



OXFORD JOURNALS  
OXFORD UNIVERSITY PRESS

---

Science Fiction in the Information Age

Author(s): Carol Colatrella

Source: *American Literary History*, Vol. 11, No. 3 (Autumn, 1999), pp. 554-565

Published by: [Oxford University Press](#)

Stable URL: <http://www.jstor.org/stable/490134>

Accessed: 20/09/2011 21:51

---

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).



*Oxford University Press* is collaborating with JSTOR to digitize, preserve and extend access to *American Literary History*.

<http://www.jstor.org>

# Science Fiction in the Information Age

*Carol Colatrella*

*The Dreams Our Stuff Is Made Of: How Science Fiction Conquered the World*  
By Thomas M. Disch  
Free Press, 1998

*Frankenstein's Daughters: Women Writing Science Fiction*  
By Jane Donawerth  
Syracuse University Press, 1997

*Immortal Engines: Life Extension and Immortality in Science Fiction and Fantasy*  
Edited by George Slusser, Gary Westfahl, and Eric S. Rabkin  
University of Georgia Press, 1996

*Political Science Fiction*  
Edited by Donald M. Hassler and Clyde Wilcox  
University of South Carolina Press, 1997

*Science Fiction and Market Realities*  
Edited by Gary Westfahl, George Slusser, and Eric S. Rabkin  
University of Georgia Press, 1996

Let me begin with the obligatory autobiographical preface: I am not a scholar specializing in science fiction, nor am I a science fiction writer or editor. And as a reader of science fiction, I probably qualify for advanced novice status, at least as I judge my knowledge against that of some expert students in the science fiction seminars that I have taught occasionally for a colleague. Yet like many Americans raised on 1960 and 1970s television, films, and popular literature, I am conversant with the classics of science fiction, from novels by Jules Verne, George Orwell, and Aldous Huxley to *Star Trek* and its descendants. Like many of my generation, I appreciate the plots, characterizations, and settings of science fiction when I see them in popular culture, finding such allusions and quotations to be sometimes glibly troublesome and at other times comforting in their recognizability. It is a commonplace in our time to assert that readers of science fiction are curious about the ever-increasing presence that scientific ideas and technological inventions occupy in our lives. We treasure the celebratory and fearsome aspects of science and technology in acknowledging that even the most progressive innovations might have hidden psychological or moral costs uncomfortable to bear.

In our postmodern, American way, we are alternately fascinated and bored by the media descriptions of cutting-edge scientific and technological areas such as reproductive technologies, genetic research, computing memory and speed, meteor movement, and other futuristic issues that impinge on our present-day reality. These areas of study are no longer confined to the research laboratory and the imaginative realm of science fiction because all of us daily confront the ways in which present yet future-seeming technologies create and/or solve social problems. Science fiction and commentary have become in our contemporary world what Donald Pease calls in defining the New American Studies “a field-Imaginary” (1). The field-Imaginary of contemporary science fiction (its topics, themes, stylistic conventions, ideologies, etc.) has been imported into popular culture,

elite culture, and general parlance. The frightening, Frankensteinian imagery of narratives describing biological and mechanistic adaptations of the human coincides with the realities of a world in which we communicate, calculate, and imagine with the assistance of computing devices, some small enough to wear or carry. As microelectronics engineers delight in reminding us, it is their ability to craft smaller, faster, lighter chips that drives the modern Information Revolution.<sup>1</sup> Each person has the potential to be wired, as Nicholas Negroponte notes in describing the latest items installed with computer chips and tested by the MIT media lab. So, given our history, literary and scientific, it is not surprising that readers of Mary Shelley's novel suspect that such technical advantage to turn every human being into a walking computer might lead to ethical, philosophical, and political dilemmas, a premise that writers have outlined in cyberpunk literature of the 1980s and 1990s.

American writers, particularly those moved by Shelley's tale, have long grappled with science and technology in creating a new national literature, for our myth of national identity is intertwined with ideas of scientific progress and technological innovation even as individual authors have expressed suspicion and regret about technical possibilities.<sup>2</sup> The most familiar examples appear in American Renaissance works speculating about the moral influence of natural philosophy and critically evaluating the social costs of science. Edgar Allan Poe's hymnlike, cosmogonic prose poem *Eureka* (1848), Nathaniel Hawthorne's dark stories of experimentalism ("Rappacinni's Daughter" [1848], "The Birthmark" [1846], "Doctor Heidegger's Experiment" [1837], "The Artist of the Beautiful" [1846]), and Herman Melville's eclectic fictions ("The Lightning-Rod Man" [1856], "The Bell-Tower" [1856], and *Moby-Dick* [1851]) examine science as a creative force inevitably transforming those who delve into its mysteries and, in some cases, anyone else within a reasonable distance (see Limon).

