be an incontrovertible case such as that we are considering here.

It is important to know whether or not it is indeed true that freshwater species are going extinct at a rate five times greater than terrestrial animals, and that is what scientists like Dr. Ricciardi and others are for. It is also important to know whether or not the values people place on freshwater animals are philosophically robust. But each of the facts and values invoked to buttress the ENN story's position has further, social dimensions as well. As some examples: why is this story appearing at this time and why did it make ENN headlines? Have other studies on freshwater species gotten similar attention, or does the note of alarm the authors raise make it more appropriate to ENN's objectives? Why is the full range of potential social impacts connected with reducing human driving forces of freshwater species loss not treated in any greater detail in the story? Are we simply to trust Dr. Ricciardi's judgment that few adverse economic impacts would result? And what of the values assumption that freshwater species are worthy of our concern? In addition to the philosophical complexities of arguing the general value of biodiversity, isn't it a bit presumptuous to assume that the readers of this story will agree that all freshwater species are valuable? Indeed, whose values are being advanced as the values underscoring the story's moral argument? I am sure you can think of many more questions of this sort; they do not so much challenge head-on the integrity of these facts and values as critically situate them in a social context, and scrutinize that context in which meaning—in this case, the compelling case to reduce extinction of freshwater species—is socially produced and consumed.

Indeed, Ricciardi himself is engaged in a debate over meaning when he argues in the ENN story, "Conservation campaigns tend to cater to the public fixation on furry, feathery critters. No one would think of using a mussel or crayfish as a conservation poster child." Ricciardi is challenging the "warm fuzzy" notion of biodiversity

conservation that spotlights animals most people are drawn to: my own work, for instance, has considered the northern spotted owl of the Pacific Northwest, surely an important icon of the environmental movement in the late 1980s and early 1990s (Proctor 1998c). Ricciardi's statement does not challenge whether or not species such as the spotted owl are indeed imperiled, but rather questions the overemphasis on charismatic species in biodiversity conservation efforts, which unintentionally leaves less charming species unnoticed.

If the above were all there were to social constructivism, then the space for conflict between non-constructivist and constructivist views would be minimal, as they address different domains, different questions. Yet social constructivism is more than just a way to examine the social context of facts and values; it also challenges, given their social origins, whether these facts and values are as solid and unassailable as they are portrayed by many environmentalists. Some terminology is necessary at this point (for fuller discussion see Proctor 1998a; 1998b). The solid rock upon which conventional environmental ethics is commonly built involves particular philosophical stances about the facts and values used to justify environmental concern; collectively I will call the conventional position realism, to distinguish it from constructivism. Realism is the position that the world is real and knowable. Facts are not just made-up things that legitimately differ from person to person, but rather are claims about the real world that are true to the extent that they correspond to this reality. Though realism is primarily a position about facts, it also can be invoked to suggest a similar spirit toward values in that they are not just a matter of preference or context. Realism is thus antirelativistic to the core. What is critical in this realist moral justification of environmental concern is its decided tone of universalism: that these concerns are based on facts and values that hold true universally. Universalism is what affords conventional environmental ethics

the security of standing on solid rock in its pronouncements, as they are based on what is true, not just true for environmentalists but true for—and hence morally binding upon—everyone.

Social constructivism, however, challenges the universalistic tone of this realist stance on facts and values. The constructivist challenge to values universalism is probably the less controversial of the two, as most people are willing to admit that ways of valuing nature are of human origin and thus may legitimately differ from person to person or culture to culture. The challenge to facts may however be less intuitive and thus require further clarification, especially since facts play such a pivotal moral role in the ENN and similar stories. If one views assertions of scientific fact from a constructivist perspective as primarily a human creation, then a serious measure of doubt enters our consideration of whether or not these assertions map faithfully onto reality and are thus true irrespective of who is making or believing the truth-statement. We may wonder, for instance, how exactly Dr. Ricciardi and his co-investigators assembled the reams of data necessary to come to the conclusion that freshwater species are declining at an alarming rate. Clearly they had to construct (note the verb) this conclusion out of a vast quantity of other studies and observations, or if not, they had to do so based on extrapolations from certain limited studies. How detailed a model did they construct (here's that verb again) to estimate near-future trends in extinction? Given, for instance, their argument that extinctions have been primarily due to human driving forces, did they develop estimated rates of change in habitat modification and exotic species introduction in order to estimate rates of extinction, or (more likely) did they simply base their estimate upon historical trends of freshwater special extinctions? Indeed, in their paper Ricciardi and his co-investigator admit to their scientific peers

that their method of estimating extinctions is “crude” (Ricciardi and Rasmussen 1999, 1221); yet this admission is entirely absent in the ENN story.

