R.S. Peters and Posthumanist Ecological Identity

James R. Bigari
University of British Columbia

INTRODUCTION

We are in the midst of widespread ecological devastation. Deforestation, a carbon-based energy economy, the mass influx of toxic and non-biodegradable products into the ecosystem, the fallout from the meltdown of the Fukushima nuclear power plant, and the continued threat of global warming. Such ecological threats have become a global concern as the grave effects of ecological devastation become too obvious to ignore. There has been no shortage of contributing factors cited for this problem: capitalism, Judeo-Christian philosophical presuppositions,² lack of enforcement mechanisms for international green initiatives,³ and so on. As the severity of this problem grows more acute, so does the question of what role education might play in stemming the tide of ecological collapse. In this article I will explore one answer to this question offered to us by the deep ecology movement: education for a posthumanist ecological identity. Drawing upon an often-overlooked chapter of R.S. Peters' scholarship, as well as recent work in biology, I argue that we have both philosophical and empirical grounds for adopting the development of a posthumanist ecological identity as an educational aim.

POSTHUMANIST ECOLOGICAL IDENTITY

Posthumanist scholars have critiqued humanist conceptions of humanity's place in nature, arguing that it contributes to ecological devastation. One of the most prominent of these critiques comes from the deep ecology movement. While the deep ecology critique is multifaceted and has spurred wide debate, I want to focus specifically on the discussions around "posthumanist ecological identity."

At the heart of deep ecology is a metaphysical holism that sees the PHILOSOPHY OF EDUCATION 2017 | Ann Chinnery, editor
© 2019 Philosophy of Education Society | Urbana, Illinois

biosphere not as a conglomeration of related but fundamentally independent biological entities, but rather as a unified whole in which the various flora and fauna are so interdependent that no essential distinction holds. From this metaphysics springs a critique of the atomistic individualism prevalent in the western psyche. Atomistic individualism holds that human beings possess a fundamentally separate essence from other life forms. Surrounding flora and fauna are seen as fundamentally other, and too often their existence is seen as only holding value insofar as it contributes to human flourishing. Deep ecologists argue that the psychological effect of atomistic individualism is callousness towards other life forms and selfishness in one's consumption of natural resources. Set within a consumerist, capitalist society that emphasizes quarterly gains over long-term sustainable flourishing, atomistic individualism is said to lead to widespread ecological devastation as natural resources are plundered for the sake of maximizing short-term financial profits.

As a remedy to this problem, deep ecologists advocate an "ecological self." This phrase was first coined by Arne Næss,4 one of the founders of the deep ecology movement, and it has been adopted by a number of scholars since. Reviewing this literature, Elizabeth Ann Bragg identified three key aspects of an ecological self.⁵ First, the ecological self is a broad sense of self. Bragg describes it as "field-like," encompassing other life forms, the larger ecosystem, and ultimately the entire globe. Second, it includes "emotional resonance with other life-forms; a perception of being similar, related to, or identical with other life-forms; and spontaneously behaving towards the ecosphere as one would towards one's small self (with nurture and defense)." Finally, the concept of ecological identity presupposes that it is possible to expand one's sense of self from the personal to the ecological. This picture of an ecological self can sound overly general, or even dubious as a form of human experience. Is it possible to have such a broad sense of self? The words of environmentalist John Seed can help shed light on the lived experience of this sense of self:

> I try to remember that it's not me, John Seed, trying to protect the rainforest. Rather, I am part of the rainforest

protecting itself. I am that part of the rainforest recently emerged into human thinking.⁷

The shift in identity Seed describes is not merely a shift in one's *idea* about oneself, but rather an intuitive, felt sense of the nature of oneself. One does not only *think about* oneself in a certain way, but also *feels and perceives* a certain way. In *Ecological Identity*, Mitchell Tomaschow describes identity as "all the different ways people construe themselves in social relationships as manifested in personality, values, actions, and sense of self ... to connect the self to meaningful objects, people, or ideas." Identity imbues our experience with a felt sense of self that orients us in the world and informs our thoughts, emotions, perceptions, and actions.

