

R.I.P. “NATURE”? A PRAGMATIST CRITIQUE OF FIRST-GENERATION NATURE CONSTRUCTIVISM

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ABSTRACT: *This paper serves to critique “social construction of nature” writing that arrived by storm in the geographic literature in the late 1990s and early 2000s. My main arguments are twofold. First, I find the early constructivist critique in its broadest sense to be overstated. It was, I argue, the superimposition of a larger theoretical-political project onto a new subject, “nature,” too often undertaken with little regard for its implications and effects. This first portion of the essay is realized through a discourse analysis of early constructivist writing in geography. Secondly, utilizing philosophical American pragmatism, I make the more specific argument that a significant flaw in nature-constructivist theorizing of language is a substantial part of what enabled some of the questionable claims of its practitioners.*

Keywords: *pragmatism, constructionism, nature*

INTRODUCTION

In 1998, geographers Noel Castree and Bruce Braun announced the arrival of socially constructed nature to the geographical canon, declaring that “Nature...is on the agenda as never before” (Castree and Braun, 1998, p.3). I take this claim to mark a watershed in how human geographers (and social scientists more generally) talked about nature. Of course, this was not the first claim that “nature” was a social construction, or the literal gateway from which all constructivist analyses of nature, wilderness, and biodiversity conservation sprung, but it can be fairly used to mark the arrival of the constructivist critique into the mainstream literature of academic geography. In this paper, I will assess the rush by critical geographers to fully and permanently ensconce the idea of nature in between a pair of scare quotes. I will utilize philosophical American pragmatism to critique constructivist theory, concluding that the constructivist project (as deployed in these initial papers on the subject) does not rest upon solid theoretical footing. Today, several years later, as global warming and biodiversity decline continue apace, I ponder the possibility that there were many things more deserving of the scathing, critical gaze that stared down “nature” into disciplinary submission.

TARGETING NATURE

Returning to the quote above (“Nature ... is on the agenda as never before”), a useful starting point for our examination is to scrutinize exactly which “nature” and what “agenda” the authors are referencing. The essay from which this quote is taken – the editors’ introduction to the oft-cited 1998 edited volume *Remaking Reality* – provides revealing answers to these quite-significant questions. *Remaking Reality* is an important book as it stands as one of the first, and most-cited, elaborated examinations/collections of the new “critical” nature-society studies. I begin this investigation with an examination of the specific constructs that were selected for “scare-quoting” in this essay which served to more or less introduce the new field of critical nature-society studies.

Placing quotes around selected constructs is a common way for constructionists to flag specific constructs as broadly “problematic” or, perhaps more specifically, as socially constructed (e.g., a scare-quoted “nature” is more often than not just shorthand for “socially constructed nature”). Following constructionist logic, there is no way of escaping the inherently socio-historically constructed-contingent nature of *all* language, concepts, and knowledge. Stated another way, we only and *always* know the world through constructed concepts. Bear in mind, however, that foregrounding (via scare quotes) the social construction of ‘X’ can only ever be effectively achieved by *not* foregrounding other socially constructed concepts in the same passage, lest the whole effort degenerate into a meaningless morass of scare quotes.

Case in point: On the first page of the editors’ introduction to *Remaking Reality*, there are a couple of key representative passages; each which will be taken in turn:

From biotechnology to “wilderness” preservation, from the exciting medical promises and dark eugenic possibilities of the Human Genome Project to the moral imperatives and neo-imperialist rhetorics mixed together in discourses of “biodiversity,” and from the complex politics of deforestation in India to the equally important struggles over models of global warming in Washington, nature is something imagined and real, external yet made, outside history but fiercely contested at every turn (Castree and Braun, 1998, p.1).

Which constructs in this passage are flagged with scare-quotes? “Wilderness” and “biodiversity.” Why were these two flagged to the exclusion of, say, “biotechnology”? The effect of this selective flagging, I argue, is to take the *problematization* of “wilderness preservation” and “discourses of biodiversity” as the *primary* point of departure for *any* examinations of these issues.

