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Tracking Ecophobia: The Utility of Empirical and Systems Studies for Ecocriticism

IN A COMPELLING ARGUMENT that centers on the relationship between pedagogy and activism, Nicholas Hengen Fox wonders “what good [it] is interpreting the world if we are not changing it in material ways” (15), a concern that might just as well have been asked by an ecocritic. Fox goes on to explain that in his activist-centered pedagogy, “rather than focusing on what a text says, students focus on how it has been—and could be—used in the world beyond the classroom” (15). It is curious that Fox does not reference empirical and systems studies, since, as Steven Tötösy de Zepetnek maintains, “the object of study of the empirical study of literature is not only the text in itself, but the roles of action within the literary system, namely, production, distribution, reception, and the processing of texts” (“Systems Theories” 5; translation of Van Gorp et al.). This is surely an endeavor that ought to concern ecocritics. At the outset of ecocritical scholarship, Cheryll Glotfelty noted that “all ecological criticism shares the fundamental premise that human culture is connected to the physical world, affecting it and affected by it. Ecocriticism takes as its subject the interconnectedness between nature and culture” (xix). Since ecocriticism seeks to effect social change by commenting on how texts talk (or fail to talk) about the natural environment and since such texts are produced within a literary system that also produces and sustains countervailing ideologies, the obvious utility of a systemic and empirical approach for ecocriticism is that it makes available a framework through which to generate empirically viable comments about *how* representations of nature (or non-representations of it) function within the system Tötösy de Zepetnek describes. In what follows, I examine the mutually related terms “biophilia” and “ecophobia,” arguing for systemic and empirical studies of the latter and for the possibilities for how such a study—one that would be contextualized (geographically, culturally, temporally) rather than

over-arching—can offer a more intellectually honest and viable future for ecocriticism than has been the case so far.¹

Ecocriticism has toyed consistently with ways of articulating an activist theory, with varying degrees of success.² In fact, even some scholars outside the circle of devout ecocritics have raised the question of theory and practice within the field. Joseph Carroll, for instance, maintains that “If the subject of ecocriticism is the relation of literature and the natural world, and if this relation is more important and more elemental than any other concern, does it not follow that ecocriticism should identify itself as a matrix for all literary study? To put the question operationally, in what way could ecology, as a subject matter and a concept, generate a theory of literature?” (86).

It has long been a troubling reality that literary theory is, in David Miall’s provocative view, “pre-theoretical,” since literary theories “cannot be right because they cannot ever be wrong. There is no evidence that could confute a literary theory; thus such writings are strictly speaking no more than interpretations. Literary theorists, like Galileo’s inquisitors, refuse to examine evidence for literary reading in the empirical sense; offered a telescope, they rule that such an instrument cannot exist or that it exists only as an ideological construct rather than a tool to aid perception” (23–24). Miall argues instead for an empirical study of literary reading that succeeds in giving a “central place to the experience of real readers, placing on the agenda for the first time the richness, range, and personal significance of the reading in our culture” (34). Ecocritics want much the same. Posing positions on the thematic function of trees in *Macbeth* is not going to do much to save the trees of the Pacific Northwest from the pine beetle, whose populations in recent years have exploded due to warmer winters. Posing proposals about the role and function of animals in *Tristram Shandy* is unlikely to stop people from eating Big Macs.

What might make a difference is understanding why and how ecophobia functions in the production of literary texts. Carroll comes at this issue from a slightly different angle by looking at Edward O. Wilson’s notion of “biophilia,” an approach that I want to argue against here for several reasons. Carroll observes that Wilson’s notion of biophilia takes us toward an “account of the evolved psy-

¹ E.O. Wilson describes “biophilia” as “the urge to affiliate with other forms of life” (*Biophilia* 85) and “the connections that human beings subconsciously seek with the rest of life” (*Diversity* 350). In “Theorizing in a Space of Ambivalent Openness” I define “ecophobia” as follows:

Ecophobia is an irrational and groundless hatred of the natural world, as present and subtle in our daily lives and literature as homophobia and racism and sexism. It plays out in many spheres: it sustains the personal hygiene and cosmetics industries (which cite nature’s “flaws” and “blemishes” as objects of their work); it supports city sanitation boards that issue fines seeking to keep out “pests” and “vermin” associated in municipal mentalities with long grass; it keeps beauticians and barbers in business; it is behind landscaped gardens and trimmed poodles in women’s handbags on the Seoul subway system; it is about power and control; it is what makes looting and plundering of animal and nonanimal resources possible. (208)

In the five years since I offered that definition, much has happened with the term; see, for instance, Robisch; Hillard; Mackenzie and Posthumus; Deyo; and Estok (“Ecophobia Hypothesis”).

