Part 2

Brief Historical Surveys of Science Fiction Subgenres

The Time-Travel Narrative

Time travel is an extremely rich science fiction motif offering numerous possibilities, not only for inventive plotting, but also for speculation on the fundamental nature of time – and of reality itself. In addition, the cognitive dissonance that occurs via a sudden movement from one time period to another potentially makes the time-travel narrative a paradigmatic science fictional form. The time-travel motif also presents extensive opportunities for humor and satire, giving the genre a particularly wide range. Indeed, the flexibility of the time-travel story has made it a favorite science fiction subgenre on television and in film, as well as in the novel and short story.

Narratives involving travel through time represent one of the oldest subgenres in all of science fiction. Even a story as old as Washington Irving's "Rip Van Winkle" (1819) involves time travel of a sort, in that the protagonist sleeps for twenty years, awaking to a much-changed world and experiencing a shock of cognitive estrangement of the kind that is often central to the time-travel narrative. This motif was later extended in Edward Bellamy's utopian classic *Looking Backward* (1888), whose protagonist goes into a hypnotic trance in 1887 and awakes to a utopian world in the year 2000. H. G. Wells's *When the Sleeper Wakes* (1899) similarly features a protagonist who goes into a long sleep and awakes in a very different (this time dystopian) future. More literal time-travel narratives appeared as early as early as 1881 in Edward Page Mitchell's short story "The Clock that Went Backward." Wells explored the motif in his 1888 story "The Chronic Argonauts," and Mark Twain produced a novel-length time-travel tale in 1889 with the publication of *A Connecticut Yankee in King Arthur's Court*. However, the true founding text of the genre is probably Wells's classic novel *The Time Machine* (1895), the first genuinely science fictional exploration of time travel in book-length form, though this pre-Einstein narrative did not actually explore the physics of time travel. *The Time Machine* has exercised an extensive influence on the time-travel

genre, including the production of George Pal's 1960 film adaptation of the novel, one of the classic science fiction films of its era. Perhaps the most notable example of a novel influenced directly by *The Time Machine* is Stephen Baxter's *The Time Ships* (1995), a sequel to Wells's novel that captures the style of the original while expanding Wells's brief narrative into a much more detailed exploration that takes the Time Traveler through a virtual compendium of science fiction motifs.

Einstein's meditations on time provided a scientific basis for future time-travel narratives. Nevertheless, it has remained common for time-travel narratives simply to posit the possibility of time travel without exploring the actual mechanics of the process. Typical here is Peter Delacorte's charming *Time on My Hands* (1997) – in which a time traveler from 1994 travels back to the 1930s to try to change history so that Ronald Reagan can never become president. In this novel, the traveler uses a found time machine from the future; he himself doesn't understand the technology, so he doesn't have to explain it to us, either. In Terry Pratchett's *Night Watch* (2002), part of his massive "Discworld" series, time travel occurs literally by magic. And in one popular motif, the "time slip," a character is simply transported from one time period to another, though neither the character nor the reader has any idea how this movement occurred – as when Billy Pilgrim, the protagonist of Kurt Vonnegut's *Slaughterhouse Five* (1969) famously becomes "unstuck in time," perhaps owing to the intervention of aliens from the planet Tralfamadore. The time slip often appears in fantasy narratives, though texts with a more science fictional feel can employ the motif as well. A classic case is Octavia Butler's *Kindred* (1979), in which a modern black woman repeatedly finds herself transported back into the antebellum South, enabling a complex meditation on racism and slavery. In other cases, a kind of time travel is merely a side effect of other technologies, as in Joe Haldeman's *The Forever War* (1974), in which the time dilation effect associated with space travel at near light speeds introduces an important element of temporal displacement.

Science fiction narratives play with aberrations in the flow of time in other ways as well, as in Robert Wilson's Hugo Award-winning *Spin* (2005), where mysterious aliens seal the Earth inside a barrier that causes time on Earth to pass much more slowly than time in the universe at large, so that billions of years pass in the cosmos during the lives of individual humans on Earth. Meanwhile, Philip K. Dick's decidedly strange *Counter-Clock World* (1967) imagines a late-twentieth-century Earth on which time has begun to move backward, owing to a cosmic phenomenon of unknown origin or cause. While life in many ways proceeds as it always had, anyone who has died before this phenomenon began comes back to life as time retreats to the

moment of his or her death. Those who are alive, age backward, becoming younger and younger until they eventually re-enter a womb, then undergo a reverse pregnancy until they finally cease to exist in an act of sexual intercourse that must occur as time reaches their moment of conception.

Brian Aldiss's *Cryptozoic!* (1967) also posits the flow of time in reverse as its central motif, its late twenty-first-century characters eventually discovering that when they "mind travel" by means of a psychoactive drug to what they believe is the distant past, they are in fact witnessing the future. It is only human perception that time moves forward, an illusion that provides protection against the knowledge of humanity's ultimate dissolution. In this scenario, life begins at death, whereas the womb is considered the "grave" of the human race. Similarly, the narrator of Martin Amis's *Time's Arrow* (1991) begins his story from death, but unlike Aldiss's characters, he literally experiences life backwards in time. His mind inhabits the body of a Nazi surgeon, observing the events of the doctor's life, but in reverse chronological order. Thus, the narrator witnesses the events of the Holocaust, but experiences them not as the extermination of the Jews, but as a miraculous act of healing, in which the dead are resuscitated and sent back to their homes.

One of the earliest detailed science fictional explorations of time travel in the more literal sense is Isaac Asimov's *The End of Eternity* (1955), which follows *The Time Machine* in using the time-travel conceit to explore the future course of human evolution – though in this case the evolution turns out to be more social and intellectual than biological. This book also introduces the notion of the "time cop," an operative who is officially assigned to manipulate history via time travel. While we still get very few details about the time travel technology involved (other than the indication that it uses some sort of "temporal field"), Asimov's novel does present us with the most elaborate exploration of the possibilities of time travel that had been produced up to the time of its publication. In particular, it envisions an organization called Eternity, whose agents live outside of time, traveling freely both "downwhen" and "upwhen," both observing the course of history and instituting carefully calculated "reality changes" that modify the course of history to prevent various undesirable developments. *The End of Eternity* addresses a number of aspects of time travel, including time-travel paradoxes. Indeed, we learn that the Eternity organization was enabled by the work of an Eternity agent who traveled back in time to develop the temporal-field technology that made Eternity possible in the first place. It turns out, however, that the attempts of Eternity to prevent catastrophe have moved the course of human history into a comfortable mediocrity, removing the kinds of challenges and crises that drive the most

daring technological advances. Ultimately, though, humans from the far future engineer a plot (with the mostly unwitting help of protagonist Andrew Harlan, an agent of Eternity) to prevent the establishment of Eternity in the first place, leading to technological advances that allow the establishment of a galactic empire that could be read as the one described in Asimov's "Foundation" trilogy.

Asimov's novel is the prototype of a large number of time-travel tales that feature powerful, often bureaucratic organizations that attempt to manage the potentially disastrous consequences of time travel. Typical of such organizations is the Time Patrol of Poul Anderson's interlinked short-story collection *The Guardians of Time* (1960), whose task it is to ensure that time travelers do not alter the "true" past. Bureaucrats of a ravaged future attempt to use time travel to correct the events that led to their current dire state in Terry Gilliam's excellent time-travel film *Twelve Monkeys* (1995), while in John Varley's *Millennium* (1983, adapted to film in 1989) a far-future bureaucracy oversees attempts to extract resources (mostly healthy human bodies) from the past in an effort to save a sickly humanity from extinction owing to disastrous environmental devastation.

Millennium is an excellent time-travel novel that contains a number of classic meditations on the nature of time and implications of time travel. It is in many ways reminiscent of the work of science fiction master Robert A. Heinlein, an extremely important figure in the development of the time-travel narrative. Heinlein's early short story "By His Bootstraps" (1941), for example, brought the time-travel narrative into science fiction's Golden Age. This story involves an early example of the time-travel "loop," in which travelers in time find that the principal events of history remain unchanged no matter what interventions are attempted. This story is a forerunner of numerous time-loop narratives, including those in which the passage of time is caught in a recursive loop, so that a given period of time is repeated over and over. This particular motif has been used in numerous television programs, though the best known example is probably the film *Groundhog Day* (1993). Ken Grimwood's novel *Replay* (1987), in which the central character repeatedly relives the period between 1963 and 1988, is a particularly interesting example of the time loop motif. This motif also underlies Heinlein's brief "All You Zombies" (1959). One of the classic works of time-travel fiction, this story involves a temporal manipulation agent whose time travels allow him to become his own father – and mother! At the same time, however, his activities do not change the course of his personal history but simply enable the history to be what it has been all along.

A similar vision of time travel informs Heinlein's novel *The Door into Summer* (1957). Actually, this story involves two kinds of time travel.

Protagonist Daniel Boone Davis is an engineer and entrepreneur who goes into suspended animation in the year 1970 after being cheated out of the ownership of his own robotic inventions by his erstwhile fiancée and his unscrupulous business partner. When he awakes in the year 2000, he has become a time traveler somewhat in the mode of Rip Van Winkle. However, he also learns that the technology for literal time travel has by this time been developed (though it is still in the experimental stage). He then cleverly uses this technology to travel back to 1970 to turn the tables on his would-be nemeses, then returns to a happy life in 2000. Importantly, though, this 2000 is very much the same one he found on his initial awakening, once again suggesting that history is immutable.

David Gerrold's *The Man Who Folded Himself* (1973) takes its cue from "All You Zombies" in presenting a time traveler whose movements in time (via a "timebelt" whose origin and workings are never explained) enable him to become both his own mother and his own father. Here, however, this situation is enabled by a vision of time travel as movement among different parallel universes. Each trip taken by the traveler results in a slight change in history, creating a new timeline in which the traveler has a slightly (or in some cases greatly) changed identity – while the original timeline continues unabated in parallel. Ultimately, a male and female version of the traveler meet and produce a son – who grows into the version of the protagonist we had met in the beginning of the novel.

Jack Womack's *Terraplane* (1988), an early entry in a series of novels in which the author explores a future world increasingly dominated by the sinister Dryco Corporation, is also centrally concerned with time travel and parallel universes. Here, however, there are only two parallel worlds, which are virtually identical but which have recently taken different historical paths (possibly owing to the effects of nuclear explosions), including the fact that the second world now runs several decades in time behind "our" (i.e., Dryco's) world. A machine developed by a Russian scientist (and eventually conscripted by Dryco) allows travel between the worlds, and is used, in *Terraplane*, by the scientist in an attempt to retrieve Joseph Stalin from the parallel world so that he can try to set things right in the chaotic postcommunist Russia of our world. Meanwhile, in *Elvissey* (1993), Dryco operatives travel to the "slow" universe to retrieve a young Elvis Presley whom they hope to use to combat an Elvis cult whose power is beginning to rival their own in the "fast" universe.

In Jack Finney's *Time and Again* (1970), a scientist, Dr. Danziger, develops an unlikely method of time travel that essentially involves transporting travelers to earlier eras simply by placing them in the mindset of that era. However this book is uninterested in presenting a believable method of time

travel. Instead, it focuses on a detailed description of 1882 Manhattan, to which protagonist Simon Morley travels. Morley encounters considerable difficulties in this past world, but ultimately concludes that the world of 1882 is more civilized and humane than the world of 1970 – especially after the government-sponsored project for which he is working shows signs of military-inspired interest in manipulating the past for their own ends. He thus decides to stay permanently in 1882. In a classic time-travel plot twist, he also manages to prevent Danziger's parents from meeting in that year, thus averting the eventual birth of the scientist and the founding of the time-travel project that sent Morley to 1882 in the first place.

Gregory Benford's *Timescape* (1980) represents one of the few attempts to present a detailed and believable scientific basis for time travel, while at the same time making an important contribution to environmentalist science fiction. In particular, the book presents a detailed depiction of both the personal and the professional lives of two groups of scientists who are involved in the development of a viable time-travel device. Having discovered a way to use tachyons (subatomic particles that are found to travel backward in time) to send coded messages into the past, Cambridge scientists in 1998 work to send warnings to a second group of scientists back in 1962 in an attempt to prevent ecological disasters that have ravaged the world's oceans in the intervening time and that threaten to wreak havoc on Earth's environment in the world of 1998. Among other things, *Timescape* presents an argument for the value of basic scientific research, which here helps to solve a problem crucial to the future of humanity, even though none of the research involved has any direct connection to the problem involved.

In *Doomsday Book* (1992), Connie Willis places the mechanism for time travel in the hands of twenty-first-century Oxford historians, who use the internet as a research tool, in this case to study the Middle Ages. In Willis's universe, time travel itself appears to have little value outside of academia since it cannot be readily exploited for economic gain, as it is in Michael Crichton's *Timeline* (1999), a novel that converts a number of the plot elements of *Doomsday Book* into Crichton's patented action-thriller format. Willis herself extends the ideas of *Doomsday Book* in *To Say Nothing of the Dog* (1997), describing the temporal continuum as a chaotic system in which tiny perturbations can cause major far-reaching effects. This system, however, also has the ability to correct potentially damaging incongruities introduced by time travelers; it protects itself from continuum paradoxes using "slippage," a shift in time that prevents actions that could alter history. Similar to Willis's story "Fire Watch," in which historians witness the efforts to save St. Paul's Cathedral during the Blitz, *To Say*

Nothing of the Dog centers around the destruction of Coventry Cathedral during World War II, as well as its subsequent twenty-first-century reconstruction. Considerably lighter in mood than *Doomsday Book*, which concerns the devastating effects of both a twenty-first-century pandemic and the fourteenth-century Black Death, Willis's novel also involves a hilarious romp through Victoriana, drawing upon Jerome K. Jerome's 1889 comic classic *Three Men in a Boat (to Say Nothing of the Dog)*, from which Willis's book takes its title.

Orson Scott Card's *Pastwatch: The Redemption of Christopher Columbus* (1996) is an interesting variant on the theme of time travel, this time based on an assumption of the mutability of history. Here, scientists from the twenty-third century (working for the Pastwatch organization) develop a technology that allows them to travel back to the time of Christopher Columbus in an effort to avert the baleful consequences of the European colonization of the Americas. In this novel, Card makes a laudable attempt at acknowledging the horrors wrought upon the inhabitants of the New World as a result of the arrival of European colonizers at the end of the fifteenth century, suggesting that virtually any alternative would be preferable. Thus, the Pastwatch scientists opt to intervene in the past, even though they know that this action will send history off in a radically different (and largely unpredictable) direction, which will mean that their own reality will paradoxically never have existed. Unfortunately, Card is unable to overcome his own religious biases, ultimately constructing a "successful" scenario in which Native Americans are "saved" from colonialism by putting aside their own savage culture and replacing it with a healthy dose of Christianity and by the building of an indigenous American empire of which Columbus himself is a central organizer.

John Kessel's *Corrupting Dr. Nice* (1997) is a relatively lighthearted novel that nevertheless manages to create both political satire and a thoughtful vision of the possible implications of time travel. Here, time travel is again predicated upon the existence of an infinite number of parallel universes. Thus, if time travelers wreak changes in the past, there are no consequences for the original timeline, which continues unchanged while the manipulation of the past leads to the creation of a new alternative timeline that branches off from the original at the point of intervention. As a result, time travel is practiced extensively, mostly under the control of the powerful Saltimbanque Corporation, which uses the infinite pasts as a limitless collection of tourist destinations. These pasts also provide an inexhaustible source of resources, as when oil is imported from various pasts in which the supply of that commodity is still rich. Even people are routinely imported from the past, including various versions of Jesus Christ, still popular in the

future even though access to the past has made it clear that he did not rise from the dead or otherwise have supernatural powers. On the other hand, there are those who are uncomfortable with the unrestrained exploitation of the past, organizing protests against the practice on the grounds that it may have consequences that are not yet known and that, in any case, it disrupts the lives of people in the past, even if they live in alternative timelines. Kessel's time-traveling protagonist is aided (or not) by an artificial intelligence implanted in his brain, indicating the influence of recent cybertechnology – as well as cyberpunk science fiction. This same influence can be seen in such works as George Foy's *The Shift* (1996) and Joe Haldeman's *Old Twentieth* (2005), which use virtual reality technology to allow "travel" into computer simulations of the historical past. *Corrupting Dr. Nice* also engages in an extensive dialogue with contemporary popular culture, including both music and film. Indeed, much of the novel's plot is taken from Preston Sturges's screwball comedy *The Lady Eve* (1941).

Kessel's use of images from the history of film points toward the extensive use of time-travel narratives in film itself. All of the *Terminator* films depend centrally on time travel, even if such travel is not absolutely central to the action of the films, while *Twelve Monkeys* was one of the most effective science fiction films of the 1990s. Gilliam's *Time Bandits* (1981) demonstrates the comic effects of the time-travel subgenre, as does the extremely successful sequence of *Back to the Future* films that appeared between 1985 and 1990. On American television, virtually all major science fiction series have employed the time-travel motif at one time or another, including all entries in the *Star Trek* television franchise – culminating in *Star Trek: Enterprise* (2001–2005), in which a "Temporal Cold War" plays a central role. Other series have been devoted specifically to time travel, beginning with Irwin Allen's *The Time Tunnel* (1966–1967) and extending through such series as *Voyagers!* (1982–1983) and *Quantum Leap* (1989–1993), whose protagonist randomly jumps not only into different time periods but into the identities of various different individuals. Time travel is also central to the series *The 4400* (2004–). The long-running British television series *Doctor Who* quite often employs the time-travel motif, and the doctor's TARDIS is able to travel as easily through time as through space. Finally, the American series *Sliders* (1995–2000) involves protagonists who travel among parallel universes, often in a mode that essentially involves travel to different time periods in our own world.

Meanwhile, the use of the parallel universe motif in so many time-travel narratives, while offering numerous time-traveling possibilities, also indicates a kinship between the time-travel subgenre and the alternate history subgenre, which explores different courses that might have been taken by

history had certain events turned out differently. Works in this genre thus revisit the past in a mode that is akin to time travel, especially as time-travels are often concerned with the creation (intentional or not) of alternative histories.

The alternative history narrative has typically been considered marginal to the enterprise of science fiction, partly because such narratives typically involve little or no actual science and partly because so many alternative histories (the ever-popular alternative histories of the prolific Harry Turtledove are typical here) seem more interested in using the alternative past as a setting for rollicking adventures than in genuine meditations on the historical process. However, as Karen Hellekson notes in her recent book-length study of the genre, the alternative history has grown more respectable and mainstream.

The alternative history novel typically looks at a single crucial turning point in history (the "point of divergence") and then attempts to explore the different ways history might have proceeded had that turning point played out differently. For example, numerous novels conjecture possible alternative paths that might have been taken by history had the South won the Civil War – as in Ward Moore's *Bring the Jubilee* (1953) – or the Axis powers won World War II – as in Philip K. Dick's *The Man in the High Castle* (1962). In keeping with the central interests of science fiction, some alternative history stories have imagined the impact on history of the availability of different technologies, as in the so-called steampunk narrative, epitomized by *The Difference Engine* (1990) written by cyberpunks William Gibson and Bruce Sterling. At first glance, then, the alternative history novel would appear to be more closely related to the genre of the historical novel than to science fiction. On the other hand, the alternative history novel achieves many of the same effects of cognitive estrangement that are central to the science fiction novel as a whole. In particular, the reader's awareness of the course taken by history in our world (or "our timeline" as it is often put) creates an immediate cognitive gap between that history and the fictionalized history proposed in the novel. The reader is then presumably encouraged to view history in a new light and to understand that the outcome of history depends upon specific human actions and is not foreordained.

The entire course of modern history turns out differently in a work such as Keith Roberts's much respected *Pavane* (1968), which explores a world in which the Catholic Church and medieval aristocracy were able to defend their power successfully and to defeat the emergent bourgeois revolution in Europe (thanks partly to the assassination of Queen Elizabeth I and the victory of the Spanish Armada over the English forces in the famous battle

of 1588). In the case of Roberts's novel, the Catholic Church's resistance to scientific advancement (familiar in our own history) turns out to be motivated by a desire to avoid repetition of an earlier cycle of history in which such advancement ultimately led to a nuclear holocaust.

If Pavane's Catholic Church seeks to avert the destructive consequences of the rise of capitalist modernity, other alternative histories have similarly imagined a world in which Western-style modernity fails to achieve global hegemony. For example, in Christopher Evans's *Aztec Century* (1993), America is not subjugated by European colonization, but the reverse is in fact beginning to be true. The novel focuses on an alternative twentieth-century England that, as the novel begins, has just been conquered by the rival Aztec empire, which has been gradually encroaching on the British Empire for some time. In *Lion's Blood* (2002) and *Zulu Heart* (2003), Steven Barnes imagines an America that has been colonized by Africa, rather than Europe. Robert Silverberg's *The Gate of Worlds* (1967) envisions a world in which the fourteenth-century plagues that swept Europe had been far more damaging than they actually were, crippling Europe to the point that its subsequent rise to global dominance would have been made impossible.

While Silverberg's novel fails to flesh out its world in any real detail, Kim Stanley Robinson's *The Years of Rice and Salt* (2002) starts from a similar premise and demonstrates that a science fiction novel can, in fact, do such things. Here, Robinson begins with a history-altering premise quite similar to that of Silverberg's *The Gate of Worlds*, but then provides a convincing panoramic view of the social, political, economic, and intellectual history of the globe for a period of roughly seven hundred years – extending well into what would be the twenty-first century in our timeline.

To make this daunting task more manageable, Robinson does not attempt to construct a continuous narrative but instead provides a series of snapshots of key historical moments via a series of ten novellas that explore gradually advancing periods of history, constructing a consistent and credible narrative of world history, fleshed out by extremely detailed and convincing depictions of life in particular places and times during the course of this history. With Europe and Christianity removed from the historical stage, world history in *The Years of Rice and Salt* is driven largely by the rivalry between China and Islam (which eventually includes a resettled Europe), each of which is itself a complex culture. Chinese culture is itself informed by a rivalry between Buddhism and Confucianism, while Islam contains the same division that it does in our world: the opposed tendencies toward militant expansionism and benevolent egalitarianism. In any case, *The Years of Rice and Salt* gives us a detailed look at both of these rival

cultures, providing in the process some of the most compelling descriptions of non-Western cultures in all of science fiction. On the other hand, many aspects of Robinson's sweeping alternative history resemble our own timeline quite closely, suggesting that history is driven by powerful forces that are not easily diverted by specific individual events – and also recalling the way in which the manipulations of the past in time-travel narratives often have surprisingly little effect on the eventual outcome of history.

Together, the time-travel narrative and the alternative history narrative provide opportunities for science fictional explorations of numerous aspects of the history of our world – and of the nature of history itself. The "what if" scenarios generated in these subgenres provide new points of view from which to examine the "what was" and "what is" of our own world, while at the same time often providing reminders that the outcome of history is not foreordained but is contingent upon human action, even if that action is limited by certain fundamental conditions of possibility. As a result, these narratives have great potential for creating the kind of thought-provoking reading experience that is central to all the best science fiction.

Suggested Further Reading

Hellekson, Karen, *The Alternate History: Refiguring Historical Time*, Kent, OH: Kent State University Press, 2001.

Nahin, Paul J., *Time Machines: Time Travel in Physics, Metaphysics, and Science Fiction*, 2nd edition, New York: Springer-Verlag, 1999.

Westfahl, Gary, George Slusser, and David Leiby, eds. *Worlds Enough and Time: Explorations of Time in Science Fiction and Fantasy*, Westport, CT: Greenwood Press, 2002.

Notable Time-Travel Fiction

Brian Aldiss, *Cryptozoic!* (1967).
Martin Amis, *Time's Arrow* (1991).
Poul Anderson, *The Guardians of Time* (1960).
Isaac Asimov, *The End of Eternity* (1955).
Stephen Baxter, *The Time Ships* (1995).
Edward Bellamy, *Looking Backward* (1888).
Gregory Benford, *Timescape* (1980).
Octavia Butler, *Kindred* (1979).
Orson Scott Card, *Pastwatch: The Redemption of Christopher Columbus* (1996).
Michael Crichton, *Timeline* (1999).

Peter Delacorte, *Time on My Hands* (1997).
Philip K. Dick, *Counter-Clock World* (1967).
Jack Finney, *Time and Again* (1970).
George Foy, *The Shift* (1996).
David Gerrold, *The Man Who Folded Himself* (1973).
Ken Grimwood, *Replay* (1987).
Joe Haldeman, *The Forever War* (1974) and *Old Twentieth* (2005).
Robert A. Heinlein, "By His Bootstraps" (1941), *The Door into Summer* (1957), and "All You Zombies" (1959).
Washington Irving, "Rip Van Winkle" (1819).
Jerome K. Jerome, *Three Men in a Boat (to Say Nothing of the Dog) (*1889).
John Kessel, *Corrupting Dr. Nice* (1997).
Richard Matheson, *Bid Time Return* (1975).
Edward Page Mitchell, "The Clock that Went Backward" (1881).
Terry Pratchett, *Night Watch* (2002).
John Varley, *Millennium* (1983).
Kurt Vonnegut, *Slaughterhouse-Five* (1969) and *Timequake* (1996).
H. G. Wells,"The Chronic Argonauts" (1888), *The Time Machine* (1895), and *When the Sleeper Wakes* (1899).
Connie Willis,"Fire Watch" (1983), *Doomsday Book* (1992), and *To Say Nothing of the Dog* (1997).
Jack Womack, *Terraplane* (1988) and *Elvissey* (1993).

Notable Alternative-History Fiction

Kingsley Amis, *The Alteration* (1976).
Steven Barnes, *Lion's Blood* (2002) and *Zulu Heart* (2003).
Terry Bisson, *Fire on the Mountain* (1988).
Orson Scott Card, *Pastwatch* (1996).
Philip K. Dick, *The Man in the High Castle* (1962).
Christopher Evans, *Aztec Century* (1994).
Amitav Ghosh, *The Calcutta Chromosome* (1995).
William Gibson and Bruce Sterling, *The Difference Engine* (1990).
Ward Moore, *Bring the Jubilee* (1953).
Audrey Niffenegger, *The Time Traveler's Wife* (2003).
Christopher Priest, *The Separation* (2002).
Keith Roberts, *Pavane* (1968).
Kim Stanley Robinson, *The Years of Rice and Salt* (2002).
Robert Silverberg, *The Gate of Worlds* (1967).
Brian Stableford, *Empire of Fear* (1991).
Harry Turtledove, *In the Balance* (1994), *Second Contact* (1999), *American Front* (1998), *Blood and Iron* (2001), and *Return Engagement* (2004).

Notable Films

Back to the Future. Dir. Robert Zemeckis, 1985.
Back to the Future II. Dir. Robert Zemeckis, 1989.
Back to the Future III. Dir. Robert Zemeckis, 1990.
Bill and Ted's Excellent Adventure. Dir. Stephen Herek, 1989.
The Butterfly Effect. Dir. Eric Bress and J. Mackie Gruber, 2004.
Déjà Vu. Dir. Tony Scott, 2006.
Donnie Darko. Dir. Richard Kelly, 2001.
Frequency. Dir. Gregory Hoblit, 2000.
Goundhog Day. Dir. Harold Ramis (1993)
Millennium. Dir. Michael Anderson, 1989.
Primer. Dir. Shane Carruth, 2004.
Somewhere in Time. Dir. Jeannot Szwarc, 1980.
Star Trek IV: The Voyage Home. Dir. Leonard Nimoy, 1986.
Star Trek: First Contact. Dir. Jonathan Frakes, 1996.
The Sticky Fingers of Time. Dir. Hilary Brougher, 1997.
The Terminator. Dir. James Cameron, 1984.
Terminator 2: Judgment Day. Dir. James Cameron, 1991.
Terminator 3: Rise of the Machines. Dir. Jonathan Mostow, 2003.
Time after Time. Dir. Nicholas Meyer, 1979.
Time Bandits. Dir. Terry Gilliam, 1981.
The Time Machine. Dir. George Pal, 1960.
Timecop. Dir. Peter Hyams, 1994.
Timeline. Dir. Richard Donner, 2003.
Twelve Monkeys. Dir. Terry Gilliam, 1995.

The Alien Invasion Narrative

Narratives involving the invasion of the Earth by alien forces from outer space are among the oldest forms of science fiction. Such narratives were particularly popular in Great Britain in the late nineteenth century, culminating in the publication of H. G. Wells's *The War of the Worlds* in 1898. Wells's novel established many of the conventions of the alien invasion subgenre and set a standard against which subsequent alien invasion narratives have tended to be compared. Among other things, *The War of the Worlds* demonstrates the potential of alien invasion narratives to serve as commentaries on real-world social and political phenomena, especially colonialism. Narratives of alien invasion experienced a particular flowering in the United States in the 1950s, responding to a paranoid sense of threat that was central to American culture in the peak Cold War years. Since that time, alien invasion narratives have remained popular, branching out in a variety of directions, often demonstrating an extremely sophisticated ability to deal with complex social and political issues.

The War of the Worlds was written as British colonial expansion around the globe proceeded at a rapid pace, often leading to the violent destruction of the peoples and cultures being colonized. It is a powerful critique of British colonialism that works through the reversal of asking British readers to view colonialism from the point of view of the colonized, rather than their accustomed position as colonizer. Most of the texts that immediately followed *The War of the Worlds*, however, were fantasies that again placed Western readers in the position of colonizer, generally with no criticism of colonialism intended. For example, Garrett Serviss's *Edison's Conquest of Mars* (serialized in *The New York Evening Journal* in 1898) is a sort of American sequel to Wells's novel in which the famous inventor Thomas Edison leads the forces of Earth in a retaliatory strike against Mars.

Though few novel-length alien invasion stories followed immediately in the footsteps of *The War of the Worlds*, the subgenre came into its own

in the 1950s, when such works as Robert A. Heinlein's *The Puppet Masters* (1951) imagined alien invasions that could often be read fairly transparently as allegories of the threat of communism. In Heinlein's novel, parasitical alien slugs (from Titan, a moon of Saturn) land in Iowa and begin attaching themselves to the backs of human hosts, whose minds they then control. Using these human puppets to do their bidding, the alien masters quickly move forward on a program of global conquest. Much of the book is straightforward Cold War propaganda in which the slugs are depicted as being much like communists. Indeed, Heinlein is careful to ensure that this connection will be made even by the most literal-minded of readers. Heinlein also gets in a few shots at communist sympathizers, noting that the only thing more disgusting than a human mind in the grip of the slugs is the idea of humans who willingly work in complicity with the slugs, even without having a parasite directly attached (*Puppet*, 251).