Once examined more closely, then, a rather straightforward assertion of environmental fact such as high rates of freshwater species extinction starts looking quite complex indeed, and it becomes apparent that those who constructed this knowledge had to make many crucial assumptions and simplifications along the way. Yet many, many environmental assertions are of this order of complexity. Imagine if the headline to the ENN daily news had read: “One freshwater species in one drainage has declined in last five years.” That, certainly, is the kind of conclusion warranted by many empirical scientific studies, but it lacks a certain bang, a certain moral and political imperative to care. I would assert that the social constructivist distrust of facts-as-naïve-representations-of-reality becomes more and more salient as these “facts” take on a complex and composite nature—precisely the kinds of facts that motivate a good deal of contemporary environmental concern. Consider global warming, biodiversity loss, the ozone hole, acid rain, deforestation, desertification: these are each composite facts on an order of complexity much higher than that of the ENN story. Are they true? The social constructivist would have a hard time forgetting their human origins. Are they compelling? You bet they are, to a good number of environmental sympathizers. And thus lies the apparent threat social constructivism poses for conventional environmental ethics.

I do not wish to imply from what I have suggested above that there is necessarily some conspiracy out there in which certain powerful environmentally-leaning organizations are propagating fact and value soundbites as a way of raking in financial and political support. Indeed, there is nothing to me sinister about trying to simplify the vast complexity of environmental issues into more concise statements, such as that

freshwater species are declining at a certain rate or that biodiversity is valuable. At some level this is an inherently human tendency of making meaning out of complexity. One way to think about this tendency involves the concept of narrative. As the environmental historian William Cronon has said:

Narrative is the chief literary form that tries to find meaning in an overwhelmingly crowded and disordered chronological reality....By writing stories of environmental change, we divide the causal relationships of an ecosystem with a theoretical razor that defines included and excluded, relevant and irrelevant, empowered and disempowered....Narrative succeeds to the extent that it hides the discontinuities, ellipses, and contradictory experiences that would undermine the intended meaning of its story (Cronon 1992, 1349-50).

A narrative, in other words, is a story, not a fairy tale devoid of real content but rather an intentional selection and construction of evidence to bring forth some meaning or moral.

Perhaps the moral to the ENN story is clear precisely because it is a story, a deliberately constructed narrative, the result of including certain facts and values and excluding countless others, of shaping the result into a notion of human-environment interaction with some profoundly disturbing moral implications. Narrative allows us to say that the ENN story is not so much untrue as partially true, in that it is quite literally made up, that is, constructed, shaped, in this case by scientists and journalists working to form a meaningful narrative out of a very complex environmental issue.

Universalism is a very important though unmentioned component of this narrative. Universalism helps us interpret the facts and values that provide its moral justification as being universally binding—that is, not just the facts and values that Dr. Ricciardi chooses to believe, but facts and values we all must listen to and heed.

Social constructivism's most serious charge, then, is to question—and perhaps legitimately so—the universalism underlying the ways conventional environmental ethics invokes facts and values in its defense. Yet if we discard universalism, what do environmentalists have in place of that secure basis? Constructivism seems to imply that we must replace the solid rock of universalism upon which much environmental concern is founded with the shifting sands of specific cases and multiple perspectives. This is the decidedly sub-universalist stance that facts and values are true and morally compelling only as understood in a certain context, a position we can call particularism.

How will environmentalists retain their distinctive voice on environmental problems if theirs is now one of many voices, each granted a measure of de facto legitimacy given the particularistic limitations of each claim to represent the truth? That, indeed, is a major worry among those who argue that recent theoretical perspectives on nature will wreak havoc on legitimate environmental concerns. The Pulitzer Prize-winning poet and self-avowed bioregionalist Gary Snyder recently put it this way in an article entitled “Nature as seen from Kitkitdizze [his home] is no ‘social construction’” (Snyder 1996, 8):

I must confess I'm getting a bit grumpy about the dumb arguments being put forth by high-paid intellectual types in which they are trying to knock Nature, knock the people who value Nature, and still come out smelling smart and progressive....The current use of the “social construction” terminology...is based in the logic of European science and the “enlightenment”....this socially constructed nature finally has no reality other than the quantification provided by economists and resource managers. This is indeed the ultimate commodification of Nature, done by supposedly advanced theorists, who prove to be simply the high end of the “wise use” movement [for background on wise use, see Echeverria and Eby 1994].