Deep ecologists hold that we should seek to develop an ecological identity, as such an identity inherently motivates environmentally-conscious behavior. The research on this assumption is mixed,9 and it is not the issue I will take up here. Rather, I am interested in the philosophical grounds for establishing the development of a posthumanist ecological identity as an educational aim. To do this I will answer two questions. First, does the very concept of "education" provide some grounds for including ecological identity as an educational aim? To answer this question I will turn to an unlikely scholar for this purpose: R.S. Peters. Although Peters may rightly be characterized as a pre-eminent humanist scholar, I will argue that a largely overlooked conceptual analysis of education put forward by Peters late in his career provides us with a compelling philosophical framework for including the development of a posthumanist ecological identity in education. It is important to note that my use of Peters' work is decidedly minimal, in the sense that I am not engaging in a posthumanist exegesis of Peters' work. The question of whether Peters' work is, on the whole, coherent with posthumanism, I leave unanswered. Rather, I merely want to explore whether one element of Peters' work (i.e., his awareness-based conception of education) might provide a conceptual foundation for positing the development of a posthumanist identity as an educational aim.

The second question I will address is whether there are grounds for believing that a posthumanist ecological identity is an accurate picture of humanity's place in nature. I will draw upon recent biological research to provide some evidence for the veracity of posthumanist ecological identity.

R.S. PETERS' CONCEPTUAL ANALYSIS OF EDUCATION

Over the course of his approximately thirty-year career, R. S. Peters dedicated substantial time to a conceptual analysis of education. His first analysis, presented in the 1966 publication *Ethics & Education*, ¹⁰ provided an analysis of education as a process of initiation that meets three basic criteria: (a) something worthwhile is being intentionally transmitted in a moral manner; (b) knowledge, understanding, and a cognitive perspective of some breadth, which are not inert but shape the way in which the individual perceives and interacts with the world and others, are being promoted; (c) there is wittingness and voluntariness on the part of the student.

Peters' analysis sparked wide debate, and it is a testament to this work that it continues to be the subject of debate to this day.¹¹ His method was said to be guilty of covertly reading into the concept of education a particular set of normative assumptions.¹² From a Marxist perspective, this was said to perpetuate and normalize linguistic biases of the dominant middle-class culture. 13 His criteria of worthwhileness was said to be contradicted by those who see education as a corrupting influence,14 or by those who have historically been disempowered (women and minority groups) and for whom formal education has largely been an alienating enterprise that does little more than perpetuate their subjugation. 15 Furthermore, it was argued that his prioritizing of the intrinsic worth of education over its extrinsic worth was intellectualist. 16 The second criterion (knowledge, understanding, and wide cognitive perspective) was said to be overly rationalistic and neglectful of aesthetic, emotional, spiritual, or religious aspects of life.¹⁷ The criterion of wittingness and voluntariness was said to be incoherent insofar as "if you start out committed to transmitting what's worthwhile to kids in such a way that the kids will become committed to it, you're inevitably going to violate their 'wittingness and voluntariness'."18 Finally, his synthesis of these criteria into a conception of "edu-

cation as initiation" in the second chapter of *Ethics & Education* was said to be overly conservative and to perpetuate existing sexist institutions.¹⁹

In his 1973 article "Aims of Education – A Conceptual Inquiry," Peters addressed many of these critiques, and acknowledged that the concept of education is "a very fluid one" and that its diversity of usage is greater than he may have initially acknowledged.²⁰ Peters tempers his early analysis, arguing that the criteria he initially suggested for the concept of education were not necessary and sufficient conditions of the concept of education, but rather a reflection of the values of modern pluralist democracies.

