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Science Fiction

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Science Fiction

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Summary and Keywords

Science fiction (SF) emerges as a distinct literary and cultural genre out of a familiar set of world-famous texts ranging from Mary Shelley's *Frankenstein* (1818) to Gene Roddenberry's *Star Trek* (1966–) to the Marvel Cinematic Universe (2008–) that have, in aggregate, generated a colossal, communal archive of alternate worlds and possible future histories. SF's dialectical interplay between utopian optimism and apocalyptic pessimism can be felt across the genre's now centuries-long history, only intensifying in the 20th century as the clash between humankind's growing technological capabilities and its ability to use those powers safely or wisely has reached existential-threat propositions, not simply for human beings but for all life on the planet. In the early 21st century, as in earlier cultural moments, the writers and critics of SF use the genre's articulation of different societies and different possible futures as the occasion to reflect on our own present, in ways that range from full-throated defense of the status quo to the ruthless denunciation of all institutions that currently exist in the name of some other, better world. SF's global popularity has grown to the point where it now looms quite large over cultural production generally, becoming arguably the most popular narrative genre in existence, particularly in the sorts of SF action spectacles that have dominated the global box office of the first two decades of the 21st century. It has also become increasingly difficult to tell the difference between the things we *used* to think of as SF and the advanced communication, transportation, and entertainment technologies that have become so ubiquitous and familiar that we now take them for granted, as well as the growing prevalence of political, economic, and ecological crises now erupting out of the pages of our science fictions, like our very worst dreams come to life.

Keywords: science fiction, speculative fiction, sci-fi, scifi, utopia, future, speculation, extrapolation, science fiction studies, Afrofuturist

Introduction

“The more comprehensively a definition seeks to encompass science fiction,” writes Paul Kincaid, “the more unsatisfactory it seems to those of us who know the genre.”¹ This refusal of the possibility of defining science fiction extends beyond what should be included or excluded in the category to even the proper *name* of the genre under discussion, with different groups of writers, fans, and critics embracing (among others) “science fiction,” “speculation fiction,” “structural fabulation,” “sci-fi,” “SF,” “sf,” and “SF/F,” and other groups aligning just as vociferously against each possibility.² The problems of definition only multiply as one seeks to identify some historical origin point for SF, or some essential set of characteristics—a set of narrative or imagistic tropes, a consensus point of view or ethos, perhaps even a politics—that might reliably distinguish the genre from the larger body of fictional literature, much less from the other speculative genres (fantasy, horror, myth, utopian speculation, the fairy tale, etc.) that seem to be in close proximity. Despite the tremendous usefulness and seeming intuitiveness of “science fiction” as a taxonomic concept—we really do feel as though we know it when we see it, to paraphrase Justice Potter Stewart’s famous definition of obscenity in *Jacobellis v. Ohio*—scholars and critics of SF frequently find themselves rehearsing the same set of decades-old debates whenever it comes time to write a comprehensive introduction to the genre such as this one.

John Rider’s Pioneer Award-winning essay “On Defining SF, or Not: Genre Theory, SF, and History” (2010) thus proposes five meta-propositions for (not) defining SF:

1. sf is historical and mutable.
2. sf has no essence, no single unifying characteristic, and no point of origin.
3. sf is not a set of texts, but rather a way of using texts and of drawing relationships among them.
4. sf’s identity is a differently articulated position in a historical and mutable field of genres.
5. Attribution of the identity of sf to a text constitutes an active intervention in its distribution and reception.³

These principles are useful guides for exploring the different ways critics and fans have understood the term “science fiction,” as well as the various sorts of texts that the genre has been understood to include or exclude in different moments of its production and reception, both in and outside the academy.

Science Fiction and Utopia

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In his widely influential 1970s scholarship on SF, recognized by most 21st-century scholars as the primary origin point for science fiction studies as a critical practice in the academy, Darko Suvin defined the genre as “the literature of cognitive estrangement.”⁴ SF posits some principle of possible difference from reality as we know it—what Suvin calls a “novum”—and then spins out the consequences of that difference both for individuals and (more importantly) for collective social life. The novum separates SF from mimetic (or “realistic”) fiction, which seeks to mirror reality rather than differentiate itself from reality; we know we are reading SF when we read about things that *could*, but do not actually, exist. At the same time, Suvin’s conception of the novum also distinguishes SF from other speculative genres; while fantasy relies on a principle of difference from reality as we know it, the novum of a fantasy story is not “possible” from a scientific, materialist perspective. No thinkable process of biological evolution could produce a monster with the head of a bull and the body of a human, nor could the waving of a stick and the careful recitation of a magic spell ever cause someone to fly. This is why only SF’s estrangement is, for Suvin, “cognitive”; the estrangements found in fantasy, fairy tale, horror, and the like tend to be structured not by scientific rationality but instead by their own internal and highly nonscientific rules (or non-rules). The speculations of SF, as opposed to either mimetic or fantastic fiction, therefore exist in a hybridized state of unrealized plausibility: they follow from scientific and materialist assumptions about what is possible, even as they describe events and objects that do not yet exist or are not yet known.

