'Every Age Gets the Art It Deserves’- Science Fiction: History, Background and Definitions
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It would be logical to commence this essay by attempting to identify the approximate locus of SF within the general corpus of literature as perceived by the academy. Fiction might here be seen as having four main categories: canonical fiction (the classics), serious fiction that strives to become canonical, plain fiction (best sellers or general works) and junk fiction: popular and gauche fiction that includes mysteries, thrillers, westerns, romances, fantasy, and SF.1 It has been argued that so-called junk fiction is as rewarding for its followers as the more serious genres, as junk fiction too can be complexly self-referential, richly interconnected and intertextual,² taking on great depth and meaning when interpreted in the light of a much larger arrangement of interrelated stories, with all of the associated conventions and clichés, transcending a simplicity that is apparent only to the inexperienced. We SF readers ‘do not listen for that melody. We listen for the variations’.³ And conversely, ‘[m]ost of what seems inexcusably unintelligible in popular fiction is crystal clear to those who have learned how to read it’.⁴

SF was initially named thus in 1851 by William Wilson. He suggested a new form of fiction that he called ‘science-fiction’, a literature that would interweave the revealed truths of science with fiction, prefiguring Gernsback’s perceived role of SF as a science teaching approach that will be discussed later.⁵ Actually defining SF is an endlessly challenging and disputatious task, one that has been deemed impossible since SF ‘is the literature of change, it changes even as one tries to define it’.⁶ Thus the slogan on the masthead of the first issue of Amazing Stories, one of the earliest SF magazines: ‘Extravagant Fiction Today, Cold Fact Tomorrow’.⁷

Any determined attempt at defining this genre is problematised as any definition may instantly invite contention from critics. A reasonable and widely accepted definition of SF from the multitude available is that of Darko Suvin wherein he posits that SF is ‘the literature of cognitive estrangement’,⁸ a literature with a wide ‘spectrum or spread of literary subject-matter, running from the ideal extreme of exact recreation of the author’s empirical environment to exclusive interest in a strange newness, a novum.’⁹ Suvin elaborates further, stating that ‘SF takes off from a fictional

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2 Interestingly, it has been demonstrated that the SF genre reached a number of stories sufficient to achieve intertextuality by the early 1870s. See Darko Suvin, Victorian Science Fiction in the UK: The Discourses of Knowledge and of Power (Boston: G.K. Hall, 1983), p. 389.
4 Ibid., p. 60.
9 Ibid., 373.
(“literary”) hypothesis and develops it with extrapolating and totalizing (“scientific”) rigor. Suvin ably sums up his argument that ‘SF is, then a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alternative to the author’s empirical environment’. Suvin’s novum is derived from Bloch’s critical history of utopia, The Principle of Hope (1986), wherein Bloch, in one of the great works of the human spirit, contends that a philosophy of hope must stand on the front of the world process, a front that is related to newness, to the new and to the novum. Jameson’s influential Archaeologies of the Future (2005) further avers that SF proposes a ‘minimal formulation of Utopian demands which might somehow retain effective universality’. The utopian and communal aspect of SF has been additionally elaborated in Molyan’s, Demand the Impossible (1986), who elegantly states that ‘in the fragmented openness enabled by the science fiction narrative, the possibilities of the social revolution are symbolically explored and reiterated’. In brief, then, SF is a genre that is characterized by the postulation of a novum, and details the logical consequences of such a novum, allowing readers to conceptualize a set of utopian or dystopian circumstances wherein the real and postulated realities are consistent, but where the borders of actuality have been transgressed. Moreover, SF is Hegelian, in Hegel’s terms, believing that the rational alone is real, and the real is rational, as it is SF’s overriding goal to attempt to be logical, with outcomes expressed in solely rational categories, while partaking of Campbell’s monomyth, wherein a protagonist sallies forth into a ‘region of supernatural wonder: fabulous forces are there encountered and a decisive victory is won’. SF constitutes a contemporary type of myth as the conventional ‘myth is diametrically opposed to the cognitive approach since it conceives human relations as fixed, and supernaturally determined’, unlike quotidian life which definitely is not. The mimesis of reality is therefore an important component of SF, a modern-day myth that allows readers to identify with the characters and the story, with a scientific premise ‘which, according to Aristotle, must be plausible rather than necessarily true’. If we were to define by example, typical central elements in SF narratives would include protagonists who have been lifted out of their quotidian life to another locus in space and/or time, or who have been imbued with special attributes such as being scientists (not necessarily sane) or possessing special powers. Technological objects or devices may also feature and these may be useful, or conversely, threatening to the protagonist, or to society/humanity or possibly even to the entire universe. An exotic setting may also be depicted, and this may have been reached through space transportation or through time travel, conceivably even by the ready expedient of cryogenic suspension or some other similar plot device. An exotic encounter with an unusual being may also be introduced, and this may be a special human, alien, android, robot, cyborg or artificial intelligence or any combination of the above, with SF, as it were, acting as a crucible for the reader’s reflexive