Of all the issues on the nature “agenda” today, it is these two (or wilderness-biodiversity preservation taken together as one issue) for which so many nature-constructivists reserve their deepest skepticism. Notice how each of the issues highlighted in this passage is foregrounded. Regarding biotechnology, specifically the Human Genome Project, we are presented with positive (“the exciting medical promises”) alongside the negative (“dark eugenic possibilities”) of the discourse. Fair enough. All overly-simplistic renderings of this discourse – whether they be the techno-utopian marketing schemes of its corporate sponsors or the blanket denunciations of the entire project as “unnatural” – make deserving targets for constructionist critique. We are also urged to notice the “complex politics of deforestation” and the “equally important struggles over models of global warming.” Again, fair enough. The politics of each of these issues are incredibly complex, and while foregrounding the *complexity* of the issues will not necessarily produce a crystal-clear activist case for or against one side of the issue, it can provide the grounds for meaningful and productive interventions. Indeed, Rangan (2000) and Demeritt (2001) have produced important works that do just this for deforestation in India and global warming, respectively.

In addition to the scare-quoting of “wilderness” and “biodiversity,” *how* are these issues foregrounded? “Discourses of biodiversity” (and, at the risk of belaboring my point: why “discourses of ‘biodiversity’” but not “discourses of global warming” or “discourse of deforestation”?) mix together “moral imperatives” and “neo-imperialist rhetorics.” Unlike the previous examples, this is not even a dual positive/negative presentation of this issue. For constructionists, biodiversity somehow demands doubly-negative flagging when introduced (or even triply-negative, if counting the scare quotes). The authors apparently feel no need to even connote that there may be a worthiness to this “discourse.” And for one final point to make regarding the “moral imperatives” and “neo-imperialist rhetorics” of “discourses of ‘biodiversity,’” these two selected components of the (incredibly) complex science and politics of biodiversity conservation represent a common ground upon which Marxists and poststructuralists can (and do) contest this issue.¹ If indeed the case can be made that biodiversity conservation is *most fundamentally* a discourse of moral imperatives and neo-imperialism, then poststructuralists (as anti-moralists) and Marxists (as anti-imperialists), it would seem, have a duty to join hands in the refutation of this discourse. More broadly, I suspect that one of the deliberate, strategic reasons that constructionist accounts of “nature” have become so popular with theoretically-informed social scientists is that – case in point: biodiversity conservation – discourses of nature provide grounds for poststructuralists and (some) Marxists to temporarily set aside their often-intense internal squabbles and rally against a perceived common enemy.

Even as I hope the first example effectively articulates my main point, a few more examples might help make the argument more convincing. Consider another passage from the *Remaking Reality* introductory essay: “More than ever before, then, nature is something made. For some, this represents the ‘end’ of nature, a response rooted firmly in a modern dualism in which nature is seen as external to society: its other. From this perspective nature must be defended against its ‘destruction’ by humans, and battle lines are drawn to preserve its ‘pristine’ character” (Castree and Braun, 1998, p. 4). The first sentence highlights a shortcoming within nearly all constructionist and a considerable slice on Marxist writing on nature: Valorizing the “made” character of contemporary nature is an aching anthropocentric sentiment, *especially when taken as one of the points of departure for politics*. In a critique of David Harvey’s (1996) *Justice, Nature, and the Geography of Difference*, Raymond Rogers captures my reticence toward this perceived need to flag nature’s “destruction” with scare quotes. Rogers is commenting on David Harvey’s pronouncement that it is “materially impossible to destroy the earth.” Rogers counters: “The claim that it is ‘materially impossible to destroy the earth’ allows some space for socialism to emerge. To have a more immediate and grief-stricken sense of loss of species, meaning, and livelihood does not allow for a sense of global succession” (Rogers, 1998, p. 48). Only a person bereft of any sense of grief whatsoever over loss of species, or environmental degradation in general, it seems, would find it necessary to problematize the idea that non-human nature could be destroyed.