Already, however, such a definition begins to run aground, as what counts as “science” in SF is highly variable and, in practice, seems to have more to do with speculative plot devices that writers in the genre considered sufficiently plausible-sounding at the moment of the genre’s inception in the early 20th century (that is, nearly a century ago). In other words, any pretense at strict adherence to scientific rationality would seem to rule many if not most classic SF narrative situations out of bounds as well, including faster-than-light travel, time travel, superpowered mutation, psychic superbeings, digital immortality, and even the presence of fun gadgets like anti-gravity boots, lightsabers, teleporters, and laser guns. In practice what actually seems to divide SF from other genres is a kind of raw textual decisionism: if you say the teleportation comes from magical powers, you have fantasy, whereas if you say it is technological innovation, you have SF. For this reason Carl Freedman has proposed that the “cognition” of Suvin’s “cognitive estrangement” should be replaced instead by the rhetorical operation he calls “the cognition effect”: “The crucial issue for generic discrimination is not any epistemological judgment external to the text itself on the rationality or irrationality of the latter’s imaginings, but rather ... the attitude of *the text itself* to the kind of estrangements being performed.”⁵ With this in mind we can see that the dividing line between speculative genres becomes highly porous, and indeed perhaps utterly unsustainable altogether; the same basic narrative situation could become SF, fantasy, horror, or even all three simultaneously, depending on the way the text or film licenses itself *rhetorically*. (Think, for example, of the way the familiar figure of the zombie could be at home in all three genres, depending on whether there’s a line of dialogue at the

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start of the narrative announcing the cause of the zombies' rise as an escaped virus, a magic spell, or something radically and terribly ineffable.) Both speculation and mimesis also become, from this perspective, very subject to historical change: the kind of psychic supermen stories that authors cast as SF in the 1940s and 1950s look wildly unscientific in the 21st century, whereas the sorts of pocket communicators that were the height of science fictionality in the 1960s *Star Trek* have become ubiquitous and utterly mundane in 2016 (and in fact look rather old-fashioned!).

In any event, for Suvin and the tradition of SF scholarship that followed him, articulating the principle of possible difference was only the opening gambit in a properly critical reading of the genre. The possible "difference" in SF, the novum that generates its "cognitive estrangement," always then prompts for Suvinian criticism the political re-evaluation of our own world as it *actually* exists. (For this reason the "science" of SF for Suvin-style critics is more social science than physical science; the real heart of the genre is not in force, motion, or chemical formulae, but social organization, group psychology, sociology, and economics.) SF estranges us from the "real world" in the sense that it removes us to another socio-historical context from which we can then re-encounter the real world and our real social history with fresh perspective. For Suvin (and related leftist scholars of SF like Carl Freedman, Thomas Moylan, and Fredric Jameson, among others) this de- and re-familiarizing encounter with difference is always structured by the progressivist political desire for utopia; as Suvin is fond of noting, he sees utopian literature and SF as existing in a kind of Möbius family tree in which each one is both parent and child to the other. SF, as a genre, tells us that the law of history is that societies change. It grants us positive utopian visions of societies that changed for the better, and negative, dystopian warnings about societies that changed for the worse. SF's assertion of historical mutability thus always carries, for Suvinian criticism, a potent and urgent political charge that, generally speaking, aligns with the agenda of the socialist left.

Suvin's argument thus implies a history of SF that extends well beyond the usual 19th-century precursors in Mary Shelley, Edgar Allan Poe, Jules Verne, and H. G. Wells into texts like Jonathan Swift's *Gulliver's Travels* (1726) and especially Thomas More's *Utopia* (1516). SF, the Suvinian critic argues, is the way we think about utopia today, and utopia is the reason we think about SF, whether that's the explicit theme of the text, merely implicit, or even actively disavowed. Suvin solves the problem of the many texts that seem to plainly *lack* a utopian political orientation, as well as the wide body of texts that viciously opposes the political left, by arguing that such texts do not properly count as SF at all—a remarkable excision from the main body of the genre that, by Suvin's own estimation, probably removes from consideration 90 percent of what is marketed as SF. Other scholars working in the Suvin mold have found alternative solutions, including the introduction of new varieties of utopia (like the critical utopia and the critical dystopia that self-reflectively interrogate each concept, as in Moylan), or an emphasis on the creative work of the critic to expose the dialectical tensions within texts (as in Jameson),

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or even the elevation of SF to the status of a quasi-philosophical “critical theory” (as in Freedman). Still other critics, especially in the 2000s, have largely broken with the Suvinian paradigm altogether, in favor of an inverted focus on the relationship between SF and the violent historical conjuncture called “empire.”