Nineteenth-century American authors revealed hope and skepticism concerning the power of science and technology to transform social values (see Franklin). Reformer and author Lydia Maria Child wrote radically in "Hilda Silfverling: A Fantasy" (1845) of the possibility that cryogenic science might permit a woman wrongly convicted of her child's murder to escape from the puritanical and repressive environment into which she was born.<sup>3</sup> Mark Twain's *A Connecticut Yankee in King Arthur's Court* (1889) satirizes scientific and technological progress in questioning whether modern innovations really aid human society. The question of science's social influence still haunts modern

*... our myth of national identity is intertwined with ideas of scientific progress and technological innovation even as individual authors have expressed suspicion and regret about technical possibilities.*

science fiction writers as they delineate the likely outcome of our obsessions with technology by framing its use within narratives concerned with convenience and cooperation or competition and destruction.<sup>4</sup>

In our own time, science fiction's possibilities have encouraged us to think globally and even universally. The current popularity of galactic spectacles, whether comic or serious (think also of the movies *Independence Day* [1996], *Men in Black* [1997], *Contact* [1997], *Gattaca* [1997], *Deep Impact* [1998], etc.), complicates our notions of high and low art, of distinct and rigid generic boundaries, as the beauty and power of science and technology impress audiences moved by the magnitude and insidious potential of ideas and innovations to damage individuals, social groups, and whole civilizations. Many SF fictions, films, videos, and games have crossed over into mainstream venues that mix politics and entertainment, which are no longer considered separate as television news executives seek to expand their audiences, attracting readers, computer users, and television watchers. Consider the phrase "Star Wars," which has multiple referents—it signifies a film indebted to the television series (also now a book series) *Star Trek*, strategic defense plans of the Reagan administration, computer games available to children and adults alike via the Internet or commercial purchase, and the documentary television coverage of the Gulf War. Politics, commerce, and entertainment converge, as news from Wall Street reminds us.

Defying the strict confines of science fictions, narrative conventions dependent on extraordinary mechanistic and biological possibilities, supernatural powers, and immortality are now routinely incorporated in mainstream fiction, film, and television, for "vampiric," "ghostly," "alien," or even "angelic" figures frequently appear within quotidian stories in these media. As any toddler's parent knows, Sesame Street now features explicitly alien characters alongside the more humanized Bert, Ernie, and Zoe, and the most popular US show for teenagers has one of their own slaying vampires on a weekly basis. There is a subgenre of Hollywood comedy concerning body switching (of father and son, mother and daughter, sister and sister) that presents such transformations as mystical science. Our cultural preoccupation with risk, particularly in testing our chances in lotteries or other forms of organized and state-sponsored gambling, has encouraged the representation on film of a supernaturalized component of luck: destiny, a concept that is especially appealing when incorporated into modern romances like *Next Stop, Wonderland* (1998). It is not surprising that university courses in postmodern fiction inevitably include texts blurring the boundaries of main-

stream and science fiction such as books by J. G. Ballard, Octavia Butler, Michael Crichton, Thomas Pynchon, Margaret Atwood, and William Gibson, works that should not remain cordoned off into the large science fiction section of your local bookstore precisely because they speak to the interests of the general reader as much as to the traditional science fiction fan.

As a general rather than an expert reader of the genre, I differ from science fiction purists, as I have discovered in reading the texts under review, because I am overwhelmed rather than invigorated by its immense range and productive field—revisionist histories, feminist utopias, technological thrillers, and space fictions—and because I have neither the technical savvy nor the patience to indulge wild speculative fantasy that encourages Silicon Valley/Alley programmers or space enthusiasts to read fictions for the science's sake. I am bemused by how science fiction narratives serve as predictors of scientific discoveries and techniques within the traditional domains of utopias, alternate worlds, immortality, time travel, cloning, robots, and space colonies, but I am more attracted to the power of science fiction to track and to motivate political and social change than I am in its ability to serve as a harbinger of scientific discovery. As an historically minded critic of narrative, I appreciate the common feature of the books under review in noticing science fiction as concerned with transformation, as Frederik Pohl notes (citing Tom Shippey) in claiming that “science fiction is a literature of change” (Hassler and Wilcox 7). The volumes edited by Gary Westfahl, George Slusser, and Eric Rabkin similarly attribute this defining principle of change to those editors who formulated and defined the genre, from Hugo Gernsback, whose 1920s *Amazing Stories* promoted the genre and its practitioners, to John W. Campbell, Jr., who wrote and spoke manifestos on what science fiction is versus what it is not (in his view a category best kept distinct from fantasy, horror, and speculative fiction).