In one of his final book-length publications, *Essays on Educators*, Peters once again explores the concept of education, moving the more controversial aspects of his early analysis from under the umbrella of education proper, and into the category of educational aims that are promoted in, and are the product of, modern western democracy.²¹ However, he also asserts that although the concept of education is inherently contestable, it is not completely so; we cannot coherently call anything we like education. At the very least, education has to have something to do with learning – "a process of mastering something or coming up to some standard as the result of *experience*" but not just any kind of learning. Pointing to modern western socio-historical contexts, Peters identifies the industrialization of the 19th century as a key factor in the development of the education/training distinction, which helps elucidate the specific kind of learning *education* signifies:

It came to be realized that it would be a benefit if the average man could read, write and perform elementary calculations. Many skills and roles, too, required a modicum of specialized knowledge if they were to be performed efficiently. What is now called "training" became widespread, often backed up by religious instruction to 'gentle the masses'.²³

Training often indicates "knowledge and skill devised to bring about some specific end,"²⁴ whereas "education" is often used to denote "beliefs, attitudes and outlook of a person *qua* person and not just in his capacity as a skilled man or

the occupant of a specific role."25

The question then arises, what does developing the human *qua* human entail? Peters rightly, I think, warns that "developing the whole man" cannot mean that education somehow builds the person from the ground up. Rather, "education surely develops a person's *awareness* by enlarging, deepening and extending it."²⁶ While Peters does not go into detail about why he chooses to place awareness at the center of his conception of education, it seems he does so because it is a more general concept than *knowledge* or *understanding*, and thus can incorporate a wider range of uses of education and educational aims:

[Robin] Downie and [Elizabeth] Tefler, for instance, maintain that knowledge of various kinds is the distinguishing feature of an educated person. I myself, in previous writings, assigned a similar role to all-around knowledge and understanding. But this is manifestly contestable, even within our own society. Many people, for instance, think that forms of awareness such as the aesthetic and the religious ought to be developed; but to talk of "knowledge" in these spheres is scarcely appropriate ... to confine education to the development of knowledge is to impose an unwarrantable restriction on it.²⁷

Placing awareness at the center of education provides a conceptual breadth that is lacking in *knowledge-* or *understanding-* based conceptions of education, a point I have defended in previous work.²⁸

The focus of this awareness expansion, Peters claims, "can only be the human condition." While Peters does not explicitly state why this *must* be the focus, if education is taken in the above sense of educating the person *qua* person, then the human condition seems a natural choice for the general focus of education. In turn, Peters argues that the human condition comprises three primary aspects: (a) "features of the natural world that impinge on man and those that he shares with the natural world as part of the kingdom of nature;" (b) the interpersonal world we inhabit, including elements such as human af-

fection, hate, dominance and dependence, and friendship and loneliness; and (c) the economic, social, and political world, including poverty and affluence, authority and violence, crime and punishment, consensus and dissent.

I want to address the first element of Peters' tripartite characterization of the human condition: "features of the natural world that impinge on man and those that he shares with the natural world as part of the kingdom of nature." What does it mean to raise one's awareness of this aspect of the human condition?

RAISING AWARENESS OF THE HUMAN CONDITION

In its most obvious sense, raising awareness of the features of the natural world that impinge on man, and those that he shares with the natural world, would include knowing pertinent facts: how ecosystems function, their constituent elements, the laws that govern their movements, and so on. Experientially, this amounts to *having ideas and beliefs* about this topic. While much could be written about this aspect of education, it is not the focus of this paper. Rather, it is our sense of identity in relation to the natural world I want to address here.

How is identity important for awareness promotion? First, it is one thing to have an idea about oneself as a certain kind of being, but it is quite another to *realize* that one is that kind of being. Another way to elucidate this distinction is to say that there is a difference between having a thought about oneself, and to have that idea about oneself "manifested in personality, values, actions, and sense of self." This is a unique form of awareness, namely, the lived experience of self-awareness as a certain kind of being.

Work in feminist epistemology sheds further light on the unique awareness-promoting function of identity. Margaret Little argues: "How reliable one will be in accurately discerning the moral landscape and knowing what ought to be done depends, then, not just on how good one is at weighting risks and foreseeing consequences, say, but on the nature of one's emotions and desires."³¹ The values we identify with influence our intentions and emo-

tions, which in turn influence what we notice in our environment. We do not notice *facts*, rather, we notice *particular facts*. In order to be properly sensitive to the natural world, our identity must accurately reflect our relationship to the wider biosphere.

