The years 1895 and 1926 mark monumental events in the history of sf: the publication of *The Time Machine*, H.G. Wells’s first important work of fiction, and the inauguration of *Amazing Stories* (1926–2005), edited by Hugo Gernsback, the first magazine devoted exclusively and explicitly to publishing sf (or “scientifiction,” as Gernsback then called it). But there is no more than a loose connection between the two events, and certainly no developmental or progressive history that leads us from Wells’s artistic achievement to Gernsback’s entrepreneurship. In fact, Gernsback’s pulp milieu bears only a slight resemblance to the publishing context in which Wells worked, and Gernsback’s one novel-length piece of fiction, *Ralph 124C 41+: a romance of the year 2660* (1911–12), entirely lacks the craft and thoughtfulness that make *The Time Machine* important. The history of sf in this period is diffuse, even if one simplifies the task by concentrating on English-language fiction, as I will do here. Writing that history involves the retrospective gathering together of scattered materials that find a clearly delineated focus and identity as early sf largely because of Gernsback’s commercial project.

Nonetheless, Wells’s importance is quite independent of Gernsback’s. We would still be reading *The Time Machine* and assigning it some kind of special place in the history of generic innovation even if Gernsback’s reprintings of Wells – and publication of Wells’s many imitators – had not so thoroughly woven him into the fabric of pulp sf. The year 1895 marks a watershed in the history of sf not just because of *The Time Machine* itself, but because it inaugurates the most important phase of Wells’s career. The major works that followed, including *The Island of Doctor Moreau* (1896), *The Invisible Man* (1897), “The Star” (1897), *The War of the Worlds* (1898), *When the Sleeper Wakes* (1899), *The First Men in the Moon* (1901), “The Land Ironclads” (1903), and “The Country of the Blind” (1904), comprise arguably the most important and influential body of fiction any writer has contributed to the genre. It is so impressive an achievement that it has sometimes inspired the exaggerated claim that Wells invented sf itself. In fact, he took up a range of devices and themes that were already being widely used, including time travel, future-war stories, contact with lost races, extraterrestrial journeys, scientific experiments gone awry, utopian speculation, and quasi-apocalyptic natural disaster. One of the distinctions of the fiction of Wells’s great decade is that, more than any other writer, he gathered together in one place almost all of the disparate threads of what we now identify as early sf.
Even more compelling than the breadth of Wells’s subject matter, however, is the depth of his exploration and transformation of it. In *The Time Machine*, for example, Wells seized upon and made his own a plot device that had enjoyed a great deal of popularity in the preceding decade. One of the most widely read and hotly discussed books of the period, Edward Bellamy’s *Looking Backward: 2000–1887* (1888), narrates a contemporary New Englander’s visit to the future where he observes a vastly more efficient and equitable society. Its famous and influential polemical counterpart, William Morris’s *News from Nowhere* (1890), also uses time travel to promote a different vision of social improvement. Mark Twain’s anti-clerical satire, *A Connecticut Yankee in King Arthur’s Court* (1889), sends its time-traveler in the opposite direction, pitting a contemporary engineer’s rationality and know-how against the brutality and superstition that rule Twain’s imaginary sixth-century Arthurian England. It is sometimes said that Wells’s key innovation upon the time-travel plot is his invention of the time machine itself, allowing him to replace the accidental time-travelers and Rip-Van-Winkle-like trances of these earlier stories with the deliberate exploratory journey of his scientist protagonist. Instead of the guided tours by which Bellamy’s and Morris’s visitors learn about the future, then, Wells’s Time Traveler encounters the world of A.D. 802701 as a riddle that only gradually unfolds its secrets. The drama of interpretation, as the Time Traveler works through a series of hypotheses about the relationship between the surface-dwelling Eloi and the subterranean Morlocks who inhabit this far-future Thames Valley, makes for a fluent synthesis of the utopian and satirical material typical of earlier time-travel stories. And just as this plot’s dynamism sets it apart from those of Bellamy and Morris, the clarity of Wells’s exposition distinguishes his novel from the earlier, comparable, but somewhat opaque attempt at depicting a posthuman future in William Henry Hudson’s *A Crystal Age* (1887).

