Situating Ecomodernism via EcoTypes

Jim Proctor, Lewis & Clark College (jproctor@lclark.edu)
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Situating ecomodernism

What is ecomodernism, and how does it compare with other forms of contemporary environmental thought? Ecomodernism arose in large part out of a critique of certain classic environmentalist notions such as limits to growth (Meadows et al. 1974). But ecomodernism is not the only contemporary alternative; as but two examples evidenced among BTI Senior Fellows, political ecology (e.g., Robbins 2012) and post-naturalism (e.g., Latour 2004) also command considerable scholarly attention. To appreciate the relative strengths and weaknesses of the full suite of contemporary environmental thought—including, but not limited to, ecomodernism— we need some sort of comparative framework. Here I propose a starter framework, which (with apologies to ecology) I call ecotypes; I then situate ecomodernism and certain other approaches in this framework.

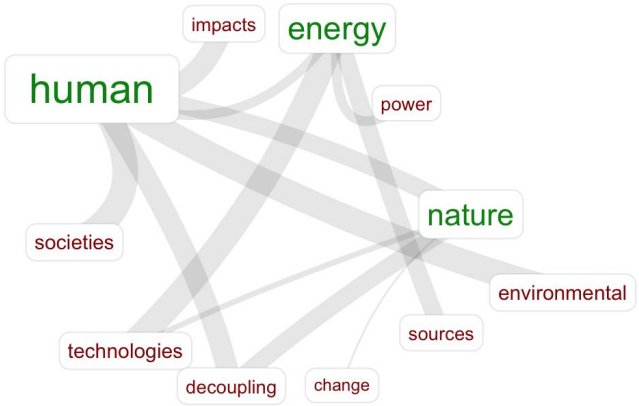

Figure 1. Ecomodernist manifesto text analysis.

Now, ecomodernism could be situated in other ways. As one quick approach, a text analysis[1] of the ecomodernist manifesto reveals emphasis on the following words: human (74 instances), energy (34), nature (32), land (25), and decoupling (24). These key terms relate to each other as indicated by the diagram at left. A similar text analysis of key ecomodernist publications or their antecedents (e.g., Shellenberger and Nordhaus 2007) would provide a fuller picture of ecomodernist discourse, its relative emphases and lacunae.

More deeply, situating ecomodernism requires that we interrogate its conceptual assumptions and policy implications, e.g., what is meant by decoupling, how decoupling would unfold in particular geographical contexts, and what power would be accorded to key actors in the process. Once we do this, we may identify important similarities and differences with other contemporary approaches. Ultimately, the key concept in ecomodernism is modernity itself, which can be understood in a variety of ways (Berman 1983, Giddens 1990, Latour 2013). To date, proponents of ecomodernism have not yet carefully defined what form of modernism/modernity they espouse, and how its key policy implications follow.

Even without these details, my hope is that the ecotypes framework may provide a generalized point of beginning to help launch a more nuanced comparison and conversation between ecomodernism and other contemporary approaches. The framework itself is subject to further

[1] Many online analysis engines are available; I used a beta version of Voyant Tools (beta.voyant-tools.org).

development and critique; let's accept it as provisional for now and see what light it may shed on ecomodernism.

Antecedents

Contemporary popular and scholarly environmental thought[2] involves many shades of green. Yet the taxonomies we have inherited from classic environmental thought are quite limited, in part because theirs was a Crayola box limited to two colors: green vs. brown. This language persists: look at the preponderance of eco-, green, earth-friendly, natural, sustainable, and other marketing modifiers suggesting that the only choice is to support the environmental alternative—not *which* environmental alternative to support. When shades of green arose in classic environmentalism, they were typically simple (often pejorative) binaries, such as radical vs. reformist or anthropocentric vs. biocentric approaches (e.g., Naess 1973).