The previously cited passage from Castree and Braun also sets up a troublesome insider/outsider binary, with the insiders being constructionists who correctly recognize the “made” character of nature, and the outsiders being romantics who insist on forging philosophically indefensible programs opposing nature’s “destruction.” These outsiders, it seems, comprise the majority of the contemporary US environmental movement. The poet Gary Snyder contends that deconstructing the notion of “pristine” nature is “beating a dead horse.” For environmentalists, Snyder argues, “‘pristine’ is only a relative term,” correctly signifying the real differences between the more or less “wild terrain” that remains and the much more profoundly “made” landscapes that dominate the world (Snyder, 1996, p. 8).

I will highlight one more passage from Castree and Braun’s essay:

[Our] first point is that nature... ‘cannot pre-exist its construction’: it is figure, construction, artifact, displacement. It is something made – materially and semiotically, and both simultaneously. Those, like “deep greens,” who would still appeal to “nature” as a source of moral and political guidance will, of course, find this argument scandalous (Castree and Braun, 1998, p. 5, internal quote is from Haraway, 1992).

Clearly, the point that nature is “made” is fundamental – perhaps the core of their critique of “greens.” Moreover, of all the “greens” out there, it is “deep greens” that are (rather tiresomely) targeted as, more than any others, mired in indefensible foundations. This brusque writing-off of deep ecology is typical for constructionists but also somewhat perplexing. Deep ecology, I would argue, deserves. After all, it is deep ecologists who have, as much as anyone, thought long and hard about what it might mean to think and *live* in a less anthropocentric manner (see Katz, Light and Rothenberg (2000) for sympathetic, yet still *critical*, examinations of deep ecology).

When Castree and Braun boast that their efforts will be found “scandalous” to deep greens, it seems less an invitation into a productive, scholarly dialogue as much as a smug dismissal of the entire deep ecology movement. Castree and Braun assert that constructionist politics “embodies a liberatory potential, radically opening the field of debate and action surrounding what kinds of natures we seek” (Castree and Braun, 1998, p.5). It is difficult to imagine, however, despite their qualified pro-“nature” rhetoric, exactly which existing cohorts of self-identified environmentalists, if any, they are positioning themselves within, even as they make it quite clear which ones they are positioning themselves against.

It is not just deep greens, however, that are written off more or less indiscriminately in much of the constructionist literature. In an essay examining the Eden Project,² Rob Bartram and Sarah Shobrook find “environmental conservation ... being drawn into the duplicative strategies of scientific and technological simulation ... as if to reclaim or protect nature’s reality” (Bartram and Shobrook, 2001, p. 371). Leaving aside the question of whether techno-utopian projects like the Eden Project are representative whatsoever of any “environmental conservation,” after eight pages of critiquing the project they conclude that “the paradox of proximity to nature is that it only confirms its irrevocable loss and that environmental conservation is no more than an illusory act of social redemption.” Environmental conservation as an “illusory act” notwithstanding, the authors somehow “are not suggesting that nature should be dismissed or forgotten” (Bartram and Shobrook, 2001, p. 371).

In nearly as broad-brushed a sweep, Bruce Braun and Joel Wainwright dismiss the entire field of environmental ethics: “[T]o assert that environmental issues are primarily about ‘ethics’ (how to act *toward* nature) is to assume that it is only our attitudes and values that are at stake, not the ‘thing’ to which the ethical relation is to be fostered” (Braun and Wainwright, 2001, p. 42). Their message is quite clear: environmental ethicists are deluded and somewhat egocentric theorists who care more about their own values than about non-human nature. Even though the overstated or even fatuous nature of this claim is probably self-evident, I would point the authors to Val Plumwood’s (2002, p. 188) “interspecies dialogical ethics” or Wim Zweers’ (2001, p. 1) “participation with nature” as representative environmental ethical theories that have plenty to say about the “things” with which ethical relations need to be fostered.