The Perspective of Paradox

As noted above, not all of what goes under the banner of social constructivism directly contradicts conventional accounts, and so to some extent social constructivism simply enriches realist discussions of environmental ethics by including certain important social considerations. We could thus resolve differences between the two by the position of separation, which maintains that they do not really contradict each other so long as they keep to their own place. Let the scientist tell us about reality; let the constructivist tell us about the social conditions under which truths about reality have been produced. That way neither treads on the other's turf. This resolution assumes that the contradiction between the two positions obscures their relative independence—that, although there are points of disagreement, another look would suggest that the two actually address different concerns, and that if only they would remain in their separate domains there would be much less conflict.

Yet at another, more fundamental, level, what to many environmentalists is a truthful and compelling case of facts and values is to the constructivist just one of many possible accounts and hence not universally binding. So we are faced with a classic dilemma in which one position contradicts the other in quite fundamental ways. How are we to make sense of this conflict? I would like to discuss two common solutions, then proceed to a more paradoxical way of understanding it. The first is the position of exclusion: you choose the side you like best and you ignore, or work to disprove, the other. Say you believe that truth does really correspond to reality and all that social constructivist talk is beside the point. Maybe, for instance, you share the concerns expressed in the ENN story that freshwater species are disappearing at an alarming rate, and the implicit value statement that these species are worthy of our concern. You

believe the account to be fully truthful and compelling, and you find any social constructivist challenge to this account to be unwarranted and possibly politically dangerous in that it may deflect the resultant call to action. The clear choice for you is to deny the legitimacy of social constructivism in this case, and maintain the purity of the conventional position. The opposite position can be maintained as well: suppose you are quite suspicious of the truth of the story in social constructivist fashion. The simplest thing to do is to deny the validity of a non-constructivist basis for the ENN story and thus maintain the purity of your own position.

The exclusion position is what feeds many battle cries to rid the world of the enemy. It is hence enormously powerful politically, in large part due to its purity and simplicity. It is also intellectually and morally suspect, for what I hope to be obvious reasons: the realist view and the constructivist view cannot and, I believe, should not be dispensed with so readily. This leads to a much different position of compromise, quite common in environmental rhetoric today. From the perspective of compromise, the conventional and social constructivist arguments should be viewed as two extremes, and as such can probably be reconciled if interpreted in less extreme ways. Somewhere nearer to the middle, the compromise position argues, lies a place where a milder version of each can meet. In the case of the ENN story, for instance, consider an account that admits that the story was constructed by scientists but emphasizes that they used facts, not made-up pseudo-evidence, to build their case.

The compromise position makes a good deal of pragmatic sense in the political arena of environmental debate, where polar opinions are more the rule than the exception. It speaks to an attempt to recognize what is worthy in two contradictory positions while trying to reconcile them nonetheless. Yet it does so in many cases by necessarily diluting each, reducing them to at best a weakened version and at worst a

mere shadow of their core argument. This is one reason compromise is so hard to attain in many cases of environmental conflict.

My work on conflicts over nature has suggested another possible way to understand this contradiction: paradox (Proctor 1998a). A paradox is a contradiction that is nonetheless true, i.e., a contradiction whose truth resides in the paradox and is not revealed by resolving it in some way. If the exclusion position resolves contradiction by tossing out one side and the compromise position dilutes both elements of a contradiction to the point where they meet somewhere in the middle, paradox suggests that these modes of resolution lose important truths captured best in the tension that exists in a contradiction. The paradoxical “resolution” of the realist-constructivist contradiction thus lies not in choosing sides nor in searching for some elusive balance, but rather in admitting, in true paradoxical fashion, that both sides are basically correct as they stand yet neither is fully correct without the other. It is thus a resolution that defies resolution. Paradox suggests that many important truths have their shadow, and that they and their shadow constitute a more whole—though certainly also a more tense and twisted—truth.