If the above observations are sound, and if we take seriously Peters' awareness-based conception of education, then becoming aware of the first element of the human condition (i.e., "features of the natural world that impinge on man and those that he shares with the natural world as part of the kingdom of nature" would include becoming aware of one's identity in relation to the natural world.

A few conceptual notes are worth addressing. First, our sense of identity is socially constructed. As such, identity is not a static object existing "out there" that we may "become aware of." Rather, it is something that is continuously being created in a dynamic process between an individual and the environment. Acknowledging the social construction of identity does not imply that identity is wholly fictional, but rather that how the raw material of experience is put together into various identities is a creative and constructive process. So "deepening and broadening awareness" of one's identity in this sense refers to a process of becoming more aware of the identity that has developed thus far, and identity as it continues to develop in light of a variety of influences.

Second, we all embody multiple identities. When we talk of fostering the development of a certain "identity" through educational practices, we should always see this as introducing only a partial identity into an ever-moving flux of identities picked up throughout life. In this case, we are interested in the broadening and deepening of our awareness of our identity as it relates to the natural world.

TENABILITY OF A POSTHUMANIST ECOLOGICAL IDENTITY

It is beyond the scope of this article to undertake a thorough defense of posthumanist ecological identity in relation to the myriad accounts

of human nature that exist across the philosophical and religious spectrum. However, I want to provide some cursory evidence that a posthumanist ecological identity is a tenable account of humanity's place in nature. Given that the defining characteristic of a posthumanist ecological identity is radical interdependence, the obvious place to look for evidence for this view is in relationships between biological entities that demonstrate the highest degree of interdependence. To this end, recent work in biological symbiosis sheds light on this issue. The validity of using empirical research to ground philosophical claims is an ongoing topic of debate in the area of philosophical naturalism. However, whatever else might be said about the human condition from a philosophical standpoint, the question of our relation to the biosphere must, at least in part, be answered by the best evidence we can garner from biological sciences. Humans are, if nothing else, biologically embodied. Insofar as we can observe that this biology necessitates the kind of radical interdependence described by posthumanist ecological identity, we can say that such interdependence is part-and-parcel of what it means to be human.

Recent research on biological symbiosis reveals a striking degree of interdependence between species. Broadly speaking, symbiosis refers to "different organisms living together." Symbiosis comes in three forms: one organism might obtain some benefit (e.g. food, shelter) from another organism without helping or harming the other; there might be a mutually beneficial relationship between two organisms; or, an organism might gain some benefit at the expense of the other. Recent developments in biology have revealed that biological symbiosis is not only prevalent, but also essential for complex life forms to thrive.³⁵

One of the most striking examples of the importance of symbiosis for human life is found in the way of our relationship to the microbiome in our gut. Each of us carries around three to five pounds of genetically distinct organisms in our digestive system. Estimates on the ratio of human to non-human cells in a human body have ranged from 10:1, to 1:1; the point being that nonhuman living organisms make up a large part of what we usually take to be human.³⁶ The only reason this is not evident is because human cells are much

larger than bacteria. These entities are so interwoven with the physical "self" are that they have come to be called a "virtual organ" by biologists, an organ without which we could not survive. These entities help digest our food, produce essential nutrients, and help combat disease. In return, we provide these beings with a habitable environment and a steady source of nutrients.

While this relationship reveals a high degree of interdependence between our physical bodies and other organisms, this relationship goes deeper, to our very sense of self as mediated by our cognitive and emotional habits. Al Carlson and his colleagues found that the make-up of infants' microbiome at one year of age predicts later cognitive development in relation to communicative behavior.³⁷ Our microbiome also influences our habitual emotional states. Recent research has found that manipulating the gut biome through high dose probiotics has significant impact on anxiety and depression disorders.³⁸ The reverse also holds. One study on infant monkeys showed substantial differences in the microbiome between those were raised by stressed versus undisturbed mothers. It appears that not only can our microbiome affect our psychological state, but also that our psychological state can impact the health of our microbiome. This research has led microbiologist Margaret McFall-Ngai to claim that: "Human beings are not really individuals; they are communities of organisms."³⁹

