Tillting for Windmills: Climate Change, Websites, and Ecocritical Pedagogy

Patrick D. Murphy

University of Central Florida

A significant portion of ecocritical work today needs to be devoted to analyses of the representations of the organic world by means of the digital virtual world. This portion will likely need to increase as more and more people around the world come to rely on the worldwide web for news, research, and access to information of all kinds. The presentation of literature itself is changing, not only in terms of electronic formatting through Kindle and other devices, but also through multimedia poetry and art websites, and online literary journals. Even fan fiction affects the reception of aesthetic texts, such that reading becomes an increasingly interactive process with readers not only commenting on work in progress but also rewriting stories. The gap between reading and gaming is decreasing.

Governments, corporation, nongovernmental organizations, activist groups, and engaged individuals increasingly rely on websites to reach the public, shape consciousness, promote policy, and disseminate texts, images, and videos of every type and kind. Relatively little of this work may resemble the subjects of the literary criticism with which colleagues in their forties and fifties began their careers. Nevertheless, it as an extension of the concerns that precipitated many of their commitment to the field of ecocriticism and it is a subject of attention that can be rewardingly studied with both the same interest in critical analysis of modes of communication and representation, on the one hand, and with the same goals of cultural enrichment and transformation, on the other hand. It is also an arena of ecocritique in which the current generation of college-age youth play out their debates and develop their political, ethical, and environmental conceptions (see Murphy, "Reading").

Certainly the twenty-first century began incipiently sometime in the 1960s or 1970s depending on what key technologies, political events, and scientific discoveries a person wants to identify as transitional pivot points from the mindset of twentieth-century modernity. In like manner, the future seems often to have happened at least a decade before it is recognized as a changed condition from the present. Perhaps that is also the case for critical practice, which invariably and necessarily lags behind aesthetic creation and technological innovation.

When the first courses and programs in technology and rhetoric, technology and literature, and texts and technology were developed, in contradistinction to the long standing

courses in science and literature or science writing, they were likely viewed not as the arrival of the future of aesthetic media and the dominant aspects of rhetoric in daily lives but rather as some faddish pursuit. Certainly given the resistance to poststructuralism, postmodernism, and literary theory in general in American ecocritical studies, attention to technology other than as the enemy or as the antagonist were going to be rare there. After all, a key early text was none other than *The Machine in the Garden*. Yet, as rhetoric and composition studies became a segment of ecocritical analysis enjoying increasing respect, it was just another step sideways to arrive at the rhetoric of digital technology.

Yet, even then, the websites themselves of groups and people taking on environmental issues were not addressed, but usually only the print content. For an ideally holistic critical orientation, ecocriticism has been insistently discretionary in its attention to the worldwide web. To some degree this inattention has reflected a generational gap between academics and writers who came of age before the ubiquity of cellphones, ipods, and laptops and perceived the humanities as fundamentally a print-based phenomenon. There were forays into film, but often in these the films were read as if they were texts in much the same way that plays are often studied on the basis of their scripts rather than their performances.

The ecocritical study of digital media needs not only more attention but a distinctive orientation that combines investigation of the rhetorical and narrative features of websites as a totality, as well as the rhetorical and narrative features of the website content, which is predominantly multimedia, as well as reception and reader response analyses distinguishing differing audiences. Further, the interactive dimensions of many of these websites, as well as the gaming part of digital media, needs to be included in critiques. For example, La Molleindustria is an Italian website that designs free online videogames focusing on social critique and commentary. "Oiligarchy" positions the player as an oil company ceo and the game options lead to various outcomes resulting from peak oil, with the business-as-usual route to financial success producing world disaster. The game itself clearly has significant environmental dimensions as well as a strong narrative line educating players about economics, geology, and politics. But, additionally, the website that hosts this game also has its own persuasive dimension in addition to each of its games having an ethical orientation. The home page includes a "postmortem" that explains the design strategy behind "Oiligarchy" as well as a brief primer on peak oil theory. Holistically, then, the site has a strong ethical position, contains numerous narratives about and within game plots, and linkages across games of interrelated cultural, political, and economic ideologies and structures that directly and indirectly contain ecocritiques. In like manner, many websites that

provide scientific information about ecology and environmental issues or promote particular organizations make use of interactive extrapolative simulations and changes-over-time videography, such as NASA's "Global Climate Change" website with its portrayals of Arctic and Antarctic sea ice levels (NASA).

