Running Head: GREEN READING

Green Reading, Green Gaming: The Future of Ecocriticsm, Storytelling, and Environmental

Ethics in Virtual Worlds

Matthew G. Kaplan

University of Minnesota, Twin Cities

Green Reading, Green Gaming: The Future of Ecocriticsm, Storytelling, and Environmental Ethics in Virtual Worlds

Born out of a literary tradition, the field of ecocriticism has been slow to recognize the interpretative and ethical possibilities of virtual and game landscapes. Though odd in the sense that ecocriticism has long dealt with the imagined *textual* landscape, this resistance makes sense with regard to the protection of non-idealized nature: One can only handle so many lapsed cultural representations of the real thing, our interactions with it, until one must wonder if society itself is moving farther away from considerations of what it is to be "non-human."

Yet ecocritics have been quick to recognize that they cannot operate solely within a single sphere of purely academic influence. Rather, in order to promote and advance cultural notions of sustainability (problematic as the term may be), current ecocritics recognize that they must anticipate and draw upon a dialog with the technological, the scientific, and the public at large. Thus, a convergence of sorts with the aims and subjects of video game studies produces new rhetorical possibilities with regard to game designers and players: Today's video game communities are not isolated but instead are forced to encounter new cultures and ideologies and respond to them. In picking up on this ability to immerse oneself in a digital culture that responds to and affects the real world, game studies appears to identify games as important ethical and ideological spaces capable of transforming culture. I argue that ecocritics must create a dialog with game scholars and designers, and must to some degree harness the rhetorical power of gaming in order to remain relevant in the age of the persistent virtual world and to successfully influence the environmental narratives being communicated therein.

The aim of this essay is to therefore point to a forward thrust in the acceptance of new technologies—in particular, virtual game worlds such as those found in MMORPGs (massively

multiplayer online role playing games)—in the discipline of ecocriticism. Moreover, I will illustrate how evolving concepts of the utility of virtual environments can assist ecocritics in branching out both their analyses and dialog with the public. In particular, I will point to how a study of virtual environments as embodying *narratives of environmental ethics* bridges important gaps in present cultural studies.

This is not an essay written primarily for ecocritics, although a basic familiarity with the past aims of literary ecocriticism may aid the reader in acknowledging the importance of technological scholarship. Nor is the subject matter at hand primarily the domain of game theorists: If nothing else, I hope to show that our evolving game worlds and "second lives" offer vital spaces for expanding the stories told between academic, designer, and player with regard to our natural world. By the end of the day, we must positively change the way people interact with their environments. And to that end, we must change the way we play and think while playing.

Ecocriticism in the Digital Age

Perhaps one of the most original and optimistically technological approaches to a more modern ecocriticism has come from H. Lewis Ulman. Following in the footsteps of techno-savvy ecocritics like N. Katherine Hayles, Ulman's "Beyond Nature/Writing: Virtual Landscapes Online" (2001) urges ecocriticism to think past the sometimes stubborn virtual/real dichotomies ushered in by more stalwart, literary ecocritics: "decrying the existence and seductive allure of digital VR [virtual reality] seems futile, for technologies are notoriously difficult to uninvent, and VR will only increase in representational power" (p. 345). Ulman argues for a reflective consideration of how ecocriticism lends itself to more constructive ideas about modernity: "Instead, it behooves us to discover what imaginative and conceptual resources we need to

construct ethical and healthy relationships between digital and material worlds, just as ecocritics have been working to establish such relationships between textual and material worlds" (p. 345).

Just how can such concepts of the virtual result in improved ethical relationships? Using the example of the virtual game world of *Riven,* Ulman claims that "virtual landscapes can be judged by how they help us anticipate and understand our experiences of the landscapes they model and of landscapes in general" (p. 349). Ulman's own experiences in the virtual world of *Riven* suggest that a critical reading of the virtual landscape elicits culturally-distinct analogies between hyperreal and real: "At the very least, *Riven* represents these familiar human relationships to nature: (1) the world as created or transformed by human writing... (2) the world as a resource... and (3) the world as weapon.... approximations and reenactments tell a kind of truth" (p. 350). Whereas critics like Lawrence Buell, Mark Slouka, J. Stan Rowe, George Sessions,[1] and Paul Shephard[2] had previously discouraged ecocriticism from exploring the virtual, Ulman concludes that, just as technological culture has much to learn from the astute readings of ecocritics, ecocriticism has much to learn and gain from explorations of this technology: "Because cyberspace often presents traditional representational strategies to us in new contexts, it can help us see the virtual at work in texts and landscapes alike and reveal the breaks and edged beyond which we can see the real. Conversely, ecocriticism has much to offer studies of cyberspace.... If our virtual models of whatever sort are leading us into unhealthy relationships with our environment, then we need to change those models, not fantasize about abandoning virtuality" (pp. 354-55).

