

Environmental Post-humanism in Literature and Science: Narrating Humans and Worlds in Transformation

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Context

After the publication of a number of ground-breaking works including Katherine Hayles's *How We Became Posthuman* (1999) and Neil Badmington's *Alien Chic* (2002), academic debates on post-humanism have intensified in the past few years, resulting in a boom of relevant publications and conferences. Recently, scholars like Rosi Braidotti, Ursula Heise and Stacy Alaimo have argued that environmental issues need to be taken into account when discussing post-humanist issues, and vice versa. If we live in a post-human world, this is not just because of advancements in science and technology, but also because climate change and related phenomena have made us more aware that human existence is largely determined by nonhuman forces that cannot be fully controlled. My current book project will answer to this call from scholars by developing the concept of *environmental post-humanism* through a reading of narratives of evolution in contemporary science fiction and popular biology. In an era of turbulent planetary change, these genres can play an important role in imagining the dynamic relations between humans, nonhuman species, and environments.

Goal

This study develops the concept of environmental post-humanism through analyses of acclaimed science fiction novels by Octavia Butler, Kim Stanley Robinson, Greg Bear, Neil Stephenson, and others, in which the human species suddenly transforms in response to new or changing environments. In these stories, climate change, pollution, overpopulation, and other phenomena trigger the transformation or prompt humans to migrate to other planets, where they then transform in interaction with their new habitats. While certain scientists in these stories vainly attempt to stop or control the process of transformation, the protagonists realize that the event is too complex to be harnessed. They patiently follow the unfolding change, adapting their own ways of thinking and living along the way. In short, these novels picture human beings—scientists in particular—as *participants in* rather than masters of their environments, thus offering themselves as fascinating examples of environmental-post-humanist thinking. I argue that these novels discard a romantic notion of the environment as a benign force, instead flagging the complexity and risks involved in the changing relations between humans and their environments. They envision the planet as an unstable stage for evolution, while representing the human body as a home for bacteria and viruses. This fascinating turn toward nonhuman insides and outsides is effectuated by drawing narrative tension from biological theories that stress interaction and emergence (e.g. symbiogenesis, Developmental Systems Theory), problematizing a tendency to compartmentalize life. I argue that whereas neo-Darwinism reduces evolution to a random process involving matter-information, these novels and biological theories figure life itself as a kind of narrative: an environmentally mediated, dramatic, phased *event* that enlists human and nonhuman actors.

My analysis combines a focus on narrative in literary studies with an interest in actor-networks in Science and Technology Studies (notably, Latour's notion of "actant" is derived from the literary theorist Greimas). I demonstrate how these texts reinvent a non-modern form of storytelling that unsettles conventional relations among characters, story worlds, and emplotment. Rather than offering a strictly hierarchical ordering in which human protagonists are situated *in* a story that occurs *in* a fictional world, these novels narrate an emergent, constructive interaction between actants, events, and environments. They replace anthropocentric dichotomies of subject and object, nature and culture, human and nonhuman, with a multipolar, symmetrical ontology. This ontological symmetry is paralleled by an epistemological symmetry: rather than relying on a single master discourse, narrators and characters in these texts connect diverse ways of thinking about (human) life across disciplines and cultures, confirming biologist Lynn Margulis's plea that evolution is "everybody's story." Narratives offer vivid experiences of possible futures, which are key in addition to the more abstract forms of knowledge provided by science. Moreover, they usefully explore the political, ethical, and epistemological implications of environmental post-humanism—a concept that may inform less exploitative ways of inhabiting the earth, but that may also facilitate new forms of violence.