More recent approaches have expanded these shades of green, but they have limitations. Nadasdy's spectrum of environmentalism (2005) simply includes "brown," "light green," and "dark green" alternatives. Steffen (2009)[3] added one ("bright green"), which resonates with ecomodernism in important ways, but his typology is more of a thought exercise than an empirically validated schema. Dryzek (2013) suggested, again without extensive empirical validation, a two-dimensional typology of four basic approaches, differentiated by "prosaic vs. imaginative" and "reformist vs. radical" axes. In a more focused context, Nisbet (2014) identified three recent groups of public intellectuals commenting on climate: ecological activists, smart growth reformers, and ecomodernists. Nisbet's schema is based on theory and evidenced by a number of examples, but possibly less generalizable beyond the case of climate discourse. In the popular realm, Milfont and Duckitt (2010) identified fully twelve factors defining contemporary environmental attitudes, though ultimately a single higher order factor, "Generalized Environmental Attitudes," seems best to explain these twelve. As perhaps the most extreme typology, *Integral Ecology: Uniting Multiple Perspectives on the Natural World* (Esbjörn-Hargens and Zimmerman 2009) defines over two hundred approaches to environmental thought in its appendix—yet reduces all to a simple two-dimensional rubric differentiating between exterior and interior experience, and collective vs. individual realities (see also Esbjörn-Hargens 2009).

Single binaries appear to be problematic Procrustean beds on which to situate the contemporary spectrum of environmental thought; yet binaries offer both conceptually clear distinction and possibilities for empirical validation.[4] Multiple sets of binaries, then, may preserve their strengths while defining a higher-dimensioned space in which to situate contemporary environmental approaches. This is what I will do here via ecotypes.

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[2] The term "environmental thought" is admittedly vague—though note that it encompasses both scholarly and popular ideas, as the two by no means fully overlap. Two important caveats: the term does not imply some causal preeminence to consciousness over practice (described as idealism on one of the EcoTypes axes!); and, forms of environmental thought are certainly specific to space and time—we work here in an early 21st century North American context, with unexplored relevance to other places and times.

[3] As Steffen's is a blog post, page numbers will not be cited in quotes from this text that follow below.

[4] One interesting possibility may involve personal construct theory/repertory grid methodology, which builds binary constructs inductively from qualitative interviews; see e.g. Jankowicz (2005).

Axes of difference

To launch our ecotypes-based conversation, I propose six primary axes of difference as a relatively compact set that nonetheless highlights key tensions in contemporary environmental thought.[5] These axes are presented in alphabetical order below. I do my best to present the poles of each axis binary using non-pejorative language, as none is intended.

- *Domain* (material vs. ideal). Environmentalism certainly operates in practical domains, with actions to reduce pollution or achieve other material outcomes, but it also can take on expressions that emphasize consciousness, values,[6] and spirituality. The domain axis highlights this difference between material and ideal emphases in environmental thought.
- *Nature* (pure vs. hybrid). A good deal of North American environmentalism is grounded in notions of nature that emphasize its order and harmony, often in contrast to the human realm; yet many theorists[7] have rejected this pure view in favor of relational, hybrid realities that ultimately challenge the very category of nature (and society).
- *Scale* (individual vs. institutional). Environmental action can be conceived at multiple scales, each assuming a particular theory of change. Individual-scale (e.g., consumerist) action, assuming an incremental theory of change, is commonplace in environmentalism, though others have rejected this approach in favor of larger-scale, institutional change achieved via law, policy, or collective practice.
- *Science* (orthodox vs. heterodox). The natural and social sciences have played a major role informing environmental policy and management. This axis highlights an important tension between the orthodox consensus in science, obtained via conferences, publications, and professional associations, and heterodox readings of science that dispute or wander outside these orthodox views.
- *Society* (consensus vs. conflict). A common divide in the social sciences contrasts consensus vs. conflict models of society: do prevalent or desired cultural, social, economic, and/or political forms represent consensus among people, or is conflict more the norm, where social forms are controlled by an elite—and thus power and politics are central? Environmentalism somewhat uncomfortably spans both models.
- *Time* (conservative vs. progressive). One of the most important axes of difference in environmental thought concerns temporal outlook, as classic North American environmentalism adopted in many respects a conservative viewpoint, oriented more positively toward the past (e.g., previously unspoiled nature or more harmonious social arrangements with nature) than the future; yet recent environmental approaches are

[5] Some classic binaries in environmental thought (e.g., conservationism vs. preservationism) are not included here, as they arguably derive from these more fundamental axes (e.g., nature and time), and are less significant to contemporary scholarly debates—though conservationism vs. preservationism, and other classic binaries, may remain potent notions in certain popular debates.