10 Ibid., 374.
11 Ibid., 375.
19 For a depiction of SF as the modern mythology, see Patrician S. Warrick and others (eds.), Science Fiction: Contemporary Mythology, The Sfwa-Sfra Anthology (London: Harberrcollins, 1978).
21 Many of these discrete tropes have been individually engaged in critical works. See, for example George Slusser and others, eds. Worlds Enough and Time: Explorations of Time in Science Fiction and Fantasy (Westport: Greenwood Press, 2002).
wish fulfilment. An overt or covert Faustian thirst for knowledge and power is also often integrated and stories are frequently a bravura, comprised of a pastiche of borrowed elements from pulp, gothic, detective, horror, school, sport, romance, adventure, myth, legend and fantasy. In these ways, SF clearly fits into Todorov’s definition of a unique genre in that

genre represents, precisely, a structure, a configuration of literary properties, an inventory of options [...] It merely permits us to establish the existence of a certain rule by which the work in question – and many others as well – are governed.

SF was born in the pulps, that ingenious medium invented by Munsey in 1896. Gernsback, inventor and SF pulp magazine pioneer fervently believed that stories of superscience should primarily teach, prophesy and illuminate the public with upcoming scientific advances, while simultaneously fostering interest in the sciences. He is popularly known as the founding father of American SF, having created and edited the world’s first SF magazine and is also ‘ritually vilified’ for his overdramatization of the genre.

Hence, Gernsback’s Wonder Stories: The Magazine of Prophetic Fiction predicted television, tape recording, microfilm, solar energy, atomic weapons, fluorescent lighting, plastics, synthetic fabrics, stainless steel, hydroponics, juke boxes and many others in one of his own stories in 1911, along with various gadget stories. This is not to say that all SF predictions become true, as while hindsight is always 20/20, prediction is invariably myopic, as admonished by Hegel:

[...] every individual is a child of his time; so philosophy too is its own time apprehended in thoughts. It is just as absurd to fancy that a philosophy can transcend its contemporary world as it is to fancy that an individual can overleap his own age.

Hegel exaggerates by claiming that ‘a philosophy’ such as SF can never prefigure the future, as the single example given above to which we have deliberately limited ourselves clearly shows.

It was by way of these cheap pulps that SF began to emerge as a self-conscious genre, despite the repeatedly recycled clichéd stories, and

[...] implicit in many stories is the “manifest destiny” of the human race [...] mankind is justified in subjugating lesser [...] breeds [...] if science fiction is to be considered [...] a means of opening mankind to the wonders of the universe.

This foregrounds perhaps the most important function of SF, a point that will be raised in more detail later, that ‘is to neutralize the future, to remove the natural fear that humanity feels for the unknown’, to dispel our trepidations with regard to the future and to

22 It is worth pointing out that SF ‘is characteristically cast in the Gothic or post-Gothic mould’, a fact noted by several critics. Brian Aldiss, Billion Year Spree: The True History of Science Fiction (London: Corgi, 1975), p. 8.
26 Hugo Gernsback, ‘Ralph 124C 41+’, Modern Electrics, April 1911-March 1912.
28 For a comprehensive review of this period, see Everett Franklin Bleiler and Richard Bleiler, Science-Fiction: The Gernsback Years (Ashland: Kent State University Press, 1998).
replace it with upbeat utopian visions, where the utopian ‘contemporary triad of race, class and gender replaces Moore’s old triad of greed, pride and hierarchy’. In this way, SF’s potential for the prediction of future developments and what they might mean for humanity alleviates the fear of what changes the future will inevitably impose on our species.