Campbell is quoted in *Science Fiction and Market Realities* as claiming that “[s]cience fiction . . . unlike other literatures, assumes that change is the natural order of things” (16), a bold and overly exclusionary statement if one recognizes that realist and naturalist narratives implicitly or explicitly promote political or social change by delineating the human cost of the status quo, such as Herman Melville’s criticism of naval discipline in *White-Jacket* (1850), Harriet Beecher Stowe’s of slavery in *Uncle Tom’s Cabin* (1852), Upton Sinclair’s of meatpacking in *The Jungle* (1906), or feminist literature identifying the pain of patriarchal oppression, such as Kate Chopin’s *The Awakening* (1899) and Charlotte Perkins Gilman’s “The Yellow Wallpaper” (1892). Yet

although other kinds of fiction can be seen as promoting change, I agree with Campbell that only science fiction narratives focus on change as imagined to have already taken place, as the fiction is set in some future period or in a past or present with a different history or bearing different technological circumstances from what the present-day reader knows. The reader can afford to be retrospectively nostalgic in contemplating what is presumed to have already happened as successful or not. Or, as Bruce Franklin wrote so elegantly of nineteenth-century American examples: “From the perspective of the present, this science fiction of the past shows just how much an age determines and displays itself through what it sees as remote possibilities” (ix). The speculative capacities of science fiction narratives acknowledge ever-present American overlapping interests in technological progress and regretful optimism about social problems, so it is not surprising that in our definitively and defiantly ambivalent age contemporary fictional narratives have incorporated the conventions and strategies familiar from science fiction of what is bad about the good or good about the bad.

In the early twentieth century, Campbell’s pronouncements accounted for science fiction as a distinct genre examining the possibilities of social change formulated by scientific and technological developments in order to develop distinctive publishing venues for science fiction (SF) and related genres such as fantasy, but today critics wonder whether such a divide, if it exists, is good for SF. In 1988 Larry McCaffrey noted, “[I]t has only been during the past twenty years that truly major literary talents have been drawn to science fiction in the country that produced the atom bomb and landed on the moon” (1166), and he bemoaned the fact that “the accomplishments of science fiction have continued to remain overlooked by the literary establishment,” likely because “it emerged in the United States from the pulp magazines” (1167).<sup>5</sup> While print science fiction may have a limited fan base (all too often presumed to be adolescent boys and men), the Hollywood media spectacle has helped to make science fiction a ubiquitous discourse within futuristic and historical realist fictions because film’s technologically enhanced language can now serve our need to see enormous special effects made possible by digital video editing, hence Kevin Reynolds’s *Waterworld* (1995) and James Cameron’s *Titanic* (1997).<sup>6</sup>

The science fiction writers and critics represented in the volumes under review (either in their own words or via critical analyses of their novels and short stories) emphasize both classic and popular culture features of the genre while also explicating its significance as a force for political change in Anglo-American

society. Speculation on SF conventions and on the impact of SF principles for society are two intertwining threads woven through the five volumes under review; however, the authors of the monographs, in the inevitable depth and profundity that is available in 200 rather than 20 pages, more successfully explain larger cultural dimensions of the science fiction genre. Because two of the three anthologies under review developed from proceedings of the annual Eaton conference in California—*Immortal Engines*, from the April 1992 conference, and *Science Fiction and Market Realities*, from the April 1990 conference—while the third anthology, *Political Science Fiction*, reprints essays from a 1993 special issue of *Extrapolations*, they represent a significant cross section of views from writers, editors, and critics that can be read profitably by all readers interested in the past, present, and future of science fiction or in the relations between literature and science. The Eaton volumes offer short pieces bearing the signs of their origin as oral presentations (few footnotes, many arch jokes, and the appearance of ad libs to other speakers) that focus respectively on the topics of immortality and the economic world of mostly American SF with a nod toward European SF, while *Political Science Fiction* collects longer and more developed essays examining specific SF classics proposing utopias and dystopias delineated by classic and contemporary SF writers, including a cluster on *Star Trek*.<sup>7</sup>