² See my “Theorizing in a Space of Ambivalent Openness: Ecocriticism and Ecophobia” and S.K. Robisch’s fiery response: “The Woodshed: A Response to ‘Ecocriticism and Ecophobia.’” This exchange led in turn to “a call for submissions to a special forum on the broader topic of ‘Ecocriticism and Theory’ that would appear in one of the 2010 issues of *ISLE* [*Interdisciplinary Studies in Literature and Environment*]” (Slovic, “Further Reflections”). The issue itself (2010.1), however, barely touched the hypothesizing that spurred it.

chology that derives from our deep evolutionary past" (*Consilience* 158), but the problem with singling out one point (Wilson's biophilia) on what is a spectrum condition (since biophilia can hardly account for the factory farm), as so many ecocritics have been wont to do, is both misleading and intellectually dishonest. A fuller and more honest approach would have to look at the position and role of ecophobia within that spectrum condition. If we are going to take the pursuit of empirical evidence seriously, then it is necessary to take off the blinders with which Wilson burdens his theory.

Wilson's notion of biophilia as an adaptive strategy for survival does not seem to describe adequately what Carroll calls "the immediate problems of shelter, hunger, and physical danger." Moreover, if, he argues, these problems "are less pressing, at least for those of us in the affluent West," all of us are "rapidly becoming conscious of great potential danger from a catastrophically degraded natural environment" (*Consilience* 90). Indeed, for the notion of biophilia to have any interpretative or empirical value it must be as part of a larger spectrum condition, in which the notion of ecophobia must also be included. Moreover, ecophobia itself must be seen as an adaptive strategy that is now perhaps as useful for our survival as other long obsolete adaptations: the appendix, the tailbone, wisdom teeth, and so on. Empirical and systemic studies are both necessary and inevitable for the environmental humanities, but perhaps before we can really get into this discussion, we need to debunk Wilson's cancerous nonsense: it is time to face facts, one of which is that Wilson, who is often wrongly seen as a bridge between the sciences and the arts, is not qualified to discuss what literary people do, how literature functions in society, and how very complex literary systems and products are, even if he were interested in doing so. Wilson's arguments are so severely compromised and represent such a bare-faced epistemological bigotry as to be virtually useless for developing empirical approaches for literary studies. Both in *Consilience* and in his lectures a decade later, he misconceives what it is that literature does, essentializing a monolithic notion of literature by claiming that its only purpose is to entertain: "the central role of *pure* literature is the transmission of the details of human experience by artifice that directs aesthetic response—originality and power of metaphor, not new fact" ("Synergism"; emphasis added). As I state elsewhere (see "Narrativizing" 155), by using the phrase "pure literature," Wilson illustrates graphically his distance from the kinds of theoretical work people in the humanities do.

There is indeed a case to be made here for "consilience" between the arts and sciences, for understanding (and perhaps measuring and proving) literary productions in socio-biological terms as adaptive strategies that have quantifiably promoted and ensured our survival. Miall puts the case well in his consideration of "whether the proclivity for literary experience fulfills some identifiable and distinctive role," and he maintains that "while species-specific traits are commonly thought to require fifty or more generations to develop, the evidence for literature goes back well beyond this; thus the time span for the existence of literature is more than adequate to propose the question: Is literary experience an adaptation, selected by evolutionary pressures because it enhanced survival and reproductive ability?" (190). Yet, even as I write this, I do so with the cautionary warning that literary studies must not become a minion of the sciences, a slave to methodologies both foreign and ineffective for a discipline that requires its own tools and interpretive strategies, a servile bondservant to analytical models designed for

other purposes and effects. It is, after all, precisely this servile relationship to the sciences that Wilson imagines.

Although Wilson offers the term “consilience” to describe “literally a ‘jumping together’ of knowledge by the linking of facts and fact-based theory across disciplines to create a common groundwork for explanation” (*Consilience* 8), his notions of literature are fatuously reductive and simplistic. He promotes and seems genuinely to believe, for instance, that “science explains feeling, while art transmits it” (127); that postmodernists are “a rebel crew milling beneath the black flag of anarchy” and “believe we can know nothing” (44); and that “outside our heads there is freestanding reality. Only madmen and a scattering of constructivist philosophers doubt its existence” (66). One has to wonder how sentiments such as these can possibly encourage greater dialogue between the arts and sciences. To me, it seems unlikely indeed to expect a plausible methodology for sustaining a consilience from a person who misapprehends what literary people and others who compose narratives actually *do*.