Science Fiction and Empire

The “imperial turn” in science fiction studies inverts the utopian focus of the Suvinian critics by focusing instead on reactionary and counterrevolutionary trends in the genre. While the against-the-grain reading strategies of the imperial-turn critics are often quite similar in method to the against-the-grain reading of Suvin and Jameson, what is being revealed is typically not utopian but *anti*-utopian political formulation, which uses the positing of historical difference to legitimate structures of violence and domination in the present. In paradigmatic works from the 2000s like Istvan Csicsery-Ronay’s “Science Fiction and Empire” (*Science Fiction Studies* 2003), Patricia Kerslake’s *Science Fiction and Empire* (2007), and John Rieder’s *Colonialism and the Emergence of Science Fiction* (2008), the imperial-turn critics of SF excavate the racist and colonialist assumptions about difference that are not only evident in early entries in the genre but continue to structure creative production in the genre to this day. “It is not a matter of asking whether but of determining precisely how and to what extent the stories engage colonialism,” writes Rieder:

The work of interpreting the relation of colonialism and science fiction really gets under way, then, by attempting to decipher the fiction’s often distorted and topsy-turvy references to colonialism. Only then can one properly ask how early science fiction lives and breathes in the atmosphere of colonial history and its discourses, how it reflects or contributes to ideological production of ideas about the shape of history, and how it might, in varying degrees, enact a struggle over humankind’s ability to reshape it.⁶

Both Rieder and Csicsery-Ronay begin their anti-utopian histories of SF by noting that SF originates and rises to prominence in nations around the time that these nations begin entering into global politics as imperial actors. They cite its originary emergence in England and France at the heights of those empires, as well as subsequent high interest in the genre in Germany, the United States, Russia, Japan, and contemporary China as those nations have entered imperial politics on the world stage. SF’s perpetual fascination with military narratives, its interest in discourses of racial difference and racial essence (not to mention questions of racial superiority and inferiority), and its repeated ruminations on the rise and fall of empires is thus no accident but rather reflective of the genre’s nature as “imperial dream-work.”⁷

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Imperial-turn reading practices, like those of the utopian school, offer wide variety, as the imaginative plasticity of SF texts allows many to be read dialectically. Thus *Star Trek* (to take one globally well-known example) offers a famously optimistic vision of a post-nationalist, post-militaristic, post-capitalist, and indeed post-scarcity future Earth with exciting and dizzying technological progress, united under the banner of world government and a member of a similarly pacifistic “Federation of Planets.” At the same time that it presents this utopian vision, it depicts the Federation as bedeviled by implacable racial enemies (the Klingons, the Romulans, the Cardassians, the Dominion, the Borg, and others) and constantly at war, while the protagonists of the series are uniformed soldiers ostensibly “on a mission of peace” but serving on a heavily armed warship whose primary mission of discovery is always also expansionistic and resource driven. Especially in the 1960s original series, a paradigmatic *Star Trek* plot involves the Federation’s melting-pot crew (led by the swashbuckling Captain Kirk, modeled on Horatio Hornblower and played by a scenery-chewing William Shatner) encountering some indigenous society beyond the charted maps of Federation space in Act I; toppling their ruling class, their dictator, or their godlike all-knowing supercomputer in Act III; congratulating the citizens of the planet on their newfound freedom; and then zipping off to their next encounter with a new group of natives the following week. Depending on one’s preexisting political commitments and critical methods—as well as the episode or movie of choice—one can thus read *Star Trek* as either a challenge or endorsement of the status quo of world affairs: at once a daring utopian challenge to all that now exists *and* a deeply reactionary confirmation of the permanent necessity of violence by the liberal state (especially the United States) against frightening Others with whom no genuine friendship is possible. So it is for any sufficiently complex and rich text in SF: what looks in the hands of one critic to be a utopian vision of a better, freer tomorrow might easily look to another as a startlingly *anti*-utopian future of repression, exploitation, exclusion, and misery.

The operation of SF as a dialectical interplay between utopian and imperial articulations of contemporary politics and possible futures can be traced across the history of the genre. This is especially true of the sorts of fantastic technologies one sees in early entries in the genre in writers like Wells, Verne, and the so-called Edisonade invention narratives that were extremely popular at the turn of the 20th century, before “science fiction” even had wide currency as a name for a distinct, recognizable genre. Such devices characteristically had the potential for dual use as weapons or logistics, if indeed the *primary* proposed use of the gadget was not always military in orientation. The vibrant debates that animate SF studies in its flagship journals and major academic conferences in the present moment typically hinge on the polarized political charges for the genre produced by these two critical approaches, utopian and imperial, radical and conservative, as they uneasily orbit and intersect one another both in the individual texts and in the genre’s creative production as a whole.

Other Approaches

Of course, the dialectical relationship between utopia and empire as two ideological “poles” in SF, while currently a major interest of scholars working in science fiction studies, does not exhaust the interpretative possibilities of the genre either.

Contemporary interest in the lived experience and creative praxis of marginalized and oppressed groups, and in texts that celebrate and empower the subaltern, is a very important thread in contemporary SF scholarship as well, as the imagination of social and historical difference in SF makes it a natural place to discuss race, gender, sexuality, disability, and other forms of bodily difference (in contexts that are not always reducible to either the utopian or imperial ambitions of state and capital). As Elyce Rae Helford has succinctly said, both SF and fantasy have historically served as “important vehicles for feminist thought, particularly as bridges between theory and practice. No other genres so actively invite representations of the ultimate goals of feminism: worlds free of sexism, worlds in which women’s contributions (to science) are recognized and valued, worlds that explore the diversity of women’s desire and sexuality, and worlds that move beyond gender.”⁸ While at another cultural moment Verne and Wells might have clearly shared recognition as the two “fathers” of the science fiction genre, from the view of the 21st century that crown would surely rest on the head of a “mother,” Mary Shelley, the author of *Frankenstein*, penned nearly half a century before the other two works.