Yet Wells’s marvelous machine and streamlined plot development would be worth little more than a footnote in the history of sf were it not for the visionary power of the futures his Time Traveler visits. Sf, like the historical novel, is intimately bound up with ideas about historical change, especially the linked notions of progress, evolution, and modernity. For example, Grant Allen’s time-travel novel, *The British Barbarians* (1895), exploits the widely shared assumption, which informed an entire generation of anthropologists, that contemporary Europe represented the fully developed phase of a history of civilization whose past developing phases were visible in non-European, savage societies. Allen (who, like Wells, was an advocate and popularizer of Darwinism) simply reverses the perspective of the ideology of progress by having an anthropologist from the future visit present-day England to study its savage rituals and superstitious beliefs. *The Time Machine* also reverses contemporary assumptions about progress, but, unlike Allen, Wells does not leave the ethnocentric framework of the ideology of progress intact. While Allen’s future is simply and unquestionably superior to the present, Wells depicts a future in which humanity has degenerated into the subhuman Eloi and Morlocks, and then gives this degeneration a cosmic scale in the protagonist’s brief, bleak glimpse of the entropic heat-death of life itself. Wells also attacks the identification of progress with industrialized Europe, by making the speciation of the Eloi and the Morlocks the ironic outcome of the triumph
of technological rationality over scarcity. Furthermore, the future’s technological triumph is undone in this manner not because its inhabitants lapse into the habits of “savage” societies, but because it perpetuates a form of savagery peculiar to contemporary “advanced” societies, the class division between capitalists and laborers. In the long run, the upper class’s exploitation of the workers turns into dependence upon, and finally utter subjection to, them as the Eloi end up not only being tended to by the Morlocks but also becoming a staple item of their diet. Finally, this dialectical reversal of the capitalist masters into the slaves, or more precisely the cattle, of their machine-tending former servants obliterates the opposition between nature and culture itself, turning the man-made arrangement of class duties and responsibilities into a grotesque natural symbiosis. Thus Wells’s tale challenges the entire framework of assumptions that bolster chauvinistic belief in the superior rationality of European industrial civilization. And Wells does so with a seamless weaving together of extravagant conjecture and realistic detail – as one of the Time Traveler’s listeners comments, “the story was so fantastic and incredible, the telling so credible and sober” (Wells 1987: 89) – that would remain one of the benchmarks of stylistic achievement in the genre.

The Time Machine set a high standard that much of Wells’s fiction lived up to in the years that followed. The depth and clarity he brought to the time-travel plot is typical of his handling of other popular types: invasion and the near-future war in The War of the Worlds and “The Land Ironclads”; the mad scientist whose experiments go disastrously wrong in The Island of Doctor Moreau and The Invisible Man; the extraterrestrial journey in The First Men in the Moon; the explorer’s encounter with a lost race in “The Country of the Blind”; and apocalyptic natural disaster in “The Star.” He made some remarkable innovations in these stories. For example, the Martians of The War of the Worlds are the prototype of all the cyborgs and the hyper-encephalic future humans and extraterrestrials of later sf, and in the Selenites of First Men in the Moon Wells pioneered the strategy of modeling alien anatomy and social organization on insects. But what characterizes Wells’s great decade on the whole is not the novelty of his invention, but rather the way he breathes vitality into the commonplace plots and devices of an already thriving early sf.