Written in the vein of the ideological and economic analyses making up *Political Science Fiction*, Jane Donawerth's *Frankenstein's Daughters* admirably connects political-social-ethical values described by feminist cultural theorists to similar aspects of fictional narratives by women, but her ideological critique, developed in her university teaching of these narratives and critical works, restricts her analysis in ways offensive to those leery of such claims, notably Thomas Disch. Disch has written the most engaging book of this group in accounting for the cultural ramifications of science fiction writing and reading. In addition to supplying juicy tidbits of science fiction gossip, Disch supports his critical views by drawing on his extensive knowledge of texts, writers, and the publishing industry, but his views, with the exception of his being repelled by what he perceives as doctrinaire feminism, are not substantially different from what his counterparts claim in the other volumes. He acknowledges the market pressures on writers and the power of the SF word to inspire good, in portraying multiculturalism in a positive light and seeking to resolve ethnic fragmentation, or evil, as his analysis of Timothy McVeigh's reading of *The Turner Diaries* as inspiration for the Oklahoma City bombings demonstrates. That Disch's

book has been printed by a major publishing house, been successfully marketed to a general audience, and received generally positive reviews indicates that his argument appeals to more people than fans of his science fiction and children's books or the attendees at DragonCon or other science fiction fan conventions.

Disch's children's books, which have inspired the animated musical films *The Brave Little Toaster* (1987) and *The Brave Little Toaster Goes to Mars* (1998), are similarly carefully crafted to appeal to the broadest possible audience by imaging technology according to its humanlike vulnerabilities and its futuristic capabilities. If we believe that our appliances have sentimental attachments to us, as we have to them, then it is all too easy to shudder at the phrase "planned obsolescence" when it is discussed by various appliances. It is not surprising that contemporary fiction reflects and refracts our continuing engagement with old and new media, or to put the situation in Brave Little Toaster terms, we cannot throw out our appliances even if they are superseded by newer, better models because our old friends have been good to us. As Wall Street analysts track the approaching convergence of old and new channels of information—telephone, television, and computing—cultural critics inevitably remark on novelizations of films and television shows and the increasing tendency of one medium to allude to or quote another (think of film or postmodern fictional characters defined by their viewing of television shows and Internet fanzines devoted to embellishing on mass media narratives). Media are not thrown away, only absorbed.

Alvin and Heidi Toffler have claimed that ours is an information age, the third wave succeeding previous eras formed by the agricultural revolution and the industrial revolution.<sup>8</sup> In an information age, everyone becomes a critic, for better or worse, because the proliferation of information encourages transmission, reception, sale, and exchange as the basic mode of human existence, but the democratization of information is not necessarily empowering for individuals or for society. As information becomes an available commodity, we all "know," whether we want/need/demand or not, about everything: from the royal family's display of grief after Princess Diana's death to the intimate details drawn from the sex lives of public officials. Each "factoid" seems potentially important for future conversation, whether it is relayed over a cellular phone, in an Internet chat room, or within proximity to a television studio, in order to understand the floating references of our day in headlines and sound bites.

It is our ever-present anxiety that we might be missing something important, some bit of evidence that might make the

whole case clear, that might identify who is responsible for the crime, for there always already is a crime, whether it will be eventually punished or not. We are all Scully and Mulder, of television's *The X-Files*, searching our family backgrounds, health records, contemporary events, and basically everything to find the evidence that will support what we suspect and fear—that there is evil in the human soul, a looming conspiracy, some power greater than us, an alternate universe, extraterrestrial life, your spouse/neighbor/boss who is an alien. Perhaps fears about the growing diversity of our culture or the looming presence of the government and media intruding upon the private and the personal shade our understanding of the future's possibilities. As Alexander Star notes, in a review of Disch's book: "The bug-eyed extraterrestrial has joined the folklore of American life, becoming one more figure in the multicultural pageant" (10). Or perhaps it is the sheer proliferation and transmission of information that grounds our anxieties. In any case, whether due to political ideology or psychological fatigue, we can attest to feelings of disorientation common to paranoia, drug psychosis, and media overstimulation as we decode whatever messages are available for the purposes of survival, recognizing that all choices are contingently made of equal parts optimism and anxiety.<sup>9</sup>

Seeking edginess of mood and genre, popular media of the information age—sampling in rap and hip-hop music, digital video news transmissions on the Internet, and computer-animated special effects in television shows and films—incorporate technologies into existing discourses that are not quite the same for the supplements, whether these be in the form of chemicals or computers incorporated into the drug-taking, cyborg characters.<sup>10</sup> Narrative forms are altered as all stories tend toward hypermedia: the reader must be thoroughly engaged and experimental in putting together the pieces that appear to escape our control. Like the cynical and confused Case, cyber-cowboy narrator of William Gibson's *Neuromancer* (1984), who quickly moves from conversation to conversation and tries to figure out who can be trusted in an age of virtual appearances, we yearn, flee, and find the technology we use as both attractive and repellant in its violence, and we are eventually surprised that there is more to life, but perhaps nothing else worth writing about, as Case's story ends in an uncomplicated romance and bland survival.