Paradox may sound like so much rhetoric to the reader, but I am convinced that we live with paradox all the time; indeed, paradox is resolved not in theory or concept but in practice. Each of us can probably recite our own list: I recall, for instance, how much I struggle with understanding the ways in which joy and pain are interwoven, the contradictory virtues of discipline and abandon, my desire to connect with others yet retain my distinctive voice, and the beauty and struggle of relationships, where I and my partner seek to understand the tensions that both draw us together and send us apart. Being an academic, I try to think my way through problems, but I simply cannot in these cases; I can only live my way through them. Indeed, the Greek paradoxos, a

compound of para (beyond) and doxa (opinion; from dokein [to think]), roughly means “conflicting with expectation,” and suggests the futility of conceptually resolving paradox.

Many apparent paradoxes are, however, false paradoxes, and must be labeled as such if we are to retain some dignity to the concept of paradox. Indeed, one of the earliest philosophical uses of paradox was by the 5th-century BCE philosopher Zeno as a logical strategy of proving the soundness of his master Parmenides’ teachings by pointing out the absurdities—or false paradoxes—that would result from following premises contrary to those of Parmenides. Thus the Achilles paradox, for example, claimed that a slower runner will never be passed by the faster runner in a race as a means of defending Parmenides’ doctrine of the unreality of motion.

We encounter false paradoxes in our lives all the time, and these too expose inconsistencies in our assumptions. Yesterday, for instance, I was sure it was going to be a cold day because the morning was cool, but I ended up sweltering in my heavy clothes as the heat rose through the afternoon. How can a cool morning end up a hot day? Well, ask any meteorologist and you will hear all about low humidity and descending air masses warming up and so forth; the bottom line—which most inhabitants of arid areas know well—is that there is no necessary contradiction at all between waking up to a cool morning and sweating through a hot day. To what extent, then, is the apparent contradiction between realist and constructivist views of nature not a contradiction at all? The separation argument noted above would maintain that contradiction can be removed if only the two views on nature would restrict themselves to their appropriate domains; but this would necessitate avoidance of the fundamental constructivist critique of universalist elements inherent in the conventional view. No, from what I see the contradiction between the two is real and volatile, as statements

like that of Gary Snyder noted above and recent anti-constructivist works like Reinventing Nature? Responses to Postmodern Deconstruction attest (Soulé and Lease 1995; for discussion see Proctor 1998b).

What light does paradox cast on the ENN story? Its perspective concerns not so much the details as the moral that arises from it. The conventional account cries out for our moral attention: North American freshwater species need our conservation efforts immediately! The constructivist critique challenges the universalistic assumptions in how facts and values were invoked to arrive at this moral. Paradox honors the truth in both of these claims, and in so doing acknowledges the necessary tension between universalism and particularism in the ways we justify our environmental concerns. Let us listen to those who tell us that we must act to save freshwater species, says the perspective of paradox; they have at some level a legitimate and universally-binding claim on reality. And at the same time let us be prepared to challenge the constructedness of their claims, and the constructedness of our own counter-claims, in the spirit of particularistic limitation. The environmental ethic underlying the ENN story must be modified to embrace both universalistic confidence—the ability to speak the truth and willingness to trust those who claim to do so—and particularistic critique and humility—the ability to question the context of truths we hear and speak. If paradox seems to steal the thunder from the moral bang of the ENN story by validating constructivist critiques, it however refuses to honor some flip-flop from realism to constructivism, which—among more theoretical implications—may unfortunately neglect the plight of freshwater animals in so doing.

Paradox also implies that none of us can embody the “whole truth”; each of us must admit our shadow but cannot become a shadowless being due precisely to the specificities of our lives and truths. I cannot ask Dr. Ricciardi, for instance, to take

constructivism fully into consideration in his realist account of North American freshwater fauna, because to do so he may risk diluting what he has to say. But I can ask him to respect the integrity of the constructivist critique at the same time he speaks his realist truths. The tension between Dr. Ricciardi and his constructivist (indeed, constructed! I know of none so far) critics is, paradox argues, unavoidable, and not resolved by exclusion, compromise, or separation.