The diverse group of critics and creators that are commonly grouped under the name “Afrofuturism”—and related groups like those writing about indigenous futurism, Latin@futurism, and techno-Orientalism—likewise see SF as a space where nonwhite people can speak back to the hegemonic forces that historically have dominated them and can craft new futures that include them too. At the extremes of its critical ambition the Afrofuturist school transforms our understanding of the relationship between SF and black writing, even boldly suggesting (as Isiah Lavender III does) that in the end “all black cultural production in the New World is SF” insofar as the experience of slave trade, at its core, is a science fictional one that has more in common with an alien invasion or UFO abduction story than to any realist or naturalist narrative.⁹ “Black people” in the aftermath of slavery and in a world still filled with ongoing racism and state violence, argues Greg Tate along similar lines, already “live the estrangement that science fiction writers imagine.”¹⁰ This rearticulation of the genre has brought much contemporary interest in previously neglected works in SF’s early history, especially in the Afrofuturist tradition in the genre, which sees authors working to imagine futures for the human race and for human society that are not structured by white supremacy and Eurocentrism. This tradition of creation can be traced to Martin R. Delany’s 1859 anti-slavery novel *Blake; or the Huts of America*, as well as to a number of works by contemporaries of Verne and Wells (perhaps most notably Sutton E. Griggs’s 1898 novel *Imperium in Imperio*, which centers on a hidden black government secretly opposing the white supremacist U.S. government in Washington, DC, or *Of One Blood* by Pauline Hopkins [1902–1903], which reveals the secret history of a technologically advanced

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black civilization in Africa), as well as the large number of contemporary texts from black writers in the genre like Octavia E. Butler, Samuel R. Delany, Walter Mosley, Derrick Bell, Nalo Hopkinson, Sofia Samatar, Nnedi Okorafor, and many others. Against a tradition in SF reception that (until recently) tended to focus on both white male authors and white male readers, contemporary SF scholarship foregrounds a much more diverse history by devoting attention to works that (like *Imperium*) were popular and widely read in their moment but nonetheless fell out of the historical narrative because they were not widely circulated or valorized among white male elites in the metropole.

Recently, the politics and philosophy of disability has become a very important question in SF for similar reasons, not only with regard to the question of estrangement and alienation that many people with disabilities feel when encountering ableism but also with regard to the futurological discourse of “the cure,” whose terms sometimes can just as easily seem eugenic and brutally eliminationist as they can hopeful.¹¹ Similar critical interventions have attempted to incorporate even nonhuman beings into the locus of science fictional consideration, in the SF version of the “animal turn” that has been seen elsewhere in the academy in the early 21st century; the place of animals in SF history garners a particular sort of urgency in the moment of global ecological crisis that scientists are saying may well be “the sixth mass extinction,” the first one inaugurated and accelerated by mankind. This intersectional redirection of our attention away from a canon that centers the privileged (white, straight, male, middle or upper class, able-bodied, cisgendered, human, etc.) subject outward toward the supposed “periphery” in which the vast majority of the world’s *persons* actually reside—a trend which has been strongly felt not only elsewhere in literary study but in other humanistic disciplines like philosophy and history as well—has energized and revitalized the study of SF by directing the attention of scholars and fans to new types of speculations from fresh voices. While many of these explorations, generally speaking, still fall somewhere within the utopia-empire orbit, it would likely be reductionist to say they *all* do, or to foreground that one aspect of these discourses over all others.

Still other approaches try to step back from the politics-infused approach that has dominated literary criticism in the post-1960s era by foregrounding instead questions of form and aesthetics. This is especially true of scholars working on SF texts that do not originate in prose fiction or even in narrative film, such as music or video games. Samuel R. Delany—an SF writer who is also one of the genre’s finest critics—has long noted the extent to which SF seems primarily to be a sort of language game that generates pleasure in its reader not by appealing to utopian speculation or a spirit of fiery, oppositional resistance but by creating contexts in which familiar words and phrases become defamiliarized and transformed into uniquely original utterances with novel meanings. His famous examples—“the door dilated”; “his world exploded”; “she turned on her left side”—reveal SF as in fact a close kin to poetry, as its pleasure comes in its generation of unlikely “possible images of the impossible” through the manipulation of word and image.¹² A similar approach, taken by Damien Broderick, recasts the appreciation of science fiction as a quasi-theological act of exegetical decipherment: “Sf is written in a kind of code (on top of—and sometimes displacing—all the other codes of writing) which

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must be learned by apprenticeship.” Broderick calls this code a “mega-text” and notes the encyclopedic knowledge of “imaginary worlds, tropes, tools, lexicons, even grammatical innovations borrowed from other textualities” that make up the intertwined creative practices of both writing and consuming SF.¹³ A mega-textual approach to SF directs our attention not only to the multiple lines of relationality between texts in the genre but to the way the acolyte of the genre puts the pieces together, noting again that the pleasure of SF can be as much an act of creative joy for the reader as for the writer.

