

dry soil of the Middle East" (18), by hunting local game, and by drying dung for fuel.

The range of national, religious, and cultural backgrounds; the diversity of feelings, from deprecation to pride; the variety of geographic locations in Canada, and the coverage of different decades within this slim collection present a cross section of Arab-Canadian experiences and cultures. Despite an occasional shortcoming, *Arab-Canadian Writing* truly contributes to the rich multicultural fabric of Canadian society.

George Levine

*DARWIN AND THE NOVELISTS: PATTERNS OF SCIENCE IN VICTORIAN FICTION*

Cambridge, MA.: Harvard University Press, 1988. Pp. 319

Reviewed by A. Leslie Harris

A commonplace about the Victorian novel is its interest in the desacralized world, its attempt to convey the real rather than the ideal. Science tries to explain reality; the novel to depict it. The interpenetration of these two approaches is the focus of Levine's study. Neither a traditional influence study nor a chapter in the history of science, this work tries to show science and art fusing, occasionally almost unconsciously, to illustrate the power of an idea.

Levine begins with a "gestalt of the Darwinian imagination" (13) to show what Darwin shared with the novelists: beliefs in form ("shape"), in complicated social relationships, in "comic" endings (the gradual improvement within an open system), and in abundance and variety rather than disorder. Then Levine turns to natural theology that loose amalgam of biblically based laws governing human behavior and the natural world. Drawing on Whewell's *Bridgewater Treatise*, he argues that many of the issues Darwin confronted (multiplicity of life forms, change, adaptation to the environment) had been anticipated in natural theology. Darwin's views were not in "total conflict" with earlier explanations but were "divergence by descent" (49). To illustrate the pre-Darwinian view, Levine considers Austen's *Mansfield Park*, a novel whose "ordered and essentially closed system" (59) echoes the natural theologians' efforts to contain variety and abundance. Fanny Price's quiet observation of others and aversion to their selfishness suggests natural theology's middle ground between detached scientific observation and religious morality. Her final happiness reaffirms a rational world that would be good, if human weaknesses could be controlled. For reclaiming Fanny from critical disfavor, we should be grateful to Levine.

Although Darwin did not apply his biological theories to religious and social arenas, his "inversion" (84) of natural theology changed how his world thought and how it could be portrayed in fiction. Levine's examination of Darwin's successive revisions of the *Origin* shows how Darwin's devotion to natural knowledge and observation and his constant reversion to chance as a main biological principle led to novelists who rejected historical perfectionism (inevitable progress from lower to higher) and allowed chance to threaten the world's perceived order.

Dickens respected Darwin's theories, and his novels' attention to change and chance parallel Darwin's biological works. His reviews and essays show curiosity about contemporary scientific speculation, and his novels echo this interest in their preoccupation with domestic details and with ordinary data that resonate with unfamiliar, even frightening, explanations. His world is one of multiplicity, of aberrations and insanities as well as the apparently knowable and sane. Dickens described himself as a realist, and Levine shifts him into the mainstream of realist fiction, a needed antidote to the current "metaphysical" Dickens. Levine does not overlook the places where Dickens is not strictly Darwinian, notably in his assigning significance (if largely hidden from his characters) to chance and change. The chapter devoted to *Little Dorrit* uses natural theology, thermodynamics, and evolution to explain the "strangeness" of a novel that tries to reconcile a tragically fallen world (heading toward dissolution, entropy, and death) and a hopeful one (where progress is seen in life-giving variety).

Levine's most interesting argument is that the true impact of Darwinianism is seen not in works that grappled directly with chance, change, and adaptation, but rather in the way the new creed so saturated the Victorian mind that even Trollope, uninterested in science as he was, absorbed the implications of natural selection. An almost unconscious Darwinianism marks Trollope's career. While initially seeming a quirky choice as the centerpiece for this study, Trollope depicts a morally irrational world but one that is "explicable in time" (209). His concern with details, moral detachment, change, and time are essentially Darwinian, as are his separation of the ideal from the real and his use of the observer to impose order.

But Trollope's obsessive observation does not dominate the late Victorian novel as a narrative stance. Instead, "observing" itself becomes tainted. No observation is neutral; what the observer sees most keenly is himself. Levine's final chapter discusses the disruption at the heart of Darwin's theories. When Darwin tried to discuss humanity in terms of natural selection, he did not apply his theory to social or political thought. That was left to Marx, Engels, Spencer, and later nineteenth-century novelists, who reflected changing attitudes toward Darwinianism. Ranging from Scott to Hardy, with some attention to Eliot and Thackeray, this discussion of the breakdown of realism is fascinating in its scope, if skimpy in its particulars. The rising distrust not merely of detached observation but of language's capacity to render reality leads these novelists to use art to evade irrationality, change, and revolution. By Conrad, the novel can no longer faithfully observe reality because the violence inherent in natural selection means rejecting all that is human. Language cannot tell the truth, only the "glow about the kernel." Once meaning is taken out of change, causation is separated from divine intention, and "progress" in sociopolitical terms becomes violent revolution, then language cannot reflect detached order, and art becomes escape.

Students of the nineteenth-century novel have reason to be grateful to Levine for his attempts to bring science—and the philosophical underpinnings of nineteenth-century science—together with fiction.