A FEMINIST CRITIQUE

There is no shortage of critiques of deep ecology.⁴⁰ Of particular importance to the points made above are feminist critiques of deep ecology that argue that a posthumanist ecological self has a disturbing colonial flavor to it, insofar as it negates difference and "otherness" – be it another human, animal, plant, or ecological system.⁴¹ It makes all things "me." Such a presupposition opens the door for crass projections of one's perspectives onto others. However, the feminist critique is not so much a negation of the validity of a posthumanist ecological identity as an ontological claim, but rather a warning that we need to exercise epistemic humility in what we claim to know about our

fellow life forms. The theme of unity that pervades a posthumanist ecological identity must not morph into a simplistic anthropomorphism.

CONCLUSION

I have argued that if Peters was right that education is fundamentally about broadening and deepening our awareness of the human condition, including "features of the natural world that impinge on man and those that he shares with the natural world as part of the kingdom of nature," then one aim of education should be to develop that aspect of one's identity that relates to one's place in the biosphere. Recent research on symbiosis gestures towards a level of interdependence similar to that espoused in accounts of posthumanist ecological identity. While the majority of arguments for developing a posthumanist ecological identity rest on empirical assumptions about such an identity motivating environmentally conscious behaviour, I have argued that education should seek to develop a posthumanist ecological identity not because it would help stem ecological devastation (although it might), but because posthumanist ecological identity reflects a central aspect of the human coition, and it is the very function of education to deepen our awareness of what it is we are.

¹ John Bellamy Foster, *Ecology Against Capitalism* (New York, NY: Monthly Review Press).

² Lynn White Jr., "The Historical Roots of Our Ecological Crisis," in *The Environmental Handbook*, ed. Garrett de Bell (New York, NY: Ballantine, 1970).

³ David G. Victor, "Enforcing International Law: Implications For An Effective Global Warming Regime" (paper presented at the Fourth Annual Commings Colloquium on Environmental Law, Duke University, April 1999).

⁴ Arne Næss, "Self-Realization: An Ecological Approach to Being in the World," *Trumpeter* 4, no. 3 (1987): 35-42.

⁵ Elizabeth Ann Bragg, "Towards Ecological Self: Deep Ecology Meets Constructionist Self-Theory," *Journal of Environmental Psychology* 16, no. 2 (1996): 93-108.

- 6 Bragg, "Towards Ecological Self," 95.
- 7 Joanna Macy, World as Lover, World as Self (Berkeley, CA: Parallax Press, 1991): 184.
- 8 Mitchell Tomaschow, *Ecological Identity: Becoming a Reflective Environmentalist* (Cambridge, MA: The MIT Press, 1995), 3.
- 9 Bragg, "Towards Ecolgical Self."
- 10 R.S. Peters, Ethics & Education (London, UK: George Allen & Unwin, 1966).
- 11 Kelvin Beckett, "R. S. Peters and the concept of education," *Educational Theory* 61, no. 3 (2011): 231-255; David Carr, "Philosophy and the meaning of 'education'," *Theory and Research in Education* 1, no. 2 (2003): 195-212; Stefaan Cuypers and Christopher Martin, eds., *Reading R. S. Peters Today: Analysis, Ethics, and the Aims of Education* (Hoboken, NJ: Wiley-Blackwell, 2011); Bryan Warnick, "Ethics and Education Forty Years Later," *Educational Theory,* 57, no. 1 (2007): 53-73.
- 12 John Woods, "Commentary," in *The Philosophy of Education*, ed. R. S. Peters (Oxford, UK: Oxford University Press, 1973).
- 13 D.L. Adelstein, "The Philosophy of Education or the Wisdom and Wit of R. S. Peters," in *Counter Course*, ed. T. Pateman (Harmondsworth, UK: Penguin, 1971).
- 14 R.S. Peters, "Philosophy of Education 1960-80," in *Educational Theory and Its Foundation Disciplines*, ed. Paul Hirst (London, UK: Routledge & Kegan Paul, 1983).
- 15 Robin Barrow, "Was Peters Nearly Right About Education?" in Reading R. S. Peters Today: Analysis, Ethics, and the Aims Of Education, eds., Stefaan E. Cuypers, & Christopher Martin (Hoboken, NJ: Wiley-Blackwell, 2011); Warnick, "Ethics and Education Forty Years Later."
- 16 Richard Pring, "Liberal Education and Vocational Preparation," in *Beyond Liberal Education: Essays in Honour of Paul H. Hirst,* eds., Robin Barrow & Patricia White (London, UK: Routledge, 1993).
- 17 B.A. Cooper, "Peters' Concept of Education," *Educational Philosophy & Theory* 5, no. 2 (1973): 59-76.
- 18 James McClellan, *Philosophy of Education* (Englewood Cliffs, NJ: Prentice-Hall, 1976), 20.
- 19 Jane Roland Martin, "The Ideal of the Educated Person," Educational The-

