The History of the Twentieth Century
Episode 330
"Amazing Stories"
Transcript

[music: Fanfare]

Stories of exotic lands, populated by strange peoples, have likely existed for as long as there have been human beings.

During the Age of Discovery, countless imaginary tales were told of explorers visiting some remote and fictional land.

By the twentieth century, however, the entire world had been explored, from pole to pole. If you wanted to tell a tale of an explorer in a remote and unexplored land, you could no longer set it on Earth. But there *are* other planets…

Welcome to *The History of the Twentieth Century.*

[music: Opening War Theme]

Episode 330. Amazing Stories.

Pointing out the moment when science fiction first began, identifying a literary work as the first science fiction story ever told, is a controversial topic in itself. Fantasy stories, which I talked about in episode 302, have been around as long as stories; indeed, they were probably the first stories told. But science fiction only came along much later.

One strong contender for the title of "first science fiction story" is the Englishwoman Mary Shelley's novel *Frankenstein,* published in 1818. Mary was just 18 years old when she began the story. That was in 1816, while she was in a relationship with the poet Percy Shelley, whom she eventually married. Mary and Percy and Mary's stepsister were on a summer holiday visiting Lord Byron along with some other guests in Geneva, Switzerland. But the summer of 1816 was not a good time to go on holiday. That year, 1816, is known as "The Year without a Summer," which we now know was caused by the eruption of Mount Tambora in the East Indies. Since the weather was rainy and cold most of the time, the group staying indoors most of the time and amused themselves reading ghost stories. Lord Byron then suggested that each of them write a ghost story.

Mary had trouble getting started. She felt embarrassed because everyone else was hard at work writing and here she was with no ideas. Ironically, no one else's story amounted to much, while Mary's idea, once it came, was a doozy and led to her publishing an enormously influential novel.

Mary's inspiration came when the group was discussing the experiments of the Italian scientist Luigi Galvani, who demonstrated that electricity could make severed frog legs move. There was also the observation of English physician Erasmus Darwin, the grandfather of the more famous Charles Darwin, who believed that he had observed an inert vorticella, a microscopic organism, come back to life. In 1816, the nature of life was a scientific puzzle. Some objects were alive and some weren't, but what exactly was the property (or the ingredient) that made living things different from dead things. Mary speculated that electricity might be what separated the living from the nonliving, and speculated further that science might be on the verge of finding a means to bring dead organisms back to life, possibly involving the application of electricity, and imagined someone attempting to reanimate a human being, and *voilà, Frankenstein.*

What's significant about her story idea is that she began with contemporary scientific discoveries, extrapolated them, then conceived of a startling new technological application that might emerge and wrote a story about it. And that's a pretty good definition of science fiction.

Long time listeners know that I have labeled science fiction of the 19th and early twentieth centuries as "proto-science fiction," because we're not quite there yet. At least, you know, 19th-century bookstores didn't have a section labeled "science fiction" where they put *Frankenstein* alongside the work of Jules Verne and H.G. Wells. So today's topic is how and when science fiction was named and recognized as a discrete literary genre.

Some of the works of American writer Edgar Allan Poe might also be called science fiction, but the next writer I want to focus on is French author Jules Verne, who took an interest in Poe's work, by the way. Verne had ambitions of becoming a writer, but by age 35, he had sold only one short story—I know how that feels, Jules!

In the early 1860s, Verne turned to nonfiction and wrote a book on the history of ballooning. It included a chapter at the end speculating on the possible use of balloons as a solution to the problem of how to explore Africa. When he shopped his manuscript around though, it attracted little interest until he met a publisher who specialized in children's books and suggested to Verne that he rewrite the book for boys—today we would call it the "young adult" market—with a greater emphasis on the speculative side of the book.

Verne, frustrated novelist that he was, was inspired. He went home and in two weeks wrote a novel about exploring Africa titled *Five Weeks in a Balloon,* published in December 1862. *Five Weeks in a Balloon* benefited from the public interest in African explorers of that time and became a big success, and not only with young readers.