[6] It could be argued that the domain axis may unfairly lump together a variety of idealisms that espouse quite different values and should rightly be their own binary; one classic example would be approaches motivated by anthropocentrism vs. biocentrism/ecocentrism. We have not included this classic divide in environmental ethics, however, as the scholarly discussion has largely moved on to more nuanced considerations.

[7] As part of the "science wars" starting in the 1990s, a wide range of scholars shed light on these notions of nature as social constructions. Though this realist/constructivist epistemological divide continues, theorists have generally moved on to consider nature's ontological dimensions, i.e., what nature (certainly a construction, but not only a construction) really is. This is why I emphasize the pure/hybrid divide, and not its epistemological antecedent.

intentionally progressive, stressing future possibilities via social and technical innovation. For purposes of simplicity and given significant conceptual resonance, the time axis subsumes a parallel axis regarding embrace of new technologies.[8]

These six axes are not necessarily orthogonal (i.e., independent of each other), yet it remains for theoretical logic or empirical evidence to identify significant associations, thus potentially consolidating these axes to a smaller resultant group. Alternatively, there may be significant overlooked axes that may well deserve to be added to the group above. Given the intent to come up with a sufficiently general, and generalizable, set of ecotypes, we shall start here.

EcoTypes

Forms of environmental thought advanced by authors such as Steffen and Nisbet, and others not mentioned in these schema, map onto the six axes of differentiation (with some espousing both poles of an axis), such that we can illustrate each via one ideal-typical ecotype representing a generalized popular or scholarly position. The six related ecotypes and their key values are very briefly summarized below,[9] ordered via two commonplace approaches, two alternative/radical approaches, and two approaches informed by various forms of scholarship.

- *Light green* [scale]. "Light green" is one of Steffen's ecotypes; as Steffen described it, "Light green environmentalists tend to emphasize lifestyle/behavioral/consumer change as key to sustainability, or at least as the best mechanism for triggering broader changes." Light green thus expresses the individual pole of the scale axis, with its key value perhaps best expressed by the classic phrase "think globally, act locally." Additionally, it represents a consensus view of society, a pure view of nature as resonant with consumer environmentalism, and both material and ideal domains, among others.
- *Bright green* [time]. "Bright green" is another of Steffen's ecotypes, focusing on "innovation, design, urban revitalization and entrepreneurial zeal." Bright green lumps together two categories in Nisbet's schema: smart growth reformers and ecomodernists. Indeed, like the light green ecotype, bright greens represent a spectrum of approaches. Yet all share a progressive view of time (and derivative positive outlook on technology), which serves as its defining axis; among others are an emphasis on the institutional scale, a consensus view of society, and an endorsement of orthodox science. Sustainable development could be understood as a key value, given its classic time-based definition ("…development that meets the needs of the present without compromising the ability of future generations to meet their own needs" [WCED 1987]) and emphasis on growth.
- *Dark green* [domain]. "Dark green" is the third of Steffen's ecotypes, but is defined more restrictively here, to differentiate them from red greens. To Steffen, dark greens "emphasize the need to pull back from consumerism (sometimes even from

[8] Attitudes toward new technologies (e.g., in energy or agriculture) indeed constitute another potentially important axis of differentiation. Yet with few exceptions, technophobic approaches (quite common in classic environmentalism) are derived from a conservative, past-oriented approach to time, whereas technophilic approaches resonate strongly with future-oriented approaches to time. Other ecotypes axes (e.g., a scale axis-based preference for decentralized vs. larger-scale energy production) may further differentiate attitudes toward technology in environmental thought.