- ory 31, no. 2 (1981): 97-109. Eleanor Kallman Roemer, "Harm and the Ideal of the Educated Person: Response to Jane Roland Martin," *Educational Theory*, 31, no. 2 (1981): 115-124.
- 20 R.S. Peters, "Aims of Education: A Conceptual Inquiry," in *The Philosophy of Education*, ed. R.S. Peters (London: Oxford University Press, 1972).
- 21 R.S. Peters, Essays on Educators (New York, NY: George Allen & Unwin Ltd., 1981).
- 22 Ibid., 33.
- 23 Ibid.
- 24 Ibid.
- 25 Ibid.
- 26 Ibid.
- 27 Ibid., 35.
- 28 James Bigari, "The Relation of Education for Autonomy and Education for Morality: Implications for Debates Over Educational Aims" (PhD diss., University of British Columbia, 2016).
- 29 Peters, Essays on Educators, 34.
- 30 Peters, Essays on Educators, 34.
- 31 Margaret Little, "Seeing and Caring: The Role of Affect in Feminist Moral Epistemology," *Hypatia* 10, no. 3 (1995): 117-137, 122.
- 32 Peters, Essays on Educators, 34.
- 33 Tony Watling, *Ecological Imaginations in the World Religions* (New York, NY: Continuum International Publishing Group, 2009).
- 34 Emiley A. Eloe-Fadrosh and David A. Rasko, "The Human Microbiome: From Symbiosis to Pathogenesis," *Annual Review of Medicine*, 64, (2013): 145-163, 146.
- 35 Angela Douglas, The Symbiotic Habit (Princeton University Press, 2010).
- 36 Ron Sender, Shai Fuchs, and Ron Milo, "Are We Really Vastly Outnumbered? Revisiting the Ratio of Bacteriual to Host Cells in Human," *Cell* 164, no. 3 (2016): 337-340.
- 37 Al Carlson, "Variation in the Infant Gut Microbiome is Associated with Cognitive Development and Brain Morphometry" (paper presented at the Annual Meeting of the American College of Neuropsychoopharmacology,

Hollywood, FL, 2016).

- 38 Jane Foster and Karen-Anne McVey Neufeld, "Gut-Brain Axis: How the Microbiome Influences Anxiety and Depression," *Trends in Neuroscience* 36, no. 5 (2013): 305-312.
- 39 Margaret McFall-Ngai, "Opening Address" (presented at the 108th General Meeting of the American Society for Microbiology, Boston, MA, 2008).
- 40 David R. Keller, "Deep Ecology," in *Encyclopedia of Environmental Ethics and Philosophy*, eds. J. Baird Callicott and Robert Frodeman (London, UK: Macmillan Library Reference, 2008).
- 41 Karen Warren, "Ecofeminist Philosophy and Deep Ecology," in *Philosophical Dialogues: Arne Næss and the Progress of Ecophilosophy*, eds. Nina Witoszek and Andrew Brennan (New York, NY: Rowman & Littlefield Publishers, Inc., 1999).