Verne would write many more novels of this kind. His own term for what he was producing was *voyages extraordinaires*, extraordinary voyages. He would write several dozen of these before his death in 1907, the most notable of which are *Journey to the Center of the Earth, From the Earth to the Moon, Twenty Thousand Leagues under the Sea,* and *Around the World in Eighty Days.*

The 19th century saw great scientific and technological advances. Charles Darwin's theory of evolution, Louis Pasteur's germ theory of disease, and James Maxwell's equations which led to the harnessing of electricity, just to name three. By the last quarter of the 19th century, science had emerged as no longer merely one field of academic study among many, but as the most influential field of academic study. It was science and technology, more than anything else, that made Western civilization dominant across the planet.

And that brings me to H.G. Wells. I won't dwell on Wells, because I've talked about him quite a bit already. He burst upon the scene in the last decade of the 19th century with 1895's *The Time Machine* and 1897's *War of the Worlds*. What these works have in common is that they take modern scientific knowledge and extrapolate it, as Mary Shelley had, but Wells was the first writer to demonstrate the power of science fiction not merely to speculate on new ideas, but to boggle the reader's mind by presenting a sweeping vision of a world or a time or an idea radically different from our own experience.

Later in his career, and as we've already seen, Wells developed a reputation as someone with an uncanny ability to foretell the future, and he wrote stories that were primarily intended to present a realistic picture of future technological developments and their possible impact on society, the apotheosis of which would be 1933's *The Shape of Things to Come*.

We now have all the pieces on the board. Mary Shelley demonstrated how to tell a story about some future technological marvel rooted in the science of today. Jules Verne demonstrated how to give these stories a sense of adventure, and H.G. Wells demonstrated how to give them a sense of wonder.

All we need now is for someone to come along and combine all these ingredients.

[music: Holst, "Jupiter" from *The Planets*]

In New York City in 1882, a publisher named Frank Munsey had an idea for a magazine. It would publish children's fiction in serial form; that is, a long story would be told in installments over several issues, and by the time readers finished that story, they would (hopefully) have already gotten caught up in another, and so on. He called the magazine *Argosy,* which is a highfalutin word for *abundance*.

Argosy struggled at first. Munsey had made a mistake in aiming the magazine at a child audience. The idea here was to get readers hooked on the magazine for the long term, but children grow up, surprisingly quickly, and they quickly outgrew *Argosy*.

The magazine gradually shifted away from children and revamped itself for an adult audience, first with a mix of fiction and nonfiction, but there were other magazines of the day that did the same sort of thing and competition was fierce. In order to turn a profit in these circumstances, *Argosy's* owners revamped the magazine once again. It went from weekly to monthly, but it fattened itself up to 192 pages, plenty of reading material to last you a month. In order to increase the profit margin, *Argosy* cut expenses to the bone. The magazine would not be printed on glossy paper, but on the cheapest paper available, coarse and not exactly white. They wouldn't bother trimming the ragged edge of the pages, either. *Argosy* would also pay its writers significantly less than other markets did.

The formula worked, and by the beginning of the twentieth century, *Argosy* had increased its circulation from several thousand to several hundred thousand. Clearly, *Argosy* was on to something, and a plethora of similar magazines soon appeared. This category of magazine came to be known as "pulp magazines," distinguished from the more traditional—and more upscale—"glossy magazines."

The rise of the pulp magazine parallels the rise of so-called "yellow journalism," which I talked about in episodes 243 and 287. Universal literacy created a huge number of working-class readers. The Hearst and Pulitzer newspapers aimed to deliver the news to this new class of reader; pulp magazines aimed to deliver them entertainment.

There are also parallels in subject matter. Those newspapers relied heavily on sensational headlines and stories of crime and corruption, the more lurid and the more violent, the better. The pulp magazines eschewed high-minded literary fiction about contemporary life in favor of stories centered on people, places, and events far removed from the quotidian experiences of their working-class readers. This category of fiction came to be called "pulp fiction." British publishers had already developed something similar, known pejoratively as "penny dreadfuls" because they cost a penny; these were also published on cheap paper, but they were not so much magazines as novels sold in installments.