In the end, the valiant (and resourceful) Americans manage to defeat the slugs through the use of germ warfare, a controversial weapon in the 1950s, and one the use of which Heinlein here wholeheartedly endorses. Indeed, one of the central messages of the book is that we need not only to remain eternally vigilant, but also to be willing to use any resources at our disposal to defeat our enemies. Cavanaugh, who has at one point been taken over by one of the slugs, bears them a particular animosity, but his "kill-all-slugs" expressions of racial hatred can be taken as a pretty clear expression of Heinlein's attitude toward America's communist enemies. It is thus with particular satisfaction that Heinlein (through Cavanaugh) reports the apparently complete destruction of all slugs on Earth, even though he warns that we still need to be alert, lest there be others lurking in some obscure Third World hideout, like the Amazon (*Puppet*, 321). Meanwhile, the Americans prepare to launch an all-out genocidal assault on Titan itself so they can wipe out the slugs once and for all. Cavanaugh goes along on the mission, gleefully ending his narrative with the announcement, "Puppet masters – the free men are coming to kill you! *Death and Destruction!*" (*Puppet*, 340, Heinlein's italics).

One of the best-known alien invasion stories of the 1950s is Jack Finney's *Invasion of the Body Snatchers*, serialized in *Collier's* magazine in 1954 and first published in book form as *The Body Snatchers* in 1955. Here, alien seed pods blow in from outer space, settling in the small California town of Mill Valley. The pods have the ability to grow into exact replicas of any human beings with whom they come into contact, and the citizens of Mill Valley are gradually replaced by the resulting replicants. Ultimately, only physician Miles Bennell is left to resist the alien takeover of the town, which threatens to spread from there to encompass the entire country, or even the

world. Luckily, however, he is able to inflict so much damage that the pods decide to leave Earth to look for another planet that will be more easily colonized.

Finney's novel was the basis for the 1956 film *Invasion of the Body Snatchers* (remade in 1978 under the same title). The film follows the book fairly closely, but ends on a less optimistic note. Bennell has finally been able to alert the authorities outside of his town (called Santa Mira in the film), but the pods have already spread beyond the town and it is not at all clear that they can still be stopped. The notion of stealthy invaders who essentially take over the minds of normal Americans, converting them to an alien ideology, resonates in an obvious way with the Cold War fear of communist subversion. Indeed, the film has come to be widely regarded as an iconic cultural representation of its contemporary climate of anticommunist paranoia. It is certainly the case that the replacements, who look the same as everyone else, but feel no emotion and have no individuality, directly echo the era's most prevalent stereotypes about communists. Thus, the assurances given Bennell by the replacements that his life will be far more pleasant if he simply goes along with the crowd and learns to live without emotion can be taken as echoes of the supposed seductions offered by communist utopianism.

On the other hand, the makers of the film (and, for that matter, the author of the original novel) have stated that they intended no such allegorical commentary on the threat of communism. Meanwhile, even if one does choose to see communism as the indirect topic of the film, it is also quite possible to read the paranoid vision of the film as a subtle critique of anticommunist hysteria. By this reading, the film suggests that the notion of communists secretly taking over various aspects of American life is about as likely as tiny seeds blowing in from outer space, then developing into large pods that grow perfect replicas of specific human beings, whom they then do away with and replace. In this view, the film suggests that the communist conspiracy warned against by anticommunist alarmists such as Senator Joseph McCarthy is incredibly farfetched, the stuff of B-grade science fiction.

Invasion of the Body Snatchers is now regarded as one of the signature films of the 1950s. It is, in fact, the principal reason that Finney's novel is still so well known. The alien invasion subgenre was to a large extent dominated by films in the 1950s, including a 1953 film adaptation of *The War of the Worlds*, as well as such interesting films as Christian Nyby's *The Thing from Another World* (1951), William Cameron Menzies's *Invaders from Mars* (1953), and Jack Arnold's *It Came from Outer Space* (1954). Many of these films were overt expressions of anticommunist paranoia,

including such tawdry efforts as *Invasion USA* (1952) and *Red Planet Mars* (1952). Others were extremely low-budget attempts to capitalize on the popularity of alien invasion movies in the 1950s, including such works as Ed Wood's *Plan 9 from Outer Space* (1959), now notorious as perhaps the worst film ever made. Such films, now regarded with nostalgia by many, provided much of the inspiration for Tim Burton's *Mars Attacks!* (1995), perhaps the finest – or at least funniest – comic science fiction film ever made, rivaled only by *Men in Black* (1997), another alien invasion film. Meanwhile, the popularity of Roland Emmerich's *Independence Day* (also released in 1996) indicated the ongoing viability of the alien invasion film as the twentieth century drew to a close.

Among the many alien invasion films of the 1950s, one that stands out is Robert Wise's *The Day the Earth Stood Still* (1951). Far from feeding the anticommunist frenzy of the time, Wise's film is a plea for global peace and understanding – and a warning that the Cold War arms race might ultimately lead to disaster for the entire planet. Here, the Christlike alien Klaatu (Michael Renny), accompanied by his imposing robot, Gort, comes in peace, but is greeted with violence. Still, he survives to issue a stern warning: human civilization will be destroyed (by an intergalactic robot peacekeeping force) if it seeks to extend its violent ways beyond Earth. This rejection of the Cold War arms race was a courageous gesture in a film that was produced at the height of American Cold War hysteria and at a time when Hollywood itself was under siege by anticommunist zealots in Washington. The success of the film thus demonstrated the way in which science fiction, because it is perceived by many as divorced from contemporary reality, can serve as a venue for trenchant social and political commentary that might have been judged too controversial in a more "mainstream" form.

Among the novels of the 1950s, Arthur C. Clarke's *Childhood's End* (1953) is notable for its treatment of alien invaders as essentially benevolent. Here, partly through genuinely advanced technology and partly through trickery, a contingent of alien Overlords establishes dominion on Earth, imposing rules that are designed to prevent the human race from destroying itself and the rest of the planet. One rule, for example, forbids cruelty to animals. The most important rule involves the establishment (working through the UN) of a single World State that makes Earth's nations obsolete. The rule of the Overlords, led by Supervisor Karellen, issues in an unprecedented era of peace and prosperity for the Earth, though some find this utopian existence a bit boring, given that humanity now has no real challenges to face. Artistic and other forms of creativity are greatly curtailed as well, introducing some fairly standard meditation on the

possible downside of utopia. Some early critique of television is introduced as well: one reason artistic creativity seems to have failed is that human culture comes to be dominated by television. Meanwhile, the Overlords themselves remain mysterious and distant. Indeed, for more than fifty years they stay entirely out of sight, revealing themselves only after decades of their presence have prepared the human race for their appearance – which is exactly like devils, complete with wings, horns, and pointed tails. (It turns out that this vision, so common in world mythology, has come about as a result of a sort of echo memory from the future, a phenomenon that accounts for a variety of "racial" memories.)

In the final analysis, it is revealed that the Overlords have come to Earth at the behest of their own master, a sort of collective "Overmind" that consists of the fusion of a variety of species with vastly advanced psychic abilities. Despite their own advanced material state, the Overlords have no such abilities. As a result, they are at an evolutionary dead end; their function in the galaxy is simply to help races (such as humanity) that do potentially have such abilities survive until evolution brings those abilities to fruition. In the end, this evolutionary leap does occur, eventually leading to a situation in which almost all of the world's children under ten years old have them.

The Overlords continue to oversee the remainder of the human race, though, with no racial future, many humans commit suicide, either alone or en masse. The transformed children, meanwhile, are moved to a separate area of their own. Eventually, the untransformed humans die out, except for Jan Rodricks, an engineering student who had stowed away aboard an Overlord supply ship in order to view the amazing wonders of the Overlord home world. He returns after the eighty-year round trip (during which he ages only four months owing to relativistic time dilation) to find himself the last man on Earth. As the children prepare to join the Overmind, the Overlords finally evacuate Earth for their own safety, leaving Jan behind to broadcast to them what he sees of the final process, which leads to the complete dissolution of the Earth.

As Cold War tensions eased in the 1960s, the alien invasion subgenre receded into the background of contemporary sf. Interesting works did continue to appear, however. Indeed, the very fact that no particular version of the alien invasion narrative was especially popular during the 1960s and 1970s meant that the subgenre was able to branch out in a number of new directions. For example, Thomas Disch's *The Genocides* (1965), once again presents advanced alien invaders bent on the destruction of the human race. However, the tone here is very different from that of the paranoid works of the 1950s, and Disch's novel is more a warning against human arrogance than against the possibility of sinister alien forces lurking just outside our

planet (or our country). Here, the aliens identify the Earth as a perfect spot for growing the huge, fast-growing plants that they use for food. So they seed the planet with the crop and then set about eradicating the various pests that might interfere with its growth, including human beings (who are compared in the text to worms burrowing into an apple).

Michael Crichton's *The Andromeda Strain* (1969) can almost be read as a reversal of *The Genocides* in the sense that the alien invaders here are lowly crystalline microbes picked up in orbit by an American spacecraft. When the craft subsequently crashes, the alien plague threatens to run rampant on Earth, to the potential destruction of humankind. Earth is saved at the last moment by the organism's own mutation into a form that is not harmful to humans, but the near-miss serves (in a novel published in the year of the first manned landing on the moon) as a warning of the potential dangers of contamination from outer space. *The Andromeda Strain* was made into a successful film (directed by Robert Wise) in 1971, thus launching Crichton's work as one of the most commercially successful multimedia franchises in science fiction history.

John Varley's *The Ophiuchi Hotline* (1977) deals not with an alien invasion in itself, but also with the aftermath of an alien invasion that has left mysterious invaders (who seem to exist largely in another dimension) in control of Earth, while humanity is essentially in exile in the rest of the solar system. In addition, a second group of aliens has, for the past four hundred years, been broadcasting high-tech data into the solar system (apparently from the star system 70 Ophiuchi). Much of this data is indecipherable, but the part that can be decoded has become the basis for most human technological advances during this period. These advances are considerable, and *The Ophiuchi Hotline* is a veritable catalog of science fictional technologies, including space habitats, cloning, digital uploading of consciousness, and interstellar travel. Ultimately, it is revealed that the hotline information comes not from 70 Ophiuchi but from a starfaring race known as the Traders, who have established a broadcasting station only one-half-light year from the solar system. In return for all the data they have supplied over the centuries, these Traders eventually demand payment in the form of detailed knowledge about human culture so that they can assimilate it into their own civilization. They also reveal to the humans in the solar system, many of whom dream of retaking Earth, that the invaders (who have actually taken Earth not for themselves but to liberate the dolphins and whales there, whom they regard as far more intelligent than humans) are far too sophisticated and powerful ever to be repelled. Humanity's best hope is to strike out into the galaxy in search of life in another star system, and that project begins as the book ends.

In the world of film, Steven Spielberg's *Close Encounters of the Third Kind* (1977) and *E.T. the Extraterrestrial* (1982) provide looks at benevolent alien visitors who differ dramatically from the sinister bug-eyed invaders of most previous alien invasion films. They also provide sharp critiques of certain elements of human society. Still, the treatment of aliens and alien cultures in American culture in the 1980s was not, as a whole, particularly generous. During that decade, the anti-Soviet rhetoric of the Reagan administration often sounded like something from the paranoid 1950s, so perhaps it is no surprise that the alien invasion subgenre sometimes returned to the spirit of the 1950s as well. *Footfall* (1985), by Larry Niven and Jerry Pournelle, was one of the most successful alien invasion novels of the 1980s. It is also a highly representative work of its time in that it seems designed, at least partly, as an expression of support for the development of superweapons programs, including the Reagan administration's "Star Wars" Strategic Defense Initiative. Using a format that is reminiscent of any number of disaster films, *Footfall* presents a detailed account of actual combat between the Earth and an alien spaceship and the impact of this combat on a number of individual characters. In the novel, a huge alien spacecraft approaches Earth, demanding unconditional surrender from the Earthlings. The aliens, known as the fithp, look very much like baby elephants, except that they have two trunks, each of which has finger-like tentacles on the end. In a bit of anticommunist allegory that harkens back to the 1950s, the fithp are a herdlike species who act in groups and are virtually incapable of taking individual action, resulting in considerable miscommunication between them and the individualistic Earthlings they encounter. They also seem less intelligent than humans and less able to deal with unfamiliar situations, while the digits on their "trunks" are far less nimble than human fingers.

Ultimately, the fithp are defeated when the US, employing the advice of a number of science fiction writers conscripted as consultants, conceives a plan to build a huge, nuclear-powered spacecraft that will be able to carry heavy weapons and thus engage the fithp mothership in a battle for superiority in space. This project succeeds, and the new ship successfully battles the fithp until they finally issue an unconditional surrender, even agreeing to work with humans to reconstruct the modified Bussard ramjet that originally allowed them to undertake their interstellar flight to Earth, which means that humans will acquire this technology as well.

Greg Bear's *The Forge of God* (1987), like *Footfall*, employs the disaster-thriller format to explore the motif of alien invasion, though the vaguely liberal politics of Bear's novel can be taken as a sort of riposte to the conservatism of Niven and Pournelle. Here, a mysterious alien force of

"planet-eaters" literally dismantles the Earth in order to use it for raw materials, while we observe the activities of a variety of characters as they await the inevitable end. Meanwhile, in a bit of political satire that comments on the religious rhetoric of the contemporary Reagan administration (but even more strikingly looks forward to the religiosity of the administration of George W. Bush), Earth's response to the crisis is given a twist when US President William Crockerman takes no action at all because he interprets the attack as the wrath of God and the destruction of Earth as the Biblical apocalypse. Luckily, a second force of benevolent aliens spirits away a select group of humans (as well as a collection of human cultural artifacts) on a series of space arks – enabling, among other things, Bear's 1992 sequel, *Anvil of Stars*, in which the surviving humans seek revenge against the planet-eaters.

In film, James Cameron's *The Abyss* (1989) combines with *The Day the Earth Stood Still* to bookend the period of the Cold War arms race with cautionary alien invasion tales on film. Here, highly advanced aliens have set up shop deep beneath the ocean. They then use their extremely sophisticated abilities to manipulate water to create vast tidal waves that threaten to wipe out many of the coastal areas of Earth unless the Eastern and Western blocs begin to set aside their differences and seek a negotiated détente rather than continuing the upward ratcheting of the arms race that had continued through the Reagan years of the 1980s. This intervention is successful, and the film ends on a hopeful note that peace can be maintained on Earth.

The alien invasion novels of the 1980s were topped off by Octavia Butler's "Xenogenesis" trilogy, comprising *Dawn* (1987), *Adulthood Rites* (1987), and *Imago* (1989). This highly complex and ambitious sequence, designed largely as a critique of the aggressive policies of the Reagan administration, addresses a number of crucial issues, including racism, gender, militarism, and colonialism. Here, the alien Oankali (who actually have a great deal in common with Varley's Traders) reach Earth in the wake of a devastating nuclear conflict that has virtually destroyed human civilization on the planet. They then use their highly advanced biotechnology to restore humanity to health, but only in the form of human-Oankali hybrids who are meant to leave the planet and become starfaring gene traders like the Oankali themselves.

One of the most prominent science fiction works of the 1980s was neither a novel nor a film, but a four-hour television miniseries, Kenneth Johnson's 1983 alien invasion epic *V*, which was so successful that it was followed in 1984 by a six-hour sequel, *V: The Final Battle*. The original *V* provided some of the most compelling television viewing of the 1980s, and certainly

the most compelling alien invasion narrative on television to that point. In *V*, a virtual compendium of previous alien invasion motifs, huge flying saucers suddenly appear over major cities around the globe. The aliens, who appear to look exactly like humans, then make contact, declaring themselves friendly and announce that they have come to Earth because their planet has serious environmental problems that can be solved only with the use of a chemical that they hope to manufacture on Earth, using the refuse of Earth's cities as raw materials. In return, they promise to provide the people of Earth with high-tech solutions to their own problems. This benevolence turns out to be a ruse, however, and the aliens have really come to Earth to harvest the planet's vast water supplies for their own use. What's worse, the aliens (whose real appearance turns out to be reptilian) plan to harvest the planet's human population as well, some to use as soldiers in their various wars of conquest, but most simply to be used as a source of food. Ultimately, however, human resistance forces mobilize to repel the invasion and save the planet.

Of course, alien invasions had figured prominently in such classic television series as *The Twilight Zone*, *The Outer Limits*, and *Doctor Who* and had provided the entire matter of at least one entire reasonably successful series, *The Invaders* (1967–1969), in which alien invaders disguised as humans made life miserable for protagonist David Vincent (Roy Thinnes). The alien invasion motif of the latter involved a paranoia that made it a clear predecessor to *The X-Files*, so much so that the success of the latter series in the early 1990s led to a miniseries sequel to *The Invaders* in 1995, while Thinnes himself became a recurring guest star on *The X-Files*.

The X-Files itself was clearly the most important alien invasion television series of the 1990s, and probably of all time. Running through nine seasons from 1993 to 2002, this paranoid conspiracy thriller introduced a number of new high-tech concepts to the alien invasion television subgenre. It is, however, distinguished more by its air of paranoid suspicion toward shadowy forces within the US government than by its fear of sinister aliens. Audiences were also attracted to the air of sexual tension between the FBI-agent protagonists Mulder and Scully, and by the show's postmodern sense of epistemological uncertainty. Finally, despite the tense drama with which its central alien invasion conspiracy motif is presented, *The X-Files* is also highlighted by the comic quips of Mulder and by a number of playful episodes that spoof the normal seriousness of the program.

Other notable alien invasion television series of the 1990s included *Space: Above and Beyond* (1995–1996), created by two of the producers of *The X-Files*. This series is essentially a gritty combat drama in which forces from Earth battle against the Chigs, an alien race determined to conquer the

planet. Also worthy of note were the 1998 BBC miniseries *Invasion Earth: The World War Has Begun* and the highly interesting *Earth: Final Conflict*, created by *Star Trek* creator Gene Roddenberry, which ran for five seasons, beginning in 1997. *Earth: Final Conflict* is a highly inventive series, though in its final seasons it grew more and more reminiscent of *The X-Files*, involving plots to create alien-human hybrids through secret genetic experiments and also suggesting sinister secret forces at work within the US government.

The most notable development within the subgenre of the alien invasion novel in the 1990s was the return to prominence of British writers. Perhaps most notable in this regard is the "Aleutian" trilogy by Gwyneth Jones, comprising *White Queen* (1991), *North Wind* (1996), and *Phoenix Café* (1998). Jones's trilogy draws upon insights from contemporary poststructuralist theory to develop a postmodernist challenge to conventional Enlightenment (and colonialist) notions of Self and Other. It also shows a sophisticated understanding of colonial history, which the trilogy extensively allegorizes. The "Aleutian" trilogy also imagines some genuinely inventive aliens. Apparently lacking the high-powered information sources of many sf aliens, Jones's aliens stumble upon the Earth having had no idea a habitable planet was there. Further, they are not an official expedition, but essentially an independent crew of entrepreneurs. Described by Jones herself in an essay on the trilogy as a "feckless crew of adventurers and dreamers," they have been wandering the galaxy in search of profit, though they eventually become extensively entangled in the global politics of Earth, leading to considerable confusion and unrest when they finally depart in the third volume after a 300-year stay.

Actually, Jones's aliens are quite similar to humans (and some can even pass for humans), but this similarity only serves to make the encounter between the two species even more complex. For example, this similarity causes each species to view the other through its own cultural expectations and conventions, leading to considerable miscommunication and confusion, a situation that is often reflected in the disorientation of the reader, who often finds herself in the same position as the human characters in the book: struggling to learn about and understand the Aleutians by putting together the bits and pieces of information that are available. Conversely, the attempts of the Aleutians to understand humans provide a defamiliarizing perspective on human culture and society. By the end of the trilogy, the human characters and their culture seem as strange and alien as do the Aleutian characters. Indeed, the boundary between human and Aleutian is progressively blurred as Jones's sequence proceeds.

The aliens of Ian McDonald's *Sacrifice of Fools* (1996) are in many ways reminiscent of Jones's Aleutians and encounter many of the same sorts of

cultural confusion as they try to co-exist with humans on Earth. In *Evolution's Shore* (1995) and *Kirinya* (1998), McDonald breaks significantly new ground in the alien invasion genre with his vision of strange alien "biological packages" that land on Earth and then proceed to move across the landscape, transforming everything in their path through a sort of nanotechnology. This transformation includes human beings, who appear on the verge of a new evolutionary leap thanks to the effects of the alien technology.

Another recent examples of the British alien invasion novel is Liz Williams's *Empire of Bones* (2002), which proposes that humanity is actually descended from the írRas, a race of interstellar travelers whose principal reason for being is to colonize various worlds around the galaxy, at the same time extending the evolutionary range of their already extremely diverse race. In the novel, the írRas return to Earth after a long period of being out of contact – and find that their evolutionary plans for the planet have gone seriously awry. *Empire of Bones* is set in India, which helps to make its exploration of the intersection of medicine, disease, and colonialism particularly rich.

Also of interest among recent works is *The Mount* (2002), by the American feminist writer Carol Emshwiller, an allegorical fable in which a weak-legged alien race, the Hoots, have colonized the Earth, using enslaved humans as mounts upon which the ride about the countryside. The Hoots proudly proclaim the kindness with which they rule their human subjects and indeed point out how much better off humans are to have Hoots to take care of them. As such, they not only recall the paternalist rhetoric of Western colonialism on Earth, but also in many ways echo the strategies by which the working classes are governed under capitalism. Novels such as *The Mount* and *Empire of Bones* indicate the ongoing vitality of the alien invasion narrative as a mode of social and political critique as we move into the early part of the twenty-first century.

Suggested Further Reading

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Notable Fiction

Greg Bear, *The Forge of God* (1987).
Octavia Butler, "Xenogenesis" trilogy: *Dawn* (1987), *Adulthood Rites* (1987), and *Imago* (1989).
Arthur C. Clarke, *Childhood's End* (1953).
Michael Crichton, *The Andromeda Strain* (1969).
Thomas M. Disch, *The Genocides* (1965).
Carol Emshwiller, *The Mount* (2002).
Jack Finney, *The Body Snatchers* (1955).
Robert A. Heinlein, *The Puppet Masters* (1951).
Gwyneth Jones, "Aleutian" trilogy: *White Queen* (1991), *North Wind* (1996), and *Phoenix Café* (1998).
Ian McDonald, *Evolution's Shore* (1995), *Kirinya* (1998), and *Sacrifice of Fools* (1996).
Larry Niven and Jerry Pournelle, *Footfall* (1985).
Garrett Serviss, *Edison's Conquest of Mars* (1898).
John Varley, *The Ophiuchi Hotline* (1977).
H. G. Wells, *The War of the Worlds* (1898).
Liz Williams, *Empire of Bones* (2002).

Notable Films

The Abyss. Dir. James Cameron, 1989.
The Andromeda Strain. Dir. Robert Wise, 1971.
Close Encounters of the Third Kind. Dir. Steven Spielberg, 1977.
The Day the Earth Stood Still. Dir. Robert Wise, 1951.
E.T. the Extraterrestrial. Dir. Steven Spielberg, 1982.
Independence Day. Dir. Roland Emmerich, 1996.
Invasion of the Body Snatchers. Dir. Don Siegle, 1956.
It Came from Outer Space. Dir. Jack Arnold, 1953.
Mars Attacks! Dir. Tim Burton, 1995.
Men in Black. Dir. Barry Sonnenfeld, 1997.
The Thing from Another World. Dir. Christian Nyby, 1951.

The Space Opera

During the years of the 1930s, when written science fiction was dominated by the pulp magazines and the most prominent science fiction works on film were the "Buck Rogers" and "Flash Gordon" serials, stories of adventure in outer space rose to the center of the genre, though the common term for such stories, "space opera," was not suggested (by sf writer Wilson Tucker) until 1941. This term was originally derogatory, suggesting second-rate, formulaic stories written by untalented hacks. Later, while the term continued to have pulpy connotations, it came to be associated with some the best-known and most-loved works of the entire science fiction genre, from novels of the 1950s by writers such as Isaac Asimov and Robert A. Heinlein, to television series such as the various incarnations of *Star Trek*, to films such as the *Star Wars* sequence. In addition, a renaissance in the subgenre of space opera, beginning in the 1980s, has produced some of the most complex and thought-provoking novels in the history of science fiction, though many recent works look back in a selfconsciously nostalgic way to the swashbuckling action and larger-than-life heroes of the early space opera.

Among the writers who defined the terms of the subgenre in the 1920s and 1930s, E. E. "Doc" Smith stands out as perhaps the most important. Smith wrote space operas from the 1920s to the 1960s. His first novel, *The Skylark of Space*, was originally written during the period 1915–1920, then published in *Amazing Stories* in 1928; it appeared in book form in 1946 and again in a revised edition in 1958. It became the first of a sequence of four "Skylark" novels and has some claim to being the first true space opera. Smith's most important works, however, were the stories and novels of the "Lensmen" series, which established many of the conventions of the genre, while envisioning a great deal of interesting future technologies and describing some of the first genuinely interesting aliens in all of science fiction. Here, two vastly advanced races, the good Arisians and the evil Eddorians, have been battling for supremacy for billions of years. Earth is part of a

special breeding program through which the Arisians hope to develop a civilization advanced enough to defeat the Eddorians. (The title comes from the "Lens," a bracelet worn by members of the Arisian Galactic Patrol to give them certain telepathic and other powers.)

Most of the "Lensmen" stories originally appeared in John W. Campbell's *Astounding Science-Fiction*, a venue that contributed a great deal to the development of the space opera. Another early writer of space opera who published extensively in *Astounding Science-Fiction* was Jack Williamson, who added a romantic flourish to the subgenre that marked his long career from such early works as *The Legion of Space* (1934), all the way up to such late works as *The Singers of Time* (1991), on which he collaborated with Frederik Pohl. Campbell himself was an important pioneer in the space opera before taking over the editorship at *Astounding Science-Fiction*, producing a number of stories and novelettes in the early 1930s that were eventually collected into such book-length works as *The Mightiest Machine* (1947), *Islands of Space* (1957), and *Invaders from the Infinite* (1961).

"Black Destroyer," the first science fiction short story by A. E. Van Vogt (who went on to become one of the major figures of Golden Age sf), appeared in *Astounding Science-Fiction* in 1939. This story (widely acknowledged to be one of the sources of the highly successful 1979 film *Alien*) was later folded, along with several other Van Vogt stories, into the novel *The Voyage of the Space Beagle* (1950), an important milestone in the development of the novel-length space opera. Another important early writer of space opera stories was C. L. Moore, one of the first women to write science fiction. Moore, often in collaboration with her husband Henry Kuttner, produced a number of stories of outer-space adventure from 1933 to 1958. Perhaps her best-known published volume is *Judgment Night* (1952), which collects five novellas originally printed in *Astounding Science-Fiction*. Perhaps the most prolific author of classic space opera stories in the 1930s was Edmond Hamilton, whose writing sometimes showed an antiromantic and unsentimental bent that now make them appear ahead of their time.

Isaac Asimov's *The Stars Like Dust* (1951) is space opera in a romantic vein not typical of that highly rational author. More typical of Asimov (and one of the major landmarks in the development of the space opera) is Asimov's "Foundation" trilogy, comprising *Foundation* (1951), *Foundation and Empire* (1952), and *Second Foundation* (1953), all of which consist primarily of combinations of stories originally published in *Astounding Science-Fiction* in the 1940s. Set in the distant future, the "Foundation" novels are in a sense post-holocaust works, in that they detail a time after the collapse of the mighty Galactic Empire plunges the galaxy into a new

Middle Ages. But the novels are typical of much of the science fiction of the 1940s in their assurances of the ultimate beneficial effects of science and technology in expanding the possibilities of humankind (and making these new Middle Ages as brief, and as bright, as possible).

Asimov eventually followed this sweeping saga of a far-flung galactic federation with a fourth installment, *Foundation's Edge* (1982), then attempted to merge the Foundation sequence with his 1950s sequence of "Robot" novels and stories in *The Robots of Dawn* (1983), *Robots and Empire* (1985), *Foundation and Earth* (1986), and *Prelude to Foundation* (1988). After Asimov's death in 1992, a subsequent "Foundation" trilogy was produced, building upon his ideas and written by some of the leading American science fiction writers. This second trilogy includes Gregory Benford's *Foundation's Fear* (1998), Greg Bear, *Foundation and Chaos* (1999), and David Brin, *Foundation's Triumph* (2000).

Robert A. Heinlein also got his start in *Astounding Science-Fiction*, publishing numerous stories there in the vein of space opera. Many of Heinlein's juvenile novels of the 1950s were space operas, as were many of his short stories. The 1950s (a particularly rich decade for the subgenre) introduced a number of variations on the space opera, including novels of interstellar conflict, of which Heinlein's *Starship Troopers* (1959) is a leading early example. Heinlein's novel has influenced any number of future entries in this military variation of the space opera, including some – such as Harry Harrison's *Bill, the Galactic Hero* (1965) and Joe Haldeman's *The Forever War* (1974) – that were constructed partly as parodic responses to *Starship Troopers*. Harrison, incidentally, is also the author of a lengthy sequence of tongue-in-cheek space operas featuring the roguish anti-hero James Bolivar diGriz, better known as the "Stainless Steel Rat," beginning with *The Stainless Steel Rat* (1961) and extending through *The Stainless Steel Rat Joins the Circus* (1999).

Heinlein stories such as "Universe" (1941) and "Common Sense" (1941) pioneered the motif of the "generation starship," in which the long times potentially involved in interstellar travel are dealt with simply by populating the ship with families who live and die on the ship for generation after generation. One of the early classics of this version of the space opera, however, is Brian Aldiss's *Non-Stop* (1958, published in the US in 1959 as *Starship*), which is ostensibly set on a generation starship, but which turns out actually to be set on a ship that is in perpetual orbit around the Earth. Generation starships are typically huge, and their passengers often do not realize that they are on a starship. A variation on this "huge ship" theme is James Blish's "Cities in Flight" sequence, the last three volumes of which – comprising *Earthman, Come Home* (1955); *A Clash of Cymbals* (1958,

published in the US as *The Triumph of Time*); and *A Life for the Stars* (1962) – involve entire cities traveling about in space. Much of the time, the inhabitants of these cities are simply looking for work, in a motif that is directly compared to the migrant Okies of the 1930s. In this sense, Blish's sequence is clearly intended to recall John Steinbeck's *The Grapes of Wrath* (1939).

Another variant on the space opera is the relativistic time-dilation novel, in which starships travel near the speed of light, causing time to pass much more slowly for those on board than in the universe at large. The classic example of this sort of space opera is Poul Anderson's *Tau Zero* (1970), though time dilation is also crucial to such important works as Joe Haldeman's *The Forever War* and Orson Scott Card's sequence *Ender's Game* (1985), *Speaker for the Dead* (1986), *Xenocide* (1991), and *Children of the Mind* (1996). The subgenre of space opera is also related to the subgenre of planetary romance, in which the cultures and ecologies of entire alien planets are described. Early examples of the planetary romance include Jack Vance's *Big Planet* (1952), Hal Clement's *Mission of Gravity* (1954), and Poul Anderson's *The Man Who Counts* (1958). Frank Herbert's sf classic *Dune* (1965) is essentially a planetary romance, though its numerous sequels expand into the galactic scale more typical of the space opera proper. Among numerous later examples of the planetary romance, Aldiss's sequence *Helliconia Spring* (1982), *Helliconia Summer* (1983), and *Helliconia Winter* (1985) stands out as a particular high point.