Recognizing science fiction as an influential genre in its use of linguistic and generic conventions, the texts under review delineate a tension between science fiction's power to raise social and political consciousness and the economic power of the marketplace in disseminating science fiction works. Life is difficult

(but not impossible, acknowledges Sheila Finch in *Science Fiction and Market Realities*) for science fiction authors wanting to have their art and paychecks too, for it is more likely that one finds work as a factory writer for one of the popular series with a sure audience or even in marketing one's own trilogy than in marketing a single novel. Most readers can relate to the problems of curtailing one's creativity to fit the marketplace that in the same volume Norman Spinrad, David Hartwell, and Kathryn Cramer describe. As the future enters the present, we have become more troubled by its hyperkinetic potentialities promising human control over the computer interface because new technologies empower, limit, and observe our ethical as well as our economic decision making.

But while science fiction remains interested in the empowering possibilities of technology to transform democracy, at this moment in time it also tries very hard to figure out the mistakes we made getting here, as Disch, Donawerth, and the essayists represented in *Political Science Fiction* demonstrate. The elusive appearance of social justice in some science fiction narratives and the vague critique of political correctness in others can make visible or occlude deeper anxieties about race, class, and gender in reengineering these cultural constructs within fictional representations of time travel or the interface of human and alien or human and machine. For example, Octavia Butler's *Kindred* (1979) raises the consciousness of readers about the slave experience by thrusting a middle-class, female, black writer living during America's bicentennial on to an antebellum plantation where she experiences oppression rather than mere marginality.<sup>11</sup> Our engagement and divorce from technology are represented in equally stark terms by Sue Thomas in *Correspondence* (1991) as contemporary versions of women's liberation from social conventions and as sexually empowering, but at significant costs, for in role-playing the characters of Rosa and Shirley, we recognize how lonely if individually empowering the technologically enhanced world is: one is so free from attachment that the insertion of another personality into one's hardware becomes a romance.

Like many other science fiction authors, Butler and Thomas appreciate that science and technology, at least as they appear in their fictional worlds, encourage social and moral progress, albeit with significant costs. Mark Leyner and Neal Stephenson cynically joke about the present and future functions of technology in such a way that humor makes possible a kind of hope confronting us in our present-day reality and in the even more frightening technological prospects to come. Readers can paradoxically find solace in their works because we are able to face the

grimmiest possibilities envisioned by fiction, creating a curious kind of empowerment that refigures our alienated loss of control over ever-changing and demanding ideas and innovations.<sup>12</sup>

Nostalgia for the imagined present is what science fiction is all about, says my local science fiction bookseller Mark Stephens, a situation that my colleague Anne Balsamo has identified as our longing to consider the genre as “the history of the future.” Although the science fiction worldview more often than not emphasizes human estrangement, Mark and Anne find themselves in venues in which each is often engaged in communication about science fictions, sharing reactions to fictions with customers, colleagues, and students, by theorizing about fictional parallels to cultural values and events. Those human interactions, like those at conventions, inevitably add to one’s appreciation of the texts and encourage the formation of reading communities that help to make the genre popular and ubiquitous. Closing as I began, by acknowledging the expertise of readers whose engagements with science fiction respectively reflect wide reading and interesting perspectives on culture, I realize that its incredible ability to morph from reality to possibility and from one style or ideology to another provides science fiction with its power. Because science fiction simultaneously replicates, reinvigorates, and replaces narrative strategies and conventions while offering cultural critique of the present wrapped sometimes within a past or future setting, it speaks to almost anyone regardless of status, career, age, nationality, ethnicity, class, or gender. In our diverse, multicultural world created by means of scientific possibilities and technological applications, any science fiction narrative helps even the less expert reader manage what could be chaos by creating a seemingly unmanageable fictional world within the confines of a book.

