Michael A. Bryson. Visions of the Land: Science, Literature, and the American Environment from the Era of Exploration to the Age of Ecology. Charlottesville: Virginia Press, 2002. 228p.

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Michael Bryon's Vision of the Land, part of the series "Under the Sign of Nature: Explorations in Ecocriticism," is a welcome addition to the growing corpus of ecocritical texts. His book is a thoughtful foray into a growing ecocritical field that explores the intersection of science and literature from the mid-nineteenth century to the late twentieth century in American history and letters. It also serves as an important link in the chain of American ecocritical studies that began with Henry Nash Smith's Virgin Land in 1950 and Roderick Nash's Wilderness and the American Mind in 1967. Bryson chooses to focus on readings from seven authors: John Charles Frémont, Richard Byrd, Charlotte Perkins Gilman, John Wesley Powell, Susan Cooper, Rachel Carson, and Loren Eiseley. As Bryson states, "these readings foster a deeper awareness of how past ideas about nature and science have shaped our current attitudes and assumptions, and how they may indeed offer insight and guidance in facing present and future challenges" (xi).

Bryson arranges *Visions* essentially by mode of scientific inquiry, moving from geographic exploration in Part 1 (Frémont and Byrd) to the scientific management of nature and the human community in Part 2 (Gilman and Powell) to natural history and the ecological perspective in Part 3 (Cooper, Carson, and Eiseley) (xi). Each part is divided into two chapters. Part 1, "Narratives of Exploration and the Scientist-Hero," looks closely at the narratives of Frémont and Byrd. In this section, Bryson gives the reader a useful introduction to the burgeoning interest in scientific inquiry in nineteenth-century America. He comments on the growing deployment of scientific exploring expeditions as the "motive force behind an aggressively expanding nation" (4-5) whose emphasis was increasingly quantitative instead of qualitative.

Chapter 1 looks at Frémont's journals and *his Report of the Exploring Expeditions to the Rocky Mountains in the Year 1842, and to Oregon and Northern California in 1843-1844*, which are empirical and artful examples of a new trend in American exploration narratives. Frémont transforms the scientist-explorer into a mythic western hero. As Bryson writes, "By revising the identity of one of the most recognizable male hero-figures in ninteenth-century literature, James Fenimore Cooper's Natty Bumppo, Frémont appropriates manliness and adventure for the rhetoric of exploration science. Equally significant is how Frémont objectifies nature as female, a passive space to be conquered by science" (5). The feminization of nature allows the scientist to objectify nature and increase the distance between observer and the observed, making the conquering of a passive space acceptable. For Bryson, though, it is the vision of the scientist-explorer that solidifies his place in American natural literary history: "the heroic power of the explorer-scientist is based upon vision—the expansive gaze afforded by a climb is an act of possession, of initiation into the wilderness, of surveying the quiet land-scape ... to see the landscape is to fulfil a psychological need—the sight of nature expands and sharpens consciousness" (20-21). Frémont can control and objectify the American landscape by bringing it within his scientific gaze, his range of vision. What he sees in the landscape is limitless possibility for the future. Bryson sets up this chapter as a comparison with all the chapters that follow.

Chapter 2 provides a look at the individual-in-nature experiment, advanced by Thoreau most eloquently in *Walden*. Yet, as Bryson points out, living at Walden Pond is a far cry from the 70 below zero temperatures that Byrd faced in Antarctica. While Byrd is collecting data on atmospheric phenomena and laying a foundation for future American claims to Antarctica, he is also collecting data about himself and humanity in the face of unforgiving nature. The technology of science controls Byrd as he must constantly check his instruments, and unlike Thoreau, who could live off the land, "Byrd can only live within and in spite of the land" (41). There is no land-as-female issue for Byrd, for as Bryson states, "the ice, wind, and total darkness of Byrd's world preclude anything but respect for the incredible power of nature and the imperative to survive" (48). The notion of the scientist-hero is thrown upside down, and we are presented with the dark side of exploration.

In Part 2, "Imagined Communities and the Scientific Management of Nature," Bryson juxtaposes the epitome of the nineteenth-century government–sponsored scientific explorer, John Wesley Powell, with the utopian novel *Herland*, by Charlotte Perkins Gilman, which is a critique of American, male-dominated science. Chapter 3 presents the reader with a close examination of nineteenth-century American science via the views Gilman provides in *Herland*. Bryson states that in her novel, "she exposes the inherent weaknesses in any practice of science that casts itself in androcentric terms. The novel consequently suggests that scientific inquiry is not value-free after all, but rather a projection of male assumptions, interests, and biases upon the study of the natural world and human culture" (58). Bryson shows how Gilman presents a different kind of science, a community-based one that strengthens the interconnections between humanity, science, and nature. The Herlanders are forward thinking and dedicated to progress, much as Powell was in his quest to gain scientific control over the arid American west.

Chapter 4 is a nice contrast and compliment to the first three chapters. Like Gilman, Powell shares "an intense interest in community—specifically, how the structure and potential of human communities depend upon a productive and responsible association with nature and the wise practice of science" (80). Furthermore, Powell's "doctrine of control is a logical extension of Frémont's project of conquering the landscape" (83). Bryson, in analyzing *Report on the Lands of the Arid Region*, illustrates the notion of nature-as-machine that can be controlled to our benefit as well as Powell's unwavering faith that scientific method will be the savior of the ever-growing American west.

Part 3, "Nature's Identity and the Critique of Space" looks at Susan Fenimore Cooper's Rural Hours and at the ecological perspectives of Rachel Carson and Loren Eiseley. Bryson calls Cooper's work "proto-ecological" due to her inherent conservation ethic, but what really appeals to him is how she portrays "the relationship between gender and the landscape, [her] emphasis on unity and interconnectedness, and [her] anthropomorphization of living creatures," which he says provides special insight into what he calls her "integrative natural history" (113). There are two important digressions in this chapter: one that gives a brief history of nineteenth-century scientific texts written for and by women, and one that compares Cooper's anthropomorphic descriptions of birds and animals with those of William Bartram, John James Audubon, John Muir, and John Burroughs. These digressions are helpful in putting Cooper's work in context in the nineteenth century. Bryson sums up Cooper by stating that for her, "science is neither a means of objectifying nor of controlling nature, but rather a system of study meant to foster moral and intellectual connections between the observer and the outside world" (133).

Bryson chooses to end the book with Carson and Eiseley, both of whom "played key roles in both the communication of scientific knowledge to a general audience and the shaping of our environmental attitudes," something done by very few writers in American history (135). His discussion of these two writers shows how far we've come since Frémont and Powell in that "they free nature from the loaded nineteenth-century metaphors of gender and machinery, and in doing so, they open up space for a different kind of relationship between science and nature" (158). Their work shows us the importance of imagination in exploration and in thinking about ethical considerations with regard to our natural environment. Overall, Bryson has crafted a detailed and thoughtful study of science and literature in America from the age of exploration to the era of ecology. His work here is essential reading for anyone interested in the growing field of ecocriticism. He states in his "Afterword" that a fundamental concern of ecocriticism and the overarching purpose of his study is "to examine the relation of literature and science to the physical world we inhabit, with the conviction that such work can reveal the texture and patterns of our beliefs about nature" (179). The vision of his work lives up to this concern. **