I conclude this section with two more examples from the nature-skeptical literature. In Éric Darier’s explicitly Foucauldian critique of “green ethics” (note the essay’s title: “Foucault against Environmental Ethics”), he asks: “Would it be possible... to imagine... a ‘Green ethics’ ... grounded not in naturalistic/essentialist assumptions but in practices of transgression of, for example, these naturalistic/essentialist boundaries? ... Wouldn’t the radical questioning and transgression of given subjectivities, such as the consumer subjectivity, be an act of resistance which could lead towards a Green ethics, a Green aesthetics of existence?” (Darier, 1999, p. 228)

Acknowledging that any social theory would be foolish not to take the lessons of antiessentialism seriously, it seems that what Darier is advocating here is transgression for the sake of transgression. All the while, he fails to see that transgressing the consumer subjectivity (without calling it that) is an everyday act that a substantial portion

of self-identified environmentalists or “greens” *are doing, every day*. No, they probably are not doing it for the sake of transgressing subjectivity. More likely, they are doing it with an eye towards the practical effects that would result from a less wasteful and ecologically degrading culture, and also for the potential effects on the individual transformed by ethical action. In similar fashion to so much nature-constructionism, Darier proposes his as not mere critique, but rather a positive assertion of “green ethics” as well. What would his green ethics look like? Transgression, subjectivity, resistance: these “magic words” (Halton, 1995, p. 6) are the keys to the ‘new’ Foucauldian green ethics. I fail to see how this is anything other than out-of-the-box Foucauldian politics. This is not Foucault *informing* environmental philosophy; this is Foucault *replacing* environmental philosophy.

Finally, I wrap up this examination of the politics of nature-skeptics with a passage from one of the most bombastic, articulate and entertaining nature-skeptics, the late Neil Smith. In his essay “Nature at the Millenium: Production and Re-enchantment” (the concluding essay in Braun and Castree’s *Remaking Reality*), Smith argues that environmental politics has lost its critical edge: “The radical genie of the environmental challenge to late capitalist nature has been stuffed back into the bottle of institutional normality just in time to calm millennial jitters about nature. The challenge for the twenty-first century is to start again, to make environmental politics subversive again” (Smith, 1998, p. 272).

This is a fantastic passage, and one I would hardly disagree with taken out of context. But when Smith lays out the five tasks of “production of nature” theorizing (his route to subversive ecopolitics), four of them are refinements of theory *qua* theory, while only one deals with environmentalist practice: through constructionism, we must “try and deflate the vocabulary of wilderness and pristine nature” (Smith, p. 277). More evidence that – as constructionists are supportive of some environmentalisms (such as the justifiably lauded environmental justice movement), and ambivalent toward others (such as biotechnology) -- they reserve their most resolute opposition for any and all manifestations of wilderness preservation. What, for Smith, would comprise the needed project? It must “involve, in part, scandalizing contemporary appropriations of environmentalism, but it also involves the more difficult task of eking out an alternative political vision” (p. 272).

I agree and disagree. I agree that eking out an alternative political vision is necessary, and I heartily agree that this is a difficult task. Where I part company with Smith, and constructionists in general, is that I do not feel that a cavalier “scandalizing” of environmental politics is the most productive point of departure for such a project. I will end this portion of the paper – my critique of first-generation nature-constructivism – by appropriating American philosophical pragmatism (much more of which follows). My overall assessment of constructionism could come in the form of answering what has been called the “pragmatic maxim”: “If we stop here, if we put it this way, what difference would it make to our practice?” (Berthoff, 1999a, p. 5). Stopping where Smith did, at “scandalizing” constructionism – its self-avowed liberatory potential notwithstanding – builds a wall rather than a bridge between social theorists and environmental activists. Is that the difference we should be trying to make?