What we now call early sf was perhaps nothing more than the loose aggregation of such commonplace devices. No one was consciously writing, publishing, or reading “sf” around 1900. Even the association of Wells’s fiction with that of contemporaries like M.P. Shiel, George Griffith, and J.W. Beresford under the rubric of “scientific romance” (Stableford 1985) is more a way of identifying these writers’ common tendencies and shared milieu than it is the delineation of an explicit, self-consciously employed generic category. Nonetheless, Gernsback and the American magazine writers did not invent sf out of nothing, and Gernsback himself was quite eager to identify a canon of earlier works that defined the sort of story his magazine was looking to publish. A generation of bibliographers has documented an almost exponential decade-by-decade proliferation, from the 1870s to the 1920s, of stories set in the future, or about marvelous inventions and heroic or mad scientists (the prototypes being Thomas Edison and Victor Frankenstein, respectively), or involving journeys into previously unexplored areas of the world (usually the poles
or imaginary subterranean caverns, as the mapping of the world’s inhabitable surface neared completion), or journeys into outer space, or into the past or the future, and so on. (The most comprehensive and informative of these bibliographies is Bleiler 1990; others, each of which has its strengths, include Clareson 1984, Clarke 1961, and Suvin 1983.) The ground for Wells’s achievement was prepared by this steady growth, which was punctuated by more spectacular publishing phenomena such as Bellamy’s utopia, or before that H. Rider Haggard’s enormously successful lost-race romances (starting with King Solomon’s Mines (1885) followed by She (1886) and Allan Quatermain (1887)), and the ongoing popularity of Jules Verne’s voyages extraordinaires, all of which established a reading audience already attuned to a set of recognizable themes and expectations for Wells to exploit. The impact of Verne and Wells was crucial to the formation of sf, but the growing market for tales oriented toward the future, stories that extrapolated upon recent scientific and technological discoveries, and stories exploring utopian or merely exotic social formations was broader and more miscellaneous than can be accounted for by the influence of individual writers. Those increasing numbers who, during these decades, wrote and published early sf must have been responding to demands rooted in their society’s collective experience of change and its collective investment in modernity.

First, these demands point toward an economic context. Surely the importance of technical innovation and scientific training to the growth and maintenance of a large-scale industrial capitalist economy has a great deal to do not only with the ongoing popularity of Verne’s fiction, with its marvelous inventions and lengthy expositions of scientific fact, throughout this period, but also with the commercial success of the American dime novel’s fictional adolescent hero-scientists, Frank Reade Jr (1892–8) and Tom Swift (1910–41). If Gernsback’s vision of sf as an educational tool, his interest in amateur radio, and his other publishing ventures, like Modern Electrics (1908–13) and Science and Invention (1920–31), are any indication, the presence of a significant audience comprising young readers oriented toward engineering and fascinated by gadgetry was crucial to early sf.

Second, the social environment that attended the climax and crisis of imperialism nurtured the growing market for sf. The tensions of imperialist competition clearly underlie one of the most important and prolific veins of sf before the First World War, the invasion stories and forecasts of future war that Wells so decisively transformed in The War of the Worlds (on the future-war motif, see Clarke 1992). The vogue for such stories would seem not only to exploit popular identification with imperial projects and popular anxieties about becoming the victims rather than the wielders of imperial military power, but also to point once again to the economic backdrop of large-scale industrial production. The popularity of future-war stories coincides with the first great industrial arms race, from George Chesney’s phenomenally successful, controversial and influential cautionary tale of a successful German invasion of England, The Battle of Dorking (1871), published in the aftermath of Germany’s shockingly swift victory in the Franco-Prussian war, to the Great War itself, the horrors of which far exceeded its many fictional forecasts. The way in which Wells’s Martian superweapons overwhelm earthly opponents echoes many an earlier fictional encounter involving new
generations of armored ships or large artillery. Many tales of invasion and near-future war were strongly realistic, heavily concerned with extrapolating credible technological advances, as exemplified by Wells’s well-wrought and critically acute “The Land Ironclads.” But the future-war plot on the whole steered steadily away from realistic prediction into ever more extravagant fantasy. Arthur Train and Robert Wood’s The Man Who Rocked the Earth (1915) is typical, with its heady combination of imperialist politics, superweapons, mass destruction, and eccentric scientists – a mysterious and isolated one, who invents a flying machine and an incredibly powerful weapon with which he threatens to destroy the world unless national leaders put an end to their war; and a second, avuncular, absent-minded one, who saves the world from the first.

The general bellicosity of the milieu is impressive. British and American fantasists of war imagined their countries invading or being invaded by every possible national opponent (Germany was the most frequent choice) and many impossible ones. Xenophobia and racism were endemic. It is no coincidence that Wells’s blood-drinking Martian invaders appeared in Pearson’s Magazine in the same year that Bram Stoker’s Dracula (1897) gave classic form to the plot of vampiric invasion. When the fantasy of international war expanded from domestic invasion to global conflict, the sides frequently were divided along racial lines. George Griffith’s The Angel of the Revolution (1893) is an early example, M.P. Shiel’s The Yellow Danger (1898) among the most extravagant. Shiel’s plot involves a quasi-migratory Chinese invasion of Europe by an army of 400 million who simply walk across the countryside, laying it to waste like a plague of locusts. Carefully diagrammed naval battles are a standard feature Shiel’s novel shares with many future-war stories; his climactic battle is remarkable because it produces 20 million Chinese casualties. Shiel follows this with the most gruesome turn of all when the English deliberately unleash a cholera epidemic upon the Chinese swarm on the continent, killing some 150 million in the process. The theme of the Yellow Peril only grew more popular after Shiel, continuing unabated right into the interwar years, especially in the USA.