While I do not want to belabor this point, I also do not want to argue for the necessity to read for ecophobia without adequately dealing with the very tangible impact of Wilson’s gleeful notions about biophilia. It is simply wrong for Wilson to assume that “facts” may only be derived from and validated by sciences, that the source of literature “is an intuitive understanding of human nature as opposed to an accurate knowledge—at least in the literal, quantifiable form required for science [and, again, Wilson uses the singular]. Metaphor—in the best writing—strikes the mind in an idiosyncratic manner” (“Synergism”). As I have stated elsewhere (see “Narrativizing” 156), Wilson does not appear to be aware that the *reason* for creativity, for individuality, for novel linguistic constructions, for new metaphors, similes, and so on is precisely to help convey information, details, and facts so as to avoid the dullness and lack of thinking delivered by dead metaphors and hackneyed writing.

Yet parts of any wreck are always salvagable. Wilson’s argument that “culture helps to select the mutating and recombining genes that underlie culture” (*Consilience* 179) is useful, as is his comment that, although “complexes of gene-based epigenetic rules predispose people to invent and adopt such conventions . . . genes do not specify elaborate conventions such as totemism, elder councils, and religious ceremonies. To the best of my knowledge no serious scientist or humanities scholar has ever suggested such a thing” (181). This reasoning is consonant with Carroll’s understanding of the relationship between literature and evolutionary history: “Throughout most of our evolutionary history, an alert attentiveness to the natural world would have been crucial to our survival, and the latent emotional responsiveness that attends this adaptive function has not disappeared with the advent of controlled climates and supermarket foods. Responsiveness to the sense of place is an elemental component of the evolved human psyche. In this respect, ecocriticism and Darwinian literary study are reciprocal and interdependent” (157–58). And this is where biophilia and ecophobia come in.

If we are to take seriously the activist goals of ecocriticism, then we also need to take seriously the idea that ecophobia is an obsolete adaptive strategy for survival that can be measured and contextualized through serious comparative cultural analyses. Indeed, if the comments by Fox resemble ecocritical attitudes, no less so does Tötösy de Zepetnek’s description of comparative cultural studies as “a field of study where selected tenets of the discipline of comparative literature are merged

with selected tenets of the field of cultural studies, meaning that the study of culture and cultural products—including but not restricted to literature, communication, media, art, etc.—is performed in a contextual and relational construction and with a plurality of methods and approaches, inter-disciplinarity, and, if and when required, including teamwork” (“From Comparative”). But, if for comparative cultural studies, to cite Tötösy de Zepetnek once again, “it is the processes of communicative action(s) in culture and the how of these processes that constitute the main objectives of research and study” (“From Comparative”), for ecocriticism the object of study is less the “how” than the “what.” Part of my claim here is that getting to the “what” requires analysis of the “how.” Ecophobia is not an isolated response: it happens in relation to many other elements within social systems (cf. Bergthaller 223). Summarizing Niklas Luhmann’s thought, Hannes Bergthaller notes of social systems that “their elements never occur as isolated phenomena, but only as links in a continuous sequence of events” (223).

Tracking the seemingly innocuous in a long sequence of events is a search for causes, not necessarily for “truth.” Siegfried J. Schmidt, one of the powerful voices in systemic and empirical studies (although he is often neglected within North America), is unequivocal on this matter: “empiricity should not be misread as a search for objectivity or truth. Instead, the claim for empiricity signaled the intention to concentrate on social processes which resulted in literary phenomena through the activities of literary agents and to realize this concentration in an empirically intersubjective way” (“Literary”). In less abstract terms, analyzing how Ruth Ozeki writes meat in *My Year of Meats* will be a very different project from looking at how William Shakespeare writes meat in *Timon of Athens*. These are two very different spaces (geographically, culturally, temporally), and an attempt to produce verifiable and reliable correlations between these spaces, on the one hand, and ecophobia, on the other, simply cannot use a template.³ After all, entomologists would not assume that the environments of *Dorylus gribodoi* (army ants, from West Africa) and *Leptothorax muscorum* (brown ants, from northern climates) are irrelevant simply because both species are ants. The specificities and practical comments about ecophobia are no less contingent. Again, this does not imply an unwillingness to make a comment; rather, it is to see that reading ecophobia is very much a case-by-case affair. Anyone expecting anything else should look elsewhere.