Now I turn to the second part of my paper, in which I argue that pragmatism provides tools that help sort out some of the problems with constructivist *theory*, particularly its (often disabling) treatments of language and material nature.

PRAGMATISM AGAINST CAVALIER CONSTRUCTIONISM

Pragmatism is a school of philosophy that arose (and has remained for the most part specific to) the United States in the late 19th century. Pragmatism’s most well-known and influential early theorists include Charles Sanders Peirce, William James, John Dewey, and George Herbert Mead. Though not as well-known or widely appreciated internationally (or even within American academic philosophy) as many European philosophers, these ‘classical’ American pragmatists continue to inform a diverse and evolving contemporary American pragmatism. Although there is a great deal of variation within pragmatism and between individual pragmatists, commonalities can be drawn.

Perhaps most fundamentally, “all [pragmatists] agree in their rejection of foundationalism epistemology” (Parker, 1996 p. 22). Pragmatist anti-foundationalism is not, however, anti-realism or anti-naturalism. Early pragmatists, particularly Peirce and Dewey, were intensely interested in theorizing the nature of scientific inquiry – in large part for the sake of the development of the practice(s) of natural science. For pragmatists, we *must* continue our scientific investigations into the ‘truths’ of the world; but our explanations need to proceed without recourse to *a priori*, unchanging ‘laws’. This emphasis on experience and *experiment* led James to call his philosophy “radical empiricism” (James, 1912, p. 238). All explanation is the product of experience, and experience has proven that our understandings of the world are nothing if not “fallible” (Parker, 1996, p. 22).

The concept of “fallibilism” – originally theorized by Peirce – is also foundational to pragmatism. Consistent with pragmatist anti-foundationalism, a belief in fallibilism means that “pragmatists hold that there is never a metaphysical guarantee to be had that such-and-such a belief will never need revision” (Putnam and Conant, 1994, p. 25). “Beliefs” are always based in certain fundamental constructs. All such guiding constructs – whether guiding natural science (for example, evolution) or social inquiry (for example, democracy or community) – are also necessarily fallible. There is never, in other words, a transhistorical, universal correctness underlying any concept of belief. This does not mean that no beliefs or constructs are correct or accurate, but rather that “we *may* be able to get it [a belief or construct] better and better, truer and truer, but we *never* get it completely right” (Hickman, 1996, p. 54, emphasis added). “May” and “better” are primary qualifiers in this sentence. To anyone who would conflate such pragmatist optimism – that “we may be able to get it...truer and truer” – with the Enlightenment “project” of the accumulation of knowledge increasingly nearing absolute Truth, it could be pointed that we only know that we *may* be getting it truer. So there is a point in trying, a necessity for inquiry, to be certain, but it is unverifiable – and therefore a non-issue – to argue whether the development of any particular truth is approaching Truth.

Pragmatist anti-foundationalism and empiricism are thus based in a desire to explain and understand the world, but in a less epistemologically confident manner than as practiced within many predominant modes of Western thought (such as positivist scientific inquiry).³ This epistemological apprehensiveness applies to both the production of knowledge and assessments of knowledge, and as such, pragmatism provides a methodology for reading science (or any field other knowledge production). Pragmatism recognizes that there is always a “tradeoff between security and definiteness” in scientific explanation: “We can and indeed should be scientific realists ... [at] the level of the looser generalities of ‘schoolbook science’” (Reschler, 2002, p. 78). Following this logic, then, it would be less sensible, literally *less meaningful*, to flag “evolution” or “biodiversity loss” as “discourses” or “social constructions” than to refer to them as “true.” The level of generality is not, of course, the sole arbiter as to validating the security of our beliefs and concepts. But the definiteness/security tradeoff is a useful heuristic tool in pragmatist methodology. When, in research, one makes assertions based on analyses of whatever object of inquiry, the “tradeoff” serves as a useful check which can help determine the appropriate assertiveness or speculativeness of the tone.

