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Romance, Revolution & Reform

Review: John MacNeil Miller, *The Ecological Plot: How Stories Gave Rise to a Science*. University of Virginia Press, 2024. 228 pp. ISBN 9780813951782, $32.50.

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THE MOST ARRESTING element of John MacNeil Miller's *The Ecological Plot* is referenced by its subtitle: *How Stories Gave Rise to a Science*. With clear and sharp argumentation, Miller traces how Victorian writers – from economists and scientists to authors of popular fiction – helped develop the study of ecology. The monograph articulates the concept of 'the ecological plot,' which Miller distinguishes from works that simply use natural locations or depict the environment metaphorically and symbolically. For Miller, the 'ecological plot' is a narrative structure that engages with the real, material conditions of the natural environment and accurately depicts the dependence of humanity on its inevitably limited resources. As Miller explains in the first two chapters, the inventor of the ecological plot is the economist Thomas Malthus, and it was then implemented into fiction by the author Harriet Martineau, who was heavily inspired by Malthusian ideas. The latter two chapters discuss the novelists George Eliot and Thomas Hardy, whom Miller views as gradually straying from the foundations of the ecological plot toward a more anthropocentric view.

It is broadly accepted that in the nineteenth century, there existed a deep relationship between scientific and literary work. Seminal works in the field of literature and science, like Gillian Beer's *Darwin's Plots* (1983) and George Levine's *Darwin and the Novelists* (1988), demonstrate that nineteenth-century scientists and novelists shared similar ideas, concerns, and vocabulary. Recent scholarship, such as Allen MacDuffie's *Climate of Denial* (2024) and Noah Heringman's *Deep Time: A Literary History* (2023), as well as the excellent collection, *After Darwin* (2022), edited by Devin Griffiths and Deanna Kriesel, also discuss the relationship between nineteenth-century literature and scientific thinking. Miller makes an even stronger claim: that literature primarily influenced science, not the other way around. As such, the proliferation of Victorian fiction depicting the relations between living organisms and their environment inspired the development of ecology as a scientific field. Miller argues that these

ecological narratives are not merely symbolic and instead depict the physical reliance of humanity on the material resources of the natural environment. He supports this claim with an impressive range of research, including analysis of literary and scientific writers along with political economists. This focus on the intersections between political economy, literature and science gives the book an unexpected dimension, as similar works do not address the influence of economists like Thomas Malthus.

The influence of Malthus on Darwin's work is well known but often understated, largely due to Malthus's connection to eugenics. Miller asserts that eugenicist thought deviates from Malthus' ideas, and he offers a sustained defence of Malthus in his first chapter. For Miller, Malthus's key contention in his most famous work, *Essay on the Principle of Population* (1798), is that human capacity for 'growth and development ultimately rests on the growth and development of the plants and animals supporting it,' and as such, there are 'finite resources that impose material limits on growth.'[1] Such an idea demonstrates how 'economic quantification fails to capture the actual flows and obstructions of vital resources that move ceaselessly through a community.'[2] Miller convincingly argues that this worldview created the framework of modern ecological thinking and that the influence of Malthus should be appreciated instead of condemned. One could argue that Miller's analysis risks being too absolute, as Miller asserts that anti-Malthusian attacks are only 'a lazy caricature of the man and his ideas,' while praising Malthus for attacking the supposedly unrealistic idea that 'human science and technology had improved dramatically and promised to do so indefinitely.'[3] This cynicism obscures the fact that science and technology have continued to improve dramatically in the nearly two hundred years since Malthus's death. Despite this, Miller's focus on Malthus is valuable and relevant to his overall argument. It is widely acknowledged that Malthus influenced Victorian novelists, yet Miller's argument is innovative, as he more narrowly focuses on interrogating how Malthus was a pioneer in shaping the ecological plots of the nineteenth-century novel.

In the second chapter, Miller details how writers like Martineau and Darwin were inspired by Malthus's insistence on the finite quantity of natural resources. Miller argues that Malthus 'had a profound effect on how they saw and described living

[1] John MacNeill Miller, *The Ecological Plot* (University of Virginia Press, 2024), p. 24.

[2] Ibid., p. 25.

[3] Ibid., pp. 22-23.

communities.'[4] For example, Martineau's *Illustrations of Political Economy* presents short tales that conclude with Malthusian morals, such as 'Weal and Woe in Garveloch', a narrative depicting resource exhaustion due to overpopulation, which ends with thematic concerns surrounding the importance of having fewer children to reduce the risk of scarcity and starvation. Martineau is still an undervalued Victorian writer and thinker, and Miller deliberately positions her as a founder of the 'ecological plot', showcasing the depth of her ecological thinking in depth, while also analysing her influence on later 'social-problem novels' like those written by Elizabeth Gaskell. Miller argues that Martineau, though largely posthumously disregarded, was crucial in transforming the ideas of Malthus into fiction, demonstrating how authors such as Gaskell and Darwin later interacted with her works. Despite this, the monograph would benefit from a discussion of other nineteenth-century scientific or literary writers, such as Alfred Russel Wallace, who receives only a glancing and rather dismissive mention. Such a broader discussion would provide a comprehensive picture of how writers of this period utilised and considered ecological ideas.

The third and fourth chapters of the book focus on George Eliot and Thomas Hardy, respectively, but significantly depart from the common praise of these authors for their depiction of the environment. Miller undertakes a more critical reading, arguing that their ecological descriptions are sentimental and human-centric. He asserts that both Hardy's novels and the later work of Eliot mark a departure from the ecological foundations established by Martineau and Malthus. Eliot's seminal *The Mill on the Floss* (1860) is, for Miller, too anthropocentric, as it eventually 'provides a picture of adult society' alone while relegating 'animal companions to the background.'[5] Miller objects to Hardy's *The Return of the Native* (1878) in even harsher terms, asserting that 'Hardy's metaphors never develop into ecological insight.'[6] Such opinions are alluring in their boldness, but Miller's omission of the extent to which he is departing from common scholarly consensus is somewhat baffling.

Overall, *The Ecological Plot* is an inventive work of scholarship that makes a significant contribution to the field of ecocriticism through its focus on the ecological value of often-derided works of political economy. Miller's depiction of the

[4] Ibid., p. 32.

[5] Ibid., p. 106.

[6] Ibid, p. 118.

interconnection between nineteenth-century literary writers, economists, and natural scientists and their importance to the development of the blueprint of ecological thinking is thoroughly convincing and invites reflection on current ecological narratives in media and literature. Though Miller is a Victorianist who situates the idea of the 'ecological plot' within the nineteenth century, the idea is relevant beyond that context. It offers a novel and productive approach for evaluating and conceptualising ecological storytelling that is relevant to the contemporary age of environmental catastrophe and climate change. Through the concept of 'the ecological plot', Miller offers ecocritics a valuable tool for examining the narratives of the Anthropocene, not only in the nineteenth century, but also in the twenty-first and beyond.

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