Magazine editors change, and John W. Campbell’s paradigmatic editorship of Astounding Science Fiction can be said to represent a golden age of SF, an era which ‘valorizes a particular sort of writing: ‘Hard SF’, linear narratives, heroes solving problems or countering threats in a space-opera or technological-adventure idiom.’ Campbell reigned supreme from the banner year 1938 until his death in 1960, with the majority of the best-known writers in the genre debuting here. This, and later other pulp magazines emphasized heroic action, romance, exotic worlds and creatures, and fantastic adventures, with almost invariably buoyant and optimistic endings, the modern successors of fairytales. While the magazine’s SF content changed, Campbell retained Gernsback’s popular magazine format, including chatty editorials, advertisements for radio kits, razors and body-building regimens, scientific publications, correspondence courses, and fan mail. The latter was the second most important magazine component, the genesis of critical theory devoted specifically to the genre and incidentally providing useful feedback to the magazine editors. For example, in 1926, G. Peyton Wertenbaker (who later went on to write SF) wrote pointing out that the value of ‘scientifiction’ lay not only in the imparting of technical information and scientific knowledge sugar coated by a story, but in its ability to rouse emotion by gothically portraying ‘things vast, things cataclysmic, and things unfathomably strange’.

It was thus under Campbell’s tenure that Astounding rose to the level of the premier SF magazine worldwide, arguably through his insistence on stories based on plausible and reasonable science. His ‘ideal reader was an engineer, who would bat around ideas in stories with other engineers [...] in their search for real solutions’. And it was here that Robert Heinlein, Campbell’s greatest discovery, was unleashed. Heinlein was arguably the author who invented modern SF, who introduced the modus operandi of

[d]escription by indirection — the art of describing his future worlds not through lumps of exposition but by presenting it through the eyes of his characters, subtly leading the reader to fill in by deduction large swathes of background that a lesser author would have drawn in detail.

Heinlein and others who debuted through Astounding, such as Isaac Asimov, Arthur C. Clarke, Poul Anderson, Hal Clement, included many scientists and engineers, and it was these men of science who would dominate SF for the next fifty years, shaping it and directing it. Campbell preached his type of SF through his magazine’s editorials, wrote stories and taught others to write in his manner, and other magazines copied. Campbell paid more as his publisher (Street and Smith) was very successful, and under Campbell’s influence, writing styles improved, stories were toned down, the science became more plausible and reasonable, such that it could be logically and

34 G. Peyton Wertenbaker, Amazing Stories, July 1926, p. 297. Even earlier and more illustrious SF criticism is available, including, for example, Walter Scott, ‘Remarks on Frankenstein, or the Modern Prometheus: A Novel’, Blackwood’s Edinburgh Magazine, March 1818.
35 Edward James, ‘Before the Novum: The Prehistory of Science Fiction Criticism’, in Parrinder, Learning From Other Worlds, pp. 19-36 (p. 23).
36 Heinlein regarded Kipling highly and it was Kipling who was responsible for the technique of exposition by indirection, as in his 1912 story With The Night Mail. See Eric S. Raymond, ‘A Political History of SF’, Libertarian Futurist Society (newsletter), 2007 <http://www.catb.org/esr/writings/sf-history.html> [accessed 30 June 2011].
reasonably extrapolated from contemporary scientific advances. Thus, ironically, SF was made to face its own ‘reality test’ since stories were forced to be convincingly credible. This approach is not new, and was prefigured by Aristotle who stated that ‘we ought to postulate any ideal conditions, but nothing impossible’. Hence, Campbell influenced the career and thinking of virtually every major SF writer of the time, ‘not back-peddling on Gernsback’s grandiose vision for science fiction: he was extending it’. SF readers and writers continued to interact strongly in the magazines, developing ideas, conventions and images. They were sheltered from the rest of the field of literature and from this hothouse, under ‘conditions of marginality and insularity that produced an extraordinary cohesion’, SF matured and entered its golden age. Truly, Campbell changed the direction of science fiction writing. He refused [...] the tired old BEM space operas [...] he wanted hard, logical science, presented in the context of real, believable characters. He encouraged [...] social and political themes; he urged [writers] to dream clearly [...] to examine the world that was and to extrapolate what it might be.