[9] Space precludes fuller discussion with examples; this important task awaits further explication of ecotypes, beyond the immediate application here toward situating ecomodernism.

industrialization itself) and emphasize local solutions, short supply chains and direct connection to the land." Steffen's dark greens resemble Nisbet's ecological activists in many ways. Here, dark greens are defined by a strong spiritual impulse (e.g., deep ecology) and/or theological reverberations (e.g., apocalypticism) in their discourse; as such, they represent the idealism pole of the domain axis, with spirituality as a key value (see e.g. Albanese 1991; Taylor 2010). Among other important axes are a conservative view of time, an interestingly heterodox view of science, and a pure view of nature.

- *Red green* [society]. As defined here, red greens include movements such as environmental justice and political ecology, for which a conflict model of society is the key axis, and thus politics are a key process and equity a key value. Though they resemble dark greens in advocating for more radical change, to red greens this change lies primarily in the material vs. ideal domain, a key difference between the two. As one other significant axis, institutional-scale change is important to red greens.
- *Scigreen* [science]. A great deal of environmental management involves the application of scientific knowledge, not explicitly aligned, with, for instance, bright or red green ecotypes. This ecotype embodies orthodox science as its primary axis, with objectivity and emphasis on facts as key values. Though generally wary of political commitments, scigreens may often espouse a consensus view of society given their institutional role, and may be more comfortable with pure than hybrid views of nature, among other axes.
- *Neogreen* [nature]. Similar to scigreens, the final ecotype also builds on scholarship, but more from certain social sciences and humanities (scigreens typically build on the natural sciences and applied social sciences). Neogreens represent the hybrid pole of the nature spectrum; as such, relationality may be the neogreens' key value. Neogreens come at environmental thought from a post-naturalist perspective somewhat distinct from the other ecotypes, since the very concept of nature at the heart of environmental thought has rarely been challenged by environmentalists. Neogreens also generally represent a progressive view of time, and an orthodox (though critical) view of science.

These six ecotypes have important points of agreement and disagreement, and are thus friends and enemies in interesting ways. Here is a quick tabular summary, where larger italicized terms represent the primary axis for each ecotype, other polar tendencies are indicated, and ecotypes that embrace both binary poles of an axis are listed as such.

Axis → / ↓ EcoType	**Scale**	**Time**	**Domain**	**Society**	**Science**	**Nature**
Light green	*Individual*	[both]	[both]	Consensus	[both]	Pure
Bright green	Institutional	*Progressive*	[both]	Consensus	Orthodox	[both]
Dark green	[both]	Conservative	*Ideal*	[both]	Heterodox	Pure
Red green	Institutional	Progressive	Material	*Conflict*	Orthodox	[both]
Scigreen	[both]	[both]	Material	Consensus	*Orthodox*	Pure
Neogreen	Institutional	Progressive	[both]	[both]	Orthodox	*Hybrid*

Table 1. Provisional comparison of ecotypes by axis pole.

The above table suggests a few unique characteristics of these general ecotypes:

- ➔ *Light greens* alone espouse a purely individual view of scale
- ➔ *Dark greens* alone embrace heterodox over orthodox science
- ➔ *Red greens* alone adopt a purely conflict model of society
- ➔ *Neogreens* alone approach nature as, one could say, purely hybrid

What may be more important, however, is the degree of resonance among these ecotypes, as many share common axis characteristics (one or the other pole or both) with other ecotypes. Yet these are still ideal-typical types, not yet actual movements. Below, we apply these ecotypes in the context of one movement of interest: ecomodernism.

Situating ecomodernism

If the above six axes of differentiation, and six related ecotypes, express some of the most general features of contemporary environmental thought, where would ecomodernism be situated?[10] Clearly, it resonates strongly with the bright green ecotype, given its prioritization of a progressive approach to time (as modernism may imply); we also can imagine some key similarities and differences with political ecology (a red green ecotype) and postnaturalism (a neogreen ecotype), two other major recent scholarly movements. To consider ecomodernism a bit more deeply, here is a (very) brief summary by axis of differentiation, from more to less significant axes:

- *Time*. Ecomodernism is strongly progressive in its view of time; this is one of its defining modernist characteristics, clarifying a rejection of ecospirituality and limits to growth as temporally conservative approaches, and explaining its related endorsement of technological innovation as key to addressing ecological problems. As noted above, important questions arise as to the form of modernism ecomodernism endorses, as critics such as Latour (2015) have suggested that its progressive view of time is naïve; but there is little doubt that this is a highly significant axis.
- *Science*. Ecomodernism also strongly advocates orthodox views of science, including scientists' general support for items many environmentalists reject such as GMOs and nuclear power. Here, too, as with time, ecomodernists contrast strongly with classic environmentalism—and have built a bit of notoriety around this reputation.
- *Scale*. Ecomoderns advocate institutional-scale actions, supporting for example government investment into technological innovation. Ecomoderns have devoted relatively less attention to critiques of individual-scale emphases in classic environmentalism than they have to environmentalists' common approaches to time and science, but scale remains a relatively significant axis to ecomoderns, who commonly express their positions in universalist and generalized/generalizable ways.
- *Domain*. Ecomodernism appears to be more interested in material practice than ideological change, but some earlier ecomodernist publications (e.g., Shellenberger and Nordhaus 2009) resonate with notions in ecological modernization (as well as Inglehart's postmaterialism thesis; see e.g. Inglehart and Baker 2000) that material and

[10] Here, too, space precludes fuller discussion, which by necessity would include citations to key ecomodernist documents, a timeline of key concepts in the brief history of ecomodernism, etc. Much remains for us to do, if we wish to advance ecomodernism in a properly reflexive manner.

ideological change accompany each other as part of modernization. So, ecomodernism may be understood as embracing this full axis rather than one particular pole.

- *Nature*. An apparent contradiction in ecomodernism lies in its simultaneous embrace of a hybrid, technologized nature similar to neogreens, and a purer, more separable, integrative view of nature via its recent emphasis on decoupling human society from nature. Ecomodernism thus arguably displays a bipolar emphasis with respect to pure vs. hybrid axes; this is an area worth further clarification.
- *Society*. Ecomodernism possibly ascribes to a broadly consensus view of society; more clearly, ecomodernism tends not to engage in the politics that characterize conflictual views of society, relative to other contemporary approaches (e.g., political ecology) where recognition of difference and the reality of political conflict is central. This too may be an area worth further clarification.

Given these six axes, it becomes difficult to visualize ecomodernism in the full spectrum of contemporary environmentalism. Taking two dimensions at a time, though, one could readily situate ecomodernism vis-à-vis other academic and popular movements. For example, the figure below presents two defining characteristics of ecomodernism (time and science) relative to a dominant (light green) movement, which could be called lifestyle environmentalism.

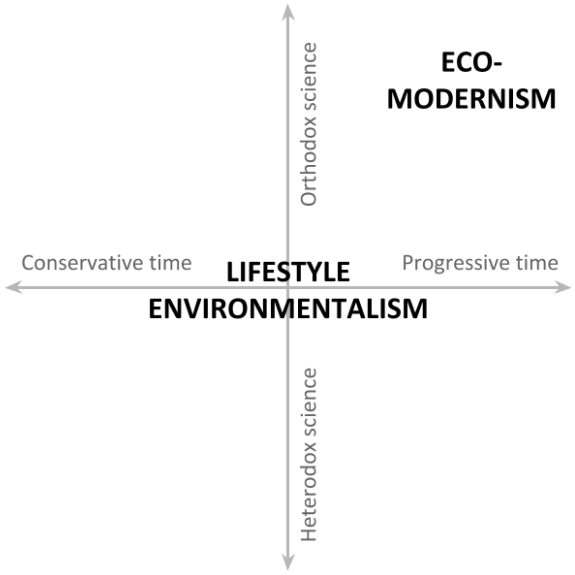

Figure 2. Ecomodernism compared with lifestyle environmentalism via time/science axes.

In sum, ecomodernism is characterized by central assertions regarding time and science, and can be situated on the scale and domain axes as well. Its most significant lacunae arise in comparison of its view of society to other contemporary approaches, and its most significant current contradiction may arise in its view of nature. Ecomodernism is a very recent movement, so we can expect that these characteristics may evolve over time.

As with the ecotypes developed above, this summary of ecomodernism is highly provisional, and will doubtless be improved with the input of others during the summer 2016 BTI workshop.

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