The topic of climate change, by its very complexity and high degree of technical modeling and simulation provides an excellent case study of the significance and benefits of a techno-textuality ecocritical approach. To demonstrate this point I need to make use of a graduate seminar taught in the fall of 2009. This course had to be designed as a doctoral course appropriate for a specific program, the PhD in Texts and Technology. Focusing the course on websites that address climate change satisfied the technology side of the program title. At the same time, the larger implications of such websites for digital representations of environmental issues in general and for the utilization of cyberspace by nongovernmental organizations could satisfy the text side of the program in terms of a communicative field containing messages, stories, and other rhetorically and narratively based texts.

The course, therefore, would address "the narrative and rhetoric of climate change." Students were advised in the description that the course would analyze the representations of climate change as it appears on various websites. That would require a three-pronged approach to analysis, looking at the differences and relationships among narrative strategies, rhetorical strategies, and design strategies with particular attention to usability for general screeners and the communication and distortion of scientific data by non-scientific based sites. The sites to be analyzed were to range from U.N., U.S., and other government sites, to ngo and think tank sites, to newspapers and individual blogs.

The readings, as distinct from the study examples, were arranged to include an up to date overview of climate change science, a communication studies text on rhetoric and environment, a text on the role of computers in perception, persuasion, and organization, and a text on usability testing design. At the start of the semester students worked individually posting both reading notes and applications of the readings to different websites in response to weekly activities. By mid semester students organized themselves into groups with the task of selecting a set of web sites to research and analyze consisting of a range across the types identified. Their task would be to produce a consensus document to be posted as a blog, wiki, or part of a website, presenting their findings, which should reflect some consideration of key concerns about content and structure. Students were also given the option to do some website design as part of their group portfolio.

37

In the end, the three work groups all produced prototypes of websites. One group developed a site designed for uncommitted screeners who were concerned about the issue. Another group developed a website that profiled a company devoted to helping organizations addressing environmental issues to develop new or improved websites to promote their organization. The third group developed a website that highlighted why the members of the group were concerned about climate change, the resources they used to develop their positions, and the areas where they saw themselves making an impact on the development of public awareness. These portfolios included reading resources, glossaries, FAQs sections, as well as graphics, navigation tools, and the other technical requirements for websites.

The importance and benefits of this particular course and the issue of the cyber dimension of ecocriticism include several related aspects. First, a set of technical communication and literature students who had largely ignored the subject of climate change were exposed not only to the science of global warming but also to the ways that different groups and organizations present and critique that science. Second, these students not only learned content about the subject, but also skills about how to advise governmental and nongovernmental organizations on better ways to represent information about environmental issues via the web more effectively. Third, they discussed the ways in which this particular environmental issue is framed, as could well be the case with other ones, result in critiques of contemporary consumer culture and point out the areas of daily life that require significant and rapid transformation from an ecological perspective. Fourth, it is possible to have a course with a high technological application content and emphasis that includes throughout an ecocritical perspective and environmental concern, not only in relation to its specific subject, but also to the general ecology of website design. This result may prove useful to other ecocritics who teach courses largely or exclusively outside of literary studies to figure out how to integrate environmental issues into skill dominant courses.

The course as a form of ecocritique highlights the pseudo-transparency of website information dissemination, the aesthetic and structural features for creating an impression of facticity with or without accurate facts, documentaries as plotted narratives, authenticating strategies of design, and other aspects of technological persuasion and virtual aesthetic impressions as they affect audience perceptions of environmental issues and, in some cases, environments themselves, such as Antarctica or the Himalayas.

Cyberspace is an ever increasing component of daily reading, viewing, and information gathering for billions of people. The virtual world invariably has a strong aesthetic component because it is so highly visible; at the same time, it has strong cultural

practices components, particularly as a result of its persuasive dimension. The web is a vehicle that ecocritics need not only to learn to ride, but also to drive in terms of design, usability analysis, and content critique. Unlike the ecocritical study of literature, in the field of websites, videogames, and other digital media, ecocritics cannot only comment on the aesthetic artefacts but also on the processes of design with the possibility of intervention at the beta stage.*

*Thanks to Concetta Bommarito for introducing me to "Oiligarchy," Fall 2009.

Works Cited

Marx, Leo. *The Machine in the Garden*. 1964. New York: Oxford UP, 2000.

Molleindustria, La. http://www.molleindustria.org/en/home. Accessed 21/1/2010.

Murphy, Patrick D. "Reading Between Now and 2010: Preparing for the Differences of Cybericonographic Literacy." *Poetics of In-Between Space*, ed. Sang-koo Kim and Paul Patton. Pusan: Pusan National UP, 2005. 331-47.

NASA. "Global Climate Change." http://climate.nasa.gov.

NASA. "Is Antarctica Melting?"

http://climate.nasa.gov/news/index.cfm?FuseAction=ShowNews&NewsID=242. 21/1/2010.

"Oiligrachy." http://www.molleindustria.org/en/oiligarchy. Accessed 21/1/2010.