What kind of fiction did these pulp magazines publish? In a nutshell, adventure stories; exciting tales of people in exotic locations. These would include war stories, mysteries and stories about crime and law enforcement, sports stories, historical stories, romances, and Westerns. And they published stories about aircraft, which were a new and exciting thing at the time. And they published stories about the supernatural, the fantastic, the occult, and horror. And they published what at the time were labeled "spicy" stories. Today we might call them "erotica," although they were, by today's standards, rather tame.

Most pulp magazines restricted themselves to one or another of these story types. Readers who had already read and enjoyed a few Westerns, for example, were obviously the core audience for a new Western, so it made sense to create a magazine dedicated to publishing strictly Westerns. Or detective stories, or stories about the supernatural, and so on. In our time, we call this genre fiction.

Since pulp magazines did not pay as well as glossy magazines, that meant that the most popular and admired writers wrote for the glossies. Writers who wrote for the pulps were, uh, less popular and admired. Pulp magazines could be a good place for an aspiring writer to begin their career and hone their craft; when their writing got good enough they could, and often did, jump over to the glossies.

It was possible for writers to make a living writing exclusively for the pulps, but only if their output was prodigious. Writers who supported themselves in this way would write as many stories as possible as quickly as possible, as many as a dozen a month. Pulp fiction writers often used pseudonyms even when they were already popular under their own name, so that a magazine could publish two stories by the same writer in the same issue without acknowledging it.

To summarize what I just said, the stories in pulp magazines were most likely written by one of two kinds of writer: either someone just starting out and hadn't fully mastered the art of writing fiction yet, or someone who was cranking out a story or two every week for the sake of the money. In neither of these cases would you expect the writer's output to be very good. And in most cases, pulp fiction was not very good. It was stigmatized as a "literary ghetto," a place for unskilled writers and shameless hacks, as opposed to the glossy magazines, where you could find fiction by the writers who deserved to be taken seriously.

Even so, pulp magazines boomed after the First World War and reached their peak of popularity in the Thirties. During the Great Depression, there was a market for cheap entertainment, like movies and radio programs and pulp magazines, which typically sold in the range of 10 to 35 cents per issue.

At their peak in the 1930s, there were some 150 pulp magazines being published in the United States, and the concept was spreading to Europe, where you could find pulp magazines in Britain, France, Italy, or Germany.

Imagine a newsstand with, say, 100 different pulp magazines on display. In order to compete, these magazines needed a way to stand out. *Argosy* originally didn't even have a picture on the cover; by the Thirties, pulp magazines were still pulp on the inside, but they had glossy covers, where they could advertise their contents with an eye-catching cover. And what I mean by "eye-catching cover" is a full-color illustration that typically featured one or more of these visual elements: a crime or act of violence in progress, an exotic location, a creepy-looking someone or

something, a bare-chested man, and/or, and most crucially, a lovely young woman whose clothes seem about to come off.

These gaudy illustrations often had little or nothing to do with any of the stories inside the magazine, but their lurid style—and especially their frequent incorporation of semi-naked women displaying the maximum amount of flesh that was legally and socially acceptable at the time—simply added to the impression that these magazines were not the places to go when you were in search of serious literature.

But this was not entirely true. Occasionally a pulp magazine story could be quite good, although readers interested in quality fiction could be forgiven for being unwilling to shuck a hundred oysters in the hope of finding one pearl.

A few of these magazines endeavored to stand out from the pack by offering better quality stories. This usually meant paying the writers a little more than the average, in order to attract better talent. Regular readers of these pulp magazines quickly learned which of the magazines had the better stories, and who were the better writers, but it would have been difficult for a newcomer to work that out just by looking over the covers on display at the newsstand.

I have some more to say on the subject of pulp magazines generally, but I want to defer that to next week's episode, because today we are focused on science fiction.