While Ulman stops short of mentioning explicitly how ecocriticism can help to alter such virtual worlds for the better, non-ecocritical studies of virtual world usage would seem to

---

[1] See *The Trumpeter 13.1* (1996) and *14.3* (1997) for Sessions' and Rowe's critiques, respectively.

[2] (1995). Virtually Hunting Reality in the Forests of Simulacra. In *Reinventing Nature? Responses to Postmodern Deconstruction*. Washington, D.C.: Island Press.

confirm his suggestion that virtual worlds are undoubtedly useful mechanisms by which to converse with, and potentially alter, modern attitudes. For example, a study by Orland et al. finds that decision support systems based in virtual reality allow community leaders in charge of decision-making to more realistically infer environmental changes to their environment, thereby increasing a sense of "ownership" in the results (p. 146).

That said, the question remains as to which *specific* foci of study the ecocritical discipline can lend to studies of the virtual. In his acknowledgment of the narrative formation of the virtual game world, Ulman points to, but does not necessarily indicate, one feature of current ecocriticism that will prove useful to future considerations of the virtual: telling environmentally "ethical" stories to the public.

After studying the techniques employed by four professional storytellers who have successfully gotten audiences to embrace environmental ethics, scholars Wirth and Gamon conclude that the emotional, contingent, and reflective aspects of narratives allow for transformative effects: "Truth established in narrative has a stronger cognitive effect than truth established through rationality. People need social interactions and emotional well-being to survive, and stories can satisfy our deep need for interconnection with others. Also, a listener's relaxation during storytelling makes it easier for the brain to form short-term memory connections, whereas stress inhibits the brain's ability to form permanent new memories" (Storytelling as Teaching Tool, para. 1). However, in order to be rhetorically effective, these narratives must be employed in ways that seem modern and familiar to the audience: "[The storytellers] mentioned using lighting effects and the latest audio-visual technology.... If the storyteller was able to help people put something of their own lives into stories, if the stories were relevant to people's lives, then Storyteller Fowler considered the experience to be

successful. As successful vocational educators understand, you must begin from the place you

find the learner" (Attributes of Successful Storytelling, para. 2-3).

Thus, successful narrative dialog with the public cannot only take the form of objectivist

ethical pedantry or monadic, journalistic nature writing. Rather, it must also be modern in the

sense that it appeals to current audience perspectives involving ideas of the "local," the

communal, and the deeply personal. Also, narratives of environmental ethics must elicit some

sort of audience co-authorship, whether in the reflective sense of offering alternatives to the

author's perspective, or in the explicit sense of helping to create the stories used.

Implications for the Way We "Read" Game Narratives and Their Ethics

By almost all accounts, game designer Chris Crawford's *Balance of the Planet* was a

marketing flop. Based on then-novel "hypercard" technology, the game was an environmental

resource simulation of sorts, released in time for Earth Day, 1990. As Crawford (2003) notes,

environmentalists and educators loved the game. They flocked to the ethically-charged

simulation of varying environmental perspectives, which allowed users to play out scenarios

from the vantage points of oil companies and environmentalists alike. The simulation in play

was not entirely relativist; rather, it embodied Crawford's own pro-environmental and political

values: "While I wanted to be fair to all sides, I had to plunk down some values for the

coefficients, and those values represented my own opinions about environmental problems.

Although my own values are obvious in the game, the fact is that *every* game we produce reflects

the values of the designer" (p. 392).

Nevertheless, while the game was a hit with some, it was largely dismissed by the

audience at whom it was aimed: game-players. In fact, the game went on to sell a paltry 12,000

copies, barely recouping its modest marketing and production expenses. Crawford admits, "Basically, gamesters and computer people hated it.... One magazine reviewer lambasted it because, in his words, it 'just isn't fun.' I suppose this is understandable in a games magazine, but it still bothered me that a serious environmental game was being measured by the standards of shoot-em-ups" (p. 402).