Finally, a great deal of criticism has focused on the question of both distribution and reception as central problematics in SF’s history, noting, as Edward James memorably has, that in the final analysis “SF is what is marketed as SF.”¹⁴ Understanding SF as a kind of marketing strategy for publishers and film studios—as a *brand*, a brand that defines itself against competitors like heroic fantasy, horror, the superhero comic, the fairy tale, and the like—can be as rich a critical orientation as any of the aesthetics- or politics-centered approaches to the genre, revealing valuable new patterns in creation, dissemination, and reception. The term “science fiction” itself comes to us precisely by way of branding; Hugo Gernsback coined it (following his brief embrace of the disastrous portmanteau “scientifiction”) in large part as a marketing strategy for describing what united the many strands of originals and reprinted stories to be found in the pages of his “new sort of magazine.”¹⁵

Focusing on this aspect of SF’s history also draws much-needed critical attention to the special place of fandom and the ways in which intense interactions between writers and fans have shaped the genre since its inception. Here again we see Hugo Gernsback’s impact, as Gary Westfahl has argued extensively; the editor’s introduction of that first issue of *Amazing Stories* calls upon his readers to “get your friends to read it and then write us what you think of it,” anticipating or perhaps literally calling into existence the fan community that would sustain SF for the next hundred years through letters, fan magazines, fan fictions, fan scholarship, conventions, cosplay, Tumblr hashtags, and on and on.¹⁶ The ongoing interplay of the fan with individual creators in the field, with the corporations that often own the rights to the intellectual property, and with other fans—relationships that can be both very warm and quite frosty, sometimes rapidly swinging from one extreme to the other—has, until recently, been an overlooked aspect of the history of science fiction, but has now received much more attention through the fan-centered work of scholars like Henry Jenkins. Fan studies is now recognized as a central part of the study of SF scholarship, shedding new light on the immense transmedia universe of the genre.

A (Very) Brief History of Science Fiction

While any attempt to propose an abstract periodization of SF will inevitably produce omissions, elisions, and oversimplifications—as well as invite the familiar scholarly drama

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of canons and counter-cans—generally speaking, a discussion of the development of science fiction as a genre can be focalized through something like the following schema:

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Early precursors: “Science fiction” *avant la lettre*, as in the early modern fantastic “voyages to the Moon” of Lucian, Cyrano de Bergerac, and others; the floating technological metropolis of Laputa in *Gulliver’s Travels*; More’s *Utopia*; and so on. In *Metamorphoses of Science Fiction*, Suvin suggests elements of cognitive estrangement as a principle of the imagination can be traced back as far as mythological narratives like “Epic of Gilgamesh” and the Book of Genesis, the latter of which (the story of man’s hubristic overreach, followed by a fall) really does track as the prototype for any number of SF narratives that would follow.

Nineteenth century: Mary Shelley’s Gothic novel of the grotesque reanimation of dead flesh through scientific means, *Frankenstein* (1818), is now widely recognized as the first SF novel, with her plague novel *The Last Man* (1826) a similar anticipation of the tradition of post-apocalyptic and deserted-Earth novels that would follow in various registers over the next century and a half. After Shelley the three principal acknowledged literary forefathers of SF are the famous works by Edgar Allan Poe (1809–1849), Jules Verne (1828–1905), and especially H. G. Wells (1866–1946).

Other representative authors: Edward Bellamy, Mark Twain

Turn of the century (c. 1900–1920s): The turn of the 20th century saw an interest in narratives of technical inventiveness, often in concert with open imperial warfare (often genocidal in nature, focused on chemical and biological superweapons). Not many of these so-called Edisonades—so named after Thomas Edison to highlight the figure of the inventor characteristically at the story’s center, with Edison himself literally appearing as the main protagonist of an unauthorized sequel to *War of the Worlds*, Garrett P. Serviss’s *Edison’s Conquest of Mars* (1898)—retain a tremendous amount of critical interest in the 21st century in their own terms, though the names of some writers of the period who experimented with proto-SF as a form (like Jack London, E. M. Forster, Charlotte Perkins Gilman) are still very well known.

Other representative authors: Edgar Rice Burroughs, Karel Čapek, H. P. Lovecraft, Yevgeny Zamyatin

“Scientification” (early pulp era, c. 1930s and 1940s): This period sees the first coining of the phrase “science fiction” by editor Hugo Gernsback in the pages of his pulp magazines *Amazing Stories* (and especially *Wonder Stories*, his follow-up project after losing control of *Amazing Stories* in bankruptcy court) in the late 1920s and 1930s. His terminology and editorial vision became the point around which the genre first crystalized as a set of discrete literary practices that are recognizably distinct from other sorts of creative production. At the same time, Gernsback’s reach somewhat exceeded his grasp; his own publishing endeavors were not successful or sustainable, and frequently went out of business, while his personal techno-optimistic vision of science was challenged by the popularity of stories about disaster and apocalypse, even within the pages of his own

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magazines. Writers of the latter portion of the pulp era—emerging in a genre that was better defined and championed by editors and readers with alternative visions—are better remembered in the early 21st century. Many of these writers first came to the genre by way of their early fandom of the Gernsback era.