## Notes

1. “Throughout the past four decades, both the productivity and performance of microelectronics have advanced at exponential rates unmatched in technological history. The number of transistors per microchip has skyrocketed by a factor of 100 million, while the cost of a chip has remained virtually constant. And the amount of energy consumed in a binary switching transition has been reduced by more than five decades! Consequently, microelectronics has become the principal driver of the modern Information Revolution” (Meindl 16–17).

2. In this paragraph and that following, I summarize passages from my essay “Science and Literature” (1999). Also see the recent textbook anthology *The English Literatures of America, 1500–1800*, edited by Myra Jehlen and Michael

Warner (1997), which carefully links scientific and technological history in its survey.

3. "Hilda Silfverling" appeared in *Columbian Lady's and Gentleman's Magazine* and was reprinted in *Fact and Fiction: A Collection of Stories* (1846); Carolyn Karcher's *A Lydia Maria Child Reader* (1997) includes the story (374–95).

4. Disch reports that the critic Morris Dickstein was somewhat perturbed to hear George Orwell's *1984* (1949) described as science fiction (4). In the summer of 1998, the Modern Library list of 100 great novels in English provoked similar responses from some surprised to see Orwell's work and Aldous Huxley's *Brave New World* (1932) included.

5. McCaffrey also points out that science fiction is a force for social change in asserting that "some of the most significant new directions in American fiction indicates that our best writing continues to evolve in opposition to our culture's reigning ideologies and its ongoing exploitation of people and language" (1162).

6. According to the 1998 *Market Share Reporter*, fiction books account for about two-thirds of all US book sales; general fiction books represent 49% of all fiction sales, children/youth's fiction 20%, horror 9%, mystery 8%, romance 8%, and science fiction 6%. I thank Anne Garrison for her help in finding this information.

7. See also Lynne Joyrich, *Re-viewing Reception: Television, Gender, and Post-modern Culture* (1996), and Bonnie Dow, *Prime Time Feminism: Television, Media Culture, and the Women's Movement since 1970* (1996).

8. The Tofflers' books include *Future Shock* (1970), *The Third Wave* (1980), and *Powershift: Knowledge, Wealth, and Violence in the 21st Century* (1990).

9. Jodi Dean, *Aliens in America: Conspiracy Cultures from Outerspace to Cyberspace* (1998), makes the case more strongly than I do that Americans live in a paranoid culture.

10. See David Porush, *The Soft Machine: Cybernetic Fiction* (1985), for a discussion of postmodern novels by Joseph McElroy, John Barth, Donald Barthelme, Samuel Beckett, William Burroughs, Thomas Pynchon, and Kurt Vonnegut.

11. I thank my colleague Deborah Grayson for pointing out the significance of Butler's setting Dana's contemporary life in the US bicentennial period.

12. See Winner, esp. chs. 1 and 2.

### Works Cited

- |  |  |
|--|--|
| <p>Colatrella, Carol. "Science and Literature." <i>Encyclopedia of American Literature</i>. Ed. Steven Serafin. New York: Continuum, 1999.</p> | <p>Franklin, H. Bruce. <i>Future Perfect: American Science Fiction of the Nineteenth Century</i>. New York: Oxford UP, 1966.</p> |
|--|--|

- Karcher, Carolyn. *A Lydia Maria Child Reader*. Durham: Duke UP, 1997.
- McCaffrey, Larry. "Fictions of the Present." *Columbia Literary History of the United States*. Ed. Emory Elliott. New York: Columbia UP, 1988.
- Limon, John. *The Place of Fiction in the Time of Science: A Disciplinary History of American Writing*. New York: Cambridge UP, 1990.
- Meindl, James D. "Beyond a Profound and Pervasive Impact." *Research Horizons* 15.4 (1998): 16-17.
- Negroponte, Nicholas. "Framing the Future." Leadership Center Forum. Marietta, Georgia. 28 Jan. 1997.
- Pease, Donald. "New Americanists: Revisionist Interventions into the Canon." *boundary 2* 17.1 (1990): 1-37.
- Star, Alexander. "The Truth Is Out There." Rev. of *The Dreams Our Stuff Is Made Of*, by Thomas Disch, and *Aliens in America*, by Jodi Dean. *New York Times Book Review* 9 Aug. 1998: 10-11.
- Toffler, Alvin, and Heidi Toffler. "Framing the Future." Leadership Center Forum. Marietta, Georgia. 28 Jan. 1997.
- Winner, Langdon. *The Whale and the Reactor: A Search for Limits in an Age of High Technology*. Chicago: U of Chicago P, 1986.