While he may not acknowledge it, Crawford's game was primarily a failure, not in reaction or intention, but in execution. Though Crawford may have wanted to convey a "narrative" of sorts, a game-based storyline of resource management and the realistic negotiation of pressing environmental factors, he did not sufficiently address the narrative expectations of the audience. Instead, the game contradicts two key arguments of narrative scholars like King, Wirth, and Gamon: Because it is found to be "not fun," the narrative is obviously not sufficiently *expressive*, and it is not sufficiently relevant to the specific *audience*. Similarly, in terms of game narrative scholarship, the game achieves didactic storytelling at the expense of player co-authorship and interaction.

If ecocriticism can afford virtual worlds an opportunity for valuable cultural reflection, it can also point to how virtual worlds can embody *successful* environmental narratives. *Balance of the Planet* certainly embodied valuable environmental lessons in a way that was culturally reflective, but it was not what one would call a successful instance of interactive environmental storytelling.

In contrast, Michael Young et al. (2006) have examined virtual worlds such as *Quest Atlantis* and *The Sims Online* for their successful environmental storytelling. These games, called massively multiplayer online games (MMOGs), allow for multiple user interaction and individual story-input, but in doing so, adhere to more modern, increasingly technological

audience concepts of local "community" (as referenced above by King) and story co-creation. With regard to the MMOG *Quest Atlantis*, the authors note, "Like other MMOGs, *QA* inspires its players with a story-based context and with a variety of associated activities anchored in this backstory. In this case, the story context involves the social, cultural, and environmental decay of the mythical world of Atlantis; the overall goal of participants is to travel a variety of virtual worlds (Unity World, Culture World, Healthy World, and Ecology World) in order to retrieve knowledge that may help save Atlantis from destruction." As opposed to *Balance of the Planet*, these MMOGs offer audiences a sufficiently *active* opportunity for narrative emergence: "Just like our everyday experience, the virtual interaction among MMOG players via their avatars can be viewed as a kind of situated cognition, characterized by agent-environment duals, perception-action duals, and affordance-effectivity duals that allow learning to arise from active forms of engagement rather than the mere storage and retrieval of information from memory...."

MMOGs like *Quest Atlantis* are pointedly educational in tone; the majority of popular MMOGs are more similar to Ulman's explored cyberscape of *Riven*—imbued with particular ethics, perhaps, but in more subtle forms. Fueled by the aforementioned characteristics of current ecocritical inquiry and traditional ecocritical explorations of authenticity, future research must examine the ways in which these increasingly popular virtual narratives reflect and, in turn, affect the human relationship with nature.

Reading the Landscape of NCSoft's *City of Heroes* and Blizzard's *World of Warcraft*

Though technically a MMOG, *Quest Atlantis* is not necessarily what most game players think of when they hear the term "massively multiplayer." More iconic entries in the genre include the seminal *Ultima Online*, Sony's *Everquest*, and recent, popular fantasy roleplaying

games like *Guild Wars* and *Age of Conan.* These games are highly structured spaces for organization, communication, and storytelling with thousands of players experiencing different environmentally-grounded quest narratives simultaneously.

Screenshot of *City of Heroes* Interface

NCSoft's *City of Heroes* is one of the few MMORPGs that has as its setting a world that often mirrors our modern environments. As opposed to games like *Warhammer Online* and *Everquest*, which take place in magical landscapes inhabited by mythical creatures, *City of Heroes* places human characters within familiar contexts. Players create a superhero character and then lead that character on a long series of quests and plotlines through environments ranging from beautiful business districts and parks to dilapidated "military zones" and deserted cities that are overrun by potentially hazardous environmental threats.

As with many video game environments, the landscape of *City of Heroes* is dotted with hyperbole—themed areas that accentuate cultural problems (e.g., rows of buildings on fire or ruptured by an earthquake) in the same way that Disneyland might celebrate imagined cultural

mythos. Nevertheless, the landscape is meticulously detailed and structured in a way that makes it imminently recognizable.

Of course, while these digital environments are reflective of their real-world counterparts, they do not contain the same sense of history present in a real environment. That is, it is always evident that these are areas created *for* the user—each zone within the city is functional in the sense that it is the site of specific quests and adventures. It is therefore impossible to read the digital landscape for its history of human-environmental interaction. While one may read a real-life landscape for its evolution, there is no such sense of continuity here. Likewise, the environments never really change; occasionally, the designers may alter the environments for some interface purpose, but there is only so much the user can do to alter the landscape.