Other representative authors: Katharine Burdekin (writing as Murray Constantine), Aldous Huxley, Fritz Lang, Jerry Siegel and Joe Shuster, E. E. Smith, Olaf Stapledon

“The Golden Age of science fiction” (later pulp era, c. 1940s–1960s): While Gernsback’s coining of the term and solidification of the genre as a publishing “brand” was an origin point for the genre, later publishers and editors were more successful not only on the business side but also in terms of longer-term influence. One of the major editors of the later pulp era, *Astounding’s* John W. Campbell, was incredibly influential in shaping the larger vision of the genre’s futurological orientation, as the authors and types of stories he promoted ultimately became understood as the standard in the genre. Donald A. Wollheim, another influential editor of the period, would later describe the development of a “consensus future” for humankind among Golden Age writers that remains quite familiar as one possible future for technological civilization, the “good” future we could expect for the species provided we didn’t first nuke ourselves into oblivion: the slow movement of the human race into extraplanetary settlement elsewhere in the solar system (the Moon, Mars, the asteroid field, etc.); followed by movement to other stars utilizing faster-than-light technology; followed by humanity’s founding of a hyperbolic Galactic Empire (either alone or in concert with other races) with a huge number of peopled worlds, perhaps so many that Earth itself becomes an unimportant backwater or forgotten entirely.¹⁷ The names of major writers of the Golden Age remain well known to 21st-century scholars and readers, even as some of their assumptions about politics have begun to seem quite old-fashioned, among them the three who might well be thought of as the “holy trinity” of this era: Isaac Asimov, Robert Heinlein, and Arthur C. Clarke.

The two pulp eras also mark the beginning of SF’s movement into other media forms besides the prose short story or the prose novel, including radio, television, and especially film. This movement would, as one would expect, only intensify in the coming decades, which would see the popularity of science fiction film, television, and game media strongly eclipse traditional literary productions.

Other representative authors: Alfred Bester, Ray Bradbury, Frank Herbert, Judith Merril, Gene Roddenberry, Theodore Sturgeon

New Wave (c. 1960s and 1970s): The New Wave emerged as a strong competitor to the Golden Age ethos in the 1960s and 1970s (even though Golden-Age-style fictions remain strongly popular, and likely the most economically profitable mode of SF, to the present day, and even though elements of New-Wave-style counterculture can be strongly felt in pre-New-Wave writers like Alfred

Bester and Philip K. Dick, the second of whom is arguably the single most influential SF writer of this era and perhaps of all time). In the United States especially, the emergence of the New Wave can be dated to the publication of two specific anthologies both edited by Harlan Ellison, *Dangerous Visions* (1967) and *Again, Dangerous Visions* (1972), which introduced not only new writers to SF fandom but also new thematic concerns and a specifically countercultural attitude. The New Wave in England began earlier and is associated with the magazine *New Worlds* as edited by Michael Moorcock beginning around 1964, work that was popularized in the United States through another very influential anthology edited by Judith Merril, *England Swings SF* (1968). The New Wave coincided with the huge wave of political changes in the 1960s and 1970s—the women’s movement, the civil rights movement, decolonialization and national liberation movements, the gay rights movement, and so on—and was specifically inflected by a new pessimism about the prospects of the human race. The “failure” of the Space Race to inaugurate the first steps toward that Galactic Empire consensus future—no lunar colonies, no mission to Mars, and indeed no missions to the Moon after 1972—undoubtedly contributed to this growing pessimism in the SF community, as did the concurrent emergence and growing prominence of the ecological movement. The two taken together augured a particularly chilling reversal of the techno-optimism of the consensus future: now we were not only condemned as a species to be trapped forever on this planet, but the very technologies that we thought would liberate us turned out to be destroying the environment we depend on to survive.

Other representative authors: John Brunner, Samuel R. Delany, Stanislaw Lem, Ursula K. Le Guin, Joanna Russ, the Strugatsky brothers, Andrei Tarkovsky, James Tiptree Jr. (Alice Sheldon), Kurt Vonnegut

Cyberpunk and post-cyberpunk era (c. 1980s-1990s): As with the emergence of the New Wave, the cyberpunk “movement” emerges in the 1980s as a response to the New Wave without ending either that mode of creative production or, for that matter, the Golden Age; no cyberpunk or post-cyberpunk fiction of any stripe was as globally influential as the highly nostalgic, space-operatic *Star Wars* franchise that begins with *Episode IV: A New Hope* in 1977, or the return of the archetypal “consensus future” franchise *Star Trek* to global prominence via its move to a film franchise in 1979 and its return to television in the form of *Star Trek: The Next Generation* in 1987. Still, naming the cyberpunk period as a discrete period is necessary to note the rise of the computer as a key locus of science fictional speculation, as well as a place (through the rise of the Internet and ubiquitous digital technologies like the iPhone) where it becomes increasingly difficult to tell the difference between what was once wild SF speculation and what has become our mundane, everyday reality. The space of the computer—the digital—also reframes some of the possibilities of utopian optimism and cataclysmic pessimism that, as we have seen, have always been in strong tension in SF: the computer is the technological device that might someday liberate us