Systemic and empirical studies have taken and continue to take a bad rap, among both U.S. and European scholars. There have been many charges against empirical studies of literature, and, to be sure, some are valid, others not. Among the valid, perhaps, is the warning against triviality. For instance, Hendrik van Gorp, R. Ghesquiere, Dirk Delabastita, and J. Flamend point out that “Some objections often raised to the empirical study of literature are the triviality of many of its research results such as confirmation of what was already known or suspected” (117). This seems to have some validity (see, for example, Harker 55, 57; or Holland 397). Yet, while some of the critiques are indeed valid, the field overall is more sinned against than sinning.

One of the problems is based on simple misunderstandings. As Schmidt has argued, “Since most literary scholars have had no personal experience of what the ‘scientists’ actually do, the negative semantic connotations of ‘empirical’ and

³ The problem with some of the sillier responses to the notion of ecophobia has been to read for and insist on a kind of one-size-fits-all understanding of ecophobia.

'positivistic' still prevail despite all the revolutionary theoretical and conceptual developments within the sciences" ("The Empirical" 138).⁴ By the same token, as I note above, some scientists have no personal experience of what literary people actually do. Just as literary scholars need to learn that empirical studies don't actually gut literary studies, so too do the likes of Wilson need to have explained to them that postmodernism does not deny that Hurricane Katrina happened but rather shows *how* Katrina is written to endorse and bolster one ideology or another (and Wilson is obviously blind to these ideological determinants).

It is also worth keeping in mind that there are many approaches to the empirical study of literature. Following Gerard Steen, Paul Sopčák, in the "Introduction" to the "Theoretical and Philosophical" section of *Directions in Empirical Literary Studies*, describes the "multi-disciplinarity and multi-nationality of the enterprise" (3) and the resulting tensions involving competing "paradigms." These include approaches that are variously linguistic, psycho-cultural, evolutionary, phenomenological, and so on. With this in mind, it would be a terrible mistake to think that systemic and empirical studies are some new and radical thing. Contextualizing literature is at the very core of such approaches as New Historicism and Cultural Materialism, for instance, and understanding the psychological purchase of a given piece of work is at the core of Reader Response theory. For empirical and systemic studies, the questions are many indeed. Thus a big tent approach rather than the sort Wilson promulgates⁵ is best and most productive, and, not coincidentally, it is also a big tent approach that has characterized ecocriticism from the start. Empirical and systemic studies have much to offer ecocriticism's ability to understand the production and reproduction of ideologies. Indeed, if there is to be hope that ecophobia may be wiped out, then there remains a great deal of bigotry to overcome before biophilia and ecophilia can take its place. Empirical and systemic studies may very well be steps in the right direction.

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Works Cited

Bergthaller, Hannes. "Cybernetics and Social Systems Theory." *Ecocritical Theory: New European Approaches*. Ed. Axel Goodbody and Kate Rigby. Charlottesville: U of Virginia P, 2011. 217-29. Print.

⁴ Tötösy de Zepetnek makes a similar observation: "On both sides of the Atlantic, the notions of 'system' and 'empirical'—the latter particularly so [. . .] evoke the criticism of neo-positivism, the accusation of 'number crunching,' the criticism of disregard for the primary properties of a literary text, [. . .] The argumentation that all these and other criticisms—mostly knee-jerk criticisms [. . .] are based on misunderstandings" ("Text" 2).

⁵ Wilson's dismissal of post-structural critiques of the constructedness of texts, including the very text of science itself, dismisses an entire branch of knowledge in defense of itself. Such can only restrict and not expand knowledge: simple math.