The space opera tended to recede in prominence among the science fiction novels and stories of the 1960s and 1970s, which turned in more literary and more socially engaged directions. However, one might note here the work of the Polish science fiction writer Stanisław Lem, who wrote a number of lampoons of Western space opera during this period, while himself taking the form to a new level of intellectual seriousness in his classic *Solaris* (1961). Meanwhile, the space opera reached unprecedented new audiences with the success of Gene Roddenberry's *Star Trek* television series, which originally ran on NBC in the US from 1966 to 1969, but became even more successful beginning in the 1970s when it was widely rerun in syndication. In fact, the syndicated run of *Star Trek* became one of the most important phenomena in television history and made the series one of the most influential television programs of all time.

In addition to its continual syndicated showings, *Star Trek* has inspired a vast fan culture that includes conventions, merchandising, and an extensive sequence of related novels. The *Star Trek* phenomenon made cultural icons of both its featured spaceship, the *USS Enterprise*, and its central characters (including the histrionic Captain James T. Kirk; the hyper-logical

half-Vulcan first mate Mr. Spock; and the irascible medical officer, Dr. McCoy). The original series also grew into an extensive television franchise, spawning a succession of sequels, including *Star Trek: The Next Generation* (1987–1994), *Star Trek: Deep Space Nine* (1993–1999), *Star Trek: Voyager* (1995–2001), and *Enterprise* (2001–2005). Meanwhile, the original series spilled over into theatrical film, becoming one of the most lucrative and successful franchises in movie history. At this writing, there have been ten *Star Trek* films, the first six of which are extensions of the original series, with the original cast, though the advancing age of this cast by the time of *Star Trek VI: The Undiscovered Country* in 1991 became an increasing source of comedy as the rickety *Enterprise* crew dragged itself around the galaxy, thinning hair, thickening waistlines, and all. *Star Trek Generations* (1994) then served as a transition film that killed off Captain Kirk and handed the baton of the film franchise over to the cast and crew of *Star Trek: The Next Generation* which was just coming to the end of its television run at that time.

The collective images that make up the universe of *Star Trek* have by now become a crucial part of the popular Western imagination, while the technological trappings of the *Star Trek* universe – with its warp drives, force fields, phasers, tricorders, communicators, transporters, and replicators – have become a central source of the popular notion of what the technology of the future might be like. The seemingly optimistic political vision of the franchise has been similarly powerful; in *Star Trek* the political oppositions of twentieth-century Earth have seemingly been overcome, making the future Earth of the twenty-third and twenty-fourth centuries the capital of a vast, united, and benevolent "United Federation of Planets" that encompasses much of the galaxy, reaching out to new worlds with its message of tolerance, peace, and interplanetary cooperation.

The long-running British television sf series *Doctor Who* (1963–1989, resurrected in 2005) contained strong elements of space opera, while later television space operas such as *Babylon 5* (1993–1998) and *Farscape* (1999–2003) brought the televised form of the subgenre to a new level of sophistication. In the meantime, films from *Forbidden Planet* (1956), to *2001: A Space Odyssey* (1968), to *Star Wars* (1977) and *Alien* (1979) made space opera a major cinematic form as well. The *Star Wars* films, like the *Star Trek* and *Alien* films, turned out to be the beginning of extensive film sequences. *Star Wars* is a particularly classic example of the space opera, with its intentionally nostalgic look back to the pulps and serials of the 1930s.

While the space opera was a relatively secondary form of written sf from the 1960s to the mid-1980s, occasional important works related to the

subgenre continued to appear. Among these, one might single such works as Larry Niven's *Ringworld* (1970), which involves a gigantic ring-shaped artificial world that circles a star. In addition, C. J. Cherryh's *Downbelow Station* (1981) brought a new complexity and sophistication to the treatment of spacefaring adventure, taking such tales far beyond the days of the simplistic early space operas. Frederik Pohl's *Gateway* (1977) is also notable. It employs the standard space-opera device of faster-than-light travel to facilitate interstellar adventure, but adds an extra wrinkle in that this travel is accomplished via ships left behind by the mysterious Heechee alien civilization. The humans who "pilot" these Heechee craft must basically go wherever the ships are programmed to take them – only hoping that the destination will be safe and profitable. Ursula K. Le Guin's entire sequence of "Hainish" novels also centrally rely on the remnants of an ancient, now-lost civilization. This sequence features a far-flung galactic federation, enabled by the fact that ancient explorers from the planet Hain spread human civilization (and DNA) across the galaxy perhaps a million years earlier. The administration of this federation, meanwhile, is facilitated by the development of communication devices known as "ansibles," which allow essentially instantaneous communication across interstellar distances. Many of the Hainish novels are actually detailed explorations of specific planetary cultures, as in *The Left Hand of Darkness* (1969), *The Word for World is Forest* (1972), and *The Dispossessed* (1974).

Bruce Sterling's *Schismatrix* (1985) was a key text in what turned out to mark the beginning of a resurgence in the space opera in American science fiction. Combining motifs from cyberpunk, posthuman, and alien invasion science fiction with the basic space opera conceit of humans living in manmade outer-space habitats, Sterling's novel demonstrated the ongoing relevance of space opera as a subgenre of written science fiction. It was accompanied by numerous other important works in the subgenre by American writers. Another early entry in the space opera resurgence was Greg Bear's *Eon* (1985), featuring a vast alien space habitat constructed from an asteroid using advanced technologies that make it possible for the inside to be bigger than the outside, apparently even approaching the infinite. Dan Simmons's *Hyperion* (1989, followed the next year by a sequel, *The Fall of Hyperion*) maintains a basic space opera scenario, but adds an exploration of complex metaphysical ideas, while employing a narrative structure of storytelling derived from Chaucer's *Canterbury Tales*. Also important are Vonda McIntyre, who wrote several novels in the *Star Trek* sequence, as well as independent space operas such as *Superluminal* (1977), and Lois McMaster Bujold, much of whose somewhat humorous work (including the early entries in the "Vorkosigan" saga, named for the severely

disabled interstellar spy and mercenary Miles Vorkosigan) involves space operas featuring a future universe of space colonies connected by faster-than-light travel via wormholes.

A particularly inventive addition to the space opera is David Brin's "Uplift" sequence, a series of six novels (published between 1980 and 1998) in which Brin imagines a vast and ancient galactic civilization of numerous oxygen-breathing intelligent species (there are also other kinds of intelligent species that are not part of this system), each of which was "uplifted" to sentience through the intervention of another, older sentient species, in a sequence going all the way back to the Progenitors, the first intelligent species in the galaxy. In a sort of echo of the "white man's burden," sentient species generally see it as their duty to uplift any promising pre-sentient species they may encounter, thus enriching galactic culture by expanding the pool of intelligent life. However, newly uplifted species must serve an extended period of apprenticeship in which they serve their patron species essentially as indentured labor – and are sometimes brutally exploited by their patrons.

Brin thus presents as fundamental to intelligent life in the galaxy a paternalistic and hierarchical relation between species that is highly reminiscent of the legacy of colonialism and racism on Earth. On the other hand, his books are often critical of this system (especially as it is abused by certain species), while at the same time presenting the human race as a potential sport that might have evolved intelligence independently without the intervention of a patron. (In turn, humans have uplifted chimpanzees and dolphins even before they encounter the wider galactic civilization, and they seem to treat these "client" species with much more equanimity than is typical in the galaxy.)

Especially noteworthy (but only vaguely space operatic) among the American science fiction novels of the 1990s are the entries in Kim Stanley Robinson's "Mars" trilogy, including *Red Mars* (1993), *Green Mars* (1994), and *Blue Mars* (1996). Here, Robinson elaborates in great technological and sociological detail an effort to terraform Mars to make it suitable for colonization by humans, thus relieving some of the pressures caused by overpopulation and other pressures on Earth. In the meantime, he very deftly explores the various political debates involved in this project to build a new world system that hopefully avoids the previous mistakes made on Earth – while fighting off the attempts of Earth-based corporations to seize control of the project.

Mathematician Vernor Vinge, perhaps best known for his popularization of the idea of the technological singularity, made major contributions to the space opera in the 1990s with his Hugo Award-winning far-future epics

A Fire upon the Deep (1992) and *A Deepness in the Sky* (1999), which take place in a universe mostly divided into two regions, The Slow Zone and The Beyond. Because of the basic physical properties of the universe in each zone, much more advanced thought (including the computational abilities required to develop faster-than-light travel) is possible there. Earth, however, resides in The Slow Zone, limiting the kind of technology that can be developed there. (There is also an additional region, The Transcend, in which almost limitless technological advances are possible, thanks to the existence of vastly superhuman post-singularity artificial intelligences known as The Powers.)

Vinge's notion of such posthuman intelligences makes his work an important forerunner of the numerous space operas that have appeared in the early twenty-first century. For example, the Australian Greg Egan envisions a vastly advanced human race that has largely mastered the stars, sometimes shedding their corporeal bodies to facilitate interstellar travel. Vinge is also an important predecessor of much of the recent resurgence in British science fiction, sometime referred to as the British Boom. Indeed, while some of the best-known British space operas before the 1990s were actually lampoons of the form – including M. John Harrison's *The Centauri Device* (1974) and Douglas Adams's *The Hitchhiker's Guide to the Galaxy* and its variants and sequels – the writers of the British Boom have brought British space opera to the very forefront of the subgenre. These writers have often added a new level of literary sophistication to the space opera, while frequently combining it with themes and technologies more typical of other subgenres, especially cyberpunk.

Both Charles Stross and Ken MacLeod, for example, have envisioned post-singularity universes in which advanced artificial intelligences evolve at spectacular speeds, then develop a variety of high-tech capabilities (including interstellar travel), after which they seemingly wink out of existence, perhaps moving into a different dimension of reality. The remaining humans are able, to some extent, to take advantage of the technologies left behind by the artificial intelligences, though they are sometimes limited by their inability to understand these posthuman technologies. In addition, in the future galaxy of Stross, certain technological advances (especially time travel) are limited by the intervention of a far-future posthuman entity known as the Eschaton, which seeks to prevent any changes in the historical time line that led to its own evolution. Stross's *Singularity Sky* (2003), *Iron Sunrise* (2004), and *Accelerando* (2005) and MacLeod's *The Stone Canal* (1996), *The Cassini Division* (1997), *Cosmonaut Keep* (2001), *Dark Light* (2002), and *Newton's Wake* (2004) – are particularly interested in the social, political, and economic dimensions of their future post-singularity

galaxies, producing serious and intelligent explorations of these issues that are a far cry from the pulp origins of the space opera. Meanwhile, MacLeod's recent *Learning the World* (2005) is space opera in a more classic vein, involving an expedition to colonize another star system that turns out already to have intelligent inhabitants.

Peter Hamilton has produced a number of space operas on a grand scale and in a fairly classic vein, updated with the latest in science fiction technology. His space operas include the entries in the "Night's Dawn" trilogy (1996–1999), so massive (more than 1,000 pages each) that they were published in the US in six volumes. *Fallen Dragon* (2001) is a standalone novel that in many ways reads as a condensation of many of the central ideas of "Night's Dawn," while its dark depiction of an ultra-capitalist future world complicates Hamilton's reputation (gained partly from a series of early anticommunist dystopian novels) as a promoter of capitalism. *Pandora's Star* (2004) and *Judas Unchained* (2005) are also large-scale space operas. Also worthy of note are the recent space operas of Alastair Reynolds, including *Revelation Space* (2000), *Redemption Ark* (2002), and *Absolution Gap* (2004). Writing somewhat more in a classic space opera vein than Stross and MacLeod, Reynolds nevertheless resembles them in his combination of motifs (and technologies) from a variety of different science fictional subgenres.

Other important recent British space operas include John Clute's *Appleseed* (2001) and the volumes of Colin Greenland's "Plenty" trilogy, notable for their use of a female protagonist. Harrison, having seemingly dismissed the space opera in *The Centauri Device*, himself returned to the form with *Light* (2002), a rousing entry that enthusiastically employs the space opera form that Harrison had seemingly rejected in *The Centauri Device*. Justina Robson introduces a number of interesting elements to the space opera in *Natural History* (2003), including the notion of "forged," or genetically engineered humans who are designed to performed a variety of specialized tasks, including serving as intelligent starships. Meanwhile, Richard K. Morgan's "Takeshi Kovacs" novels resemble the works of Stross and MacLeod in their use of cyberpunk conceits within the space opera form. In fact, the first novel in this sequence, *Altered Carbon* (2002) is almost pure cyberpunk, but the series evolves in the sequels, *Broken Angels* (2004) and *Woken Furies* (2005), more into the vein of space opera, including an especially interesting treatment of the motif of salvaging leftover alien technologies.

Worthy of special note among the space operas produced in the British Boom are the "Culture" novels of Iain M. Banks, a multinovel sequence that both builds upon a number of classic precedents in science fiction and

explores genuinely new territory. These novels elaborate the political, social, and cultural practices of the Culture, a vast (and vastly advanced) intergalactic federation governed by hyper-intelligent artificial intelligences known as Minds. However, Banks gives a refreshing twist to this potentially dystopian motif by instead making it utopian, at least on the surface: the Minds are efficient and benevolent rulers who manage the affairs of humans far better than humans could ever hope to. Further, humans in this highly affluent machine-ruled society live rich, healthy, and active lives (with potentially limitless lifespans), somewhat in the tradition of the technology-enabled utopian future Earth envisioned in the *Star Trek* franchise. Their principal problem is the potential for boredom, given that all of their major problems are solved in advance by the Minds. They do, however, find a variety of exciting and fulfilling ways to spend their time and explore their personal creativity. Perhaps the most problematic aspect of the Culture is its tendency to meddle in the affairs of other civilizations that they encounter in space (one of the ways the humans in the Culture try to add meaning and purpose to their lives), trying to nudge those other civilizations toward the kind of egalitarian society that they themselves have. Among other things, this motif creates sources of conflict that add plot interest, but Banks clearly presents the interventionism of the Culture as a far different phenomenon than the imperialism of Earth's past. While Europeans felt justified in colonizing most of the globe because of their confidence in the superiority of their way of life, the Culture is not interested in colonization. Moreover, the intellects of the Minds are so vast (and so objective) that cultural relativism might not apply here: the Culture may really *be* the best possible society, an achievement it is only attempting to share with others. However, this motif is far from simple in Banks's novels. Even the Minds can make mistakes, and their attempts to intervene in the evolution of other cultures can sometimes lead to unforeseen bad results. Further, Banks maintains a certain tension in his depiction of life within the Culture, leaving open the possibility that life there is not as utopian as it might first appear, possibly because human beings themselves are too limited to exploit fully the opportunities offered them by the Minds.

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Apocalyptic and Post-Apocalyptic Fiction

Ancient literature, produced by a low-technology human culture that was very much at the mercy of natural phenomena, is filled with tales of natural (or supernatural) disaster and its aftermath. However, Mary Shelley's *The Last Man* (1826) – in which a deadly plague gradually wipes out humanity while the immune protagonist looks on – is quite often identified as the first postapocalyptic science fiction tale. Other tales of apocalypse and post-apocalypse appeared over the next 120 years, with Richard Jefferies's *After London* (1885) providing an important milestone in the development of the subgenre into its modern form. However, it was not until the atomic bombing of Hiroshima in August, 1945, followed by Cold War nuclear tensions, that post-apocalyptic stories – especially those dealing with nuclear holocaust and its aftermath – were propelled to the forefront of science fiction.

Writing about the science fiction films of the 1950s, Susan Sontag argues that these films reflect what she calls "the imagination of disaster" (*Imagination*). These films, she notes, are typically about disasters wrought by the irresponsible use of science, though science, used responsibly, can also be the key to dealing with the disasters. The same can be said for many of the novels and short stories of the 1950s. Given the Cold War political climate of the twenty or so years after World War II, it is not surprising that many of the most important science fiction works of the period dealt in one way or another with the possibility of nuclear holocaust and its aftermath. However, one of the first important postwar disaster narratives was George R. Stewart's *Earth Abides* (1949), which deals, not with the impact of nuclear war, but with a mysterious plague that sweeps across America, killing virtually everyone within a matter of days.

In Stewart's plague-decimated US, there are scattered survivors, who are immune to the plague. Some of these survivors ultimately join together to form the Tribe, a group that ultimately moves toward a return to a simpler life as hunter-gatherers, clearly based on the lifestyle of the Native Americans whose culture was virtually destroyed by the advance of modern American civilization. In this sense, Stewart's book anticipates many later post-apocalypse fictions, such as Leigh Brackett's *The Long Tomorrow* (1955), which describes an agrarian, deeply technophobic society that develops after a nuclear war.

Judith Merril's *Shadow on the Earth* (1950) builds directly upon the tensions of the Cold War, presenting an apocalypse that arises precisely from a surprise nuclear attack on the United States, though it does not specifically identify the attackers as Soviets. But Merril's book is highly unusual among post-apocalypse works of the 1950s in its focus on a female protagonist, housewife Gladys Mitchell, who attempts to cope with the aftermath of the nuclear assault, not by exploring the surrounding area or attempting to rebuild society, but simply by keeping her household running and taking care of her two daughters.

In so doing, Gladys must overcome a variety of obstacles, including the American security forces, who take charge in the wake of the attack, allowing them to act out their right-wing male fantasies of domination and control. Far from heroizing the flag-waving patriots who defend us from the Soviet nuclear attack (which arose from conditions in which the Americans were equally culpable), *Shadow on the HEarth* eerily anticipates the Patriot Act era by suggesting that there are opportunists among us who are anxious to use such an attack (or, by extension, even the threat of such an attack) as an excuse for establishing their own repressive measures.

John Wyndham's *The Day of the Triffids* (1951) gives the post-apocalyptic tale a twist that draws upon the horror genre in its vision of deadly, ambulatory, meat-eating plants that spread across the globe, threatening human hegemony over the planet. This threat is made especially serious because humanity has been weakened by widespread blindness as the result of a mysterious meteor shower. Though it does not feature a nuclear war, *The Day of the Triffids* (adapted to film in 1962), shows the impact of Cold War tensions by hinting that the deadly plants may have originally been engineered in the Soviet Union, which hovers in the text as a inscrutable and indefinite menace.

Bernard Wolfe's *Limbo* (1952) is a more clearly political novel, though the exact nature of its politics is difficult to determine. In fact, *Limbo* is ambiguous in a number of ways, and Wolfe's description of the book, in his postscript, as a "grab bag of ideas that were more or less around at the

mid-century mark" is accurate (*Limbo*, 435). Nevertheless, the very scope of this grab bag makes *Limbo* a valuable social document, while at the same time serving as a demonstration of the intellectual ambitiousness of the book. The book is also ambitious in a literary sense, making extensive use of allusions, puns, and other wordplay in the midst of an exploration of the baleful aftermath of an all-out nuclear war, as survivors on both the American and Soviet sides strive to rebuild civilization, while ostensibly taking steps to ensure that such a nuclear holocaust can never again occur.

Limbo focuses on the experiences of Martine, a talented brain surgeon, who has been living for eighteen years on a remote Indian Ocean island to which he fled in the midst of World War III. When he returns to civilization, he learns that the United States has now been reduced to the Inland Strip, an area with a population of about 38 million that is the only habitable part of the former US. Both coasts have been devastated in the nuclear war, orchestrated on each side by giant computers. Martine discovers to his horror that both the Inland Strip and the Eastern Union (the remnants of the Soviet Union) are now dominated by a culture of "Immob," or immobilization. Central to this culture is "vol-amp," or voluntary amputeeism, a sort of literalization of the notion of disarmament. It is widely believed in this culture that amputation of the limbs reduces natural human aggression, thus helping to keep the peace and prevent further nuclear wars. Extreme though this measure might be, it is also hypocritical. As it turns out, both sides have been stockpiling nuclear weapons for years, mouthing détente, while secretly preparing for war, which in fact breaks out late in the book.

Limbo is not a serious attempt to envision what life and society might be like in the aftermath of a nuclear holocaust. Rather, it is a Menippean satire that comments on Wolfe's own contemporary world, employing both its future setting and its outrageous images as techniques of cognitive estrangement. Much of Wolfe's critique is aimed at the regimented society of his fictional future, clearly meant as a commentary on the societies of both the United States and the Soviet Union in the 1950s. This critique provides many points of contact between his book and the tradition of dystopian fiction, which clearly has much in common with post-apocalyptic fiction. Even more reminiscent of dystopian fiction is Mordecai Roshwald's *Level 7* (1959), set in a huge underground bomb shelter the inhabitants of which are attempting to survive the effects of a massive nuclear war. In a clear satirical commentary on the regimentation of American life in the 1950s, life in the facility is highly regulated: every activity (including conjugal meetings) must be performed according to a strict schedule. Eventually, even this facility is unable to protect its inhabitants from death, as the devastating effects of the nuclear holocaust gradually seep downward to Level 7, the lowest and

presumably most secure level in the facility. Among other things, *Level 7* thus warns Americans not to develop a false sense of security that thorough preparations can save them from the effects of nuclear war.

Richard Matheson's *I Am Legend* (1954) combines Stewart's bio-catastrophe with the fictions of nuclear holocaust that are conventionally associated with the fears of the 1950s. Here, nuclear war somehow spurs the growth of bacteria that turn everyone on Earth (except protagonist Robert Neville) into vampires. Neville spends his life alone, barricaded in his house at night, then carrying out guerrilla raids in the daytime, when the vampires sleep. In response, the vampires lay nightly siege to Neville's house in an attempt to wipe out their last remaining enemy. However, Matheson's treatment of the Us versus Them opposition between Neville and the vampires turns out to be far more interesting than any quick summary of the scenario might lead one to suspect. At the very beginning of the book, Neville recognizes the conformism of the vampires, realizing that they cannot tolerate his difference. He also realizes the irony that the vampires are now on top, having been, throughout history, an outcast minority against whom the majority has shown extreme prejudice. Yet, despite his own embattled predicament, Neville concludes that the historical hatred of vampires might have been unfair. He wonders, for example, if the vampire is "worse than the manufacturer who set up belated foundations with the money he made by handing bombs and guns to suicidal nationalists?" (*Legend*, 32).

In the end, Neville is finally overwhelmed by the vampires as they seek to set up a new vampire society. The book then takes a startling turn when he realizes that the poles of normality and abnormality have now been reversed. As the majority, the vampires are now normal; as a one-of-a-kind freak (who has, among other things, been going about committing mass murder by driving stakes through the hearts of sleeping vampires), he is the abnormal one, the one who is a danger to organized society. Thus, in a final passage that gives the book its title, Neville realizes that he will go down in the history of the new vampire society as a legendary terror, playing the role that Dracula had played in the former human society (*Legend*, 170).

Matheson's basic scenario is so compelling that his novel has been adapted to film three times, though all three adaptations – *The Last Man on Earth* (1964, starring Vincent Price), *The Omega Man* (1971, starring Charlton Heston), and *I Am Legend* (2007, starring Will Smith) have tended to romanticize the protagonist more than does the book. Such romanticization of apocalypse survivors has appeared in numerous novels as well, particularly in works such as Pat Frank's *Alas, Babylon* (1959). Frank's book deals overtly with war between the United States and the Soviet Union, though it provides relatively few details of the war itself,

concentrating instead on the struggles of the inhabitants of a small Florida community, Fort Repose, to survive in the wake of the cataclysmic conflict. *Alas, Babylon* (like much of Frank's work) is extremely representative of a certain style of conservative thought in the 1950s in that it treats nuclear war as inevitable, while warning (echoing a central theme of Frank's best-selling nonfictional writings) that the US is sorely prepared for such a war.

Worse, Frank seems almost to revel in the destruction of the modern American system, depicting post-holocaust Fort Repose as a kind of laissez-faire utopia, where strong individuals can work out the solutions to their problems without the interference of government regulations and bean-counting bureaucrats. Indeed, Frank seems relatively unconcerned about the massive destruction and loss of life associated with the nuclear attack. Perhaps there is even a sort of I-told-you-so satisfaction in Frank's fantasy of what will happen to the US as a result of not heeding his warnings. There is also a sense that the destruction of the country returns it to the "good old days" of the American frontier, when men were men and women were women, and the bureaucracy of the modern welfare state did not interfere with the ability of strong individuals to carry out their plans and fulfill their desires.

Perhaps the most critically respected post-holocaust novel of the 1950s is Walter Miller's *A Canticle for Leibowitz* (1959). Actually a series of three novellas, Miller's book employs a vision of cyclic history to trace the course of civilization from the year 2570 (six hundred years after a nuclear holocaust has plunged humanity into a second Dark Ages), to the year 3174 (when a second Renaissance announces a rebirth of science and culture), to the year 3781 (when civilization has recovered its former heights, only again to destroy itself via nuclear war). The book, though informed by considerable ironic humor, suggests an extremely dark and pessimistic vision of human civilization, arguing that humans need to use science and technology in order to fulfill their potential, but that they will inevitably misuse these tools, leading to their own destruction.

Pierre Boulle's *Planet of the Apes* (1963) envisions a postnuclear holocaust world in which human civilization has collapsed, to be replaced by a civilization ruled by intelligent apes. This novel inspired the 1968 film of the same title, which became one of the best-known works in all of American popular culture. Both the novel and the film also contain numerous satirical commentaries on contemporary human society, gaining cognitive dissonance through displacement into the far-future ape-ruled society. The film was remade in 2001, but (reflecting the changed nature of popular anxieties) dropped the nuclear theme and instead viewed the fall of humanity (and rise of the apes) as the result of genetic engineering gone awry.

The true poet of post-apocalypse during the postwar period is probably Philip K. Dick, who wrote a whole series of such fictions, including *The World Jones Made* (1956), *The Man Who Japed* (1956), *Vulcan's Hammer* (1960), *The Penultimate Truth* (1964), and *Dr. Bloodmoney* (1965). Of these, only the last makes any serious attempt realistically to depict conditions that might prevail after a nuclear war, and all are satirical fictions that use their post-holocaust settings merely to provide a fresh perspective from which to critique the already dystopian character of contemporary American capitalist society. However, *Dr. Bloodmoney* is unique among Dick's post-holocaust novels in a number of ways. Most importantly, it is the only one of Dick's post-holocaust novels of the long 1950s that includes important utopian elements, as numerous critics have noted. Ultimately, *Dr. Bloodmoney* is powerful as social commentary because the negative aspects of its post-holocaust world are the ones that most resemble the characteristics of Dick's contemporary America, while the positive aspects of his post-holocaust world are those that differ most dramatically from conditions in America at the end of the long 1950s.

The post-holocaust films that appeared during the 1950s often seemed designed to calm the nuclear fears of the decade, frequently displacing their vision of nuclear holocaust into the far future and often providing happy endings to assure audiences that everything would be fine, nuclear holocaust or no. The post-holocaust films of the decade generally present far less troubling images than do the novels, both in their representation of nuclear devastation and in their commentary on contemporary American society. Still, these films do attempt to make certain political points, ranging from the vaguely left-wing antiracist perspective of Arch Oboler's early effort, *Five* (1951), to the almost deranged anticommunism of William Asher's *The 27th Day* (1957).

Stanley Kramer's *On the Beach* (1959) is one of the most sanitized of all the post-apocalypse films of the 1950s. In this film, set in 1964 and based on Nevil Shute's bestselling 1957 Australian novel of the same title, a global nuclear war has apparently destroyed all human life everywhere on Earth, except Australia, which has been spared because of its remote location. Unfortunately, the clouds of deadly radiation that cover the rest of the globe are headed for Australia as well, so the Australians themselves have only a few months before what seems to be inevitable death.

To an extent, *On the Beach* is more human drama than science fiction, as it details the poignant attempts of the various characters to cope with their impending dooms. Indeed, while the how-could-we-be-so-stupid senselessness of the nuclear war looms in the margin as a message throughout, Kramer also seems to have wanted to make the film a sort of universal

commentary on how human beings come to grips with the realization of their own certain mortality. There are no corpses, no radiation burns, not even property damage. While we do see shots of post-holocaust San Francisco and San Diego, the cities are entirely undamaged. The only change is that all the people seem to have disappeared. As such, the film's anti-arms race message is muted, though still clear.

Other post-holocaust films of the long 1950s were even more indirect in their representation of nuclear war and its aftermath: graphic on-screen depictions of the actual effects of nuclear war were rare until the mid-1980s, when a spate of such films appeared, including *The Day After* (1983), *Testament* (1983), and *Threads* (1985). For example, in Edward Bernds's *World Without End* (1956), the nuclear holocaust is projected hundreds of years into the future, and the film itself is set hundreds of years after that, when radiation levels have essentially returned to normal. Many aspects of *World Without End* seem derived from H. G. Wells's classic 1895 novel, *The Time Machine*, the original far-future post-apocalypse tale, which would be adapted more directly to film a few years later in George Pal's *The Time Machine* (1960).

Ray Milland's *Panic in Year Zero* (1962) resembles *On the Beach* in its focus on the human drama of the survivors of the disaster, not the human tragedy of the victims. There are again no actual signs of nuclear destruction, though the film does depict certain negative consequences, such as the looting, rape, and murder that occur in the wake of a nuclear attack. Ultimately, the film becomes a sort of adventure tale, in which the protagonists heroically deal with the adversities they encounter as a result of the nuclear holocaust. A British film, Val Guest's *The Day the Earth Caught Fire*, also released in 1962, is less romantic in its dramatization of nuclear-related destruction, but it displaces this destruction from nuclear war to nuclear testing, which inadvertently sends the Earth careening off course and hurtling toward the sun. Meanwhile, it ends as the Russians and Americans work together to try to save the Earth, but eschews the easy solution of a happy ending, closing with the outcome of these efforts still in doubt.

The nuclear-holocaust films of the 1950s led directly to a series of what might be called pre-holocaust films. No doubt influenced by the perceived close call of the 1962 Cuban missile crisis, each of these films in its own way deals, not with the aftermath of a nuclear holocaust, but with a proposed scenario that might be envisioned as leading to such a holocaust. Such films include John Frankenheimer's *Seven Days in May* (1964) and Sidney Lumet's tense thriller, *Fail-Safe* (1964). The best of these films, however, was Stanley Kubrick's brilliant *Dr. Strangelove, or, How I Learned to Stop*

Worrying and Love the Bomb (1964), which, more than any other single film, captured the lunacy of the Cold War mentality, while at the same time suggesting that certain American attitudes in the Cold War might have been inherited from the Nazis. *Dr. Strangelove* is highlighted by the triple-threat performance of Peter Sellers as its ex-Nazi title character, as well as British air force officer Lionel Mandrake and US President Merkin Muffley. With its parodic focus on the comic absurdity of the arms race, it became a cult favorite of the 1960s' youth movement and was one of the classics of American culture of the 1960s, even though, strictly speaking, it is a British film, produced at London's Hawk Studios.