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from work, from poverty, even perhaps eventually from death itself, while at the same time it threatens our safety as an engine of mass unemployment, universal surveillance, and robot-drone-led forever war. That tension between the promise of renewal and the universalization of death, implicit in the neoliberal politics of Ronald Reagan, Margaret Thatcher, and Bill Clinton that dominated the period, is felt even in works that don't touch on the computer at all, as in Margaret Atwood's chilling feminist dystopia *The Handmaid's Tale* (1985); John Carpenter's genre-hybrids *The Thing* (1982) and *They Live* (1988); and the transformative, widely celebrated works of Octavia E. Butler (1947–2006), who for most of her career was the only African American woman earning her living writing SF and who remains a key source of inspiration to many in the field.

Other representative authors: Iain M. Banks, David Brin, Lois McMaster Bujold, William Gibson, Kim Stanley Robinson, Neal Stephenson, Wachowski siblings

The contemporary moment (the world as science fiction): In the 2000s and 2010s, this collision between the two political valences of technology remains the dominant engine of SF speculation and creation, as our world becomes more and more like what we used to think of as mere “science fiction” (in ways that are both exciting and terrifying). It was Marshall McLuhan who, thinking of the world-historical rupture of the atomic bomb, said in 1964, “We live science fiction”¹⁸—and the situation, needless to say, has only become more science fictional since then. When the Twin Towers fell to terrorist attack in 2001, it was commonplace to remark that people felt like they were watching a movie, perhaps the science fiction film spectacle *Independence Day* (1996) which saw the similar cataclysmic destruction of familiar landmarks. Since 2001 we have seen the real-life introduction of unmanned drones in war, driverless cars, increasingly sophisticated computer intelligences, and an accelerating parade of ecological disasters like floods, droughts, and wildfires all intensified by unchallenged anthropogenic climate change. It is little wonder that Kim Stanley Robinson has remarked that “science fiction turns out to be the realism of our time.”¹⁹ SF in the early 21st century is such an incredibly rich and increasingly influential location for cultural production, dominating the culture at the box office, in television ratings, and in the day-to-day games and apps that populate our digital micro-worlds precisely because in our time the entire world has become SF.

Other representative authors: Paolo Bacigalupi, Ted Chiang, Liu Cixin, Nalo Hopkinson, China Miéville, Nnedi Okorafor, Joss Whedon

Links to Digital Materials

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Encyclopedia of Science Fiction. The entirety of the third edition of the *Encyclopedia of Science Fiction*, edited by John Clute, David Langford, and Peter Nichols, and freely available online.

“The History of Science Fiction” (artist Ward Shelley). Striking science fictional visualization of science fiction’s origins, development, and ongoing relationship with adjacent and related genres like fantasy, horror, romance, experimental literary fiction, and the Gothic novel.

Internet Speculative Fiction Database. The science fiction analogue of the Internet Movie Database, the ISFDb traces both the original publication and anthologizations/reprints of science fiction literature and criticism.

“The Pulp Magazine Archive”. Voluminous digital archive of pulp magazines that includes many full scanned issues of crucial publication outlets for early SF production, including *Amazing Stories* and *Astounding*.

“Science Fiction (Bookshelf)”. Free archive of historical and out-of-copyright SF maintained by the literary digitization site Project Gutenberg.

***Science Fiction Studies* (historical archive)**. Contains abstracts of all articles and full text of selected articles appearing in *Science Fiction Studies* since its founding in 1973.

SF Hub. Wide-ranging clearinghouse of academic journals, websites, databases, and library archives useful for the academic study of science fiction, maintained by Andy Sawyer (Special Collections and Archives, University of Liverpool).

Further Reading

Allan, Kathryn, ed. *Disability in Science Fiction: Representations of Technology as Cure*. New York: Palgrave Macmillan, 2013.

Broderick, Damien. *Reading by Starlight: Postmodern Science Fiction*. New York: Routledge, 1994.

Bould, Mark, and China Miéville, eds. *Red Planets: Marxism and Science Fiction*. London and Middletown, CT: Wesleyan University Press, 2009.

Canavan, Gerry, and Kim Stanley Robinson, eds. *Green Planets: Ecology and Science Fiction*. Middletown, CT: Wesleyan University Press, 2014.

Csicsery-Ronay, Istvan, Jr. “Science Fiction and Empire.” *Science Fiction Studies* 30.2 (July 2003): 231-245.

Csicsery-Ronay, Istvan, Jr. *The Seven Beauties of Science Fiction*. Middletown, CT: Wesleyan University Press, 2008.