Until the First World War, the proto-science fiction I've talked about on this podcast, like the works of Verne and Wells, appeared mostly in Europe and tended toward a utopian view of the future. Certain basic principles were taken as given: that science and technology were good, that Western civilization became dominant because it produced more advanced science and technology than any other culture, and that the future was likely to bring more of the same. Science and technology would continue to advance, enriching everyone's lives, until the world reached a technological utopia when contemporary problems, like poverty and disease, would be eradicated and everyone would be living a lifestyle of comfort and security that readers in today's world could scarcely imagine. This was very much in tune with the optimistic attitudes of the time.

Then came the First World War, which burst upon the scene like Darth Vader striding into view through a cloud of smoke to demonstrate that technology, like the Force, has its Dark Side, and that the Dark Side is surprisingly seductive; so much so that even leaders and societies thought to have been highly advanced and civilized could and did succumb to the temptation to use the latest technology in the service of mass slaughter.

After the war, European science fiction took a dark turn. It wondered whether the future was going to be so pleasant after all. Some obvious examples from works I've already discussed: Yevgeny Zamyatin's 1920 novel *We,* Karl Čapek's 1921 play, *R.U.R.,* and Aldous Huxley's 1932 novel, *Brave New World,* all cautionary tales about the dangers technology might pose.

In the United States, the year 1923 saw the appearance of a pulp magazine titled *Weird Tales.* (Fun fact: My first published short story appeared in *Weird Tales*.) You might see *Weird Tales* as transitional. It published traditional scary stories about the occult and supernatural, but the protagonists in these stories often resorted to modern technology to deal with these phenomena. The most important writer contributing to *Weird Tales* in those early days was H.P. Lovecraft, an old-fashioned and reclusive sort of fellow living in Providence, Rhode Island, who developed a personal brand of supernatural/science fictional crossover, beginning with his 1928 short story "The Call of Cthulhu," which posited that there was much new knowledge remaining for humans to discover, but maybe it would be better if they didn't.

Enter Hugo Gernsback. Born in Luxembourg in 1884, Gernsback emigrated to the United States in 1904, at the age of twenty. Gernsback took an interest in radio and electronics. In 1908 he began publishing *Modern Electrics,* a magazine dedicated to both. Other magazines followed, notably *The Electrical Experimenter,* begun in 1913. In 1920, its name was changed to *Science and Invention.* In 1925, Gernsback's company started a radio station in New York City, WRNY.

As you can guess from the titles, these magazines sought to explain the latest developments in radio and electronics to a general audience. In 1909, Gernsback founded the Wireless Association of America, an organization of amateur radio enthusiasts that grew to a membership in the hundreds of thousands.

In addition to publishing straight science articles, Gernsback's magazines also published fiction about science and technology. For example, in 1911, Gernsback's own novel, titled *Ralph 124C 41+* was serialized in *Modern Electrics*.

In 1926, Gernsback started *Amazing Stories,* which would exclusively publish fiction about science and technology. Gernsback believed the value in these stories was that they would both entertain and educate the public. Gernsback's term for this kind of story was "scientifiction." Fans of the genre would soon unpack that portmanteau into its components and call it "science fiction."

This was a watershed moment for science fiction, and not only because this is where it got its name, but also because this is where science fiction found its home. Previously, science fiction stories, when they appeared at all, would appear here and there, scattered among the pulps, one month in *Argosy,* the next month in *Weird Tales*, and so on. They would now be collected in one place, which meant that anyone interested in science fiction knew just where to go to find some.

In other words, science fiction was becoming a genre, because there were a sufficient number of people interested in reading it and now they turned to *Amazing Stories* to find it. And more than that, Hugo Gernsback helped those people find one another and get organized. Just as he had done with his radio magazines, when he started an organization of radio enthusiasts, Gernsback started an organization of science fiction enthusiasts, or fans. The word "fan," short for "fanatic," had come into vogue in the Teens and Twenties to describe people who became devoted to this

or that movie star; the most avid readers of science fiction embraced the term and called themselves fans.