Pragmatism also rejects the fact/value dichotomy (Putnam, 2004). All facts are the products of a particular socio-historical context, but even within a particular socio-historical context, within a particular inquiring community that broadly shares a standardized approach to investigation, facts are always the “result of selective attention and of deliberately chosen experimental procedures” (Putnam and Conant, 1994, p. 206). Moreover, “what sort of situations appear to us to be problematic” are the problems we choose to (scientifically or otherwise) investigate (*Ibid.*). So facts are at least doubly value-laden from the go: A problem is chosen (this is a “function of the values we embrace”) and a mode of investigation is chosen to address the problem (*Ibid.*). The latter is a function of values as well. Which features of the problem are relevant? Which information will be helpful? How must this information be determined? Every step of the fact production process is recognized as a reflection of a value judgment. As such, pragmatism provides a useful methodological core for critical analysis of environmental debates (and the entangled facts and values therein). My broader argument, however (as I flesh out in the remainder of the paper), is that pragmatism – unlike constructionism – maintains a “critical” perspective without severing the ability to speak *meaningfully* about the world.

ESCAPING THE PRISON, BREAKING THE MIRROR: PRAGMATISM AND LANGUAGE

Pragmatism offers a useful and appropriate theory of language for an analysis of environmental debates. Pragmatism is, after all, grounded in a (qualified) *naturalism*. As such, pragmatism avoids the flat anti-naturalistic refutation that bogs down so much constructionism at the level of critique-for-the-sake-of-critique. But my argument in this section goes beyond just pointing out that constructionist critique can be inherently limited. Pragmatism, I argue, can help isolate deficiencies in constructionist *theory*. Stated more strongly, pragmatism helps show that not only does constructionism often *not work* methodologically, its conclusions are also often largely *wrong*.

Quoting Sandra Rosenthal and Rogene Buchholz (1996, p. 40), pragmatist naturalism reflects the “pragmatic focus on the human biological organism and organism-environment [relation]... Neither human activity in general nor human knowledge can be separated from the fact that this being is a natural organism dependent upon a natural environment.” A pragmatist theory of *language*, as such, properly embeds human beings in nature, in stark contrast to certain forms of constructionism that allow language, text, and discourse to float freely, “arbitrarily” even (Braun and Wainwright, 2001, p. 49), above the material world of necessity, probability, and possibility.

I will begin this section by critiquing Bruce Braun's representative (and influential) constructionist writing. The first essay examined is the widely-cited "Buried Epistemologies" (Braun, 1997). In this critique of environmental politics in British Columbia, two documents serve as the primary objects of analysis: one is published by an industrial forestry group and the other by environmentalists. One of the primary analytical goals of Braun's paper is to assess the conditions through which particular bits of knowledge are made intelligible and put to work. The forestry and environmentalist documents, we are told, assume a "metaphysics of presence" (p. 25), meaning that their authors' dubiously convey that they can accurately represent the "whole" of nature. Braun emphatically argues that "what is at issue is *not* whether [these documents] represented the landscape accurately" (p. 15). To do so would frame the issue as one of representations versus misrepresentations of nature, a method which masks the "power" that underlies any individual or group's ability to make a particular representation *work*.

Fair enough, in one respect: not attending to aspects of power in environmental controversies would certainly lead to a fairly impoverished analysis. But, as the "metaphysics of presence" accusation implies, the critique goes much deeper than this. Braun argues that "the production of an 'effect' of truthfulness [is always] tied to a metaphysics which assume[s] that *behind* representation lies an order that representation continually *approache[s]*" (p. 16., emphasis in original). Once the possibility of *any* sense of accuracy is demolished – a task largely accomplished via the constructionist "magic word"⁴ accusation of "metaphysics" – the real work (for Braun), of assessing the effects of power, can begin.