From the 1960s forward, post-disaster fiction began to focus less on nuclear holocaust and more on the possible disastrous consequences of phenomena such as pollution and overpopulation. For example, Anthony Burgess's *The Wanting Seed* (1962), Harry Harrison's *Make Room! Make Room!* (1966, adapted to film as *Soylent Green* in 1973), and John Brunner's *Stand on Zanzibar* (1968) all deal with the consequences of overpopulation. Ecological catastrophe is at the heart of such works as Brunner's *The Sheep Look Up* (1972), which explores ecological concerns in its projection of future environmental pollution and its social and political consequences, helping to establish an important new strand of apocalyptic fiction, though it might be noted that J. G. Ballard, in a sequence that includes *The Drowned World* (1962), *The Burning World* (1964), and *The Crystal World* (1966) had already envisioned various forms of ecological calamity. Kate Wilhelm's *Where Late the Sweet Bird Sang* (1976) also deals with the aftermath of environmental collapse on Earth. In film, Douglas Trumbull's *Silent Running* (1972) posits a future environmental collapse on Earth, leading to attempts to preserve nature in outer space.

David Brin's *Earth* (1990) provides an effective panoramic look at global environmental degradation, nearly leading to the death of the planet (though featuring a *deus ex machine* rescue in the end). Kim Stanley Robinson has written a number of works warning of the possible disastrous consequences of environmental irresponsibility, beginning with *The Gold Coast* (1988), the middle volume of his "Three Californias" trilogy, in which environmental decay is only one of numerous dire consequences of runaway capitalist development. Robinson's environmentalist concerns are also front and center in his masterwork, the "Mars" trilogy, which produces cognitive dissonance by removing those concerns to another planet. However, Robinson's *Forty Signs of Rain* (2004), *Fifty Degrees Below* (2005), and *Sixty Days and Counting* (2007) constitute a near-future trilogy that gains urgency from its relatively realistic depiction of the potentially disastrous effects of global warming – and the need for more effective official

responses to this looming disaster. Global warming and environmental decay also play a role in the social collapse that is central to the dystopian visions in works such as Octavia Butler's "Parable" sequence and Jack Womack's "Dryco" series.

A particularly interesting take on the post-nuclear holocaust narrative is Russell Hoban's *Riddley Walker* (1980), which is especially important for its innovative use of language, as Hoban attempts to portray a post-apocalypse England in which language itself (along with other elements of civilizations) has dramatically decayed. Hoban's credible vision of post-apocalyptic language overcomes a shortcoming of most works of the subgenre, which typically portray language as relatively unchanged, whatever apocalyptic events might have occurred. *Riddley Walker* has influenced a number of subsequent works, one of the most notable of which is Will Self's *The Book of Dave* (2006), which similarly attempts to imagine the devolved language of a post-apocalyptic England – now largely ruled by a "sacred" text that is actually the ramblings of a deranged twentieth-century London cabbie.

Other recent fictions have posited a variety of possible future disasters. For example, in Brin's *The Postman* (1985, adapted to film in 1997), a series of catastrophes occurs, but the real collapse of civilization is brought about not by the catastrophes themselves, but by the response of right-wing survivalist groups to these catastrophes. Robert Charles Wilson's *Darwinia* (1998) features the sudden and seemingly miraculous disappearance of Europe and parts of Asia and Africa, to be replaced by alien lands inhabited by strange extraterrestrial flora and fauna. In Margaret Atwood's highly literary *Oryx and Crake* (2003), experiments with genetic engineering lead to the spread of a deadly plague that wipes out most of humanity, leaving the protagonist, Snowman, to live as the last man on Earth among a variety of strange genetically engineered hybrid creatures.

Post-apocalyptic narratives potentially contain a strong element of heroic adventure, which probably explains why they have maintained a consistent popularity as a subgenre of film from the 1950s forward. Indeed, some of the best-known science fiction films of all time involve post-apocalyptic elements of one kind or another. For example, the three *Mad Max* films, especially *Mad Max 2: The Road Warrior* (1981), have included some of the most compelling and influential images in recent world cinema. In addition to such classics as *Planet of the Apes* (2001) and *Blade Runner* (1982), the three *Terminator* films are set largely in a pre-apocalypse world, but centrally involve time travelers from a post-apocalyptic future. Terry Gilliam's *Twelve Monkeys* (1995) also involves post-apocalypse time travelers, this time seeking to return to the past to prevent the apocalyptic plague that

virtually destroyed their world. The three *Matrix* films take place in a post-apocalyptic world brought about, like that in the *Terminator* films, by a war between humans and intelligent machines. Big-budget films such as *Waterworld* (1995) and *The Day after Tomorrow* (2004) grow out concerns about global warming, while George Romero's various "living dead" zombie films represent another kind of post-apocalyptic tale, as do the graphic zombie horror film *28 Days Later* (2002) and its sequel *28 Weeks Later* (2007).

Post-apocalyptic tales have also been prominent in other forms of popular culture, including television and comics. Television series such as *Jericho* (2006–2008) and *Dark Angel* (2000–2002) have had post-apocalyptic themes, which have also been prominently featured in individual episodes of anthology series such as *The Twilight Zone* and *The Outer Limits*. Meanwhile, one of the most popular comics of recent years has been Brian K. Vaughan's *Y: The Last Man*, which deals with the aftermath of a mysterious plague that suddenly strikes down virtually all males on Earth, except, of course, for the "last man" of the title. Such efforts indicate the ongoing popularity of the subgenre, even more than a decade after the Cold War that originally propelled it into prominence.

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David Brin, *The Postman* (1985) and *Earth* (1990).
John Brunner, *Stand on Zanzibar* (1968) and *The Sheep Look Up* (1972).
Anthony Burgess, *The Wanting Seed* (1962).
Angela Carter, *Heroes and Villains* (1969) and *The Passion of New Eve* (1977).
Philip K. Dick, *The World Jones Made* (1956), *The Man Who Japed* (1956), *Vulcan's Hammer* (1960), *The Penultimate Truth* (1964), *Dr. Bloodmoney* (1965), and *Do Androids Dream of Electric Sheep?* (1968).
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Mordecai Roshwald, *Level 7* (1959).
Will Self, *The Book of Dave* (2006).
Mary Shelley, *The Last Man* (1826).
George R. Stewart, *Earth Abides* (1949).
Kate Wilhelm, *Where Late the Sweet Birds Sang* (1976).
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Bernard Wolfe, *Limbo* (1952).
John Wyndham, *The Day of the Triffids* (1951).

Notable Films

The 27th Day. Dir. William Asher, 1957.
28 Days Later. Dir. Danny Boyle, 2002.
28 Weeks Later. Dir. Juan Carlos Fresnadillo, 2007.
The Andromeda Strain. Dir. Robert Wise, 1971.

Blade Runner. Dir. Ridley Scott, 1982.
A Boy and His Dog. Dir. L. Q. Jones, 1975.
Dawn of the Dead. Dir. George Romero, 1978.
The Day After. Dir. Nicholas Meyer, 1983.
The Day after Tomorrow. Dir. Roland Emmerich, 2004.
The Day the Earth Caught Fire. Dir. Val Guest, 1962.
The Day of the Triffids. Dir. Steve Sekely, 1962.
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Fail-Safe. Dir. Sidney Lumet, 1964.
Five. Dir. Arch Obeler, 1951.
I Am Legend. Dir. Francis Lawrence, 2007.
Land *of the Dead*. Dir. George Romero, 2005.
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Mad Max 2: The Road Warrior. Dir. George Miller, 1981.
The Matrix (1999), *The Matrix Reloaded* (2003), and *The Matrix Revolutions* (2003). Dirs. Andy Wachowski and Larry Wachowski, 1999.
Night of the Living Dead. Dir. George Romero, 1968.
The Omega Man. Dir. Boris Sagal, 1971.
On the Beach. Dir. Stanley Kramer, 1959.
Panic in Year Zero. Dir. Ray Milland, 1962.
Planet of the Apes. Dir. Franklin J. Schaffner, 1968.
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Silent Running. Dir. Douglas Trumbull, 1972.
Soylent Green. Dir. Richard Fleischer, 1973.
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The Time Machine. Dir. George Pal, 1960.
Threads. Dir. Mick Jackson, 1985.
Twelve Monkeys. Dir. Terry Gilliam, 1995.
Waterworld. Dir. Kevin Reynolds, 1995.
World Without End. Dir. Edward Bernds, 1956.

Dystopian Science Fiction

If a utopia is an imaginary ideal society that dreams of a world in which the social, political, and economic problems of the real present have been solved (or at least in which effective mechanisms for the solutions to these problems are in place), then a dystopia is an imagined world in which the dream has become a nightmare. Also known as anti-utopias, dystopias are often designed to critique the potential negative implications of certain forms of utopian thought. However, dystopian fiction tends to have a strong satirical dimension that is designed to warn against the possible consequences of certain tendencies in the real world of the present. After a flurry of utopian fictions at the end of the nineteenth century, dystopian fiction became particularly prominent in the twentieth century, when suspicions of utopian solutions to political and social problems became increasingly strong as those problems grew more and more complicated and as events such as the rise of fascism in Europe seemed to cast doubt on the whole Western Enlightenment project.

If utopian societies are typically designed to enable the maximum fulfillment of individual human potential, dystopian societies impose oppressive conditions that interfere with that fulfillment. These oppressive conditions are usually extensions or exaggerations of conditions that already exist in the real world, allowing the dystopian text to critique real-world situations by placing them within the defamiliarizing context of an extreme fictional society. Dystopian fiction tends to focus on certain key motifs and ideas that in one way or another involve an opposition between social control and individual desire. In the dystopian state, however, social control generally has the upper hand. Official institutions such as churches, schools, and the police are used to regulate thought, imagination, and behavior, providing individuals with a very limited range for the expression of alternative viewpoints or exploration of alternative lifestyles. Modes of activity that Western societies have traditionally seen as crucial sites for the development of

individual identity and fulfillment of individual desire (such as art and sexuality) tend to be monitored and controlled with a special intensity by dystopian regimes, often through the use of high technology devices for surveillance, mind control, and punishment.

The three crucial founding texts of modern dystopian science fiction are Yevgeny Zamyatin's *We* (1924), Aldous Huxley's *Brave New World* (1932), and George Orwell's *Nineteen Eighty-Four* (1949). These three texts directly address (and critique) the two major political systems of twentieth-century modernity. *We* warns against potential abuses of the postrevolutionary system in the Soviet Union; *Brave New World* looks in the other direction, projecting nightmarish extensions of the current system of Western capitalism; *Nineteen Eighty-Four* is suspicious of both capitalism and socialism, suggesting that either, as it exists in Orwell's 1940s world, has the potential to develop into an oppressive totalitarian system devoted primarily to its own preservation rather than to enriching the lives of its citizens. The plots of all three of these novels center around the (failed) attempts of individual heroes (Zamyatin's D-503, Huxley's Bernard Marx, and Orwell's Winston Smith) to overcome the suppression of individualism by their dystopian states. In this and other ways, they set the tone for many of the dystopian texts that followed them.

Written in the early years following the Bolshevik Revolution of 1917, *We* is an openly satirical text that makes no pretense toward realism. However, it establishes numerous motifs that would be central to later works of dystopian fiction, including later Soviet works such as Andrei Sinyavsky's *The Makepeace Experiment* (1963), Alexander Zinoviev's *The Yawning Heights* (1976), and Vladimir Voinovich's *Moscow 2042* (1987). It also exercised an especially obvious influence on Ayn Rand's *Anthem* (1938), an intensely individualistic American work of anti-Soviet dystopian fiction.

We addresses a number of issues and concerns of broad relevance to modern society, though it is most specifically aimed at Zamyatin's own Soviet context. For example, in stark contrast to the faith shown in science, technology, and rationality by Lenin and the other early Soviet leaders, *We* is centrally informed by a fear of the dehumanizing potential of technology and of an excessive insistence on rational solutions to all human problems. Importantly, however, *We* does not reject science and rationalism, per se, nor does it oppose the Bolshevik Revolution in itself. Nevertheless, it is powerful in its depiction of a sterile and stagnant One State of the distant future ruled so thoroughly by scientific and rational principles that its citizens have been stripped of any real humanity. The inhabitants of Zamyatin's dystopian society live in a sterile manmade environment from which nature has been excluded; they have numerical labels instead of

names, and they are even referred to as numbers rather than people. These numbers have lost all true individuality; they are merely interchangeable parts in the giant machine of the State.

The rulers of the One State are particularly concerned with exerting control over those aspects of human life that might lead to strong emotions and thus disrupt the rational tranquility of life. For example, "free" sex is openly approved in the One State, though strictly regulated by the official bureaucracy. Poetry and music are similarly administered by the state. However, despite such official attempts to regulate the emotional lives of its citizens, the One State is unable to achieve the level of conformity and strict rationalism that it seeks. Thus, if *We* is extremely pessimistic in its depiction of the oppressive potential inherent in the ideology of the Bolshevik Revolution, it is optimistic in its suggestion that emotional forces like poetry and sexuality are ultimately beyond the complete control of the state. Indeed, as the text ends, an all-out rebellion against the state is underway; though the state responds with strong oppressive measures, the outcome of the rebellion remains in doubt.

If *We* was written at a time of great crisis in Soviet history, then Huxley's *Brave New World*, produced during the early years of the Great Depression of the 1930s, responded to a similar sense of crisis in Western capitalism. However, Huxley's text does not envision the downfall of capitalism, but its ultimate dehumanizing triumph. *Brave New World* portrays a hedonistic future society in which individuals spend most of their time in the pursuit of instant happiness through sex, drugs, and mind-numbing multisensory entertainments like the popular "feelies" that are continually broadcast to keep the minds and senses of the citizenry occupied at all times. At first glance, then, this society is far different from the more somber dystopias produced by writers like Zamyatin and Orwell. However, the emphasis on pleasure in Huxley's future society masks a deep-seated lack of individual liberty. The sex, drugs, and popular culture prevalent in this society are intended primarily to divert attention from social problems and to prevent individuals from developing any sort of strong feelings that might lead them to challenge official authority. This world state is populated by individuals who have been genetically engineered to fill specific roles, leaving little room for individual choice – and the state is willing to take extreme measures to keep it that way. In general, however, Huxley's dystopia works, not through the overt exercise of power that characterizes Zamyatin's One State, but through the more subtle manipulations that are typical of modern bourgeois society in the West.

The Party that rules the dystopian Oceania of Orwell's *Nineteen Eighty-Four* takes dystopian power a step further. Unlike many dystopian regimes,

it makes no claims to attempt to save humanity or to improve the quality of human life. Instead, it seeks only to perpetuate its own power, which the Party functionary O'Brien images (echoing Jack London's 1907 dystopian novel *The Iron Heel*) as "a boot stamping on a human face." In short, the Party is consciously seeking to create the ultimate dystopia, a world that "is the exact opposite of the stupid hedonistic Utopias that the old reformers imagined." In describing this project, Orwell's book deals in important ways with almost all of the central motifs associated with dystopian fiction. For example, in the Oceania of Orwell's book certain mechanical applications of technology lend themselves directly to political oppression, even while science itself remains a potentially liberating realm of free thought. Religion has been conscripted by the state in the service of its own ideology, sexuality is strictly controlled to prevent strong emotional attachments between partners, and art and culture are used as tools for direct propagation of the official ideology. Perhaps the two most striking motifs in *Nineteen Eighty-Four*, however, are the revisionist manipulation of history in order to provide support for the programs of the ruling Party and the attempt to institute a new language, "Newspeak," that will allow expression only of ideas that are consistent with the Party's policies.

Orwell's text is a sort of summation of the dystopian tradition through the end of the 1940s. It has exercised a powerful influence on that tradition since its publication, with numerous direct successors, such as Anthony Burgess's *A Clockwork Orange* (1962), perhaps most notable for its depiction of psychological conditioning as a tool of official power. *Nineteen Eighty-Four* also has numerous predecessors, building in a particularly direct way upon a British tradition of dystopian fiction that developed in the 1930s, beginning with *Brave New World*. In *To Tell the Truth* ... (1933), for example, Amabel Williams-Ellis follows Huxley in warning of the dystopian potential of capitalism. She imagines a Britain in which the worst tendencies of the early 1930s have continued to develop, producing a grim, authoritarian, and impoverished (though in many ways technologically advanced) society. Meanwhile, in a motif that echoes *Brave New World*, the cultural apparatus in Britain has been almost entirely successful in suppressing any sense that concerted working-class action might bring about a change in the grim conditions that dominate this society.

Other British dystopian fictions of the 1930s were constructed specifically as warnings against the looming dangers of fascism – itself a sort of dystopian version of capitalism. Works in this vein include Storm Jameson's *In the Second Year* (1936), Katharine Burdekin's *Swastika Night* (1937), and Ruthven Todd's *Over the Mountain* (1939). Of these, Burdekin's book is probably the most important. Set 700 years after a Nazi conquest of

Britain, it imagines a future world dominated by competing German and Japanese empires, with Europe (including Britain) and Africa ruled by the Germans. The dissemination of information in this future world is strictly controlled. Books, in fact, have been entirely banned (except for one sacred "Hitler book"), and virtually all citizens are illiterate. History has been almost entirely forgotten, the only records of the past being highly mythologized versions in which Hitler has been promoted to the status of a god and all memories of any civilizations before German Nazism forgotten.

Sinclair Lewis's *It Can't Happen Here* (1935) provides an American example of the antifascist dystopia, warning that excessive fear of communism might push the United States toward fascism. Meanwhile, the banning of books in Burdekin's fascist dystopia is also a common theme in American dystopian fiction, which often depicts books and literature as powerful threats to the power of dystopian regimes. In the United States, probably the most vivid exploration of this theme appears in Ray Bradbury's *Fahrenheit 451* (1951), where an oppressive state employs teams of "firemen," whose job it is to seek out and burn books, which are strictly forbidden in this society. In lieu of books, the culture of Bradbury's future America (a direct extension of his own early 1950s context) consists of an incessant electronic barrage of popular culture that seems designed partly to purvey the official ideology of the society, but mostly to stupefy the populace by saturating their minds with useless information, much in the mode of the popular culture of *Brave New World*. Meanwhile, Bradbury depicts a thoroughly commercialized consumer culture stripped of all spirituality. The Bible itself is banned, along with all other books, and Jesus Christ now appears on television as a sort of celebrity endorser of commercial products.

Kurt Vonnegut's *Player Piano* (1952) also responds to certain specific American anxieties of the early 1950s, this time focusing on the fear that automation was beginning to make human labor obsolete, while at the same time turning people into machine-like automatons living thoroughly scripted, regulated lives. In the dystopian United States of *Player Piano*, citizens are carefully screened, tested, and categorized during their schooldays so that they can be slotted for their proper place in society. Computerized systems then keep up with these test results to ensure that their recommendations are followed. Meanwhile, even the most minor deviations from accepted behavioral patterns are recorded and stored in a massive police information system, so that potential "saboteurs" can be closely watched.

Player Piano is a typical work of dystopian sf in its concern with technological advances that are clearly intended to bring about a utopian existence but lead instead to the opposite. Then again, there is often a fine line

between utopia and dystopia, and one person's dream society might be another person's nightmare. Indeed, many sf novels include both utopian and dystopian characteristics, as in the case of Samuel R. Delany's *Trouble on Triton* (1976). Meanwhile, a work such as B. F. Skinner's *Walden Two* (1948), clearly designed by the author as an exploration of the utopian potential of psychological conditioning and scientific social design, has struck many readers as a dystopian text. Skinner refuses even to give lip service to the notion of individual liberty, arguing that freedom is in fact an illusion and that all human beings are determined rather strictly by their environment. Moreover, he suggests that democracy is an illusion as well, being tantamount to tyranny by a majority that is ill-qualified to make intelligent decisions.

New concerns with environmentalism and overpopulation in the 1960s brought these themes to dystopian fiction as well. Burgess's *The Wanting Seed* (1962) is centrally concerned with the dangers of overpopulation, projecting a future England in which overpopulation has led to a serious decline in the quality of life and to the institution of severe measures to try to limit population growth. In an American context, a similar concern with overpopulation informs Harry Harrison's *Make Room! Make Room!* (1966), which grimly depicts social and political problems arising from overcrowding – though the novel actually lacks the Swiftian theme of using human beings for food that made *Soylent Green*, the 1973 film adaptation of Harrison's novel, so memorable. Meanwhile, this film was typical of the dystopian turn taken by American sf film in the early 1970s. In 1971 alone, several films projected a dark future, with Stanley Kubrick's adaptation of *A Clockwork Orange* and George Lucas's *THX-1138* providing central examples of dystopian film. Other dark visions of the future followed, including Douglas Trumbull's *Silent Running* (1972), Norman Jewison's *Rollerball* (1975), and Michael Anderson's *Logan's Run* (1976). These dystopian visions of the future set a precedent for important films such as Michael Radford's 1984 adaptation of Orwell's *Nineteen Eighty-Four* (1949), perhaps the most important of all dystopian novels. By contrast, Woody Allen's *Sleeper* (1973) is a farcical parody of the dystopian genre, while former Monty Python member Terry Gilliam followed in 1985 with *Brazil*, which also presents a parodic dystopia, but makes many of the same serious satirical points for which the subgenre is well known. Films such as John Carpenter's *They Live* (1988), Andrew Niccol's *Gattaca* (1997), and Alex Proyas's *Dark City* (1998) continue this tradition.

Perhaps the finest dystopian novel about overpopulation is John Brunner's *Stand on Zanzibar* (1968), a massive and highly ambitious work that employs a number of complex literary strategies to explore

numerous issues in its fictional world of the early twenty-first-century. *Stand on Zanzibar*, meanwhile, ushered in a remarkable sequence of dystopian novels by Brunner that also included *The Jagged Orbit* (1969), *The Sheep Look Up* (1972), and *The Shockwave Rider* (1975). Of these, *The Jagged Orbit* focuses on racism and the criminalistic tendencies of the military-industrial complex, while *The Shockwave Rider* focuses on the impact of a worldwide communications explosion, in many ways anticipating the later phenomenon of cyberpunk science fiction, a movement that has itself shown considerable dystopian leanings.

If the 1970s saw a resurgence of utopian energy in science fiction, especially in sf written by women, patriarchy and gender discrimination also became central concerns of a number of dystopian novels by women, beginning with works such as Suzy McKee Charnas's *Walk to the End of the World* (1974) and Marge Piercy's *Woman at the Edge of Time* (1976), though the latter is a complex text that projects two alternative futures, one dystopian and one utopian. Joanna Russ's *The Female Man* (1975) also includes both utopian and dystopian elements from a feminist perspective. Probably the leading example of the subgenre of women's dystopian fiction is Margaret Atwood's *The Handmaid's Tale* (1985), which responds to the Reaganite 1980s with a horrifying account of a near future dystopian regime ruled by right-wing religious fundamentalists, much to the detriment of women, who often find themselves employed essentially as sexual slaves for breeding purposes.

An interesting spin on the gender dystopia is *The Children of Men* (1992), by the noted British mystery writer P. D. James. Here, turning the overpopulation theme on its head, all of the world's sperm (including supplies frozen in sperm banks) are suddenly and inexplicably rendered inert in the year 1995, leaving humanity with no prospects of continuing the species beyond the generation born that year. Left without hope for a longterm future, humanity sinks into despair. British society, on which the book focuses, becomes decidedly dysfunctional, until a dictatorial "Warden" manages to reestablish order at the expense of dystopian repression. By the year 2021, in which the book is set, the general population, having grimly acknowledged that humanity is doomed anyway, accepts this repression without complaint.

Grim dystopian futures remain current in American sf as well. Octavia Butler's *The Parable of the Sower* (1993) and Jack Womack's *Random Acts of Senseless Violence* (1993) depict an American society declining into violence and chaos. Womack, meanwhile, has projected a dystopian future dominated by the huge Dryco Corporation in a sequence of novels that includes the highly interesting *Elvissey* (1993), in which a cult based on

Elvis Presley-worship provides the only rival to Dryco's considerable power. Indeed, with the Cold War over and global socialism routed, at least for the time being, many dystopian visions from the 1990s forward focus on the possible abuses of growing corporate power. Examples of this phenomenon range from the rampant privatization depicted in such texts as Neal Stephenson's *Snow Crash* (1992) and Max Barry's *Jennifer Government* (2003), to the sinister manipulation of Third World politics by violence-prone Western corporations in Richard Morgan's *Market Forces* (2005), to a more conventional (if comic) dystopian vision of the dehumanizing consequences of corporate culture in Barry's *Company* (2006). Bruce Sterling's *Distraction* (1998) is also worthy of mention as a dystopian projection of social problems already in evidence in the United States in the late 1990s.

Such films as Ridley Scott's *Blade Runner* (1982), Paul Verhoeven's *Total Recall* (1990), and Steven Spielberg's *Minority Report* (2002) – all based on stories by Philip K. Dick – have presented visions of a dark (often corporate-dominated) future. Indeed, many of Dick's novels and stories include strong dystopian elements, even if they are not pure examples of dystopian fiction. A particularly successful recent dystopian film is *The Matrix* (1999), which is not based on Dick's work, but echoes many of his themes. It depicts a nightmare future in which humanity has been enslaved by machines but is kept unaware of its enslavement though mental entrapment in a virtual alternative reality. Kurt Wimmer's *Equilibrium* (2002), which shows a strong *Matrix* influence, is dystopian in a more classic vein in its depiction of an oppressive future government that insists on the drug-induced repression of all emotion in the general population.

All in all, dystopian fiction remains one of the most important subgenres of science fiction in the early twenty-first century. Dystopian narratives, especially if read as cautionary satires that critique the current order (rather than lurid fantasies that make the current order appear preferable in comparison), also remain one of the most potentially useful forms of sf. This potential is best fulfilled, however, when the dystopian critique of the possible negative consequences of current technological, social, and political trends is accompanied by suggestions of the possibility of viable preferable alternatives. In this sense, it is clear that dystopian fiction is not the opposite of utopian fiction but a kind of supplement to it.

Suggested Further Reading

Baccolini, Raffaella, and Tom Moylan, eds. *Dark Horizons: Science Fiction and the Dystopian Imagination*. New York: Routledge, 2003.

Booker, M. Keith. *The Dystopian Impulse in Modern Literature: Fiction as Social Criticism*. Westport, CT: Greenwood Press, 1994.
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Kumar, Krishan. *Utopia and Anti-Utopia in Modern Times*. Oxford: Blackwell, 1987.
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Notable Fiction

Margaret Atwood, *The Handmaid's Tale* (1985).
Max Barry, *Jennifer Government* (2003) and *Company* (2006).
Katharine Burdekin, *Swastika Night* (1937).
Karin Boye, *Kallocain* (1940).
Ray Bradbury, *Fahrenheit 451* (1951).
John Brunner, *Stand on Zanzibar* (1968), *The Jagged Orbit* (1969), *The Sheep Look Up* (1972), and *The Shockwave Rider* (1975).
Katharine Burdekin, *Swastika Night* (1937).
Anthony Burgess, *A Clockwork Orange* (1962) and *The Wanting Seed* (1962).
Octavia Butler, *The Parable of the Sower* (1993).
Suzy McKee Charnas, *Walk to the End of the World* (1974).
Samuel R. Delany, *Trouble on Triton* (1976).
Philip K. Dick, *Do Androids Dream of Electric Sheep?* (1968).
Thomas M. Disch, *Camp Concentration* (1968).
Harry Harrison, *Make Room! Make Room!* (1966).
Aldous Huxley, *Brave New World* (1932).
P. D. James, *The Children of Men* (1992).
Storm Jameson, *The Second Year* (1936).
Jonathan Lethem, *Amnesia Moon* (1995).
Sinclair Lewis, *It Can't Happen Here* (1935).
Jack London, *The Iron Heel* (1907).
Barry Malzberg, *Guernica Night* (1974).
Richard K. Morgan, *Market Forces* (2005).
Walter Mosley, *Futureland* (2001).
George Orwell, *Nineteen Eighty-Four* (1949).
Marge Piercy, *Woman at the Edge of Time* (1976).
Ayn Rand, *Anthem* (1938).
Joanna Russ, *The Female Man* (1975).
B. F. Skinner, *Walden Two* (1948).
Neal Stephenson, *Snow Crash* (1992).

Bruce Sterling, *Distraction* (1998).
Ruthven Todd, *Over the Mountain* (1939).
Kurt Vonnegut Jr., *Player Piano* (1952).
Annabel Williams-Ellis, *To Tell the Truth* . . . (1933).
Jack Womack, *Ambient* (1987), *Heathern* (1990), *Elvissey* (1993), and *Random Acts of Senseless Violence* (1993).
Evgeny Zamyatin, *We* (1924).

Notable Films

Alphaville. Dir. Jean-Luc Godard, 1965.
Blade Runner. Dir. Ridley Scott, 1982.
Brazil. Dir. Terry Gilliam, 1985.
A Clockwork Orange. Dir. Stanley Kubrick, 1971.
Dark City. Dir. Alex Proyas, 1998.
Equilibrium. Dir. Kurt Wimmer, 2002.
Gattaca. Dir. Andrew Niccol, 1997.
Logan's Run. Dir. Michael Anderson, 1976.
The Matrix (1999), *The Matrix Reloaded* (2003), and *The Matrix Revolutions* (2003). Dirs. Andy Wachowski and Larry Wachowski, 1999.
Metropolis. Dir. Fritz Lang, 1927.
Minority Report. Dir. Steven Spielberg, 2002.
Nineteen Eighty-Four. Dir. Michael Radford, 1984.
Rollerball. Dir. Norman Jewison, 1975.
Silent Running. Dir. Douglas Trumbull, 1972.
Sleeper. Dir. Woody Allen, 1973.
Soylent Green. Dir. Richard Fleischer, 1973.
They Live. Dir. John Carpenter, 1988.
THX 1138. Dir. George Lucas, 1971.
Total Recall. Dir. Paul Verhoeven, 1990.
V for Vendetta. Dir. James McTeigue, 2005.

Utopian Fiction

Utopian thought attempts to envision a society in which the various social, political, and economic ills of the real world have been solved, leaving an ideal realm of justice and tranquility. All fiction, by projecting a world that is different from the real, physical one, has a potential utopian component. Indeed, the attempt to imagine a world better than our own has long been recognized as one of the crucial functions of all literature. Nevertheless, some works of literature are more specifically dedicated to the projection of utopian visions than are others. There is, in fact, an entire tradition of utopian fiction, often with a strong science fiction component, that attempts to envision ideal societies, generally far removed from the author's world either temporally or geographically.

The tradition of utopian fiction dates back at least as far as the ancient Greeks, who produced a number of utopian works, the most important of which is Plato's *Republic* (380–370 BC), especially in terms of its influence on later utopian writers. The most fundamental political principle of Plato's ideal republic is rule by an enlightened elite of specially trained, philosophically minded thinkers, known as the Guardians. This elitism, of course, would be abhorrent to many in the modern world, as is Plato's tendency to argue that individual freedom should be sacrificed in the interest of greater happiness for all. This early work thus already indicates the potentially problematic nature of all programmatic utopian visions.