To some extent the scope of the disasters imagined in these racial fantasies partakes of a more generalized apocalypticism that manifested itself in stories of cataclysmic transformation, both natural and human-made – volcanic eruptions in Allen’s “The Thames Valley Catastrophe” (1897) and Shiel’s The Purple Cloud (1901); astral collisions in Wells’s “The Star” (1897) and Arthur Conan Doyle’s “The Poison Belt” (1915); a mad scientist’s experiments in Frederick Turner Jane’s The Violet Flame (1899); and all-out class warfare in Jack London’s The Iron Heel (1908). Such stories vary considerably in the degree to which they perform secular transformation of enduring motifs in the Christian tradition, and the persistence of mythological motifs like flooding and cyclical invites other forms of psychological and cultural interpretation as well. After the First World War, especially in England, this apocalyptic strain frequently blended with pessimism about the future of civilization in novels like Edward Shanks’s The People of the Ruins (1920) and P. Anderson Graham’s The Collapse of Homo Sapiens (1923).

Throughout the nineteenth century, colonial and imperialist expansion also provided an environment in which popular audiences avidly consumed both fictional
and nonfictional accounts of exploration. By the early twentieth century, while the extent of Britain’s empire (and of European imperialism in general) was reaching its peak, the still unexplored areas of the globe had become few and extremely remote. Stories of exploration became correspondingly more fantastic. Extraterrestrial adventure remained a relatively minor motif during most of this period; in the late nineteenth century extraterrestrial visitors were more often associated with occult wisdom and utopian speculation than with the earthly frontier. The great majority of imaginary exploration before Edgar Rice Burroughs’s Barsoom stories (beginning with “Under the Moons of Mars” (serialized 1912, as book A Princess of Mars 1917)) occurred wherever on Earth the writers could still place an isolated enclave for earthly travelers to penetrate – in the African or South American interior, at the poles or under the Earth. But writers employed these options with impressive frequency. Historians of sf have had little to say about the lost-race and lost-world stories that make up several hundred of the more than 2,500 items in Bleiler (1990), but they are important precursors to the later development of adventure-oriented sf (see Rieder 2008).

Lost-race and lost-world narratives – the paradigm for lost-race fiction is set by Haggard’s novels mentioned above; some typical, readable later examples are Frank Aubrey’s The Devil-Tree of El Dorado (1897) and The Queen of Atlantis (1899), and Robert Ames Bennett’s Thya: a romance of the polar pit (1901); the lost-world romance is a variation pioneered by Conan Doyle’s The Lost World (1912) – are on the whole formulaic and often relatively transparent fantasies of acquisition in which a small group of white men discovers an isolated civilization where they have exciting adventures finding treasure and love. The explorers frequently become embroiled in a civil war, allying themselves with a sympathetic princess against a perverse priesthood. Entry into the lost world is an ordeal, often involving a tortuous passage through an underground tunnel or river; this entrance is typically sealed upon the explorers’ exit, making their journey a private and unrepeatable one rather than the vanguard of colonial penetration. These formulaic elements combine to construct a wish-fulfilling ideological distortion that casts colonial exploration and expropriation as a return to nature, a rediscovery of lost histories and properties, and salvation for the good natives (who embrace the white men as friends or lovers) against their true enemies, the bad natives (who regard the white men as invaders and sexual rivals). Yet in the best of such narratives, like Haggard’s or Conan Doyle’s, such fantasies are offered up for enjoyment and simultaneously exposed to critical examination, especially by enforcing some ironic distance between the narrator and the expeditionary leader.