Alongside the strongly asserted anti-metaphysical foundation, however, are some starkly *realist* assertions. Perhaps the best example comes from Braun's discussion of the concept of "old-growth forests" in a footnote:

What constitutes 'old-growth' forests—and their significance—is widely debated. Most generally, 'old-growth' forests are characterized by the following: huge accumulations of biomass; large trees exceeding 1-2 m diameter at 1.3 m height and reaching 60-80 m total height; old trees, often older than 200 years and occasionally exceeding 1,000 years; and structural diversity, including various tree sizes, snags (dead standing trees), down logs, and so on (p. 26).

How else, other than assuming that nature can, in fact, be represented *accurately*, are we supposed to make sense of this passage? (This is a rhetorical question: we couldn't.) There is a flat inconsistency at work here. As critic and discourse analyst, Braun unsheathes anti-metaphysical accusations for the purposes of refuting the claims of whatever target is under scrutiny. But in the same piece, for the purposes of explanatory clarity, and (importantly) for the purposes of analysis, Braun repeatedly resorts to realist assertions that, we can only assume, he believes accurately represent reality. "Discursive constructionism" is employed here as both philosophical critique and as a vehicle to refute the statements, practices and representations of others (Demeritt, 2002, p. 774). As Demeritt argues, however, while construction-as-philosophical-critique can be a valuable method for descriptive renderings of representations of nature (or whatever else), the "strong plea for epistemic caution" ushered in through discursive constructionism does not provide solid grounds for refutation (*Ibid.*).

There is, then, something of a double standard at work in Braun's (representative) method of analysis: he employs a philosophical stance that effectively denies others of the ability say anything about the world, all the while making strong empirical claims about their research objects. Positively interpreting objects of analysis (in this case, documents) is enabled through discourse analysis. Such a *method* of interpretation is only possible, however, because the objects of analysis are not nature, but "discourses of nature" (Castree, 2001, p. 12).⁵ Biologists, ecologists, and environmentalists, those who craft (primary) representations of material nature, are not granted the same capacity to interpret and accurately represent their objects of analysis as are constructionists. We are all, it seems, granted direct access to 'texts' and 'discourses', but only indirect (at best) access to nature. The result is a thoroughly bifurcated world, one of an inaccessible "nature" (always in scare quotes to highlight its inaccessibility) and an accessible realm of discourse. Pragmatism is helpful in assessing and avoiding this quandary, pointing to both the source of this conundrum as well as a potential way out.

Ann Berthoff traces poststructuralist theory as developing in reaction to positivistic currents of literary analysis and linguistics. Berthoff (1999a) argues that poststructuralist theories and methodologies – social constructionism or discourse analysis, for example – often end up reinforcing positivism's dualizing and finalizing tendencies. Statements like Braun and Wainwright's assertion that "knowledge is socially and historically produced *rather than* found" (Braun & Wainwright, 2001, p. 46) reflect the poststructuralist "oscillation between a linguistic idealism ... and a self-refuting scientism (Putnam, 1995, p. 75). Clearly, for many constructivists, those (such as themselves) who understand the produced nature of knowledge are placed in a privileged position over those who naively think that knowledge can be discovered. Why, then, should we be surprised when ecologists react in a

hostile fashion to constructivist critiques if the constructivist point of departure rather brusquely removes their ability to say anything about their objects of study?

Constructivist framing of language/materiality is fundamentally dualistic. The significance of meaning becomes obscured, as language is perceived as a “bottomless regress of interpretations” (Putnam, 2004, p. 119). “Bottomless” (as I read it, *never touching the earth*) may be the key to this passage, as it marks the principal divide between constructionist and pragmatist theories of language. For social constructionists, reference – to the world – becomes impossible: “there is no *there* out there, with the result that kindergartners and historians, cell biologists and novelists can only *tell stories*” (Berthoff, 1999b, p. 674). Few social scientists, however, make a career out of merely telling stories. Even poststructuralists invariably return, in the last instance, to *interpretation*. It is this, *interpretation*, which becomes the key to Berthoff’s remedy for the radically skeptical anxiety over our inability to “escape the prison of language” (Demeritt, 2002, p. 774). The complexities of language, for pragmatists, are not the proof that we can never know the world, but rather the very enabling grounds for the social process of making sense of and getting by in the world.