The next major contribution to the tradition of utopian fiction was Sir Thomas More's *Utopia* (1516), the book that gave the tradition its name. More's utopia is more concrete than Plato's in that his ideal society is located in an actual physical setting (an island off the coast of South America), even though the Greek word utopia literally means "no place." More, by describing the visit of a European (Raphael Hythloday) to the island, also gives his work a more narrative bent than Plato's, helping to establish a generic model for future writers of utopian fiction. More's book makes clear the important

satirical component that resides in almost all utopian fiction in that his ideal society is quite specifically set against his own present-day England as a way of criticizing the ills of that real-world society.

Other utopian works, such as Tommaso Campanella's *The City of the Sun* (1602–1623) and Francis Bacon's *New Atlantis* (1627) followed soon after More's, but the tradition of utopian fiction received a special boost from the eighteenth century onward, when humanist faith in the potential of science and of human beings in general led to a widespread growth in notions that an ideal society, based on the principles of the Enlightenment, could literally be established. These more modern utopian visions culminated in the late nineteenth and early twentieth centuries, when a spate of utopian fictions, often inspired by socialist ideals, appeared. These centrally included Edward Bellamy's *Looking Backward* (1888), William Morris's *News From Nowhere* (1890), and H. G. Wells's *A Modern Utopia* (1905).

The utopia of *Looking Backward* centrally depends on technological and industrial efficiency and can in some ways be seen as the culmination of the Enlightenment faith in the ability of reason and rationality to build a better world. However, some, even at the time, saw this emphasis on efficiency as potentially dehumanizing, and Morris's more agrarian utopia is in large part a critical response to Bellamy's work. Wells's book, as the title suggests, represents a particular step forward in the genre, away from philosophical and sociological speculation and toward science fiction. Meanwhile, science fiction itself grew into a well-defined genre in the pulp magazines of the 1920s and 1930s, and the stories in these magazines (spurred by the technological optimism of editors such as Hugo Gernsback) typically contained strong utopian elements in their vision of a future world made better thanks to the availability of advanced technologies.

In the meantime, occasional non-technological utopian visions had made their way into modern literature. One of the most influential of these was Charlotte Perkins Gilman's *Herland* (1915), a feminist utopia that provided considerable inspiration for the wave of such utopias that began to appear in the 1970s, drawing upon the momentum of the women's movement of the 1960s. *Herland*, the most important of three utopian novels written by Gilman, describes an all-woman society from which men have been excluded for two thousand years. This highly literary work is openly fictional, employing a number of devices to enhance its central project, which is not so much the projection of a literal feminist society as a satirical critique of Gilman's own early-twentieth-century America through the defamiliarizing lens of the feminist society of the book.

Perhaps the most important book-length fictions informed by utopian themes to appear in the 1930s were those produced by the British socialist

writer Olaf Stapledon, including *Last and First Men* (1930) and *Star Maker* (1937). Here Stapledon envisions the development of highly advanced far future societies in which humanity has evolved to the point of overcoming the negative inclinations (such as individualism) of our own world. Stapledon's interests are largely philosophical and he deals relatively little with advanced technology or with politics, though his work is informed by a consistent antipathy toward capitalism and fascism and often nods toward commentary on his contemporary world.

One of the most interesting and unusual utopian fictions to appear in the 1940s also did not depend on technological optimism, but instead envisioned an idyllic South Pacific island paradise in which technology was virtually non-existent. *Islandia* (1942) is the result of the extensive attempts of legal philosopher Austin Tappan Wright to imagine a realistic island utopia over a period that began in his childhood in the late nineteenth century and extended to his death in 1931. As a result of Wright's exhaustive work on the project, *Islandia* (edited after his death into the form of a publishable novel by his widow and daughter) presents one of the most detailed descriptions of a utopian society in all of literature. The book is especially forward-looking in its treatment of women, and its anticolonialism (which emerges as a result of a conflict between the culture of the community of Islandia and that of the United States, clearly resolved in favor of the former) is ahead of its time as well. On the other hand, Wright was more interested in constructing a model society than in storytelling, so the narrative elements of the book are unusually weak, even for a subgenre that has often been criticized for the weakness of its narratives. This weakness might help to explain the relative absence of genuine utopias in science fiction film, though it should be pointed out that the future Earth that serves as a background to the various *Star Trek* television series (which inspired a string of feature films as well) is a utopian society in which all social, economic, and political problems appear to have been solved, largely because advanced technologies have ushered in a post-scarcity era.

The best-known utopian work of the 1940s is B. F. Skinner's *Walden Two*, in which the author, himself a well-known behavioral psychologist, envisions a presumably ideal community centrally informed by the careful behavioral conditioning of the entire population. Skinner's book focuses on the "Walden Two" of the title, a utopian community set in the American countryside. Walden Two works, Skinner insists, because it is based on a plan that produces citizens who are specifically conditioned to live happily and well within the structure of this particular community. Most of the action concerns a tour of the community by a group of outside visitors who have come to see how it functions. The founder and principal planner of

Walden Two conducts the tour and explains (to the visitors and thus to readers) the principles upon which the community is based. Central to these principles is a respect for science and scientific principles of efficiency. This efficiency includes many elements within the purview of traditional utopian thought, including the usual social factors like education and economics, with a particular emphasis on undoing the negative effects of the traditional family structure. Skinner acknowledges his place in the tradition of utopian literature with frequent allusions to predecessors like More, Bellamy, Wells, and Morris, clearly drawing upon many of the conventions of the subgenre as established by these predecessors. On the other hand, though intended by its author as a serious exploration of the possibility of a *utopian* society, *Walden Two* nicely demonstrates the fine line between utopia and dystopia in the way that its ideal society strikes so many readers as *dystopian*. For example, in their massive 1952 anthology of utopian thought, Negley and Patrick declare Skinner's book an outrage to the utopian spirit and describe his vision as a "shocking horror" (*Quest*, 590). Indeed, many readers have found in the psychological determinism of *Walden Two* a nightmare dystopian vision in which human beings are reduced to unthinking automatons.

By the time the science fiction novel came into its own amid the post-World War II boom in paperback publishing, science fiction (largely owing to the development of nuclear weapons) was growing more and more skeptical that technology was necessarily a boon to humanity. However, at least one key sf novelist of the 1950s, Theodore Sturgeon, stands out for the strong utopian dimension that informs his work, perhaps as a reaction against the anti-utopianism of most of the culture around him. Sturgeon's *Venus Plus X* (1960) tops off his work of the 1950s with a novel that explicitly describes a potentially utopian society. Actually, *Venus Plus X* has a dual plot structure. In one plot line, protagonist Charlie Johns awakes, bewildered, in Ledom (read "Model"), apparently a utopian society of the far future. In the alternating chapters, Herb Raile and family live a typically 1950s suburban existence. Raile works for an advertising agency and is thus ideally placed to observe the emerging consumer culture of the 1950s, which is starkly contrasted with the nonconsumerist society of Ledom.

Life in Ledom heavily depends on advanced technology, though all of the inhabitants value agrarian existence and spend considerable time in the countryside. Ledom differs most dramatically from 1950s America, however, in its attitudes toward sex and gender. As opposed to the repressive attitudes of the 1950s (which are foregrounded in the alternating chapters), sex in Ledom is considered a normal and healthy activity that is undertaken only as an expression of mutual affection. Further, this attitude is supported because all citizens of Ledom undergo surgical procedures that efface

biological gender difference by making all Ledomians hermaphrodites, leaving gender entirely as a social construction. This motif, however, suggests that, in order to achieve utopian conditions, it is necessary to alter human nature, in this case by surgery. Moreover, that this surgery involves an eradication of gender difference suggests that utopia cannot be achieved without the suppression of difference. On the other hand, the book ends with the revelation that Johns is actually Quesbu, a Ledomian who has not undergone the procedure – and he is allowed to remain unaltered, along with his mate, Soutin, in a move toward restoration of the original human race.

Venus Plus X anticipates many of the concerns about sex and sexuality of the 1960s, though it is clearly rooted in the 1950s, including the fact that its version of the 1950s ends in an apparent nuclear holocaust – though the Ledomians live on in their domed city, which turns out (in one of several late plot twists) not to exist in the far future at all. Among other things, the novel thus reminds us that the resurgent utopianism of the 1960s had roots in the 1950s and should not be read merely as a reaction against the earlier decade. In fact, while the utopian dimension of Western culture in general became particularly weak in the postwar period, thinkers such as the Marxist utopian Ernst Bloch both kept the utopian spirit alive and developed more sophisticated and open-ended visions of what utopian might be. In particular, for Bloch utopia is not an achieved goal but a future potential to be continually sought after, even after oppression and exploitation have been eliminated from human society.

Bloch's work exerted an important influence on the oppositional political movements of the 1960s, which themselves inspired something of a renaissance in the subgenre of utopian fiction in the 1970s, heralded by the appearance of such precursor works as R. A. Lafferty's *Past Master* (1968) and Monique Wittig's *Les Guérillères* (1969). Of these, the latter is informed by strong feminist impulses that foreshadow the centrality of feminist themes – or at least themes related to gender – to the utopian renaissance of the 1970s. Among the works of this renaissance (many of which also include dystopian elements) are Christiane Rochefort's *Archaos, or the Sparkling Garden* (1972), Suzy McKee Charnas's *Walk to the End of the World* (1974) and *Motherlines* (1978), Joanna Russ's *The Female Man* (1975), Marge Piercy's *Woman on the Edge of Time* (1976), E. M. Broner's *A Weave of Women* (1978), Louky Bersianil's *The Eugélionne* (1978), Sally Miller Gearheart's *The Wanderground: Stories of the Hill Women* (1978), and Suzette Haden Elgin's *Native Tongue* (1984). Gender was also central to the utopian visions of two of the most important science fiction novels of the 1970s, Ursula K. Le Guin's *The Dispossessed* (1974) and Samuel R.

Delany's *Trouble on Triton* (1976), both of which illustrate particularly well the attempts of the utopian science fiction novels of the 1970s to overcome conventional concerns that utopian societies inevitably drift into stagnation and repression. They thus contributed to the growth of the so-called "open" or "critical" utopias that were typical of this period.

Le Guin is worthy of special mention among the utopian writers of the 1970s. Not only is *The Dispossessed* possibly the centerpiece of the decade's utopian renaissance, but several of Le Guin's works include utopian elements, as when *The Lathe of Heaven* (1971) explores a variety of both utopian and dystopian scenarios. Also worthy of special mention in this context is Mack Reynolds, a former socialist labor party activist who produced a large volume of science fiction in the 1960s to the 1980s, most of it clearly informed by his leftist political vision. Much of his work is set in future utopian societies based on socialist principles, including the novels *Looking Backward, from the Year 2000* (1973) and *Equality in the Year 2000* (1977), both of which revisit and update the late-nineteenth-century socialist vision of Bellamy's utopian novels.

Though Reynolds's utopian vision grows out of older socialist traditions, most of the utopias of the 1970s were more specifically keyed to the political concerns of the moment, as with the utopias that grew out of the women's movement. Ernest Callenbach's *Ecotopia* (1975) is a central literary expression of the utopian hopes of several of the oppositional political movements of the 1960s. Informed especially by the insights of the emergent environmentalist movement, *Ecotopia* describes a secessionist utopian state on the west coast of the United States, organized according to largely socialist principles and dedicated to respect for and preservation of the Earth's natural environment. In a classic utopian motif, reporter William Weston travels to Ecotopia to do a story for his newspaper, and his observations reveal the society to readers as well. Perhaps the most striking aspect of Ecotopia is the disavowal of growth. It is a zero sum "stable state" society that maintains stability – but not stagnation. That is, zero sum means no net growth but it in no way implies the absence of change. This stable state is furthered through a variety of environmentally friendly policies, such as an extensive recycling program. Liberal education and penal policies help to maintain human conditions for all citizens, while sexual attitudes generally reflect the sexual revolution of the 1960s. Anticapitalist economic measures have driven most US corporations out of Ecotopia. The remaining economic system, though it retains some elements of free-market capitalism, has numerous socialist characteristics, including relative economic equality for all citizens, worker-owned companies, reformed working conditions, and universally guaranteed social services.

Ecotopia was followed by a less successful prequel, *Ecotopia Emerging* (1981), while *Ecotopia* itself has shown surprising staying power as a text that is still read and studied more than thirty years after its initial publication. It also exerted a clear influence on the "green" utopia of Kim Stanley Robinson's *Pacific Edge* (1990), the third volume of Robinson's remarkable "Three Californias" trilogy. Both utopian and environmental concerns remained central to Robinson's subsequent career, which has included, among other things, the editing of *Future Primitive: The New Ecotopias* (1994), a collection of stories describing ecological utopias.

Distinctive among the utopias of the 1970s for the way it looks back to the technological optimism of earlier decades is George Zebrowski's *Macrolife* (1979). Building upon the speculative vision of scientist Dandridge Cole (who coined the term "macrolife") Zebrowski imagines the development of high-tech space habitats (the first of which is merely a hollowed-out asteroid) that travel about the galaxy while their inhabitants (human, alien, artificial, or hybrid) gradually develop their individual potentials thanks to a post-scarcity economy that has solved all social ills and a high-tech environment that has, among other things, made it possible for individuals to live practically forever. On the other hand, individualism as we know it eventually ceases to exist as the individuals in these habitats become increasingly networked into one huge system. In fact, each of these traveling habitats, or "macroworlds," is envisioned essentially as a giant organism of which each individual (whether organic beings or artificial intelligences) is a component part. The smooth functioning of the macroworld thus requires particularly close cooperation and agreement among the individuals that compose it, but this is no real problem, even in the early stages of the evolution of macrolife, when distinct individuals still exist: as disagreements naturally arise, additional worlds are simply manufactured and subsequently inhabited by members of subgroups who have similar opinions and outlooks.

Eventually, macrolife spreads across the universe, advancing for billions of years into a highly evolved state. Virtually all obstacles have been surmounted, except one: the eventual collapse and death of the universe itself. Macrolife is by this time so advanced, however, that it manages to concoct a successful scheme to survive even this cataclysm, moving forward into the birth of a subsequent universe – followed, as it turns out, by another, older, form of macrolife that had surreptitiously survived the collapse of a still earlier universe, living on into our own. In its vision of radical far future evolution, *Macrolife* has often been compared to the work of Stapledon, though its vision of social evolution relies much more on specific advanced technologies than does Stapledon's.

The Reagan–Thatcher neo-conservative retrenchment of the 1980s was also accompanied by a waning in the production of utopian fictions, especially as science fiction came, for a brief period, to be dominated by the cyberpunk subgenre, the utopian dimensions of which were notoriously weak, or at least difficult to discern. However, with the sudden fall of the Soviet Union in 1991, the political climate in the United States and Britain, where utopianism had come to be vaguely associated with the presumed evils of the Soviet menace, became much more hospitable to the production of utopian fictions. Indeed, the most important science fiction work of the 1990s, Kim Stanley Robinson's "Mars" trilogy, is particularly rich in utopian energies. In *Red Mars* (1993), *Green Mars* (1994), and *Blue Mars* (1996) Robinson relates the colonization and terraforming of the red planet, including detailed debates among its colonists of the directions in which they should move to take maximum advantage of the utopian potential of an entire new planet.

The 1990s were also remarkable in the history of science fiction for the emergence into prominence of a talented group of British science fiction and fantasy writers (collectively constituting what came to be known as the British Boom) who added new utopian energies to a variety of older genres of speculative fiction. For example, China Miéville, perhaps the central figure in the British Boom, has injected new utopian energies into the genre of fantasy (once dominated by Tolkienesque escapism) by establishing clear connections between his imaginary worlds and the real contemporary world in which we all live. Among more properly science fictional subgenres, space opera and cyberpunk (now morphed into postcyberpunk) have been particularly re-energized by British Boomers such as the politically aware Scottish authors Charles Stross and Ken MacLeod, both of whom have imagined socialist-anarchist utopian futures made possible by vast advances in computer technology and artificial intelligence, though both (in good Blochian fashion) are more interested in the movement toward utopia (beginning with a sudden, explosive advance in the capabilities of artificial intelligence via a technological singularity) than in the description of actual existing ideal societies.

Within the context of overt utopianism, the leading figure of the British Boom is probably still another Scottish writer, Iain M. Banks. A writer with a substantial reputation as an author of both literary fiction and science fiction, Banks also envisions a post-singularity world inhabited by vastly advanced artificial intelligences. However, Banks goes well beyond Stross and MacLeod in providing a detailed description of an interstellar socialist utopia, known as the Culture. The product of thousands of years of biological, social, and cultural evolution, the Culture employs ultra-advanced

technology (managed by sophisticated artificial intelligences known as Minds) to produce post-scarcity conditions in which the human (or, more accurately, posthuman) inhabitants live rich and virtually endless lives devoted to leisure, recreation, culture, education, and exploration of their individual potentials.

Banks takes a science fiction scenario (rule by machines) that has often been treated as dystopian and makes it unapologetically utopian, informed by both socialist and anarchist principles. The Minds are far superior to humans in intelligence, but they are also deeply devoted to caring for humans and to making it possible for humans to live the richest lives possible. There are no actual laws, and behavior is regulated largely by social convention in an almost aesthetic way as individuals seek to live their lives in good style. Because there is plenty of wealth for everyone, the society functions smoothly with a minimum of interference from the Minds, who intercede in human affairs only when necessary, preferring simply to provide a framework within which humans can live. This framework includes extensive interstellar travel, though most humans live primarily on huge Orbitals, artificial ring-like structures (with populations of many billions) that rotate in space near stars, something like the Ringworld envisioned by Larry Niven in his 1970 novel of the same title, except that an Orbital is much smaller and does not extend around its star, as does Niven's Ringworld.

Though the problems of ordinary existence within the Culture have largely been solved, the Culture must also coexist with other civilizations that are not necessarily so advanced. This situation sometimes leads to all-out war, as in the conflict between the Culture and the religious, warlike Idirans in Banks's first Culture novel, *Consider Phlebas* (1987). Such conflicts help Banks to create interesting narratives, while also providing a dialectical vision of the Culture through descriptions of it by outsiders and even enemies. The most problematic aspect of the Culture is its tendency toward interventionism, in which it surreptitiously attempts to steer less-advanced civilizations in more positive and humane directions. In this, the Culture would seem to echo all too closely the imperialist tendencies of advanced nations on Earth, except that here one must consider that the Minds are so advanced that they really *are* qualified to guide other societies, whereas the wealthier and more powerful nations on Earth are not.

The works of writers such as Robinson, Stross, MacLeod, and (especially) Banks show a refreshing resurgence of hope in the ability of technology to bring about better societies. In this, they look back to the science fiction of the 1930s, except that their technological projections are much more believable, while the novels are also informed by much more sophisticated social

and political ideas. The fictions of such writers thus suggest a potential renaissance in utopian thinking, a phenomenon that itself suggests bold new possibilities for the evolution of real-world human societies as we move into a new millennium.

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Edward Bellamy, *Looking Backward* (1888).

Louky Bersianil, *The Eugélionne* (1978).

E. M. Broner, *A Weave of Women* (1978).

Ernest Callenbach, *Ecotopia* (1975) and *Ecotopia Emerging* (1981).

Suzy McKee Charnas, *Walk to the End of the World* (1974) and *Motherlines* (1978).

Samuel R. Delany, *Trouble on Trion* (1976).

Suzette Haden Elgin, *Native Tongue* (1984).

Sally Miller Gearheart, *The Wanderground: Stories of the Hill Women* (1978).
Charlotte Perkins Gilman, *Herland* (1915).
R. A. Lafferty, *Past Master* (1968).
Ursula K. Le Guin, *The Lathe of Heaven* (1971), *The Dispossessed* (1974).
William Morris, *News from Nowhere* (1890).
Sir Thomas More, *Utopia* (1516).
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Marge Piercy, *Woman on the Edge of Time* (1976).
Plato, *Republic* (380–370 BC).
Kim Stanley Robinson, "Three Californias" trilogy: *The Wild Shore* (1984), *The Gold Coast* (1988), *Pacific Edge* (1990);*Future Primitive: The New Ecotopias* (editor, 1994); "Mars" trilogy: *Red Mars* (1993), *Green Mars* (1994), and *Blue Mars* (1996); and *Antarctica* (1997).
Mack Reynolds, *Looking Backward, From the Year 2000* (1973), *Equality in the Year 2000* (1977).
Christiane Rochefort, *Archaos, or the Sparkling Garden* (1972).
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Feminism, Science Fiction, and Gender

Although Mary Shelley's *Frankenstein* (1818) is often credited as the progenitor of modern science fiction, the genre has been popularly conceived as a primarily masculine domain. Certainly male writers catering to a largely male readership were predominant in science fiction throughout the early and mid-twentieth century, but women were hardly absent, either as writers or readers. As characters, however, the women in the majority of these early science fiction texts (when present at all) are often peripheral, or else represented as threatening alien Others. Traditional gender roles are unchallenged; heterosexuality is compulsory. Much of the literature is frankly misogynistic. And yet it is the figure of the feminine alien Other, who threatens male dominance and is routinely vanquished in order to restore patriarchal order, that women writers have claimed as their own. Imbued with the ominous power that many male writers bestowed upon her, she became a literary tool designed to disrupt the sexual hierarchy and challenge the construction of "woman." For writers from the pulp era to those of the present day, then, science fiction has offered women a medium through which to explore their own sense of alienation within the genre itself and society at large. The genre has also enabled both men and women writers to fruitfully explore issues of gender and sexuality, including those relating to gay, lesbian, and bisexual identities. Informed by the feminist politics of the 1960s and 1970s, these texts are some of the most exciting and richly rewarding works in all of science fiction.

Women writers such as Leigh Brackett, Katherine MacLean, Marion Zimmer Bradley, and Judith Merril established a presence in science fiction from 1930s through the 1950s. However, many of these early women writers, such as C. L. Moore and Andre Norton, adopted masculine or non-gender specific pseudonyms in order to avoid prejudice by a

predominantly male audience. Nevertheless, these writers often explored gender-related issues in interesting and provocative ways. C. L. Moore, for example, frequently employed male protagonists in stories that also featured versions of the female Other remarkable for their strength and independence. In Moore's story "No Woman Born" (1944), Deirdre is a famous entertainer who, terribly burned in a theater fire, finds a new incarnation in a golden body in which her brain is housed. Determined to act again, Deirdre creates the illusion of femininity within her featureless cyborg frame, demonstrating through her grace and projection of feminine sexuality that gender is a kind of performance. Like Frankenstein's Creature, Deirdre welcomes her superhuman strength and speed, though she recognizes her alienation from the rest of humanity. By calling traditional definitions of "woman" into question, Moore's early feminist work is an example of science fiction's potential for challenging the notion that gender is an essential feature of human nature. In addition, Deirdre herself embodies Haraway's construction of the cyborg as a liberatory metaphor that transcends the essentialism of the gendered body.

Even well into the 1970s, a writer such as Alice Sheldon was still employing a masculine pseudonym, using the name James Tiptree Jr., until her true identity was revealed (to the consternation of many) in 1977. By this time, however, women writers were beginning to make a more significant impact in the world of science fiction, spurred by the feminist movements gaining power in America, Canada, Britain, and Europe in the 1960s, now referred to as Second Wave feminism. Having achieved suffrage in the first wave, feminists of the second wave pushed for greater equality in all aspects of society, including the home. Because of its speculative nature and freedom from the constraints of realism, science fiction offers a uniquely appropriate form for feminist concerns. Using cognitive estrangement and extrapolation, feminist science fiction writers render transparent the types of patriarchal structures that are so prevalent as to be almost invisible. Such a strategy serves as an effective critique of existing patriarchal conditions, destabilizing traditional assumptions about gender and highlighting its socially constructed nature. In addition, feminists carve out imaginative spaces in which they examine alternatives to patriarchal structures, perhaps the most notable of these being the feminist utopias of the 1970s.

Ursula K. Le Guin's *The Left Hand of Darkness* (1969) depicts the planet Gethen, a world populated exclusively by hermaphrodites, or androgynes. Gethenians are neither male nor female, except during "kemmer," a phase during a monthly cycle in which, triggered by the hormonal secretions of their partners, they can take the role of either sex and thus can bear or father children. In effect, sexism does not exist in this world, since sex itself is not a

fixed category. For Terran narrator Genly Ai, however, such a disruption of the gender binary is difficult to grasp. Sent as an ambassador to the planet in order to persuade the inhabitants to join the Ekumen, a vast association of planets and cultures, Genly is forced to examine his assumptions about gender as he interacts with the Gethenians. Initially, he simply categorizes them as men, which allows him to operate according to his own two-sexed notions of sexual difference. Binary thinking, however, becomes less and less effective for Genly; the fluidity of Gethenian sexual identity confounds such rigid categorization, and he is continually uneasy with what he identifies as feminine manifestations.

It is through Genly's close relationship with Lord Estraven, a politician who befriends him and who enters into kemmer as a female as they travel together, that he begins to accept the Gethenian identity as at totality rather than a contradiction. As Genly's assumptions about gender are challenged, so are the readers', and the constructed nature of gender is revealed. However, despite the utopian possibilities implicit in the depiction of a genderless and warless civilization, the novel has been criticized as portraying the Gethenians as largely male, thereby eliminating women from the text. Homosexuality is also effectively ruled out, since kemmer partners of the same sex are extremely rare. Nevertheless, *The Left Hand of Darkness* is a groundbreaking exploration of gender in science fiction. Its publication spurred numerous writers to challenge the conventions of gender relations, many within the context of utopian fiction and a number of whom explore gay and lesbian themes.

Joanna Russ's "When It Changed" (1972) is a representative feminist utopia that uses separatism to prioritize women over men in an attempt to reverse the dominant ideology of gender that pervades much of traditional science fiction. Separation from men enables Russ's characters a measure of empowerment and the opportunity to develop a society without the built-in structures of the patriarchy. The emphasis on communal values, expulsion of males from the dominant culture, and rejection of patriarchal values are all hallmarks of the feminist utopia. In the story, a plague wipes out the male population of the planet Whileaway, and over the next six hundred years, the survivors develop a non-hierarchical, cooperative, and stable society, one in which women merge ova in order to reproduce. The utopianism of this separatist lesbian society rests on the assumption that women are in some ways superior to men; this is emphasized by the nature of the encounter between the Whileawayans and the men from Earth who come to the planet to renew relations with them. The egalitarianism of Whileaway is thrown into relief by the men's calm sense of superiority and their refusal to accept an all-female society as self-sufficient, or even human.

Whileawayans also make an appearance in *The Female Man* (1975), Russ's most critically acclaimed novel. Here Whileaway functions in contrast to three other settings, one of which is a dystopia in which men and women form separate societies and engage in a literal war between the sexes. Formally experimental, the novel is narrated by four women from parallel worlds with different time probabilities, all of whom eventually interact and who are also versions of the same woman. More so than "When It Changed," *The Female Man* provides a challenge to compulsory heterosexuality in its depiction of explicit lesbian eroticism. In their use of queer content, Russ's works differ markedly from precursors of the modern feminist utopia, such as Charlotte Perkins Gilman's *Herland* (1915), which also posits a society in which women exist and prosper without men but which is entirely without sex.

Like *The Female Man*, the novels of Suzy McKee Charnas's *Holdfast Chronicles* juxtapose a separatist lesbian utopia alongside a nightmarish dystopia, in this case a post-apocalyptic Earth civilization in which women are enslaved by men and are considered subhuman. The first of four novels in the series, *Walk to the End of the World* (1974) focuses primarily on the patriarchal oppression in the city of Holdfast, while its sequel *Motherlines* (1978) portrays the lives of women who escape into the Wild outside the city. Alldera, the pregnant slave who escapes from Holdfast at the end of the first novel, lives among two communities of women known as the Riding Women and the Free Fems, whose difficult lives in the wilderness nevertheless represent a utopian alternative. Like the Whileawayans, the Riding Women reproduce without any input from men; they use their horses to aid in a parthenogenic process that results in clones of the mothers. Mothering duties are shared among all the women, whose cooperative, democratic culture serves as a stark contrast to that of the Holdfast men. The suggestion here, as in Russ and in other works such as Sally Miller Gearhart's *The Wanderground* (1979) and Sheldon/Tiptree's "Houston Houston, Do You Read?" (1976), is that women can realize utopian possibilities only in the absence of men. Since these communities form in opposition to patriarchal structures, and therefore their inhabitants define themselves in relation to these structures, the question arises as to whether separatist feminist utopias are themselves constrained by the very gender assumptions they seek to challenge. While the strategy of separatism liberates and empowers women, it has also been criticized for simply reproducing fixed categories of gender, and thus reinforcing essential notions of masculinity and femininity. The more recent separatist feminist utopia *Ammonite* (1994), by Nicola Griffith, interrogates the lesbian separatist strategy while maintaining a continuity with the tradition of its 1970s predecessors.

Another significant contribution to the feminist utopia of the 1970s is Marge Piercy's *Woman on the Edge of Time* (1976), in which protagonist Connie Ramos uses telepathic powers to travel to a utopian future where men and women peacefully coexist. In Mattapoisett, sexual differences based on gender roles are effaced, and therefore sex discrimination does not exist. Culturally, the people are androgynous. Women do not give birth; babies gestate in artificial wombs à la *Brave New World*, and both men and women breastfeed. While Piercy's vision is not separatist, it does share with other feminist utopias an emphasis on communality, nurturing, tolerance, and partnership with nature. In addition, the inhabitants of Mattapoisett enjoy sexual freedom from an early age, and routinely form attachments with members of both sexes. Like Piercy, Samuel R. Delany explores freedom from sexual taboos and from heterosexual norms in a setting that, while it is not strictly a utopia, has numerous utopian features. In *Trouble on Triton* (1976), the citizens of the heterotopia Tethys are free to enjoy all manner of sexual activities (as long they are deemed consensual), and sexual identity is fluid – anyone can undergo surgical alteration and psychological therapy in order to change gender, sex, and orientation. In Tethys, a society that recognizes multiple genders, the term gender *binary* loses its meaning. Like the lesbian communities depicted by Russ and Charnas, Delany's Tethys and Piercy's Mattapoisett provide a positive representation of alternative sexualities, as well as a radical critique of compulsory heterosexuality.

Critical responses to the separatist lesbian utopias of the 1970s include Joan Slonczewski's *A Door into Ocean* (1986) and Sheri S. Tepper's *The Gate to Women's Country* (1988). *A Door into Ocean* contrasts the utopian lesbian civilization of the moon Shora with that of the planet it orbits, a patriarchal imperialist dictatorship called Valedon. Slonczewski's depiction of the two societies bears some similarities to the civilizations of the planet Urras and its moon Anarres in Le Guin's novel *The Dispossessed* (1974), which contrasts a dystopian, patriarchal culture with a utopia in which men and women enjoy equality. In *A Door into Ocean*, however, there are no males in the utopia of Shora. Although the Valans share an identical genetic heritage with the Shorans, they view them as alien, marked as Other by the genetically engineered adaptations that enable them to live comfortably on an ocean planet. In addition, Shorans are no longer capable of interbreeding with Valans, instead merging ova in order to reproduce. Envious and fearful of the Shorans' advanced science, the Valans attempt to annex the moon, only to meet with successful forms of nonviolent resistance. Unlike previous lesbian utopias, however, Shora is open to the possibility of including men, provided they are willing to adapt to the community. This possibility is

embodied in Spinel, a young male Valan who joins the Shorans in their resistance against Valedon. Falling in love with a Shoran, Spinel decides to become a fully fledged member of Shoran society. Tepper's *A Gate to Women's Country* also suggests that genuine equality and harmony between men and women is possible, but only though a process of selective breeding, so that what are believed to be problematic aspects of masculine behavior – aggression, dominance, violence – are bred out by matriarchal societies. The assumption by the women who orchestrate the breeding is that warlike behavior is genetic rather than learned, and they justify the manipulation and murder of the men who exhibit this behavior with the essentialist argument that they are creating an ideal society by filtering out undesirable characteristics that tend to be innate in men. Apparently, the ideal society does not include homosexuality, as it is intentionally eradicated through reproductive technology. In eliminating both separatism and homosexuality, Tepper levels a disconcerting critique at the feminist lesbian utopia's tendency to exclude men.