Even in the hands of less expert writers, lost-race and lost-world narratives offer their readers a fascinating array of ideas about social and cultural possibilities. The stories tend to take an anthropological orientation that is ingeniously revealed in the subtitle of Thomas Janvier’s The Aztec Treasure House: a romance of contemporaneous antiquity (1890). They often combine the idea that non-European societies represent moments in Europe’s past with utopian speculation, as various lost races practice forms of communism, polygamy, nudity, vegetarianism, and eugenic discipline. Although most lost-race civilizations are based on savage, classical, or medieval societies, some are futuristic, as in Will Harben’s The Land of the Changing Sun (1894). When combined
with evolutionary theory, the scientific orientation of such fiction produces another entire subgenre about the relationship of human nature to culture, the narrative of human prehistory, such as Stanley Waterloo’s *The Story of Ab* (1897), Wells’s “A Story of the Stone Age” (1897), and London’s *Before Adam* (1907). The same anthropological perspective, combined with a kind of vertiginous oscillation between the protagonist scientist’s racist contempt for a contemporary savage society and his intellectual awe before what he takes to be a long-lost artifact of a super-advanced extraterrestrial visitor, characterizes London’s “The Red One” (1918), one of the best pieces of sf from this period. But no one employed lost-race and lost-world geography with greater energy or a more spectacular proliferation of anachronistic materials than Burroughs (see, for example, *At the Earth’s Core* (1914) or *The Land That Time Forgot* (1918)) and his one rival in terms of commercial domination of the pre-Amazing magazines, A. Merritt (see *The Moon Pool* (1919)). It is to a large extent Burroughs’s combination of lost-race adventure formulas with an extraterrestrial, part-savage, part-medieval, part-futuristic setting in *A Princess of Mars* and its sequels that set the stage for the space operas of E.E. “Doc” Smith and Edmond Hamilton in the Gernsback magazines. (Sometimes Robert William Cole’s dreary *The Struggle for Empire: a story of the year 2236* (1900) is cited as the first space opera, but this is no more than a piece of trivia; Burroughs and Merritt are the most significant figures.) Finally, in assessing the importance of lost-race fiction, we need to remember that its basic structure was often used as a vehicle of satire, both before Haggard’s commercial breakthrough (Samuel Butler’s *Erewhon* (1872)) and after (Wells’s “The Country of the Blind”). In fact, two of the best pieces of feminist speculation in this period employ lost-race motifs: Inez Gillmore’s very fine but little-known allegory *Angel Island* (1914), and Charlotte Perkins Gilman’s deservedly famous parthenogenetic utopia *Herland* (1915).

Although we can plausibly identify several economic and social factors that encouraged the growing market for early sf, the coherence and the limits of the category itself remain open to debate. Perhaps the key question about this period is whether, and at what point, we can say that a new set of generic expectations had become sufficiently widespread and well enough defined to organize the production, distribution, and reception of the literature assembled in the bibliographies. Contemporaries’ persistent association of Verne with Wells, to the annoyance of both, suggests the presence of some such recognition, because as individual artists they resemble one another so little that their association can only rest on some kind of generic common ground. This would imply that, decades before Amazing Stories, Verne and Wells were perceived to be staking out a new, if perhaps not very precise, position in the terrain of literary possibilities. And that terrain itself was rapidly changing. The emergent sf of 1895–1926 comes into visibility against the backdrop of the generic turmoil associated with the growth and increased diversity of reading audiences and with the marketing practices of what would soon come to be called mass culture. Sf attains the status of a recognizable genre within this mass-cultural transformation of the entire system of literary genres. In this connection, the somewhat inchoate state of early sf, compared with its relatively clearer status after the American magazines came to name and dominate the genre, makes the period all the more interesting and instructive.
One could well argue, in fact, that the loose boundaries, imprecise definition, and disparate audiences of 1895–1926 comprise a far more typical state of affairs for a literary genre than the one that has so often been the point of departure for discussions about sf, namely the highly self-conscious elaboration of the genre in the American magazines of the late 1930s through the 1950s, spearheaded by a powerful editor (John W. Campbell), featuring a highly visible group of writers strongly and sometimes exclusively associated with the genre, and attended by a self-identified, committed, and very vocal group of fans. The most serious attempt to come to terms with the differences between Wells’s generic environment and that of sf’s so-called “Golden Age” remains Stableford (1985), which describes a field of production strongly bifurcated along national lines, dominated by one-volume book publication in the UK, and by magazine publication, with a concomitant emphasis on the short story, in the US. The British “scientific romance,” the tradition of Wells, flourished from the late nineteenth century into the 1950s, but from the 1940s on it was increasingly overshadowed and eventually displaced by American “sf,” the tradition of Burroughs, Merritt, and Gernsback. But the opposition Stableford details could well be considered less a national than an endemic one developing between mass culture and the older literary practices that persisted alongside it, which were increasingly forced to redefine themselves in opposition to it.