Science Fiction

Delany, Samuel R. *The Jewel-Hinged Jaw: Notes on the Language of Science Fiction*. Revised edition. Middletown, CT: Wesleyan University Press, 2009.

Freedman, Carl. *Critical Theory and Science Fiction*. London: Wesleyan University Press, 2000.

Gunn, James, and Matthew Candelaria. *Speculations on Speculation: Theories of Science Fiction*. Oxford: Scarecrow Press, 2005.

James, Edward, and Farah Mendlesohn. *The Cambridge Companion to Science Fiction*. Cambridge, U.K.: Cambridge University Press, 2003.

Jameson, Fredric. *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions*. London: Verso Books, 2005.

Lavender, Isiah, III, ed. *Black and Brown Planets: The Politics of Race in Science Fiction*. Jackson: University Press of Mississippi, 2014.

Latham, Rob. *The Oxford Handbook of Science Fiction*. Oxford: Oxford University Press, 2014.

Rieder, John. *Colonialism and the Emergence of Science Fiction*. Middletown, CT: Wesleyan University Press, 2008.

Rieder, John. "On Defining SF, or Not: Genre Theory, SF, and History." *Science Fiction Studies* 37.2 (July 2010): 191-209.

Roberts, Adam. *The History of Science Fiction*. New York: Palgrave Macmillan, 2005.

Stableford, Brian. *Science Fact and Science Fiction: An Encyclopedia*. London: Routledge, 2006.

Suvin, Darko. *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*. Rev. ed. Edited by Gerry Canavan. Oxford: Peter Lang, 2016.

Vint, Sherryl. *Animal Alterity: Science Fiction and the Question of the Animal*. Liverpool: Liverpool University Press, 2010.

Vint, Sherryl. *Science Fiction: A Guide for the Perplexed*. London: Bloomsbury, 2014.

Notes:

(1.) Paul Kincaid, "On the Origins of Genre," in *Speculations on Speculation: Theories of Science Fiction*, eds. James Gunn and Matthew Candelaria (Oxford: Scarecrow Press, 2005), 43.

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- (2.) As will become apparent I have selected SF here both for its semiotic flexibility (the “s” and “f” can stand for “science fiction,” or for whatever else one likes) and the ease of visually distinguishing SF from other words in a sentence (as opposed to the lower-case *sf*). In quoted material I have retained the author’s preferred term.
- (3.) John Rieder, “On Defining SF, or Not: Genre Theory, SF, and History,” *Science Fiction Studies* 37.2 (July 2010): 193.
- (4.) Darko Suvin, *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*, ed. Gerry Canavan (New York: Peter Lang, 2016), 15.
- (5.) Carl Freedman, *Critical Theory and Science Fiction* (Middletown, CT: Wesleyan University Press, 2000), 18.
- (6.) John Rieder, *Colonialism and the Emergence of Science Fiction* (Middletown, CT: Wesleyan University Press, 2008), 3.
- (7.) David M. Higgins, “Towards a Cosmopolitan Science Fiction,” *American Literature* 83.2 (2011): 331.
- (8.) Elyce Rae Helford, “Feminism,” *The Greenwood Encyclopedia of Science Fiction and Fantasy*, ed. Gary Westfahl (Westport, CT: Greenwood Press, 2005), 291.
- (9.) Isiah Lavender III, “Ethnoscapes: Environment and Language in Ishmael Reed’s *Mumbo Jumbo*, Colson Whitehead’s *The Intuitionist*, and Samuel R. Delany’s *Babel-17*,” *Science Fiction Studies* 34 (July 2007): 187.
- (10.) Mark Dery, “Black to the Future,” in *Flame Wars*, ed. Mark Dery (Durham, NC: Duke University Press, 1995), 208.
- (11.) See, for instance, the influential recent collection *Disability in Science Fiction*, ed. Kathryn Allen.
- (12.) See his *The Jewel-Hinged Jaw* (New York: Berkley Winhover Books, 1977). The quoted language is from an appendix that appears at the end of his novel *Triton* (New York: Bantam Books, 1976), 337.
- (13.) Damien Broderick, *Reading by Starlight: Postmodern Science Fiction* (New York: Routledge, 1994), xiii.
- (14.) Edward James, *Science Fiction in the 20th Century* (Oxford: Oxford University Press, 1994), 3.
- (15.) Hugo Gernsback, “A New Sort of Magazine,” *Amazing Stories* 1.1 (August 1926): 3.
- (16.) Ibid. See Westfahl’s *Hugo Gernsback and the Century of Science Fiction* (Jefferson, NC: McFarland, 2007).

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(17.) Donald A. Wolheim, *The Universe Makers* (New York: Harper and Row, 1971), especially chapter 9.

(18.) Marshall McLuhan, "Notes on Burroughs," *William S. Burroughs at the Front: Critical Reception, 1959-1989* (Carbondale: Southern Illinois University Press, 1991[1964]), 73.

(19.) Alison Flood, "Kim Stanley Robinson: Science Fiction's Realist," *The Guardian*, November 11, 2009.

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