Devoted readers, or fans, of Gernsback's magazine tended to be articulate and opinionated. *Amazing Stories* received more than its share of letters praising or criticizing its stories. Gernsback printed them in a letters column and included the letter writer's mailing address. This made it possible for fans to begin writing directly to each other, which led to fans printing and distributing newsletters discussing the latest stories and developments in the field. Multi-page newsletters were dubbed "fan magazines," even though they were mimeographed onto plain paper and stapled together. Taking their cue from Gernsback, science fiction fans coined the portmanteau *fanzine* to describe these amateur publications.

Hugo Gernsback and *Amazing Stories* played a pivotal role in the development of science fiction and dominated the new field for the next several years. You all know by now that I love science fiction and I hesitate to criticize either the man or his magazine, but I have to take on both. First the magazine: it was new, it was unique, it was groundbreaking, but the stories it published—how should I put this?—weren't very good. Gernsback believed strongly that science fiction's ability to introduce scientific concepts to the general public in an entertaining way was its most important attribute, and he was willing to compromise on lesser considerations, like plot, character, and quality writing, in favor of rigorous didacticism. Stories in his magazine typically had a scientist protagonist who took up most of the story explaining their fictional field of research.

Gernsback himself engaged in dubious business practices. Many of the stories his magazine published were reprints, because the rights to reprints cost a lot less than the rights to new stories. For example, he published H.G. Wells' *War of the Worlds* as a serial in the magazine, even though the novel had been published thirty years earlier and was widely available in book form. When Gernsback bought the rights to new stories, he made a habit of short-changing the writer, or paying late, or not at all, at a time when he was paying himself a salary of $50,000 per year, equivalent to a million dollars a year in our time. Some writers were forced to file lawsuits to get paid for their work, and ventilated about Gernsback's business practices to the fans, who put those comments into their fanzines.

Gernsback's company was profitable, but debts grew, and creditors filed a bankruptcy petition in 1929. The magazines, including *Amazing Stories,* were put up for sale, as was the radio station. This being 1929, they all went for top dollar, and Gernsback's creditors were paid in full, something that rarely happens in a bankruptcy proceeding, which led to rumors that there was something fishy about the bankruptcy process. These rumors were also circulated and repeated in the fanzines.

Amazing Stories would continue, now under new management and with a new editor, while Gernsback immediately launched a new publishing company and new radio magazines, and two

new science fiction magazines: *Science Wonder Stories* and *Air Wonder Stories*, but Gernsback would no longer wield much influence over the field.

The World Science Fiction Society annually gives out Hugo Awards for accomplishments in science fiction; the award is named after Hugo Gernsback, but although Gernsback was instrumental in the emergence of science fiction as a genre and in the emergence of science fiction fandom, how much literary influence he ever had over science fiction is debatable, given how dire the stories he published were.

The most influential single story Gernsback published while he controlled *Amazing Stories* was *The Skylark of Space*, published in 1928, a serial written by a food chemist who specialized in donuts named Edward Elmer Smith, and no I am not making any of this up. *The Skylark of Space* tells the story of an American scientist named Richard Seaton, who discovers a means of faster than light travel and builds a spaceship. The villain of the story, Marc DuQuesne, steals the idea, kidnaps Seaton's girlfriend, and launches the two of them into interstellar space. Seaton is therefore forced to build another ship, the *Skylark* of the title, and set off in pursuit.

Smith, who published as E.E. Smith and was known to the fans as Doc Smith, had shopped *The Skylark of Space* to many magazines. The editor of *Argosy* wrote back that he enjoyed the story, but felt it was too "far out" for his readers. When Smith became aware of *Amazing Stories*, he submitted it there.

The Skylark of Space was a huge success. It led to three sequels, and a follow-up series about interstellar peacekeepers, called Lensmen, that ran to seven novels in all. You might well be wondering, what's so remarkable about a science fiction story involving people having adventures in interstellar space? But ah, dear listener, this was the first time. Earlier science fiction stories had almost always took place on Earth. Even *War of the Worlds* took place entirely on Earth. Even John Carter, when he went to Mars, got there through a portal, not on a spaceship.