A key element of feminist utopias, the control of reproductive technology by women shifts back to the patriarchy in Margaret Atwood's *The Handmaid's Tale* (1985), a dystopian novel that draws upon anxieties about reproductive rights in the midst of the conservative backlash of the 1980s. In Atwood's Republic of Gilead, a near future repressive state governed by right-wing religious fundamentalists, women are primarily valued for their ability to breed. Those who are unable to do so fulfill other social roles in line with patriarchal notions of gender, such as those of wife, domestic servant, and prostitute. Considered little more than vessels, the handmaids of the novel's title are conscripted by the state for breeding purposes. Octavia Butler treats a similar subject in "Bloodchild" (1984), with a twist: men are used as vessels to incubate the eggs of the insect-like alien species known as Tlic. When the eggs hatch, the Tlic cut the men's abdomens open and remove the alien grubs – provided the grubs have not already devoured their hosts, a possibility that recalls the gruesome image of alien offspring bursting from the (male) character Kane's torso in the film *Alien* (1979). Although men may be impregnated against their will, the female Tlic attempt to obtain their voluntary participation by creating a loving environment and incorporating themselves into the structure of human families. Gan, the story's protagonist, is motivated by his love for the Tlic T'Gatoi who has designated him as her host, but he also feels powerless to deny her; he and the other humans on the Tlic world have escaped from slavery on Earth and are kept by the Tlic on a Preserve for their own protection. Not only does the story suggest that oppression and exploitation are not unique to the patriarchy – Tlic civilization is

matriarchal – but by forcing men to experience sex and reproduction from the position of women in a patriarchal culture, it also responds to controversies about reproductive rights prevalent in the 1980s. In addition, the story recalls the subjugated position of black women slaves in the United States, who like Gan were forced to carry the offspring of their alien masters.

The humans of the postapocalyptic Earth of Butler's "Xenogenesis" trilogy also submit to a reproductive partnership with an alien race, but one that involves genetic exchange (as opposed to parasitism) between the alien Oankali and humans, resulting in human–alien hybrids. The aliens, however, are very much in charge, seeking to eradicate by genetic exchange what they believe is humanity's natural (and highly destructive) tendency toward hierarchical behavior. Butler's human-Oankali hybrids transgress imposed boundaries and culturally constructed categories, which metaphorically aligns them with Donna Haraway's boundary-crossing cyborg identities and their utopian possibilities.

The interface between human and machine in cyberpunk fiction also points toward the potent fusion and dangerous possibilities suggestive of the cyborg metaphor. However, this interface has been described in largely masculinist terms, and cyberpunk has been widely criticized for reinforcing gender binaries in its privileging of the mind, coded masculine, over the feminized body. Despite claims in the cyberpunk manifestos of the 1980s of a science fiction lineage that rarely included women, the subgenre in fact has precursors in feminist science fiction, including Joanna Russ's *The Female Man* and Marge Piercy's *Woman on the Edge of Time*. One early work that can claim predecessor status is Sheldon/Tiptree's "The Girl Who Was Plugged In" (1973). Like the console cowboys in William Gibson's *Neuromancer* (1984) who "jack in" to the feminized matrix of cyberspace, the female protagonist P. Burke spends the majority of her time "plugged in" to a computer system – in this case, a computer system designed by a powerful corporation. P. Burke, in other words, is plugged into masculine structures of *power*. And while Gibson's cowboys experience a sense of bodiless exultation in cyberspace, P. Burke experiences a different kind of embodiment by remotely animating the cyborg body of Delphi. Beautiful but empty, Delphi is an organic human body grown specifically for the purpose of serving as a living advertisement to sell products in a future where ads have been legally banned. P. Burke, deformed and therefore considered defective in a world that values the cultural ideal of feminine beauty embodied by Delphi's form, performs femininity in a manner to similar to that of Deirdre in Moore's "No Woman Born." P. Burke does not experience cyborgian transcendence, however; she can only perform Delphi, not fuse

with her. In the end she is rejected – and accidentally killed – by the object of Delphi's affections, who is horrified when he catches a glimpse of the woman behind the beautiful shell he loves. The romance is no more "natural" than the gendered ideal that P. Burke presents to the world through Delphi, and the commodification of this ideal by the technologies of consumerism is at the heart of the story's unsettling satire.

If the male-dominated cyberpunk of the 1980s was influenced by feminist science fiction, the opposite is also true. While Pat Cadigan is the only woman associated with the original movement, other writers such as Candas Jane Dorsey, Lisa Mason, Kathy Acker, Melissa Scott, Maureen F. McHugh, Emma Bull, Laura Mixon, Nalo Hopkinson, Nicola Griffith, and Justina Robson have incorporated cyberpunk motifs while challenging the politics of gender and sexuality fundamental to many of these texts. In addition, male writers such as Jeff Noon and Don Sakers employ feminist sensibilities in their cyberpunk-inflected novels. Feminist reinterpretations of cyberpunk envision the human–machine interface as a site for the exploration of gender and identity, but they also explore the social consequences of the interface. Cadigan's *Synners* (1991), for example, presents an alternative vision to the masculinist cyberpunk texts that often uncritically celebrate technology and privilege electronic transcendence over the mundane experience of the body, or "meat prison." Cadigan taps into the concerns that women, who have long struggled to establish a bodily presence in a patriarchal system that renders them invisible or absent, may have about embracing complete bodily transcendence.

Marge Piercy, who consciously draws upon motifs and images from Gibson's cyberpunk, sets her novel *He, She, and It* (1991) in a familiar dystopian near future characterized by environmental degradation and dominated by multinational corporations. Shira, the novel's heroine and an expert in cybernetics, returns from the artificial environment of a corporate dome to the independent free town of Tivka where she is asked to help socialize Yod, a cyborg programmed to defend the town from threats posed by the Multis and a criminal underworld. Cyborgs are banned by corporations, and thus Yod's ability to pass as human is crucial to the town's survival. Much of the novel centers around the relationship that develops between Shira and Yod, and the questions that arise about what it means to be human. Disembodied in Gibson, artificial intelligence in Piercy is entirely rooted in the technologically constructed body, unsettling the boundaries between human and machine. Further, Yod is constructed in a way that problematizes conventional notions of gender: although his form is male, his programming lends him an androgynous personality. Yod may be read as a literal though not entirely successful embodiment of Haraway's cyborg

metaphor, since despite his androgyny, he is depicted as the ideal man – i.e. a biologically male and empathic lover who is sensitive to Shira's needs and desires.

Melissa's Scott's characters in *Trouble and Her Friends* (1994) take pleasure in the freedom from a fixed identity available on the Net. This freedom from race, gender, and all identifiable bodily markers, serves as a marked contrast to the marginalization Trouble and her fellow hackers experience in the corporeal world, due in part to their queer status. The fluidity of identity can be unsettling, too, however, as when Trouble's ex-lover Cerise has virtual sex on the Net with someone she believes to be a woman, but who is in actuality the avatar of a teenaged boy. Scott emphasizes the vulnerability and embodiedness of the virtual subject, imagining possibilities both liberating and dangerous. She also challenges the compulsory heterosexuality of much of cyberpunk fiction, with *Trouble and Her Friends* joining Laura Mixon's *Glass Houses* (1992) and Mary Rosenblum's *Chimera* (1993) in feminist cyberpunk explorations of gay and lesbian identity.

An increasing number of gay, lesbian, and bisexual characters populate science fiction texts, demonstrating the field's potential to engage with issues of sexuality and providing intersections with gay and lesbian studies and queer theory. Samuel Delany and John Varley, both of whom radically deconstruct both gender and sexuality in their works, have a long history of exploring alternative sexualities in science fiction; recent works that posit multiple versions of homosexuality include Delany's *Stars in My Pocket Like Grains of Sand* (1984) and Varley's *Steel Beach* (1992). Among works that focus on the marginalization of gay/lesbian identities is Geoff Ryman's *The Child Garden* (1989), which features a world where genetically engineered viruses educate the populace, eradicating homosexuality as "bad grammar." The lesbian protagonist Milena, however, turns out to be immune to the viruses, but her potential love affair with the genetically engineered polar bear/woman Rolfa is doomed by the viruses that eradicate Rolfa's own lesbianism. Eleanor Arnason's *The Ring of Swords* (1993) also features interspecies homosexual love. For the militaristic, fur-covered *hwarhath*, however, homosexuality is the norm, and heterosexuality is considered grossly deviant. Thus the *hwarhath* consider it completely normal that their military leader Gwarha could love another male – what is odd is that his lover is Nicholas Sanders, a human whose own people view him as a traitor. Unlike Sanders, the gay protagonist in Maureen McHugh's *China Mountain Zhang* (1992) keeps his orientation under wraps, as he lives in a near future America in which the People's Republic of China is in control and intolerant of difference.

In Gwyneth Jones's *Life* (2004), human sexuality is set to be transformed by the agency of a virus, but the implications for that change are not necessarily revolutionary. Anna Senoz, a genetics research scientist, discovers that the Transferred Y viroid is a genetic trigger housed in human DNA that will ultimately lead to the disappearance of the Y chromosome. That does not mean, however, that biological males will disappear, but it does suggest that the gender binary as we know it will no longer exist. Such a fundamental transformation on the horizon suggests utopian possibilities, but Anna, who struggles with sexual harassment, the glass ceiling, and juggling career and a family, is pessimistic about whether or not fundamental changes in the material reality of women's everyday lives will actually occur. The cultural construction of gender, the novel suggests, might prove to be far more intractable than the Y chromosome. By extrapolating discoveries in contemporary genetics, Jones, who also explores the malleability of gender in her critically acclaimed "Aleutian" trilogy, both interrogates our assumptions about sex and gender and speculates about the future of humanity. How that future is to be determined, however, rests upon our shoulders.

Science fiction film and television have done far less than novels and short stories to provide thoughtful explorations of questions related to gender. However, they have led the way in the development of a major strain in contemporary popular culture: the female action hero. Film protagonists such as Ellen Ripley of *Alien* (1979) and its sequels and extending through Sarah Connor of *Terminator 2* (1991), and Trinity of *The Matrix* (1999) and its sequels have been crucial to this phenomenon, which has also included the protagonists of such television series as *Dark Angel* (2000–2002), *Battlestar Galactica* (2004–), and *Bionic Woman* (2007–). Such protagonists suggest an expansion in the roles that are available to women in popular culture, even if they are problematic in their potential glorification of the violence once associated with men. More measured depictions of women who assume traditionally masculine roles include Captain Janeway of *Star Trek: Voyager* (1995–2001) and special agent Dana Scully, the scientist and skeptic of *The X-Files* (1993–2002).

All in all, science fiction has been important in demonstrating that challenges to conventional gender roles constitute an urgent and ongoing political project. The genre's ability to engage with this project by providing sophisticated commentary on the gender issues that shape and inform our contemporary existence is what makes it so attractive as a medium for feminist concerns, as well as for explorations that serve to reveal the constructed nature of gender. Science fiction allows us to redefine gender and sexuality in ways that expand rather than limit, and it has proven to be fertile ground for

examinations of alternative sexualities. Perhaps the most tangible evidence that explorations of gender now constitute a primary concern in science fiction is the establishment of Tiptree Award, which recognizes science fiction or fantasy that explores or expands our understanding of gender. Instituted in 1991, the award is named after James Tiptree Jr., the authorial persona of Alice Sheldon and the woman whose work and public revelation of her true identity helped to break down the false boundaries between men's writing and women's writing in science fiction.

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Margaret Atwood, *The Handmaid's Tale* (1985).

Octavia Butler, "Bloodchild" (1984), "Xenogenesis" trilogy: *Dawn* (1987), *Adulthood Rites* (1987), and *Imago* (1989).
Pat Cadigan, *Synners* (1991).
Suzy McKee Charnas, *Holdfast Chronicles: Walk to the End of the World* (1974), *Motherlines* (1978), *The Furies*, (1994), and *The Conquerer's Child* (1999).
Samuel R. Delany, *Trouble on Triton* (1976) and *Stars in My Pocket Like Grains of Sand* (1984).
Suzette Haden Elgin, *Native Tongue* (1984).
Sally Miller Gearheart, *The Wanderground: Stories of the Hill Women* (1978).
Charlotte Perkins Gilman, *Herland* (1915).
Nicola Griffith, *Ammonite* (1994).
Gwyneth Jones, *Life* (2004), "Aleutian" trilogy: *White Queen* (1991), *North Wind* (1996), and *Phoenix Café* (1998).
Ursula K. Le Guin, *The Left Hand of Darkness* (1969) and *The Dispossessed* (1974).
Maureen McHugh, *China Mountain Zhang* (1992).
Laura Mixon, *Glass House* (1992).
C. L. Moore, "No Woman Born" (1944).
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Marge Piercy, *Woman on the Edge of Time* (1976) and *He, She, and It* (1991).
Joanna Russ, "When It Changed," (1972), *The Female Man* (1975), and *The Two of Them* (1978).
Geoff Ryman, *The Child Garden* (1989).
Mary Shelley, *Frankenstein, or, The Modern Prometheus* (1818).
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James Tiptree Jr. (Alice Sheldon), "The Girl Who Was Plugged In" (1973) and "Houston, Houston, Do You Read?" (1976).
John Varley, *Steel Beach* (1992).
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Science Fiction and Satire

Satire is an ancient and distinguished literary mode that typically employs humor to expose and critique the follies of various social or political practices or certain habitual modes of human behavior. Despite its use of humor, satire often makes serious and important points about weighty issues. By its nature, satire usually exaggerates the phenomena that are being criticized in order to produce fresh perspectives on them and to reveal aspects of these phenomena that might otherwise not be as clear. In short, satire depends on the phenomenon of cognitive estrangement in order to achieve its effects. In that, it has much in common with science fiction, so it is not surprising that some of the most important science fiction novels ever written have been openly satirical in their orientation.

There is a long tradition of satirical works that posit worlds that differ from our own in fundamental ways and that therefore belong to the realm of "speculative fiction." Perhaps the most obvious case here would be Jonathan Swift's *Gulliver's Travels* (1726), which among other things lampoons what Swift saw as the follies of the newly emergent science of the eighteenth century. *Gulliver's Travels* is sometimes actually considered an early work of science fiction, though it is probably best considered an example of Menippean satire, a subgenre that dates back to the work of the second-century AD satirist Lucian, who was supposedly inspired by Menippus (for whom the subgenre is named) and whose work included science fiction motifs such as voyages to the moon and Venus. Even earlier works of satire, such as Aristophanes's *The Clouds* (423 BC) contain elements that align them with science fiction.

Many works of science fiction proper contain strongly satirical components, including virtually all of the science fiction of H. G. Wells. The important Czech writer Karel Čapek (perhaps best known for coining the term "robot" in his 1921 play *R.U.R.*) often wrote in a satirical vein, including the dystopian novels *The Absolute at Large* (1922) and *War*

with the Newts (1936). Indeed, dystopian fiction is generally satirical by its very nature. Thus, major works of that subgenre – such as Evgeny Zamyatin's *We* (1924), Aldous Huxley's *Brave New World* (1932), and George Orwell's *Nineteen Eighty-Four* (1949) – are among the leading works of twentieth-century satire. In addition, authors of utopian fiction – from Thomas More's *Utopia* (1516) forward – also often construct their alternative societies largely in order to satirize their own societies.

Science fiction that is almost exclusively satirical rose to prominence in the 1950s with the work of authors such as Frederik Pohl, who satirized the emerging tendencies of post-World War II consumer capitalism in a series of short stories and novels, often in collaboration with Cyril M. Kormbluth. For example, the Pohl and Kormbluth satire *The Space Merchants* (1952), which projected a future dystopian Earth thoroughly dominated by soulless corporations (especially advertising firms), is a classic of its kind. Pohl's stories "The Tunnel under the World" (1954) and "The Waging of the Peace" (1959) also comment on the dehumanizing effects of capitalism, with important treatment of Cold War tensions included as well. The latter of these also comments on the dehumanizing potential of increasing automation.

Automation is also a central concern of *Player Piano* (1952), an early satirical novel by Kurt Vonnegut Jr. *Player Piano* responds to a number of anxieties in American life in the early 1950s with its depiction of an administered society in which human labor has been made superfluous by advanced technology, resulting in a populace that itself feels superfluous and without purpose. *Player Piano* addresses a growing fear of American workers in the early 1950s that they were in danger of being replaced by automation. In Vonnegut's future America, machines have replaced almost all human workers, except a small elite of engineer-managers who are still required to make the system operate smoothly. But the real political power of Vonnegut's engineer-managers is rather limited. Ultimate planning decisions in this machine-like society are made by a giant computer, EPICAC XIV, making *Player Piano* one of the surprisingly few 1950s science fiction novels to deal in a central way with advances in computer technology.

Vonnegut would go on to become one of the most important American satirists of his generation, often returning to science fiction themes. *The Sirens of Titan* (1959) is, among other things, a spoof of a variety of science fiction motifs, though it also effectively satirizes religion as a sham and as a mind-numbing force that renders individuals susceptible to manipulation by the unscrupulous. *Cat's Cradle* (1963), a narrative of global apocalypse, also satirizes religion, as well as the Cold War arms race. *Mother Night* (1961) features an American named Howard W. Campbell Jr. (apparently

based on legendary science fiction editor John W. Campbell Jr.), who becomes a supposed Nazi propagandist during World War II, though he is actually working as a spy for the US *Slaughterhouse-Five* (1969) is an antiwar satire that also deals with World War II (focusing on the bombing of Dresden), but includes science fiction motifs such as time travel and alien intervention. Many of Vonnegut's novels comment on science fiction through the appearances of the fictional science fiction author Kilgore Trout, possibly based on the real science fiction writer Theodore Sturgeon – though partly an alter ego of Vonnegut himself.

One of the most striking science fiction satires of the 1950s is Bernard Wolfe's *Limbo* (1952), an outrageous commentary on the Cold War arms race set in a postapocalyptic world in which citizens, not wishing to repeat the mistakes of the past, express their support for disarmament by literally having their own arms (or other limbs) removed. Described by Clute and Nicholls in *The Encyclopedia of Science Fiction* as "perhaps the finest sf novel of ideas to have been published during the 1950s," *Limbo* addresses a variety of serious issues, despite its outrageous premise (*Encyclopedia*, 1337). In particular, it satirizes the conformist corporate culture of 1950s America as a dehumanizing force that contributes to the insanity of the arms race.

Robert Sheckley was another major sf satirist of the 1950s. His story "The Prize of Peril" (1958) portrays a game-show contestant who must avoid assassins for a week in order to win, satirizing the game-show craze of the 1950s, but also foreshadowing the later reality television craze, as well as sf media satires such as the film *The Running Man* (1987). Sheckley's satirical novels include *Immortality, Inc.* (1958), which later became the basis for the film *Freejack* (1992). A somewhat darker satire, *The Status Civilization* (1960), portrays the nightmarish society of a strictly hierarchical prison planet that suspiciously mirrors modern American society.

In Robert Silverberg's *Invaders from Earth* (1958), an unscrupulous Earth corporation seeks to manipulate governmental authorities to aid it in its colonization and exploitation of Ganymede (the largest moon of Jupiter), which has been discovered to be inhabited by intelligent (but apparently primitive) life. Silverberg's novel is thus prototypical of sf narratives in which the colonization of other planets parallels the phenomenon of colonialism on Earth. Following in the footsteps of *The Space Merchants*, Silverberg's novel focuses on an advertising firm that has been hired to do public relations work to popularize the colonization process. *Invaders from Earth* stands out among sf novels of the 1950s for its sympathetic (if a bit stereotypical) treatment of the gentle inhabitants of Ganymede in the face of their exploitation (and possible extermination) in the interest of corporate gain.

Invaders from Earth is an early product of Silverberg's prolific career and not one of his more polished novels, especially in its somewhat contrived ending. It shows a strong influence of the early work of Philip K. Dick, virtually all of whose work contains strong satirical components. In one way or another, the work of Dick, with its distinctive mixture of zaniness and poignancy, satirizes virtually every aspect of American society (and of "reality" itself) from the 1950s to the 1970s. For example, in *The Man in the High Castle* (1962), his alternative history based on an Axis victory in World War II, Dick subtly but inexorably outlines parallels between the triumphant German Nazis and the militarist-imperialist tendencies of his own modern America, which was at that very time laying the groundwork for the debacle in Vietnam. Particularly prescient is Dick's concern with the growing power of the media in American life, which shows up at numerous points in his work, perhaps most effectively in *Do Androids Dream of Electric Sheep?* (1968), in which television is empowered by the spiritual emptiness of life in the real world.

Dick is a one-of-a-kind writer, though his satirical treatment of various aspects of American society in the 1960s loosely aligns him with the concerns of the so-called New Wave of science fiction writers in that decade. One might say much the same thing for the British author J. G. Ballard, whose unique career fits only loosely within the bounds of science fiction, but whose satirical short stories provided a key contribution to the success of Michael Moorcock's *New Worlds* magazine, the flagship publication of the New Wave. Ballard's satirical novels, such as *Crash* (1973), are important as well, especially for their dark take on the psychic consequences of the directions being taken by corporate capitalism. These novels are also important forerunners of cyberpunk science fiction.

New Wave writers (who also include Sheckley and Silverberg) were often sharply satirical of the British and American societies of the time. Harlan Ellison's short story "Repent, Harlequin!" Said the Ticktockman," a dystopian satire of the growing regimentation of modern life, is a typical New Wave satire. Among novel-length works, John Sladek's *The Müller-Fokker Effect* (1970) foreshadows cyberpunk science fiction in its portrayal of an attempt to record human personalities on tape, an attempt that goes sadly awry (as technology often does in Sladek's work). In the process, Sladek lampoons various central phenomena in modern American life, including anticommunist paranoia, corporations, and religion.

One of the most effective and best known New Wave satires is Norman Spinrad's *Bug Jack Barron* (1969), whose open treatment of themes related to drugs and sex was paradigmatic of the New Wave – but also caused it to be declared obscene by many early reviewers. Its title character is a former

1960s Berkeley student radical who went on to help found a major national political party and then to become the host of the eponymous television talk show in which viewers call in live by videophone to air their various grievances. Set roughly twenty years into the future relative to the writing of the book, *Bug Jack Barron* seems prescient in its vision of the increasing mediatization of American society, while the television program at its center in many ways anticipates such phenomena as the growth of talk radio and reality television.

Bug Jack Barron can be taken as an endorsement of the counterculture of the 1960s. Meanwhile, the mainstream power structure of American society is satirized as thoroughly corrupt, dominated, and driven by financial interests with no regard for human beings. The principal villain of the novel is magnate Benedict Howards, the wealthiest and most powerful man in America. Much of the plot involves Barron's discovery and revelation of a project through which Howards and his Foundation for Human Immortality have developed a longevity treatment that is affordable only by the rich and that requires the gruesome sacrifice of young children.

Spinrad's *The Iron Dream* (1972) is based on an alternative history premise in which Adolf Hitler emigrated to New York in 1919 and thus never rose to power in Germany. Except for a brief "About the Author" segment at the beginning and a mock critical commentary in the Afterword, the entire novel consists of the text of *Lord of the Swastika*, an outrageous fantasy novel that obviously enacts Hitler's personal fantasies. In this post-apocalyptic novel, most of the human race has been polluted by radiation-induced mutations as a result of an earlier nuclear war. But Hitler's alter ego, the magnificent Feric Jaggar, a genetically pure human, rises to power and manages to re-establish the dominion of pure humans on Earth, defeating the evil forces of the mutant stronghold of Zind, an obvious stand-in for the Soviet Union. In the end, Jaggar even begins a project to colonize the stars with clones of his pure human storm troopers. *Lord of the Swastika* (which, in this alternative universe, wins a Hugo Award) lampoons certain right-wing tendencies in both science fiction and fantasy novels, but does so in a way that satirizes phenomena (such as militarism) in our own world that facilitate such novels (and that made Hitler's real-world rise to power possible).

There is, of course, a rich tradition of militaristic science fiction, of which Robert A. Heinlein's *Starship Troopers* (1959) is perhaps the best known example. There are also numerous science fiction satires that critique militarism. Harry Harrison's *Bill the Galactic Hero* (1965), generally read as a direct response to *Starship Troopers*, is a leading example of such satire with its hilarious portrayal of the insane zealotry that drives an interstellar war.

Joe Haldeman's later *The Forever War* (1974) is also partly a response to Heinlein, but functions primarily as a satirical critique of the Vietnam war. That war was the object of other satires as well, one of the best of which is Ursula K. Le Guin's *The Word for World Is Forest* (1972), though this highly serious novel lacks the humor of most conventional satire. While Le Guin's book has been widely considered to be an allegory of the American experience in Vietnam, it also addresses the colonial situation in a much more general way, at the same time dealing with issues related to gender and environmentalism. Here, human colonists are engaged in an effort to "tame" (which largely means devastate) the forest planet Athshe (also known as New Tahiti), which is highly valuable as a source of lumber to be sent back to a deforested Earth, where wood is now a rare and precious commodity. There are no humans living on Athshe when the colonists arrive, though the planet does have some sentient inhabitants, whom the human colonizers refer by the derogatory term "creechies," regarding them as decidedly subhuman. In an especially clear repetition of the history of the European encounter with Africa, the Athsheans are rounded up and used as slave labor. At the same time, the forests so dear to their culture are systematically destroyed in logging operations. However, the Athsheans turn out to be more intelligent (and formidable) than the humans realize. In fact, they have a highly sophisticated culture, though the colonizers from Earth are unable to recognize it as such because it is so different from their own. The abusive treatment of the Athsheans by the humans leads to a violent uprising, while the racist and sexist attitudes of some of the human colonists provide Le Guin with the opportunity to comment on the contribution of these attitudes in our own world to colonialism in general and the American invasion of Vietnam in particular.

Le Guin's suggestion of the patriarchal foundations of colonialism points toward the satirical aspects of the numerous feminist utopias that appeared in the 1970s and 1980s, including such works as Suzy McKee Charnas's *Walk to the End of the World* (1974) and *Motherlines* (1978), Joanna Russ's *The Female Man* (1975), and Marge Piercy's *Woman at the Edge of Time* (1976). Margaret Atwood's *The Handmaid's Tale* (1985), like most dystopian texts, is highly satirical as well. These texts tend toward darkness in their satires of patriarchy, though they can at times be quite lively.

More humorous satires of the 1970s and 1980s include Barry Malzberg's *Herovit's World* (1973), which satirizes the market pressures that drive the business aspects of science fiction writing, though in a way that comments on the sad status of the individual in modern consumer society as a whole. Meanwhile, Somtow Sucharitkul's *Mallworld* (1981) skewers consumerism in its depiction of a shopping mall the size of a planet, patronized by a

variety of alien races. The most prominent satires of this period, however, are Douglas Adams Pythonesque *The Hitchhiker's Guide to the Galaxy* (1979) and its various sequels, which together lampoon life, the universe, and everything (and which may have been influenced by Sheckley's 1968 novel *The Dimension of Miracles*). Adams's sequence began as a BBC radio serial in 1978, became a BBC television miniseries in 1981 and a feature-length theatrical-release motion picture in 2005. In all media, it is a work of high silliness, featuring a heavy dose of toilet humor. However, it also contains a great deal of social satire, though the completely unserious way in which it lampoons various human foibles make it almost a parody of social satire rather than social satire proper. It is also more a parody of science fiction than science fiction proper, various staples of the genre (space travel, time travel, galactic empires, dangers of arrant technological development, planetary catastrophes, and so on) being treated with anything but respect and seriousness.

The various versions of the *Hitchhiker's Guide* sequence illustrate the multimedia potential of science fiction satire. Indeed, while science fiction television series devoted exclusively to satire have been relatively rare, numerous important series have included strong satirical components, from *The Twilight Zone* (1959–1964) to *The X-Files* (1993–2002). The long-running British classic *Doctor Who* (1963–1989, resurrected in 2005) has often been highly satirical, while the campy German-Canadian production *Lexx* (1997–2001) brought television sf satire to a new level of outrageousness. *Lexx*, like the British sf sitcom *Red Dwarf* (which ran off and on from 1988 to 1999), aims much of its satire at the sometime self-seriousness of science fiction itself, while addressing a number of other social and political issues as well.

In the realm of film, Stanley Kubrick's *Dr. Strangelove, or How I Learned to Stop Worrying and Love the Bomb* (1964) remains perhaps the most effective science fiction satire of all time. This film, featuring Peter Sellers in the title and several other roles, captured, more than any other single work, the lunacy of the Cold War mentality, while at the same time suggesting that certain American attitudes in the Cold War might have been inherited from the German Nazis. Indeed, the film's crisis is triggered by literal insanity, that of General Jack D. Ripper (played with appropriately grim lunacy by Sterling Hayden), commander of Burpelson Air Force Base and of a wing of the Strategic Air Command's fleet of B-52 nuclear bombers. Unhinged by his extreme anticommunist paranoia, Ripper orders his bombers to attack the Soviet Union, thereby triggering the labyrinthine security procedures that make it almost impossible to recall such an order, leading to global nuclear apocalypse.

Based (loosely) on the novel *Red Alert* (1958) by Peter George, *Dr. Strangelove* goes well beyond the novel in its absurdist satire of the ideology of the Cold War arms race. *Dr. Strangelove* became a cult favorite of the 1960s youth movement and was one of the classics of American culture of the 1960s, even though, strictly speaking, it is a British film, produced at London's Hawk Studios. The film is so representative, in fact, that historian Margot Henriksen entitled her own study of the ideology of Cold War America *Dr. Strangelove's America*.

Any number of other science fiction films have strong satirical components, as when Franklin Schaffner's *Planet of the Apes* (1968) comments on racism or when Paul Verhoeven's *Total Recall* (1990, based on Dick's 1966 short story "We Can Remember It for You Wholesale") satirizes the exploitative practices of capitalism. Some of the most purely satirical sf films include Woody Allen's *Sleeper* (1973), Brian Forbes's *The Stepford Wives* (1975), Terry Gilliam's *Brazil* (1985), Paul Verhoeven's *Robocop* (1987), John Carpenter's *They Live* (1988), Stuart Gordon's *Space Truckers* (1996), Tim Burton's *Mars Attacks!* (1995), and Luc Besson's *The Fifth Element* (1997).