Nonetheless, this does not mean we cannot read the entire landscape for its role as a cultural landmark placed in the context of real-world history. Indeed, if we look at the game as a cultural construct—the *intersection* of culture and representations of human-environmental interaction—we can read the digital landscape for what it says about the game's significance as an artifact of our own cultural narratives. By examining which specific environmental features, processes, and interactions are depicted, and which are not, we can determine how the landscape of *City of Heroes* marks an intersection of human and nonhuman. For example, the inclusion of overly-polluted industrial environments, no matter how simplistic, tell us something about how the game is reflective of a current cultural response (in this case, the creation of a game that depicts such pollution) to past and present industrial pollution.

As valid as such a reading of the digital landscape-as-cultural-construct may be, it raises two problems: One, it has little to do with the relationship of the game's meta-narrative to any possibly contradicting user narrative (for instance, a player may not share the same sentiment

about industrial pollution, and could choose to avoid such areas entirely, thereby limiting their

presence and significance within the meta-narrative). Two, such a reading is accessible

primarily to cultural scholars; the average user is not necessarily going to share this reading

because it assumes a preoccupation with the context in which the game itself is played.

   Instead, it is best to look at such digital landscapes as narrative *paths*. The game is

structured in such a way that, as the player progresses, he is able to explore areas of increasing

hostility. Yet it is not the landscapes themselves that present such obstacles; it is the forces that

have made them uninhabitable. Two of the zones that are least inhabitable are called "Crash

Site" and "The Hive." The former is an area in which an alien spaceship has crashed into a

previously populated urban center, subsequently transforming the landscape into something more

ghostly and alien than human. The latter is an artificial wilderness created by eco-terrorist

villains known as the "Devouring Earth." Each zone represents an example counter to

environmental values of some order: a cityscape polluted and void of life, and a wilderness made

uninhabitable by those who supposedly wish to protect it. Since the game involves comic-book

"heroes," it is safe to assume that the player's progress is based on acts of virtue. Therefore, as

the player becomes "stronger" and better acclimated to the digital world (including the human

communities and "guilds" therein), he/she becomes more capable of virtuous acts. There is

nothing that forces a player into either of the aforementioned zones, yet the progression of the

game is set up in such a way that the meta-narrative can only be read as "these ultimate

environmental wrongs *should* be righted."

   Again, while this ethically-bound narrative is pervasive and its reading inevitable, its

placement within a MMORPG necessarily includes interaction with similar and competing user

narratives. Users who find such virtues at odds with their own, or simply don't care about their

promotion, will adhere to this "reading" but may not necessarily co-author their story in such a way that it will become integral. Similarly, users from other cultures may find such landscapes to be unfamiliar, and will challenge various designed and user-produced narratives with their own. A dialog of multiple narratives is created, but the underlying message is sustained. What has been created by this reading of the digital landscape as path is, in essence, a model of community dialog guided by specific ethical principles. Those principles can be challenged or ignored, but they are ultimately indelible—the authorial power of the designer is insuperable.

Screenshot of *World of Warcraft* Interface

A "green reading" of MMORPG landscapes is by no means limited to City of Heroes' familiar, urban environments. Upon entering *World of Warcraft*'s fantastical world of Azeroth, players are forced to choose from one of several "races," each with their own political allegiance, special traits, and indigenous territory. On the side of the heroic Alliance are the Humans, Gnomes, Dwarves, and Night Elves; on the side of the nefarious Horde are Orcs, the Undead, Trolls, and the bovine-like Tauren. The game world consists of two vast continents separated by a rather sizeable ocean, yet game territories are not separated as cleanly as one may expect:

Some of the "good" races are forced to rub up against the "bad," with constant fights for territory, called "raids," taking place along their borders. Depending upon a player's choice of race, he/she will start their game world existence in a correspondingly-themed territory. For example, players of Undead characters start out in a giant, ghostly city complete with imposing ethereal glow; players of the Native American-fashioned Tauren start out in a prairie lined with teepees and totem polls; and so on. After arriving in their new homeland, players are then compelled to choose from several "jobs" that provide entry into the world's complex simulated economy. Fishing, for example, allows players to cast reels into nearby waters and catch fish to cook or sell at the market. More common careers include mining, which lets players to locate and extract precious natural minerals from the world's landscapes, and herbalism, used to turn rare plants into powerful healing potions and other valuable elixirs.