Interpretation is the ‘third’ – the bridge, if you will – in the pragmatist triadic (as opposed to dualistic) theory of language and meaning. Nothing in the world (no “sign,” in linguistic jargon) is a “clean machine awaiting a competent operator” (Berthoff, 1999b, p. 671). Rather, *every* sign – whether it be a word, symbol, phrase, narrative, bird or forest – must be interpreted to achieve *significance*: “To understand interpretation as the third element of the sign is to recognize mediation – and once mediation is understood as not constituting a barrier but as the logical condition of significance, there will be certain epistemological consequences, chief among them the recognition that all knowledge is interpretation and that all interpretation must itself be interpreted” (Berthoff, 1999a, p. 5).

Interpretation, as such, is the act of making sense of signs as things-in-the-world, whether they be bacteria, or texts about bacteria, or interpretations of texts about bacteria. Only within a dyadic (dualistic) semiotic could the idea of an “arbitrariness” between words and world arise. Within a triadic semiotic, by contrast, signs are only inert, only “confined” to the site of language, until they are interpreted. And it is through this – through every instance of interpretation – that language *works*. Granting language, texts, or discourse autonomy from the world fails to recognize the constancy of interpretation, the productivity (world-altering character) of language.

Acknowledging the productive, relational nature of language does not, of course, make the task of analyzing language (in the form of discourses or particular texts) any easier. It does not remove the problems of, say, agency, power, or contextuality. If anything, pragmatism strongly echoes the “epistemic caution” that (*ideally*) guides constructionist analysis (Demeritt, 2002, p. 774). Pragmatism’s materialized, active model of language also does not discount the self-referential dangers of interpretation: “[M]any ... ‘observations’ are but implications of the particular terminology in terms of which the observations are made. In brief, much that we take as observations about ‘reality’ may be but spinning out of possibilities implicit in our particular choice of terms” (Burke, 1996, p. 46). This passage comes from Kenneth Burke’s (p. 44) discussion of language as a “terministic screen.” “Screen” here serves as a useful metaphor for language that echoes the pragmatist contradistinction to both scientific (language as mirror) and discursive (language as prison) models of language. Language, in whatever form, can never be taken for granted, but neither should it ever be theorized or analyzed as a *wholly* self-referential entity.

Arguing against fatuous, fraudulent, or misguided environmentalisms is an important and necessary project. But to respond to their presence by merely inverting their tactics and disabling the very ground from which *any* environmentalism can speak is just as misguided (and, critically, just as methodologically flawed). Neither ecological destruction, nor “ecological destruction” – no matter how they are signified – is an arbitrary sign. After all, when environmentalists (perhaps Bill McKibben or Vandana Shiva, for example) point out that there is only “one earth,” they are *right*.

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¹ Poststructuralism is an informal term referring to a group of popularly-read, mostly-European “critical” philosophers and social theorists that rose to prominence in the 1970s. Poststructuralism did not strongly influence academic geography until the 1990s. Jacques Derrida and Michel Foucault are (arguably) the two poststructuralist theorists who have had the greatest impact on human geography. Social constructionism can be fairly viewed as a spinoff (or sub-theory) of poststructuralism.

² The Eden Project is a tourist attraction (and research operation) in Cornwall, England, that simulates different biomes from around the world, most of which are each housed inside their own geodesic dome. See <http://www.edenproject.com/> for more information.

³ Epistemology is, to put it simply, the philosophical study of how we know and understand the world. As positivistic science relies on the methodological assumption that there are external, objective truths attainable only through scientific inquiry, pragmatism (along with discourse analysis, Marxist political economy and other ‘critical’ methodologies) rejects that fundamental epistemological assumption, acknowledging rather the socially contingent nature of all knowledge and knowledge acquisition.

⁴ See the previous Halton (1995) reference.