Among more recent writers of sf satire, Terry Bisson established himself as a major new voice with *Voyage to the Red Planet* (1990), a wacky satirical romp that features the first manned trip to Mars – not for colonization or scientific research, but essentially as a publicity stunt to aid in the marketing of a film to be made during the expedition. (The novel makes it clear that the film could easily have been made via computer-generated imagery without actually going to Mars.) This motif allows for a considerable amount of satire about the entertainment industry, while Bisson actually describes a substantial amount of fairly convincing science fiction hardware, though some of his technology is satirically farfetched, as in his description of a device that allows energy (such as sunlight) to be digitized and stored on CDs for later playback. The most memorable aspects of *Voyage to the Red Planet* are its satirical presentation of a near-future corporate-dominated Earth. In Bisson's near-future America, privatization has reached new heights, and former government organizations (such as the US Navy, the National Park Service, and the UN) are under corporate ownership, a vision of sweeping privatization that would become a virtual cliché of near-future science fiction in the 1990s. By the time the voyage and the film (which has the same title as Bisson's novel) are completed, corporate takeovers have left the entire project under the ownership of the giant Disney-Gerber corporation, which heavily promotes the film with an eye toward winning as many profit-generating Oscars as possible. Indeed, it is clear that the actual trip to Mars is necessary only for marketing

purposes: The resultant commentary on the commercialization of the film industry (one award given in the Academy Award ceremony that ends the book is for "Best Tie-in Merchandising") is quite effective. The projection of the eventual impact of computer-generated imagery on filmmaking now seems more and more prescient as well.

Bisson's *Pirates of the Universe* (1996) is a postapocalyptic novel that satirizes the bureaucratic tendencies of both business and government, while *The Pickup Artist* (2001) satirizes the contemporary American loss of historical sense. A riff on Ray Bradbury's *Fahrenheit 451* (1951), this novel portrays the adventures of a "pickup artist," an agent of the government assigned to collect copies of "deleted" books, films, recordings, and other artworks so that they can be destroyed to make room for new works in a world overcrowded with people, things, culture, and information. Much of Bisson's most important satirical writing has appeared in his short stories, the best known of which is the weird but poignant Hugo and Nebula Award-winning "Bears Discover Fire" (first published in 1990 and republished in 1993 in the collection *"Bears Discover Fire" and Other Stories*).

Recent science fiction satires have typically concentrated on various aspects of contemporary consumer capitalism. For example, the portrayal of the franchising of traditional government services in Neal Stephenson's postcyberpunk classic *Snow Crash* (1992) indicates the growing intrusion of private corporations into every aspect of American life. Cyberpunk, in fact, is often highly satirical, though in *Distraction* (1998), former cyberpunk guru Bruce Sterling departs from the cyberpunk mode entirely in his presentation of a darkly comic vision of a 2044 America coming apart at the seams, largely owing to environmental decay. Meanwhile, in the lively *Down and Out in the Magic Kingdom* (2003), Canadian Cory Doctorow satirizes the Disneyfication of America and the emptiness of life in what otherwise seems to be a consumerist paradise.

The novels of Connie Willis often contain a strong satirical element, as when *Remake* (1995) satirizes the Hollywood film industry in its vision of a politically correct attempt to retroactively sanitize films of the past. Meanwhile, the banal films of the present are made (as in *Voyage to the Red Planet*) strictly via computer-generated imagery, no actors needed. In *Bellwether* (1996) Willis pokes relatively lighthearted fun at how capricious and haphazard scientific discoveries can be (or how they are just completely random, as much as we would like to pretend there's an order to these things). She also satirizes the corporate control of scientific research and the bureaucratic conformism of corporate culture.

Bellwether is typical of much recent satire in its satire of corporatism. For example, Jack Womack's dystopian novels featuring the machinations of the

evil Dryco Corporation contain strongly satirical components. *Elvissey* (1993) is one of the most satirical of these novels. Here, the corporation retrieves an alternative Elvis from a parallel universe in order to attempt to use him in their attempt to counter the growing power of the Church of Elvis (their only major rival for power in this future world). Some of the most effective satires of corporate capitalism reside in the recent novels of the Australian Max Barry, as in his vision of a near-future world dominated by American corporations in *Jennifer Government* (2003). Barry's elaboration of the goings-on of Zephyr Holdings Corporation in *Company* (2006) is not openly science fictional, but its combination of Dilbert with Kafka creates a vision of the company as a dystopian microcosm of modern America.

As with *Company*, many of the best recent satires of capitalism contain science fictional components, even if the works are not themselves science fiction proper. One might also mention the marginally science fictional novels of Chuck Palahniuk (sometimes compared with Ballard), beginning with *Fight Club* (1996). The short stories of Paul Di Filippo are particularly important as satires of capitalism, though they are more purely science fictional. Some of the best recent satires of capitalist globalization have come from the writers of the British Boom. For example, Richard K. Morgan's *Market Forces* (2005), an exemplary case of speculative, satirical science fiction that shows us, in its imaginative (and exaggerated) vision of a future capitalist nightmare, many of the central tendencies that are already present in the capitalism of our own day. Set in the year 2049, Morgan's novel presents us with a picture of a London in which class difference has been solidified by physical separation. The poor and disenfranchised of Morgan's London live in the cordoned zones, in which chaos and mayhem reign, with little police interference. The borders of these zones, however, are patrolled by heavily armed guards, who are there to prevent this mayhem from spreading into the more affluent parts of the city, where middle-class professionals can live out their domestic lives in relative order and security. Their professional lives, though, are another matter entirely. Morgan presents us with a vision of capitalism run amok in which individuals can advance within corporations by killing their rivals in ritual conflict, while rival corporations compete for contracts through violent road battles in armored cars. Many of these contracts, meanwhile, involve investments in the numerous local wars and revolutions that are endemic in the book's future Third World and that Western corporations engineer for their own profit.

Market Forces is in the best tradition of satirical science fiction – or of satire as a whole – in that it presents a seemingly outrageous exaggeration

of existing circumstances that, on reflection, turns out to be much closer to reality than first appears. It also joins works from *The Space Merchants* forward in demonstrating the special satirical potential of the cognitive estrangement that is produced by all of the best science fiction. Collectively, the many important works of science fiction satire provide one of the best illustrations of the power of science fiction to produce compelling social and political commentary.

Suggested Further Reading

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Notable Fiction

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J. G. Ballard, *Crash* (1973).

Max Barry, *Jennifer Government* (2003) and *Company* (2006).

Terry Bisson,"Bears Discover Fire" (1990), *Voyage to the Red Planet* (1990), *Pirates of the Universe* (1996), and *The Pickup Artist* (2001).

Suzy McKee Charnas, *Walk to the End of the World* (1974) and *Motherlines* (1978).

Philip K. Dick, *Time Out of Joint* (1959), *The Man in the High Castle* (1962), *Martian Time-Slip* (1964), *The Three Stigmata of Palmer Eldritch* (1965); *The Zap Gun* (1967), *Do Androids Dream of Electricc Sheep?* (1968), *Ubik* (1969), and *A Scanner Darkly* (1977).

Cory Doctorow, *Down and Out in the Magic Kingdom* (2003).

Harlan Ellison, "'Repent, Harlequin!' Said the Ticktockman" (1965).

Joe Haldeman, *The Forever War* (1974).

Harry Harrison, *Bill the Galactic Hero* (1965).

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Ursula K. Le Guin, *The Word for World is Forest* (1972).

Barry Malzberg, *Herovit's World* (1973).

Edson McCann (Pohl and Lester Del Rey), *Preferred Risk* (1955).

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Lance Olsen, *Time Famine* (1996).
Chuck Palahniuk, *Fight Club* (1996).
Marge Piercy, *Woman at the Edge of Time* (1976).
Frederik Pohl and C. M. Kornbluth, *The Space Merchants* (1952) and *Gladiator-at-Law* (1955).
Joanna Russ, *The Female Man* (1975).
Robert Sheckley, *Immortality, Inc.* (1958), "The Prize of Peril" (1958), and *The Dimension of Miracles* (1968).
Robert Silverberg, *Invaders from Earth* (1958).
John Sladek, *The Müller-Fokker Effect* (1970).
Norman Spinrad, *Bug Jack Barron* (1969) and *The Iron Dream* (1972).
Neal Stephenson, *Snow Crash* (1992).
Bruce Sterling, *Distraction* (1998).
Somtow Sucharitkul (S. P. Somtow), *Mallworld* (1981).
Kurt Vonnegut Jr., *Player Piano* (1952), *The Sirens of Titan* (1959), *Mother Night* (1961), and *Cat's Cradle* (1963).
Connie Willis, *Remake* (1995) and *Bellwether* (1996).
Bernard Wolfe, *Limbo* (1952).
Jack Womack, *Elvissey* (1993).

Notable Films

Brazil. Dir. Terry Gilliam, 1985.
Dr. Strangelove, or How I Learned to Stop Worrying and Love the Bomb. Dir. Stanley Kubrick, 1964.
The Fifth Element. Dir. Luc Besson, 1997.
The Hitchhiker's Guide to the Galaxy. Dir. Garth Jennings, 2005.
Mars Attacks! Tim Burton, 1995.
Planet of the Apes. Dir. Franklin Schaffner, 1968.
Robocop. Dir. Paul Verhoeven, 1987.
The Running Man. Dir. Paul Michael Glaser, 1987.
Sleeper. Dir. Woody Allen, 1973.
Space Truckers. Dir. Stuart Gordon, 1996.
The Stepford Wives. Dir. Brian Forbes, 1975.
They Live. Dir. John Carpenter, 1988.
Total Recall. Dir. Paul Verhoeven, 1990.

Cyberpunk and Posthuman Science Fiction

Emerging in the 1980s as a literary movement significant for its rejection of the technological utopianism of much traditional sf, cyberpunk fiction explores the often uncomfortably close relationship between humans and technology. In its near-future depiction of biomedical and electronic body modifications, direct interfaces between human brains and computers, artificial intelligences equipped with "human" qualities, and the electronic transcendence provided by new technological spaces, cyberpunk not only calls into question what it means to be human, but also suggests that the posthuman is an inevitable consequence of the dissolution of boundaries between human and machine. A challenge to the traditional model of the human subject is mirrored in the typical cyberpunk landscape, a dystopian post-industrial world governed largely by multinational corporations (in place of nation-states), dominated by urban sprawl and rife with subcultures from which its outlaw and misfit heroes are drawn. In short, cyberpunk is a fictional attempt to grapple with the realities of our postmodern condition. Initially a response to the technological explosion and postmodern culture of the 1980s, and arguably the most important sf trend of that era, its influence has spread far beyond the boundaries of science fiction, essentially outliving the cyberpunk movement itself.

The term "cyberpunk," introduced in 1983 by Bruce Bethke in a short story bearing that title and published in *Amazing Science Fiction Stories*, was first employed by editor and critic Gardner Dozois in a 1984 *Washington Post* article to describe the fiction of such up-and-coming authors as William Gibson, Bruce Sterling, Pat Cadigan, and Greg Bear. Emblematic of the juxtaposition of punk or countercultural attitudes with high technology (usually involving computers), the term quickly caught on, both as a useful descriptor and as a marketing device. However, as demonstrated in

Mirrorshades: The Cyberpunk Anthology (1986) – which includes short stories by the previously mentioned cyberpunks in addition to those by such authors as Rudy Rucker, John Shirley, Tom Maddox, and Lewis Shiner – works that fell under the blanket term of cyberpunk did not necessarily share the coherent vision representative of the subgenre as described by editor and self-proclaimed cyberpunk spokesperson Bruce Sterling. In the introduction to *Mirrorshades*, Sterling lays out the tenets of the movement, positing cyberpunk's innovative integration of technology with 1980s counterculture as a revolution in sf while claiming kinship with both the genre's hard science tradition and New Wave writers such as Samuel Delany and J. G. Ballard. Sterling also identifies postmodernist authors Thomas Pynchon and William S. Burroughs as forerunners of cyberpunk.

The writer most clearly identified with the cyberpunk literary movement is William Gibson. Gibson's early works, which include the "Sprawl" trilogy: *Neuromancer* (1984), *Count Zero* (1986), and *Mona Lisa Overdrive* (1988), as well as a collection of short stories entitled *Burning Chrome* (1986), exemplify cyberpunk fiction, with *Neuromancer* largely agreed upon as the premier cyberpunk novel. With its publication, Gibson's concept of the computer-generated alternative reality of cyberspace gained a wide currency, eventually becoming part of mainstream culture. In the novel, antihero "console cowboy" Case accesses cyberspace via a neural interface with a computer, and such is his preference for the euphoric experiences in this virtual realm that he disdains the body as a "meat prison." The "meat" in Gibson's near-future universe can easily be reshaped and augmented, as evidenced by the cyborg assassin Molly Millions, Case's partner in a high-tech heist orchestrated by the AI Wintermute; such casual modifications of bodies blur the boundaries between organic and artificial in a way that suggests posthumanity is an inevitability, but it is not clear that the hybrid posthuman represents an improvement over the outmoded human. Certainly the technological saturation of Gibson's world does not lead to a resolution of the kinds of social, political, and economic problems that were prevalent in the 1980s, and in fact they are magnified in a dystopian future where the majority of power lies with ruthless multinational corporations and the physical landscape is marked by environmental degradation and cluttered with *gomi* (junk). In *Mona Lisa Overdrive*, central characters Bobby Newmark and Angie Mitchell simply replace existence in the real world with electronic immortality in cyberspace, choosing to die "on the outside" in the ultimate example of the privileging of mind over body that is prevalent in cyberpunk.

For some critics, cyberpunk's primary contribution is its distinctive style, a surface texture that is evocative of the information overload characteristic

of contemporary postmodern culture. The kind of dense prose employed by a masterful stylist like Gibson – who crowds his sentences with street slang, brand names, high art and pop culture references, and high-tech jargon – often creates a sense of disequilibrium in the reader, who may find its intensity by turns exhilarating and confusing. Echoing other postmodern writers who create pastiche through their stylistic borrowings, Gibson borrows extensively from other genres, for example, fusing science fiction with the hard-boiled detective narrative perfected by Raymond Chandler and Dashiell Hammett. Like his own fictional junk artists, who create powerful works of art using the *gomi* that surrounds them, Gibson generates literary collage by reassembling bits and pieces of the literary past, playfully subverting these genres in the process. Additionally, Gibson and other cyberpunks pay homage to their sf predecessors. For example, the forerunner of cyberpunk antiheroes can be discerned in the work of Alfred Bester, whose troubled and cybernetically enhanced protagonist Gully Foyle in *The Stars My Destination* (1957) serves as a foil to the corruption that surrounds him in the form of family-owned corporate clans; Bester's kinetic prose in this novel and in the earlier *The Demolished Man* (1953) also anticipates the textured rendering of surface reality in cyberpunk.

Philip K. Dick's *Do Androids Dream of Electric Sheep?* (1968) is often considered a proto-cyberpunk work, featuring a bleak near future in which bounty hunter Rick Deckard is assigned to retire six androids that escape from the Mars colony and attempt to blend in on post-apocalyptic Earth. The line between androids and humans is a thin one, with androids exhibiting human qualities and desires and humans ritually "programming" themselves with a mood organ that allows them to set their mood for the day. Technology permeates all aspects of the characters' lives, and Dick's decaying urban landscapes are distinctive for their profusion of kipple (the refuse of post-industrial society) – a precursor of the *gomi* that clutters the cities of Gibson's texts, which is the outcome of unrestrained consumer desires. This sense of decay is translated as the dark, polluted, and trash-lined streets of 2019 Los Angeles in the classic proto-cyberpunk film *Blade Runner* (1982), an adaptation of Dick's novel directed by Ridley Scott. *Blade Runner* melds *film noir* conventions with dystopian sf, and its futuristic cityscape, dominated by massive skyscrapers and neon, has a distinctly Asian influence. As in cyberpunk fiction, the setting not only conveys the sense that contemporary cities like Hong Kong and Tokyo are already futuristic, but also reflects the widespread anxiety prevalent in the 1980s that Asia, and specifically Japan, would usurp the dominance of the American economy.

A literary forebear who anticipates the cyberpunk treatment of humans and their relationship with computers is John Brunner's *Shockwave Rider*

(1975), in which fugitive Nick Haflinger uses expert computer skills to evade governmental authorities in a dystopian near future America. Eventually, he propagates what Brunner coins a "worm" (a self-replicating program akin to the contemporary computer virus) that is designed to reveal all of the government's nefarious secrets to users of the global computer network and essentially nullifies the surveillance of its citizenry. A prototype of the cyberpunk hacker, Halfinger's facility with computers is unmatched, but he is subject to crippling bouts of information overload, a side effect of living in a society where the frenetic pace of technological change is often too much for humans to handle. Another recognizable antecedent of the console cowboy is P. Burke in "The Girl Who Was Plugged In" (1973), a story by Alice Sheldon, writing as James Tiptree Jr. Rather than being "jacked in" to cyberspace, where Gibson's (almost exclusively male) hackers experience an exhilarating disembodiment, deformed P. Burke is "plugged in" to a corporate-owned computer network that enables her to experience a different kind of embodiment by animating the beautiful (and thus universally desired) cyborg body of Delphi, an empty shell that serves as a living advertisement for the GTX corporation.

Sterling's *The Artificial Kid* (1980) also features a technologically mediated body – the Kid – that is inhabited by a separate personality, in this case a politician whose personality and memories are inserted prior to his death. Like Delphi, the Kid, a combat artist, is filmed by cameras everywhere he goes, and his street fights are commodified and sold to an adoring public. Although not generally considered cyberpunk, Sterling's second novel encapsulates a number of its themes, which he develops in later works. His most significant contribution to cyberpunk is *Schismatrix* (1985), which differs from Gibson's version in a few key respects: it takes place in the far-flung future, Earth does not figure prominently in the action, and computers are relegated to the background. The novel's emphasis on posthumanism as a result of genetic and technological modification, however, combined with its breakneck pace, information-dense prose, and punk sensibility, mark it as characteristically cyberpunk. Hopelessly outmoded in Sterling's future, the human has largely been supplanted by two parallel strands of posthuman development, known as the Shapers and the Mechanists. The Shapers are genetically reshaped, equipped with enhanced intelligence, immunity, and muscle control, in addition to extended life spans. The rival Mechanists are cyborgs, augmenting their bodies with electronic and mechanical prosthetics. The pure human does still exist – unmodified – on Earth, and protagonist and Shaper Lindsay Abelard serves in his youth as a Preservationist dedicated to defending the purity of human culture. By the end of the novel, however, Abelard, who earlier offends Shaper sensibilities

with the addition of a prosthetic arm (symbolic of the crossbreeding that eventually takes place between Shapers and Mechanists), fuses with an alien entity and abandons his body altogether. Ever evolving, Abelard's transformations suggest that the human is not a stable, fixed category, nor is there such a thing as an essential human nature. Abelard's optimism and openness to new experiences and forms of embodiment also indicate that Sterling does not share Gibson's ambivalence about the posthumanist future.

A famously short-lived literary movement, with even Gibson shrugging off the label, cyberpunk was declared dead as early as the publication of the *Mirrorshades* anthology, a suggestion that once the general public is introduced to a cultural production considered hip and cutting-edge, it no longer is. As the number of imitators of the original cyberpunks – especially Gibson – grew, writers who had been associated with the movement often distanced themselves, fearing a ghettoizing effect upon their work. It is also the case, however, that the works of those who had been originally hailed as cyberpunks are sometimes only marginally related to the elements considered representative of the subgenre. Greg Bear's *Blood Music* (1985), for example, poses a radical transformation of the human through genetic engineering, featuring a posthumanism that – like Sterling's – goes far beyond our current notions of what it means to be human, but the novel lacks the trademark punk sensibility and stylistic innovation of cyberpunk. Scientist Vergil Ulam injects biochips, a form of nanotechnology, into his bloodstream, setting off a chain reaction that ends with the evolved microorganisms infecting most of North America and literally dissolving the boundaries of the human body, while incorporating the essence of individual humans into a greater whole.

Mirrorshades contributor Rudy Rucker, whose "bopper" novels include *Software* (1982), *Wetware* (1988), *Freeware* (1997) and *Realware* (2000), also interrogates the traditional boundaries of the human subject in his near future saga of self-replicating robots and artificial life forms that have succeeded humanity's control of the Earth and the moon. As has often been noted, these novels are closer to the work of Dick, stylistically and philosophically, than to to the cyberpunk of Gibson or Sterling. However, Rucker's treatment of cyborgs, genetic engineering, artificial intelligence, drug use, and electronic transcendence are very much in line with typical cyberpunk concerns.

The permeability of boundaries in cyberpunk not only serves to de-emphasize the integrity of the human body, but also destabilizes traditionally held notions of the self. In a universe where personality and memories can be digitally encoded and copied, concepts like subjectivity and identity are radically undermined. K. W. Jeter, whose *Dr. Adder* (1984) has

sometimes been called the first cyberpunk novel (it was written in 1972 but failed to find a publisher for over a decade), explores the fragmentation of subjectivity in *The Glass Hammer* (1985), a novel that largely consists of protagonist Ross Schuyler watching the novelized form of his life on video. He becomes a popular media figure as a result of his success delivering black market computer chips to European buyers, racing across the Arizona desert and evading the missiles from government satellites that have killed so many of his fellow drivers; his races are filmed and broadcast all over the world. The self in the video biography, packaged and scripted, is ironically more real to Schuyler than his "real" self, which he seems to view as almost irrelevant.

Along these lines, the irreverent computer-generated personality of Max Headroom, star of the British television film *20 Minutes into the Future* (1985) and various (American) spin-offs, is an electronic copy of the real newscaster Edison Carter, while Carter himself seems like a pale imitation of his alter ego. Identity, in cyberpunk, can be cheaply acquired. In George Alec Effinger's trilogy *When Gravity Fails* (1987), *A Fire in the Sun* (1990), and *The Exile Kiss* (1991), unique among cyberpunk for its futuristic Middle Eastern setting, characters can simply plug a software personality module ("moddy") into their modified brains and acquire real and fictional personalities.

In "Pretty Boy Crossover" (1986), Pat Cadigan's story about video celebrity via digital translation, the two main characters are offered the opportunity to cross over and live an ageless, immortal existence as Self-Aware Data, shown as living video for the consumption of others in the dance clubs they frequent. While Bobby chooses digital existence, Cadigan's nameless protagonist turns it down, preferring his own embodied subjectivity. Cadigan, the only woman associated with the original cyberpunk movement, as well as the only one included in the *Mirrorshades* anthology, questions the tendency of cyberpunk to privilege electronic transcendence over embodiment, reflecting the discomfort that many women have about the erasure of the body. Treated as invisible by patriarchal systems, women have long struggled to overturn the traditional notion of "human" as being the default for "male." In Cadigan's *Synners* (1991), embodied subjectivity is viewed as a valid choice for Gina Aiesi, the novel's protagonist; she recognizes her body's limits but does not see it as confining, nor does she think of technology as a means of escape, but rather as a means of connection. As in much of cyberpunk, implants are common in *Synners*, and the closeness of the human–computer interface is facilitated by a technology that allows the user – through the implantation of brain socket implants made of living tissue – to plug directly into the global communications

network called the System. Synners – video artists who synthesize rock music and images to make virtual reality music videos – use the brain sockets to transmit their vision directly to the consumer, who must also be outfitted with the sockets. Pawns of a large corporation that acquires both their music production company and the company that invents the sockets, Gina and her lover Visual Mark are among the very first to undergo socket implantation. What they eventually discover is that although the brain sockets facilitate undreamed of heights of creativity, they are also unstable, and can cause cerebral strokes in its users. When Mark suffers a stroke while hooked into the System, the stroke takes the form of a computer virus and a contagion, destroying both the System and the brains of those plugged into it. Eventually the virus is defeated by hackers, and the novel ends with Visual Mark going on-line permanently and abandoning his body. That Mark sloughs off his body and Gina preserves hers suggests that Cadigan does not challenge gender stereotypes that associate men with mind and women with body; however, the novel critiques earlier cyberpunk texts by emphasizing the importance of the materiality of bodies and the necessity of making technology accountable.

Cadigan has consistently explored cyberpunk themes in her works, beginning with *Mindplayers* (1987), which features the memorable Deadpan Allie, a specialist in brain-to-brain interface. Later novels include *Fools* (1992), *Tea from an Empty Cup* (1998), and *Dervish Is Digital* (2000). Although Cadigan was for a time the lone woman in the midst of a movement that rarely claimed women writers as part of its science fiction lineage, she was quickly joined by a number of women writers – including Candas Jane Dorsey, Kathy Acker, and Lisa Mason – who applied feminist sensibilities to the subgenre, often critiquing, for example, the failure of cyberpunk to explore the implications of its cyborg metaphors in terms of gender, as in the work of Donna Haraway. Such writers explore notions of gender and identity in the human–machine interface and challenge the underlying politics of gender and sexuality in much of cyberpunk fiction. Interestingly, despite the movement's disavowal of the 1970s as the "doldrums" of sf, cyberpunk has predecessors in the feminist science fiction of that decade. As already mentioned, Tiptree's "The Girl Who Was Plugged In" is a proto-cyberpunk story, and Jael, the feminist assassin with prosthetic claws and steel teeth used to maim and kill men in Joanna Russ's *The Female Man* (1975) is a forerunner of Gibson's cyborg razor girl Molly Millions. Marge Piercy's *Woman on The Edge of Time* (1976) prefigures the dystopian cityscape, bodily modification, and dominance of multinational corporations in cyberpunk. With the publication of *He, She, and It* (1991), however, the influence is Gibson's, as Piercy consciously critiques his work in her

feminist revision of cyberpunk involving the cyborg Yod and his relationship with the protagonist Shira.

Emma Bull's *Bone Dance* (1991) is also indebted to Gibson's noir-inflected cyberpunk, featuring small-time hustlers who do "biz" in a post-apocalyptic near future. Sparrow, Bull's androgynous protagonist, makes a living from finding and selling technological artifacts, and over the course of the novel it becomes clear that she is a genetically engineered cyborg, designed to be gender neutral and "ridden" by another group of powerful cyborgs. Thus Bull uses the cyberpunk tropes of genetic engineering, body invasion, and mind control to deconstruct gender binaries and create new forms of identity. Cyberpunk themes also provide rich ground for the exploration of gay and lesbian identities, as demonstrated by Laura Mixon's *Glass Houses* (1992), Maureen McHugh's *China Mountain Zhang* (1992), Mary Rosenblum's *Chimera* (1993), and Melissa Scott's *Trouble and Her Friends* (1994).

Although short-lived, the cyberpunk movement has proven highly influential on sf as a whole, and numerous contemporary texts routinely employ cyberpunk motifs and themes. During the 1980s, cyborgs became popular figures in sf film, as in *The Terminator* (1984) and *Robocop* (1987), while the television miniseries *Wild Palms* (1993) openly alludes to cyberpunk and even features a cameo appearance by Gibson. The film *Johnny Mnemonic* (1995) was adapted from a Gibson short story with a screenplay by Gibson himself, but fails to bring the dynamic energies of cyberpunk to the screen. Attempts to bring a true cyberpunk sensibility to film or TV would not be successful until 1999, with the release of the virtual reality thriller *The Matrix* (1999).

One popular literary offshoot of cyberpunk is steampunk, developed in the early 1980s by K. W. Jeter, James Blaylock, and Tim Powers, and attaining a higher profile with the publication of William Gibson and Bruce Sterling's joint effort, *The Difference Engine* (1990). Set in a Victorian England, the premise of the novel is that Charles Babbage's proposed steam-driven analytical engine was actually built, thus setting off the computer revolution over a century early. The early 1990s also saw the growth of what some have labeled "postcyberpunk," works that feature a somewhat less angst-ridden and alienated sensibility than their precursors, and which often employ a humorous tone and display a sense of optimism about the future. The writer most often associated with the designation is Neal Stephenson, whose third novel *Snow Crash* (1992) is a satirical take on the cyberpunk tradition, featuring the adventures of Hiro Protagonist, one of the original designers of the Metaverse, Stephenson's update of Gibsonian cyberspace. Stephenson's *The Diamond Age: Or, a Young Lady's Illustrated*

Primer (1995) moves further away from cyberpunk, revolving around a neo-Victorian enclave near a futuristic Shanghai where nanotech is the dominant technology. Nell is the Dickensian hero, a working-class girl outside of the enclave who is educated to become a revolutionary figure by an interactive primer intended for an aristocrat's child.

Postcyberpunk encompasses a wide range of sf, including later works by original cyberpunks Gibson and Sterling, with Sterling's *Islands in the Net* (1988) as probably the earliest example. And while much of postcyberpunk appears hopeful about the future, dystopian and noir elements may still be discerned in works such as K. W. Jeter's *Noir* (1998), a grimly satirical tale of a blasted cityscape where the rich can legally murder the homeless, and the dead can be brought back to life as laborers in order to pay off their debts.

Richard K. Morgan's *Altered Carbon* (2002) also draws heavily from the hard-boiled detective narrative, deriving its style and content more directly from that tradition than Gibson ever did, while depending crucially on cyberpunk conceits such as the downloaded personality. Indeed, Morgan's central novum is the cortical stack, a small device implanted at the base of the brain that contains this downloaded personality. In the course of a lifetime, a given personality might be implanted in a number of different bodies, so much so that these bodies are referred to as "sleeves," indicating that they are regarded merely as disposable containers for the true self, which is contained in the stacks in digital form. Indeed, different sleeves can be chosen to help individuals (such as protagonist Takeshi Kovacs) undertake different missions with different physical requirements. Morgan's work is also indicative of the way in which the writers of the British Boom have frequently drawn upon cyberpunk in their work, sometimes taking it in distinctively new directions or combining it with other subgenres. For example, *Altered Carbon* has two sequels – *Broken Angels* (2004) and *Woken Furies* (2005) – which continue the engagement with cyberpunk, but also move into the realm of space opera. This particular generic combination is also crucial to the work of Charles Stross and Ken MacLeod, whose fiction typically revolves around technological singularities that produce runaway advances in artificial intelligence. The Minds of the "Culture" novels of Iain M. Banks (which can be seen as an update of the Machines of *I, Robot*) are also examples of post-singularity artificial intelligences that go well beyond the intellectual capabilities of humans.

The work of writers such as Stross, MacLeod, and Banks thus adds a new dimension to posthuman science fiction by focusing on artificially created entities that move beyond human intelligence but do not evolve through modification of humans. When British Boom writers have focused on

modifications of human beings, they have typically taken the Shaper route, rather than the "Mechanist" one, taking a particular interest in the possibilities offered by genetic engineering. MacLeod's *Learning the World* (2005), for example, features explorers who roam the galaxy seeding posthuman colonies, but who in this case encounter a civilization of intelligent aliens who are, we come to realize, more like us humans of Earth's early twenty-first century than are our own descendants, who have evolved so far into the posthuman as to be more alien than the aliens.