Paradox yields to compromise and other inclusive methods of resolving contradiction when the question turns to policy, as indeed we cannot simultaneously decide to embrace and shun corrective policy for North American freshwater fauna. Yes, some compromise is needed; no one has an inviolable claim to the truth; we must listen to each other. Yet we can and must speak also: Dr. Ricciardi has a legitimate role to play given his training and experience. And his is not the final word. At the same time environmentalists negotiate with other interests in securing adequate policy for protection of North American freshwater ecosystems, they must respect that theirs is not the full truth, that the full truth is nowhere to be found, but perhaps best represented in the paradoxical tensions that accompany struggles over what is true and right.

Larger Implications

Robert Frost once said, “We dance around a ring and suppose, but the Secret sits in the middle and knows” (Frost 1942). Chet Raymo paints in a recent book a word-picture of knowledge as an ever-increasing island in a sea of inexhaustible mystery (Raymo 1998, 46ff.) Both speak to me of our own particularistic limitations in the search for universalism. We will never know the complete truth that sits in the middle; the island of knowledge will never fill the sea. But we must not abandon what we believe

we do know; we must not stop dancing with others (I am thinking here of realists and constructivists, for instance) around that ring either. We yearn for an environmental ethics that speaks out of our own particular experiences yet has something to say beyond those particulars as well. We want to speak to what is true and morally compelling in the case of North American freshwater fauna and other forms of nonhuman nature with whom we share life. Paradox reminds us that— figuratively speaking—the Secret, the mystery, will always be with us in that quest.

To me, then, social constructivism leads not so much to an abandonment of realism in environmental ethics as an embrace of the paradox that the realist and the constructivist have something important to say, though their positions will never be blended. Paradox asks us to admit our shadows and look for the shadows in others while not expecting that any of can live perfectly shadowless lives in merging all positions with our own. Paradox is a hard concept to expect everyone to acknowledge, yet minimally we can ask that everyone respect each other's role in helping define what is true and right. There must, of course, be rules for these negotiations over meaning, for which different formulations of social interaction have been proposed (Habermas 1979; Benhabib 1996).

Paradox thus inspires a dual spirit of confidence and humility in making moral proclamations concerning the environment, and in so doing responds to some of the major historical themes of our times. Underlying the ENN story is the modernist desire for universalism (though modernism includes many contradictions in this regard—see Berman 1982; Habermas 1987). This desire furthered the role of science as the preferred vehicle for obtaining truth, and partially explains the profoundly misguided assumption that Western modes of thought and practice are typical (hence universal) among the peoples of this planet. Underlying the constructivist critique of the ENN

story lies something of the postmodernist distrust for universally-binding grand narratives, for sweeping statements of fact and value (Lyotard 1984;1993; Harvey 1989).

As modernists struggle for universals, so postmodernists struggle for particulars, and both, I feel, have their role to play, yet neither will play their role well without being held in paradoxical tension by their counterpart. Indeed, ethics finds rich soil in this tense terrain: as but one of many examples that come to mind, I think of differences between impartial conceptions of ethics such as social justice, and avowedly partial conceptions of ethics such as the feminist ethics of care (see Smith [1998] for a geographically-based discussion). To base environmental ethics on anything less than the modernist/postmodernist tension is to close the doors of environmental concern to some of the most important intellectual pulses beating in our collective hearts. Environmental concern can certainly thrive in this context; we will not lose our ability to speak our truths. Yet perhaps we will all be reminded to listen as well.

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Figure 1. Environmental News Network article, 10/16/99

Freshwater species in peril, study finds

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By Margot Higgins

Some freshwater species in North America are becoming extinct at a rate as fast or faster than rain forest species, but their plight is largely ignored, according to a recent study out of Canada.

"A silent mass extinction is occurring in our lakes and rivers," said Anthony Ricciardi of Dalhousie University in Halifax, lead author of the study. Nevertheless, few people are aware of the crisis.

The study found that common freshwater species — from snails to fish to amphibians — are dying out five times faster than terrestrial animals and three times faster than marine mammals. Moreover, freshwater animals are dying out as fast as rain forest species, which are generally considered to be the most imperiled on species on Earth.

"Freshwater species have received little conservation attention," said Ricciardi. "Conservation campaigns tend to cater to the public fixation on furry, feathery critters. No one would think of



Courtesy Illinois Natural History Survey

Freshwater species, like this endangered mussel, may be dying out as fast as rain forest species.