Putting the divided field of early sf alongside the quasi-programmatic unities of the “Golden Age” helps remind us that sf itself is not merely a mass-market genre. Burroughs, with his tireless reiteration of a successful adventure formula, is certainly a prototypical mass-market writer, whose corpus resembles that of Zane Grey or Agatha Christie at least as closely as it does that of any other early sf writer. But Gernsback, in the first issue of Amazing Stories, would call upon Wells and Verne and Edgar Allan Poe, not Burroughs, as models; and the fact that Wells enjoyed success across a number of genres, including the realist novel, makes him anything but a special case, as witness the contributions to sf by Joseph Conrad (The Inheritors (1901)) and E.M. Forster (the important early dystopia, “The Machine Stops” (1908)). Outside of England, much of the best early sf was produced by writers with high prestige in other fields, such as the eminent French sociologist Gabriel Tarde, whose splendid satire Underground Man (1905) may have provided important inspiration for Forster’s story; or John MacMillan Brown, chancellor of the University of New Zealand, whose Riallora (1897) and Limanora (1903) combine scathing satire against religious orthodoxy, racism, colonialism, and bureaucracy with one of the period’s most ambitious and elaborately detailed futuristic utopias; or the great Czech writer Karel Čapek, who is most often remembered in sf history for inventing the word “robot” in RUR (Rossum’s Universal Robots) (1920), but was also the most prominent writer of realist fiction in his country at the time of his death in 1938. Sometimes the affiliation of sf with older and more prestigious literary forms, such as the strong element of satire always present in the dystopia (for example, Yevgeny Zamyatin’s We (written 1920, translated into English 1924)), has tended to isolate these strains of sf from the rest of the genre, but such hybrid products are arguably just as persistent and definitive a feature of the genre as the formulas of Burroughs or the marketing strategy of Gernsback.
Nonetheless, it is to the pulp magazines and their reconfiguration of fictional genres that we owe the dominant version of sf. The association between magazine publication and early sf goes back as far as the publication of Chesney’s *The Battle of Dorking* in *Blackwood’s* (1817–1980), or even, if one accepts Gernsback’s claims, to Poe’s magazine publications. But the crafting of magazines that pursued a sharply defined niche audience by publishing a very consistent genre of fiction becomes part of the history of sf when the success of Burroughs’s “Under the Moons of Mars” and “Tarzan of the Apes” in *All-Story* (1905–20) in 1912 helped to focus and intensify the genre specialization of *All-Story* and its companion *Argosy* (1882–1978). Gernsback had already entered the publishing field in 1908 with *Modern Electrics*, which became *Electrical Experimenter* in 1913 and later *Science and Invention*. He began to make scientifically oriented fiction a regular part of *Modern Electrics* after publishing *Ralph 124C 41* there in 1911–12, and in 1923 he published a special “scientifiction” issue of *Science and Invention*, the year in which another important magazine, *Weird Tales* (1923–54), entered the field. In April 1926, when Gernsback published the first issue of *Amazing Stories*, *Weird Tales* featured on its cover a story by Robert E. Howard, the patriarch of swords and sorcery. Thus the mixture, in that first issue of *Amazing*, of reprinted stories by Poe, Verne, and Wells with three more recent magazine pieces (by George Allan England, Austin Hall, and G. Peyton Wertenbaker) suggestively combines an appeal to established, prestigious favorites with a selective endorsement of Gernsback’s immediate milieu. Whatever we make of Gernsback’s contribution to the development of modern sf, the magazines of 1912–26 offer a rich and still inadequately explored opportunity for research into its mass-cultural roots.

**BIBLIOGRAPHY**