One of the more interesting examples of genetic manipulation into the posthuman is Justina Robson's *Natural History* (2003), which envisions a future world in which genetic engineering has advanced to the point where human beings can be custom designed to perform virtually any task, including serving functions formerly reserved for machines. They can, for example, be starships, a fact that is crucial to the basic space opera plot of the novel. The availability of this advanced technology leads to the development of such fanciful creatures that the book almost takes on the feel of fantasy, though it retains a virtual catalog of science fiction motifs, meanwhile also providing a serious explanation of the tensions between these modified (or Forged) posthumans and Unevolved humans who maintain their natural genetic structures.

Of course, this motif of imagining the ramped-up evolution of human beings into what is effectively a new species goes back in British science fiction at least to Arthur C. Clarke's *Childhood's End* (1953), in which alien intervention facilitates the process. Such intervention, meanwhile, is explored in much more detail (and with a much better understanding of the possibilities of genetic engineering) in the "Xenogenesis" trilogy (1987–1989) of the American sf writer Octavia Butler. Meanwhile, what is effectively a form of genetic engineering goes all the way back to H. G. Wells's *The Island of Dr. Moreau* (1896), in which genetic modifications lead not to advances, but to horror, in a mode that anticipates the sometime gruesome Remaking of humans in the Bas-Lag novels of key British Boomer China Miéville.

One of the most important forerunners of the more recent British Boom explorations of the possibilities of genetic engineering can be found in *The Child Garden* (1989), by Geoff Ryman, who was born in Canada and reared partly in the US, but who has lived his adult life in the UK and is usually associated with the British Boom. Ryman's stylish rendition of a future London is set in a post-Revolution future world in which vaguely socialist principles reign supreme and in which Chinese culture is central to a world society. Mechanical technology has become almost non-existent, replaced by a variety of biotechnologies. Perhaps most striking of these is

the extensive use of viruses with which individuals are treated, endowing them with specific knowledge or capabilities. Buildings, even spacecraft, are grown rather than built, and the world is ruled by a giant biocomputer collective consciousness known as the Consensus, into which the complete mental pattern of each individual is added after being "Read" at the age of ten.

Finally, no discussion of posthuman sf would be complete without a mention of the work of the Australian sf writer Greg Egan, whose striking vision of a future human race vastly changed by technological advances looks back both to cyberpunk and to such farflung philosophical visions as the novels of Olaf Stapledon in the 1930s. Thus, Egan's *Permutation City* (1994) deals primarily with the cyberpunk trope of the computer simulation of human consciousness, while *Diaspora* (1997) presents a more adventurous exploration of the multiple possibilities of posthuman evolution. Here, some humans maintain their biological bodies, though generally with substantial enhancements, while others inhabit advanced robot bodies or even exist as disembodied intelligences with no bodies whatsoever.

Egan's work is particularly noted for its sophisticated use of hard sf concepts derived from quantum physics and mathematics, but what is perhaps more important is its willingness to imagine a future world in which technological advances have made fundamental changes not only to the nature of humanity but to the nature of reality itself. In this, his work is indicative of the way in which contemporary science fictional explorations of the posthuman move beyond the limited near-future imagination of cyberpunk to explore future possibilities rendered all the more startling because they are made plausible by contemporary real-world advances in computer technology and genetic engineering. There are, indeed, good reasons to believe that we are on the verge of staggering technological advances that will lead to unprecedented changes in the basic texture of our lives, changes for which posthuman science fiction, perhaps more than any other cultural form, might help us to prepare.

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Cory Doctorow, *Down and Out in the Magic Kingdom* (2003).
George Alec Effinger, *When Gravity Fails* (1987), *A Fire in the Sun* (1990), and *The Exile Kiss* (1991).
William Gibson, *Neuromancer* (1984),*Burning Chrome* (1986), *Count Zero* (1986), *Mona Lisa Overdrive* (1988), *Virtual Light* (1993), *Idoru* (1996), and *All Tomorrow's Parties* (1999).
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Charles Stross, *Accelerando* (2005).
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Multicultural Science Fiction

In its potential for imagining both "Otherness" and alternatives to the status quo, science fiction has proven to be as effective a literary form for deconstructing the category of race as it has been for gender. Traditionally, however, the field has been dominated by white writers, with people of color frequently excluded from the ranks of writers as well as from the fiction itself. The technological expansionism characteristic of much early sf – often accompanied by the conquest and colonization of alien peoples and planets – served to alienate many readers of color, who rarely saw representations of themselves as major human characters in these texts. They could, however, often detect a reflection of themselves in the (typically negative) depiction of alien Others, ranging from the conquered to threatening invaders. And while a number of works attempted to deal with contemporary racial tensions by positing futures or worlds in which racism does not exist and multiple races coexist peacefully, these utopian scenarios frequently sacrificed difference in order to promote a vision of racial harmony. In response, avid minority readers of early sf who recognized its shortcomings in addressing race drew upon the flexibility of the genre to accommodate difference, becoming writers who – writing from the position of metaphorical Other – interrogated the trope of colonization and explored their own sense of alienation within sf and society at large. Additionally, in recent years postcolonial writers have begun to turn to sf to express the strangeness of their societies' historical encounters with Western modernity. At least for Western readers, the perspectives of these writers produce a double sort of cognitive estrangement growing out because they write from non-Western cultural positions, while at the same time employing the usual cognitive resources of science fiction as a genre.

Western science fiction has at least made the attempt to help Western readers think beyond their own experience, often in ways that are directly and specifically relevant to the relationship of those readers and their

cultures with the people and cultures of the rest of the world. Indeed, a substantial number of science fiction novels are specifically set in the colonial or postcolonial world or derive their material directly from colonial and postcolonial cultures. Although many of these, like Frank Herbert's classic *Dune* (1965), with its ostensibly positive inflection of Arab Bedouin culture, inadvertently repeat certain stereotypes of colonialist discourse, most at least attempt to be sensitive to the cultures they portray rather than simply using these locales as exotic settings for lurid adventures.

One of the writers best known for these kinds of works is the American Mike Resnick, whose recreations of Kenya and Kenyan culture in such works as *Paradise* (1989) and *Kirinyaga* (1998) are among the most straightforward of science fictional attempts to create new perspectives on the colonization of Africa by transposing that historical event (and African culture itself) into the future colonization of outer space. In *Evolution's Shore* (1995, originally published in the UK as *Chaga*) and *Kirinya* (1998), British writer Ian McDonald depicts an Africa in the throes of globalization and coping with an alien invasion – in the form of an enigmatic life form dubbed the Chaga – that seems designed to spur human evolution in dramatic new directions. McDonald explores the effects of globalization in other postcolonial settings with recent novels *River of Gods* (2005), which takes place in the India of 2047, and *Brasyl* (2007), set in past, present, and near future Brazil. Canadian-British writer Geoff Ryman also explores globalization and the impact of Western technologies on the rest of the cultures of the world with the novel *Air* (2004), which depicts a technology that allows a vast information network to connect directly to the brains of individual people. This technology allows all the world's cultures exactly the same access to information and services – though of course users are better equipped to cope with the new technologies in some parts of the world than in others. Ryman's novel focuses on the small village of Kizuldah – described as the last village in the world to go online – in the fictional central Asian republic of Karzistan. In particular, it focuses on village denizen Chung Mae, as she learns to take advantage of the utopian possibilities of the new technology while mourning its negative effects upon her culture.

While paranoid visions of the Other are rampant in Western science fiction television and film, particularly in the 1950s, the liberalism of the 1960s fueled more positive representations and a sensitivity to multicultural perspectives. The iconic *Star Trek* (1966–1969), for example, sought mightily to avoid xenophobia and to insist on the fundamental humanity of all intelligent species, meanwhile featuring a multi-ethnic central cast. Later *Star Trek* series – especially *Deep Space Nine* (1993–1999) – go even further

in the attempt to break the dominance of American white male characters in central roles, as well as to avoid colonialist stereotyping. Partly as a result of the enormous influence of *Star Trek*, virtually every major science fiction series since the mid-1990s – *Firefly* (2002–2003) and *Battlestar Galactica* (2004–) are notable examples – has featured a multi-ethnic cast. Meanwhile, racism and xenophobia have been critiqued in a number of sf films, from *Alien Nation* (1988) to *Children of Men* (2006). *The Matrix* (1999) and its sequels feature a multi-ethic underclass that opposes the tyrannical machines that control them, with the mixed race Neo (Eurasian Keanu Reeves) as its hero. And African American Will Smith, who has had lead roles in films such as *Independence Day* (1996); *Men in Black* (1997); *I, Robot* (2004); and *I Am Legend* (2007), is surely the single biggest sf film star.

Such attempts to represent the points of view of other cultures accurately and sympathetically are a step in the right direction, but the true promise of sf in this sense lies in the representation of other cultural perspectives by those who occupy them. While such writers have been rare in sf to this point, the great success achieved by African American sf writers such as Samuel R. Delany and Octavia Butler demonstrates the promise of sf as a vehicle for the representation of cultural perspectives that differ from the white, male, middle-class mainstream of Western culture. Though doubly marginalized by virtue of being both African American and openly gay, Delany is one of the foremost figures in the history of science fiction, a highly influential author and critic whose many works have helped to redefine the genre. Beginning in the 1960s, Delany introduced a perspective that was entirely lacking in sf, and his sophisticated exploration of issues related to race and gender set his work apart from many of his contemporaries. Delany's work is also formally complex and sophisticated, informed by the latest developments in poststructuralist and postmodernist theory. From his earliest works, Delany has been concerned with sign systems and social structures, key elements explored in *Babel-17* (1966), the first novel to garner the author major recognition within the field. A space opera that features galactic warfare between the Alliance (which includes Earth among its forces) and the Invaders, the novel follows the adventures of Alliance poet, telepath, and starship captain Rydra Wong, who discovers that an effective weapon used by the Invaders is actually a new language called Babel-17. Formulated to turn anyone against the Alliance who learns it, the language alters even Wong's sense of reality as she begins to learn it, demonstrating the extent to which language has the ability to structure experience. Wong, whose diverse and hastily assembled crew eventually succeeds in communicating with one another despite speaking a variety of

languages, is with their help able to avoid being completely trapped by Babel-17 and manages in the end to turn the weapon against its creators.

Delany's *The Einstein Intersection* (1967), a post-apocalyptic tale in which difference – whether figured in terms of race, gender, genetics, or extraordinary abilities – is revealed to be the primary strength of the mutated posthumans or aliens who inhabit an Earth long abandoned by humanity. Attempting to live out the myths of their human predecessors, the mutants only begin to realize their potential as separate beings when they embrace rather than denigrate their own diversity and hybridity, leaving the ill-fitting human ways behind. Lo Lobey, a dark-skinned musician who hears music in others' minds, which he then replicates on his musical machete, is the embodiment of a difference that opens up possibilities for the future – his music has the potential to help usher in a new world order. "Difference," while it signifies much more than race in the novel, is also handled in a way that clearly resonates with debates about race in the 1960s, and Lobey's self-described appearance – brown, physically imposing, and gorilla-like – is a play on negative racial stereotypes about African Americans. That Lobey triumphs over the villain Kid Death, whose skin has a pure white cast, is symbolic of the destruction of constraints upon his people's potential to make the world new.

Dhalgren (1975), Delany's best-known novel, is remarkable for its literary experimentation and complexity, as well as for producing a radical cognitive estrangement that seems designed to make readers question everything they think they know about the world. The novel may also be seen as a commentary on the social unrest in African American urban communities in the 1960s and 1970s. Set in the fictional midwestern city of Bellona at a time roughly contemporaneous with the novel's publication, *Dhalgren* explores the social dynamics of the city in the aftermath of some unnamed catastrophe that has left it cut off from the outside world. When the Kid – an unnamed bisexual poet of apparently Native American heritage – enters the smoking ruins of Bellona, he finds most of the population gone, no governmental organizations in existence, and "normal" social structures rapidly deteriorating. The Kid thrives in this seemingly chaotic environment, producing poems and entering into meaningful and experimental sexual arrangements with women and men that pose a clear challenge to compulsory heterosexuality. In addition, Delany's treatment of an ostensible rape between a black man and a white teenage girl – the circumstances of which become murkier and less certain as the novel progresses and different points of view are introduced – challenges mythologies associated with black male sexuality. Some semblance of order in Bellona is achieved by the presence of gangs, most of whose members are black, and Kid eventually

joins one known as the scorpions and becomes its *de facto* leader. Despite the scorpions' condemnation by the local newspaper (run by what remains of the white establishment in Bellona) as destructive and lawless – echoing descriptions in the 1960s mainstream media of urban African Americans who rioted as a result of the injustices of institutionalized racism – the gang is a locus of potentially revolutionary energy that turns the traditional notion of law and order on its head. With its emphasis on an oppositional underclass that makes its own rules in a wasted urban landscape, *Dhalgren* is a forerunner of cyberpunk, though issues concerning racial conflict are frequently absent in the latter.

With *Trouble on Triton* (1976), the potentially revolutionary space for alternative sexualities suggested in *Dhalgren*'s Bellona finds its ultimate fulfillment in the heterotopia of Tethys, where citizens are free to change gender, sex, and orientation at will (through surgical and therapeutic means) and enjoy a stunning variety of sexual activities. Sexual taboos are absent, genders are multiple, and the society is defined by openness and plurality. However, for protagonist Bron Helstrom, an immigrant from the far less tolerant Mars, the lack of traditional and restrictive structures in Tethys is repellant and confusing, and despite his attempts to adapt (he even undergoes a procedure to become a woman), he never feels at home there.

Stars in My Pockets Like Grains of Sand (1984) takes another displaced subject – the former slave Rat Korga – and plunges him in a bewildering new world after his own is destroyed. His coming together with the Industrial Diplomat Marq Dyeth, a respected liaison between different cultures and species in a Federation comprised of over six thousand planets, serves as the primary plot of the novel. Theirs is a union in which each is the other's erotic ideal, and in which the difference each represents is a major part of the mutual attraction. Their brief relationship is a kind of microcosm of the staggering cultural diversity to be found among the Federation planets, and Delany's attempt to capture the difference suggested by this almost unimaginably complex universe is perhaps his most ambitious undertaking to date.

The African American Butler is widely recognized as one of the finest writers in the field. A woman and a feminist, Butler writes from a position of opposition to the ways race and gender have been traditionally represented in sf, and her fiction consistently uses the figure of the alien (whether extraterrestrial or not) to challenge these culturally constructed categories. With the "Patternist" novels, a series that includes *Patternmaster* (1976), *Mind of My Mind* (1977), *Survivor* (1978), *Wild Seed* (1980), and *Clay's Ark* (1984), Butler's examination of power relations involving race and gender are explored through psionic powers, mind transfer, viral infection,

genetic engineering, and a representation of the alien that disrupts the binary of self and other, thereby calling into question what it means to be human. Spanning hundreds of centuries in an alternative history of the Earth, the series details the origin and ascendance of a selectively bred group of telepaths, who are eventually linked together in a psychic pattern. The founder of this elite community is the genetic mutant and psychic parasite Doro, a four-thousand-year-old Nubian who oversees the breeding of his descendants in a bid to create a race of superhumans, and who ensures his own survival by killing and then transferring his essence to suitable host bodies. *Wild Seed* recounts the history of Doro's breeding program, and the novel begins in seventeenth-century Africa in the midst of the slave trade. Butler draws parallels between Doro's proprietary feelings for his descendants and those of white slave masters, as well as his callously matter-of-fact attitude toward breeding people (often without their consent). When he meets the "wild seed" Anyanwu, a three-hundred-year-old Igbo healer and shapeshifter who has heretofore existed without his knowledge, he threatens to harm her family if she does not participate in his breeding plans. Although she initially submits, Anyanwu escapes by taking the form of different animals, in addition to changing both sex and race. While her identity remains stable, the fluidity of her changes dissolves boundaries between black and white, male and female – effectively destabilizing power structures based on race and gender. Doro, for his part, also inhabits bodies of different races and sexes, but he cannot track Anyanwu when she takes animal form.

Eventually Doro and Anyanwu establish an uneasy truce in the United States, and Anyanwu becomes Emma of *Mind of My Mind*, a matriarch who oversees the vast twentieth-century family that she and Doro have created. She chooses to die when Doro is killed by his young African American daughter Mary, a powerful telepath who establishes the first pattern and thus becomes a rival to her father's power. Though something of a symbiont rather than a parasite, Mary shares her father's proprietary feelings for her people and feeds upon the network of telepaths, garnering mental and emotional strength. She also manipulates non-telepaths (mutes) to aid her family in raising telepath children, while the subjugated position of the mutes allegorizes race relations in the US. By the time of *Patternmaster*, which takes place long after the events in *Mind of My Mind*, the mutes are little more than slaves to their telepath masters.

Disease in *Clay's Ark* enables a posthumanism of a more radical sort than that orchestrated by Doro; an extraterrestrial virus carried by explorers returning to a dystopian, near-future Earth so completely transforms human cells that the hosts produce beast-like quadruped children

with increased sensory perception and maturation levels. The hybrid children create anxiety in the humans who come into contact with them, including their own parents, who find it difficult to come to terms with the difference their offspring represents. Known simply as Clayarks in *Patternmaster* and *Survivor*, the descendants of these hybrids wage war with the telepaths, who consider them to be non-human and kill them in vast numbers.

Although many of Butler's novels carry allusions to the slave narrative, it is *Kindred* (1979) that most clearly incorporates the form, combining it with a time travel story. Dana Franklin, a young African American writer, finds herself periodically transported from her 1976 California home to an antebellum Maryland plantation. The mechanism of her transport is never explained, and her involuntary trips leave her disoriented – an echo, perhaps, of the transport her slave ancestors endured in the middle passage from Africa to America. Drawn into the past whenever her ancestor Rufus Weylin, the white son of a plantation owner, is endangered, Dana rescues him several times. At first, she saves him unthinkingly, but as he grows from an abused child to a cruel patriarch, Dana begins to suppress her own instincts in order to help him survive (and thus ensure her own survival). She makes a place for herself in the slave community as she awaits her return to the present, but in adopting the role of slave, she allows herself to be treated like one. Her complicated, interdependent relationship with Rufus – who both fears and loves her – ends when he attempts to seduce and dominate her as he had other slaves. Refusing to give up the autonomy left to her, Dana kills Rufus, and in the process loses an arm to his grip. She returns home to the present mutilated, a grim reminder of the legacy of slavery that still haunts Americans, both black and white.

The "Xenogenesis" trilogy, which includes *Dawn* (1987), *Adulthood Rites* (1987), and *Imago* (1989), is generally regarded as Butler's masterpiece. Faced with the radical difference represented by the alien Oankali, who attempt to rescue what remains of humanity in the wake of a nuclear holocaust, humans struggle with accepting the terms the aliens offer: humanity will become obsolete, replaced by human-alien hybrids produced as a result of genetic exchange between Oankali and human. Only by embracing difference will humans survive, a strategy that requires them to overcome the visceral horror they feel in relation to the truly alien Oankali. The novels follow the trajectory of their resistance and the radical transformations that result from their reluctant cooperation with the aliens. Although the Oankali are more benevolent than Doro, their enforced breeding program carries the same echoes of slavery – and the Oankali simply sterilize humans who refuse to participate.

Survival – at whatever cost – is also a major theme of Butler's "Earthseed" novels, which include *The Parable of the Sower* (1993) and its sequel *The Parable of the Talents* (1998). Set in a dystopian, anarchic 2024 California where the gaps between the haves and have-nots have widened considerably, *The Parable of the Sower* is the story of Lauren Olamina, an African American teenager who is an empath, sharing others' pain and pleasure. When the walled suburban enclave in which she lives is destroyed, Lauren and the few survivors travel up the coast, seeking affordable water and jobs. Eventually they accumulate other travelers and attempt to form a utopian community away from the chaos that surrounds them. Lauren, meanwhile, develops a religion that she calls "Earthseed," which is based on the notion that "God is change" and holds that adaptation is the key to survival and to humanity's eventual progress to the stars. In order to survive, however, it is sometimes necessary to use violence, a strategy that is at odds with the utopian imagination but unavoidable in the face of threats posed by the social and economic collapse in the US. In *The Parable of the Talents*, the Earthseed community comes under attack by religious fundamentalists in the service of a new conservative president, whose brutal methods include separating parents from their children. Earthseed, however, lives on, and the book ends with Lauren watching the first starship leaving the Earth, a symbol of utopian ambitions fulfilled.

While Butler and Delany are the superstars among African American sf writers, a number of black writers have come into their own in recent years. For example, in *Lion's Blood* (2002) and *Zulu Heart* (2003) Steven Barnes produces a powerful form of cognitive estrangement in his alternative history of an America colonized by Africans who employ European slaves, deconstructing racial oppositions and demonstrating that people are fundamentally the same, though they may find themselves in very different circumstances. Walter Mosley, better known for his work in other genres, has ventured into sf with his novels *Blue Light* (1998) and *The Wave* (2005), as well as the cyberpunk-inflected short story collection *Futureland* (2001), which features a variety of black protagonists struggling to survive in a brutal dystopian near future. Seeking to demonstrate that there is, in fact, a long and rich tradition of speculative fiction by black writers, Sheree R. Thomas's two groundbreaking *Dark Matter* anthologies (published in 2000 and 2004) include selections from a wide variety of prominent and lesser known writers, among them Delany, Butler, Barnes, Charles Saunders, Tananarive Due, Nalo Hopkinson, and black sf pioneer George Schuyler.

Another important anthology is *So Long Been Dreaming: Postcolonial Science Fiction and Fantasy* (2004), edited by Nalo Hopkinson and Uppinder Mehan, which can be taken as an announcement that science

fiction and fantasy written by writers from the postcolonial world now exist as recognizable literary phenomena. Many of the stories in the volume address issues that are crucial to the phenomenon of colonialism and its aftermath. Hopkinson, a Jamaican-born Canadian novelist, argues in the introduction that science fiction, however Western its origins, offers potentially powerful tools to postcolonial writers. It is an argument that she has set out to prove in her own fiction, works that have garnered her major recognition in the field. Her first novel *Brown Girl in the Ring* (1998) features characters of Caribbean descent in the decaying urban dystopia of Toronto, in which the deterioration of the inner city has caused it to be abandoned by both the government and corporate capital, leaving an impoverished and anarchic environment dominated by the gangleader Rudy (who practices *obeah*, a sort of Caribbean black magic) and his minions. The "Burn," as the inner city is called, is in many ways a nightmarish landscape, yet the remaining inhabitants (a disproportionate number of whom are black) work together to help each other survive, establishing localized senses of community that are often lacking in the alienated urban environments of our own contemporary cities. Many of the characters are aided in their cooperative efforts by Caribbean traditions, reflecting both the author's background and because the real-world Toronto hosts a large and vibrant Caribbean community. Hopkinson's prominent use of images and motifs from Caribbean folklore give the book a specifically anticolonial slant, identifying indigenous cultures as a source of strength and as a rallying point for the collective action she celebrates. Indeed, young single mother and protagonist Ti-Jeanne draws upon Caribbean spiritual practices she once rejected, enabling her in the end to defeat Rudy with the help of others in the community.

Midnight Robber (2000), Hopkinson's second novel, also contains numerous instances of the downtrodden working to help each other. The text suggests that shared cultural traditions can help hold people together as a community even in new and very different surroundings, such as the prison planet of New Half-Way Tree. It is on this planet that Tan-Tan, a young girl descended from Caribbean colonists, finds herself permanently exiled from her home planet of Touissant after her father kidnaps her. Eventually, with the help of an indigenous alien race and sympathetic humans, Tan-Tan manages to create a place for herself and heal her psychological wounds.

Another up-and-coming Caribbean writer is Tobias Buckell, born in Grenada and raised in various Caribbean locales. Buckell's debut novel *Crystal Rain* (2006) is set on the planet Nanagada, settled by culturally and ethnically diverse human colonists who have developed a culture reminiscent of Caribbean cultures. Like Hopkinson, Buckell incorporates Caribbean dialect into the novel, and his characters are also far removed – in terms

of time and space – from their origins. Cut off from the rest of the universe for centuries as the result of an alien war, the technology the humans employ on Nanagada is somewhat primitive, which gives their civilization a steampunk flavor. In the opening of the novel, the Nanagadans who occupy the peninsula are under attack from an enemy known as the Azteca, humans living on the other side of a mountain range who worship their alien rulers (known as the Toetl) as gods – and who perform blood sacrifice identical to that practiced by ancient Aztecs. What ensues is an adventure story revolving around the characters John de Brun and Pepper, two ragamuffins, or technologically enhanced spacefaring freedom fighters, who have been trapped on the planet for three hundred years and who help the peninsula-dwelling Nanagadans defend themselves from the Azteca. Following *Crystal Rain* are the space operas *Ragamuffin* (2007) and *Sly Mongoose* (2008), which take place in the same universe but whose heroes are no longer planet-bound.

Although science fiction of the African diaspora continues to grow, Africa itself has produced relatively little of it by comparison. However, Africa does have a strong dystopian tradition, with South Africa as the source for many of these works, both in print and on radio programs. Other countries are not quite as fertile, though interest in the genre appears to be growing. Well-known Nigerian author Buchi Emecheta ventures into sf territory in her seemingly postapocalyptic novel *The Rape of Shavi* (1985), in which a group of Westerners attempting to escape what they believe to be an impending nuclear holocaust flee England in an experimental aircraft and crash in the Sahara Desert; however, the novel employs a vaguely science fictional framework to create a sort of parable of cross-cultural exchange that relies rather little on the usual technological trappings of science fiction.

There are signs that science fiction in a more conventional sense may be on the verge of a boom among postcolonial writers, however, as the rise of authors such as Hopkinson and Buckell attest. Another sign of this potential boom is the increased critical attention that has recently been shown to science fiction traditions (especially in Latin America) that have existed outside the Western mainstream for some time now. In the recent anthology *Cosmos Latinos* (2003), for example, editors Andrea L. Bell and Yolanda Molina-Gavilan collect more than two dozen sf stories (written in either Spanish or Portuguese) from Spain and Latin America, published in the range from 1862 to 2001. The Portuguese-language stories are from Brazil, which has a particularly rich tradition of science fiction writing. Although Mexico is more generally known for its incorporation of sf conventions in its cinema than in its fiction, its literary output is growing. A book such as In *The Law of Love* (1996; translated from *Ley del Amor*), a blend of science

fiction with romance in twenty-third-century Mexico City written by popular novelist Laura Esquivel, suggests that the genre's profile is rising.

As with Brazil and other parts of Latin America, in India there is a fairly long and diverse tradition of science fiction, but the works belonging to this tradition are little known in the West because few of them were written in or have been translated into English. In terms of English language works, Salman Rushdie is perhaps the best-known novelist who employs science fiction conventions in his works. He began his career, in fact, with the sf novel *Grimus* (1975), which features the adventures of a Native American protagonist in a parallel universe. The novel mixes its numerous echoes of Western literary and mythological sources with a rich hodgepodge of materials from non-Western culture. The parallel-universe motif is also central to Rushdie's *The Ground Beneath Her Feet* (1999), a rock-music retelling of the Orpheus myth.

Amitav Ghosh's novel *The Calcutta Chromosome* (1995) is, like *Grimus*, another potent combination of East and West that suggests there are more kinds of knowledge and more kinds of power than can be encompassed by Western Enlightenment models. Ghosh combines a science fiction framework with a sort of historical detective story, the solution to which suggests that the Nobel Prize-winning discovery by British scientist Ronald Ross that malaria is transmitted through the bite of the anopheles mosquito was achieved not merely through Western-style scientific inquiry but through the intervention of Eastern-style mysticism. The novel's intricate interweaving of Western science and Eastern mysticism undermines the privileging of the former in colonialist discourse, but also retain a strong connection between the two.

The work of novelists such as Delany, Butler, Hopkinson, Buckell, Ghosh, and Rushdie suggests a potentially bright future for multicultural science fiction. Shored by the cognitive estrangement provided by the science fictional frameworks within which they write, these authors remind us of the plurality of and richness of different cultures teeming across the globe. At the same time, the novels of these writers, especially when they are produced within the typically Western genre of science fiction, are suggestive of our commonalities – especially in juxtaposition to the potentially radical differences we may eventually encounter elsewhere in the universe.

Suggested Further Reading

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Michael Bishop, *Transfigurations* (1979).
David Brin, *Sundiver* (1980), *Startide Rising* (1983), and *The Uplift War* (1987).
Tobias Buckell, *Crystal Rain* (2006), *Ragamuffin* (2007), and *Sly Mongoose* (2008).
Octavia Butler, "Patternist" series: *Patternmaster* (1976), *Mind of My Mind* (1977), *Survivor* (1978), *Wild Seed* (1980), and *Clay's Ark* (1984); *Kindred* (1979); "Xenogenesis" series: *Dawn* (1987), *Adulthood Rites* (1987), and *Imago* (1989); *The Parable of the Sower* (1993); and *The Parable of the Talents* (1998).
Orson Scott Card, *Speaker for the Dead* (1986, revised 1994).
Samuel R. Delany, *Babel-17* (1966), *The Einstein Intersection* (1967), *Dhalgren* (1975), *Trouble on Triton* (1976), and *Stars in My Pocket Like Grains of Sand* (1984).
Buchi Emecheta, *The Rape of Shavi* (1985).
Laura Esquivel, *The Law of Love* (1996).
Minister Faust, *The Coyote Kings of the Space-Age Bachelor Pad* (2004).
Amitav Ghosh (India), *The Calcutta Chromosome* (1995).
Kathleen Ann Goonan, *The Bones of Time* (1996).
Frank Herbert, *Dune* (1965).
Nalo Hopkinson, *Brown Girl in the Ring* (1998), *Midnight Robber* (2000), *The Salt Roads* (2003), and *So Long Been Dreaming: Postcolonial Science Fiction and Fantasy* (2004, edited with Uppinder Mehan).
Ursula K. Le Guin, *The Word for World Is Forest* (1972).
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Maureen F. McHugh, *Nekropolis* (2001).

Walter Mosley, *Blue Light* (1998), *Futureland* (2001), and *The Wave* (2005).
Larry Niven and Jerry Pournelle, *The Mote in God's Eye* (1974).
Mike Resnick, *Paradise* (1989) and *Kirinyaga* (1998).
Salman Rushdie, *Grimus* (1975) and *The Ground Beneath Her Feet* (1999).
Geoff Ryman, *Air* (2004).
Don Sakers, *Dance for the Ivory Madonna* (2002).
Robert Silverberg, *Invaders from Earth* (1958) and *Downward to the Earth* (1969).
Sheree R. Thomas (ed.), *Dark Matter* anthologies (2000, 2004).
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Independence Day. Dir. Roland Emmerich, 1996.
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The Matrix (1999). *The Matrix Reloaded* (2003), and *The Matrix Revolutions* (2003). Dirs. Andy Wachowski and Larry Wachowski, 1999.
Men in Black. Dir. Barry Sonnefeld, 1997.
Serenity. Dir. Joss Whedon, 2005.