_Astounding_ held sway for decades and it was not until 1950 that additional pulps appeared, such as _Galaxy_ and _The Magazine of Fantasy and Science Fiction_ (F&SF), along with paperback novels and short story collections. _Astounding_, now known as _Analog Science Fiction and Fact_ remains the longest-running SF magazine of all time, and although it is still the leader in the field, its circulation has fallen drastically, from a high of 115,000 monthly sales in 1983, to 28,319 in 2006, a phenomenon experienced by all other SF and fantasy magazines. Interestingly, virtually all pulps have disappeared bar the SF magazine, perhaps due to a rise in the popularity of books, with readers eschewing cheaper magazines.

It was evident by the middle of the 1950s, even if not widely acknowledged, that a significant proportion of SF was becoming fact, and

[t]he writers of pulp-magazine science fiction, [...] after the explosion over Hiroshima of the first atomic bomb [...] were acknowledged as prophets proven right by the course of events [...] On the other hand, having in their fiction developed and controlled nuclear energy long before the Army got around to it, [...] writers were both disappointed in and fearful of the ways in which the government proposed to handle its “ultimate weapon,” ways very different from those the writers would have chosen, or even expected.

Almost as if in response, SF gave birth to a ‘New Wave’ in the 1960s. This consisted for the most part of narratives that were stylistically more sophisticated, and in a schism with the Campbellian aesthetic, an outright ‘refusal of the shiny promise of technological modernity’,

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38 Aristotle, _Politics_ Books I and II, 32 [1265a17 18].
45 Luckhurst, _Science Fiction_, p. 143.
dealing with ordinary people living ordinary lives. There was a greater emphasis on sex and violence than with science, as evinced by novels such as Ballard’s Crash (1973) which deals explicitly with symphorophilia (car-crash sexual fetishism), with protagonists becoming sexually aroused by deliberately staging and personally participating in real car-crashes.46

SF continued to develop and boom in the 20th and 21st centuries, as the deep penetration of science and inventions into society created an interest in a literature that deliberately explored technology’s influence on people and society. Critics have argued that this fiction epitomized and encouraged Edsonian American ingenuity, with the elevation of the inventor to the ‘level of cultural hero’,47 “atomjocks”48 paving the way to an Americanized utopian vision of an ideal future. Other critics have lauded this approach as SF is seen as ‘a positive response to the post-industrial world, not always in its content (there is plenty of nostalgia for the past and dislike of change in science fiction) but in its very assumptions, its very form.’49

In review, briefly, in terms of medium or format, since the 1930s, SF has undergone three successive iterations when the success of Gernsback’s Amazing Stories was followed by other pulp-magazine publishers and SF remained magazine based, with novels initially serialized including early after the Second World War, a period of ‘pulp regressions’.50 After the 1950s, the paperback format expanded very rapidly and the magazine faded away. Luckhurst has argued that this period was profitable for SF, in that it gained advantage from being a genre, a minor literature that could prosper precisely because it was considered marginal.51 The transition from magazines to books was accompanied by the replacement of the short story and novella with the full-length novel, which was in turn supplanted by television and cinema media.52

The tropes and aspirations of SF, have also mutated over the decades. The history of science fiction can be divided into four eras: 1. 1815-1926, 2. 1926-1938, 3. 1938-1945, and 4. 1945-present, and these eras were respectively the ‘primitive’, adventure-dominant (e.g. Wells and Burroughs), 1938-50 science-dominant (e.g. Campbell and Astounding), 1950-65 sociology-dominant (e.g. Wyndham and Bradbury) and 1966-present being style-dominant, narratives with deliberately enhanced literariness along with the development of sub-genres within SF itself.53

SF now provides a popular narrative with which readers and audiences can identify, exploring ‘the outer limits of the current Western paradigm, science; its playground is all that we know about the universe, and what we imagine we might eventually know.’54 Thus, from its inception three generations ago, SF has metamorphosed from pulp magazine to respected genre.

Today’s SF is fortunate in that burgeoning popularity and heavy sales have translated into the realization of the potential for all types of SF to be marketed, and the expectations for the genre are those of ‘continued growth and proliferation of mass media technology’.55 Where popularity is low or unsupported by publishing houses, authors are now free to publish their stories online, with no costs. Nowadays, everyone knows of SF and thinks he or she knows what it is. Not everyone reads, not everyone approves. But every age gets the art it deserves’,56 thanks to modern technology, particularly the Internet.

48 Ibid., p. 94.
50 Luckhurst, Science Fiction, p. 122.
References


Aristotle, *Politics* Books I and II, 32 [1265a17 18].


Wertenbaker G. Peyton, *Amazing Stories*, July 1926