Most of the game's virtual environments, while based in fantasy and richly complex lore, are comprised of simulations of vast natural spaces, including forests, deserts, and canyons. Cities, though large, are generally few and far between; outposts located within the uncharted "wilderness" of Azeroth are far more common. *World of Warcraft* places a large emphasis on exploration: Players are rewarded with "experience" points (literally, progress towards achieving a new level of skill or other advancement) for discovering new areas, and even greater rewards await those who can successfully "cleanse" the lands of whatever evil (or, in some cases, good spirit) haunts it.

As with other MMORPGs, there is no end to *World of Warcraft*. Once players have finished the numerous solo and group quests provided by the developers, gameplay becomes entirely social, with experienced players of all races focusing on banding together to defend against or attack the opposing side. In formulating new strategies for raids, players must

constantly adapt and engage in knowledge distribution, relying upon chat-relayed messages from friends elsewhere in the game world regarding enemy encampments and territorial control.

From a game studies perspective, it is easy to acknowledge the socializing potential of *World of Warcraft*—its ability to form extensive real-world, international communities based upon the imagined politics of virtual geography. As players are compelled to inhabit and protect their virtual homelands, they must also reflect upon their digital community's extension into the real world: Cross-culturally, themes of war and homeland may be pervasive, but opinions thereof are not always shared ideologically. Few would dismiss the power of a social experiment that allows players of different cultures and mindsets to bump heads or join forces in a virtual society, only to have to come to grips with their allegiance's analogs in the real world via internet forums, chat, and e-mail.

Ecocritics should likewise observe the representational power of such a simulation: The construction of racial identity in the game can allow cultural critics and users alike to reflect on the construction of identity based on landscape politics in the real world. Critics like Ulman would undoubtedly point to *World of Warcraft*'s utility as a laboratory for human-environment interaction.

However, we must also read the landscape of a MMORPG like *World of Warcraft* for what it is *not*. It is not, after all, reflective of environmental crises in any sense. Wars between species do not affect the state of the landscape, which remains ever-pristine. Although rare in location, natural resources can be tapped to no end. Players are never forced to remain in a "polluted" landscape due to pervasive social or economic factors; all races seem reasonably autonomous and at-home in their respective territories.

What would be the impetus for including such environmental lessons in a videogame? None other than that which is already found in these socializing virtual worlds of war and conquest: creating a "livable" world as real and as flawed and fragile as possible. MMORPGs present us with alternative realities, but are they without reflection and self-awareness? In a hypothetical, environmentally dynamic version of *World of Warcraft*, perhaps the nature of Azeroth can be torn apart by conflict. Resources dry up. Players are forced to inhabit spaces that are less than desirable. The world of monsters and dragons seems ever more like our own. Faced with such virtual conflict, players will most likely do what they already do as part of the basic experience of gaming—try to solve the problem. Perhaps a world of pro-active solution, rather than static fantasy, is the most desirable virtual reality of all.

Hopefully, in the future designers will produce digital landscapes that are even more representative of our own, advancing storytelling and narrativity. A digital landscape in which the environment *is* responsive to player actions will better enable path-readings that depict the consequences of human-environment interaction. Also, meta-narratives that are informed by specific scientific principles—in this case, ecological science—will better establish the credibility of their overarching ethics. Nevertheless, the above examples prove that ethical narratives are capable of being read in current games, and do not necessarily require a perfect depiction of reality in order to provide a rhetorical force *and* a forum for competing player narratives. These two aspects of online game worlds will prove particularly crucial to ecocritics, who must continue to write their own story of political and ecological relevance in an evolving landscape of game player and environmental storyteller, forever intertwined.

References

Crawford, C. (2003). *Chris Crawford on Game Design*. Indianapolis: New Riders.

Orland, B. et al. (2001). Considering virtual worlds as representations of landscape realities

and as tools for urban planning. *Landscape and Urban Planning, 54*, 139-48.

Ulman, H. L. (2001). Beyond Nature/Writing: Virtual Landscapes Online, in Print, and in 'Real

Life.' In *Beyond Nature Writing*. Charlottesville: UP of Virginia.

Wirth, D. and J. Gamon. (1999). The Art of Situated Narrative. *Journal of Vocational*

Education Research, 24(1), 45-61. Retrieved March 5, 2008, from *HW Wilson Database*.

Young, M. et al. (2006). MMOGs as Learning Environments: An Ecological Journey.

Innovate, 2(4). Retrieved March 31, 2006, from http://www.innovateonline.info/

index.php?view=article&id=66&action=synopsis