- Carroll, Joseph. *Literary Darwinism: Evolution, Human Nature, and Literature*. London: Routledge, 2004. Print.
- Deyo, Brian Daniel. "Rewriting History: Animality in J.M. Coetzee's *Dusklands* and Richard Flanigan's *Wanting*." *Ariel* 44.4 (2013): 89–116. Print.
- Estok, Simon C. "The Ecophobia Hypothesis: Remembering the Feminist Body of Ecocriticism." *International Perspectives in Feminist Ecocriticism*. Ed. Simon C. Estok, Greta Gaard, and Serpil Oppermann. New York: Routledge, 2013. 70–83. Print.
- . "Narrativizing Science: The Ecocritical Imagination and Ecophobia." *Configurations* 18.1–2 (2010): 141–59. Print.
- . "Theorizing in a Space of Ambivalent Openness: Ecocriticism and Ecophobia." *ISLE* 16.2 (2009): 203–25. Print.
- Fox, Nicholas Hengen. "Teaching (is not) Activism." *Radical Teacher* 94 (2012): 13–23. Print.
- Glotfelty, Cheryll. "Introduction: Literary Studies in an Age of Environmental Crisis." *The Ecocriticism Reader: Landmarks in Literary Ecology*. Ed. Cheryll Glotfelty and Harold Fromm. Athens: U of Georgia P, 1996. xv–xxxvii. Print.
- Harker, John W. "Literary Texts as Models: Implications for the Empirical Study of Literature." *The Systemic and Empirical Approach to Literature and Culture as Theory and Application*. Ed. Steven Tötösy de Zepetnek and Irene Sywenky. Edmonton: University of Alberta; and Siegen: Siegen University, 1997. 51–65. Print.
- Hillard, Tom J. "Deep into that Darkness Peering": An Essay on Gothic Nature." *ISLE* 16.4 (2009): 685–95. Print.
- Holland, Norman N. "The Power(?) of Literature: A Neuropsychological View." *New Literary History* 35. 3 (2004): 395–410. Print.
- Mackenzie Louisa, and Stephanie Posthumus. "Reading Latour Outside: A Response to the Estok-Robisch Controversy." *ISLE* 20.4 (2013): 757–77. Print.
- Miall, David S. *Literary Reading: Empirical and Theoretical Studies*. Bern: Peter Lang, 2006. Print.
- Robisch, S.K. "The Woodshed: A Response to Ecocriticism and Ecophobia." *ISLE* 16.4 (2009): 697–708. Print.
- Schmidt, Siegfried J. "Literary Studies from Hermeneutics to Media Culture Studies." *CLCWeb: Comparative Literature and Culture* 12.1 (2010): <<http://dx.doi.org/10.7771/1481-4374.1569>>.
- . "The Empirical Study of Literature: Why and Why Not?" *The Systemic and Empirical Approach to Literature and Culture as Theory and Application*. Ed. Steven Tötösy de Zepetnek and Irene Sywenky. Edmonton: University of Alberta; and Siegen: Siegen University, 1997. 137–53. Print.
- Slovic, Scott. "Further Reflections." E-mail to Simon C. Estok. 6 Dec. 2009.
- Sopčák Paul. Introduction. *Directions in Empirical Literary Studies: in Honor of Willie van Peer*. Ed. Sonia Zyngier, Marisa Bortolussi, Anna Chesnokova, and Jan Auracher. Amsterdam: John Benjamins, 2008. 3–5. Print.
- Steen, Gerard. "A Historical View of Empirical Poetics: Trends and Possibilities." *Empirical Studies of the Arts* 23.1 (2003): 51–67. Print.
- Sutter, John D. "Half of nature is still here! . . . Yay?" *CNN* 1 Oct. 2014. Web. <<http://edition.cnn.com/2014/09/30/opinion/sutter-living-planet-report/index.html?ref=allsearch>>.
- Tötösy de Zepetnek, Steven. "From Comparative Literature Today toward Comparative Cultural Studies." *CLCWeb: Comparative Literature and Culture* 1.3 (1999): <<http://dx.doi.org/10.7771/1481-4374.1041>>.
- . "Text in Context *alias* the Systemic and Empirical Approach to Literature and Culture." *The Systemic and Empirical Approach to Literature and Culture as Theory and Application*. Ed. Steven Tötösy de Zepetnek and Irene Sywenky. Edmonton: University of Alberta and Siegen: Siegen University, 1997. 1–5. Print.
- . "Systems Theories and the Study of Literature and Culture." *Comparative Literature* 67.2 (2015): 1–10. Print.
- Van Gorp, Hendrik, R. Ghesquiere, Dirk Delabastita, and J. Flamend. "Empirische literatuurwetenschap." *Lexicon van literaire termen: stromingen en genres, theoretische begrippen, retorische procédés en*

stiljffiguren. Ed. Hendrik van Gorp, R. Ghesquiere, Dirk Delabastita, and J. Flamend. Leuven: Leuven UP, 1991. 116–17. Print.

Wilson, Edward O. *Biophilia*. Cambridge: Harvard UP, 1986. Print.

———. *Consilience: The Unity of Knowledge*. New York: Knopf, 1998. Print.

———. *The Diversity of Life*. New York: W.W. Norton, 1993. Print.

———. “Synergism between Science and the Humanities.” University of California Television (2008): <<http://www.youtube.com/watch?v=J3jF19wtDQE>>.