Smith's prose wasn't stellar, but it was decent, and his imagination was boundless. Exotic aliens, startling technologies, fleets of spaceships battling each other with beam weapons; Smith's stories offered it all, along with a generally optimistic picture of where future technologies might lead humanity.

This kind of science fiction came to be called "space opera," by analogy to "horse opera," a derogatory name for Westerns. Space opera was often accused of being merely Westerns in space with ray guns instead of six-shooters and spaceships instead of horses, but this subgenre developed and persisted to the point that this is what most people think of first when they think of science fiction. In our time, the term "space opera" is still in use, but it is no longer considered pejorative.

Smith's stories were a tremendous influence on the field. I'll just cite *Star Trek* and *Star Wars* as two obvious examples of later science fiction with Doc Smith's work firmly embedded in their DNA.

Nevertheless, despite occasionally publishing something worthwhile, most of the stories in *Amazing Stories* were artless, owing to Gernsback's rigid insistence that the science lesson have priority over the storytelling. Even after Gernsback was forced out, *Amazing Stories* continued to be less than amazing.

By 1930, there were three science fiction magazines, *Amazing* and Gernsback's two new ones. That year, a pulp magazine publisher decided to produce its own science fiction magazine. Closely imitating Gernsback, they called it *Astounding Stories of Super-Science*. Its first editor, Harry Bates, took a dim view of his magazine's competition: "*Amazing Stories!* Once I had bought a copy. What awful stuff, I'd found it! Cluttered with trivia! Packed with puerilities. Written by unimaginables!"

Bates meant to steal *Amazing's* readers by offering them stories that were better written and more entertaining. He didn't care if there was a science lesson in the story or not. Instead of relying on science writers, as Gernsback had, Bates turned to writers with a proven track record in pulp fiction. This would cost more, but Bates and *Astounding* were willing to pay more to get better quality fiction: one cent per word, double the rate Gernsback paid his writers, if he paid them at all.

The stories in early *Astounding* were still not great. Pulp writers accustomed to producing action and adventure provided action-adventure stories with a hi-tech veneer. Unlike its competitors, which could all boast that they were published by companies that also produced nonfiction science magazines, *Astounding* had no such credential. *Astounding* was a pulp magazine, produced by a company that specialized in pulp magazines.

I should explain this. I began this episode talking about pulp magazines, then segued into Hugo Gernsback and *Amazing Stories*. But *Amazing Stories* was not, technically, a pulp magazine in its early days. It was a glossy magazine, like its sister science publications, although in terms of content, it closely resembled a pulp magazine. *Astounding* was in fact the first science fiction magazine published in pulp form.

Despite its drawbacks, *Astounding's* more lively writing quickly earned it an audience. Then came the year 1933, the low point of the Great Depression. *Amazing Stories* was forced to change over from glossy to pulp, as were Hugo Gernsback's new magazines. As for *Astounding*, its publisher went bankrupt, but the magazine was purchased by publishing powerhouse Street and Smith. Street and Smith were producing 35 pulp magazines in a variety of genres, putting *Astounding* into the big leagues; Street and Smith's marketing muscle insured that *Astounding* got prime space on the newsstand racks and the magazine thrived.

Now that all the science fiction magazines were literal pulp magazines, it became harder to maintain the premise that science fiction was educational. I mean, just look at those covers. Science fiction pulp magazine covers looked like all the other pulp magazine covers. Maybe there was a robot or an alien in the picture, but you could still expect to find plenty of lovely young women whose clothes seemed about to come off.

When Street and Smith took over *Astounding,* they appointed a new editor, F. Orlin Tremaine. Tremaine had his own vision of what science fiction should be: neither a collection of action-adventure stories not much different from other kinds of action-adventure stories, nor merely a vehicle for delivering science lessons. Science fiction should be a literature of ideas. Science fiction stories should be thought experiments that began by asking, "What if…?"

Tremaine's *Astounding* was both entertaining and innovative, and it soon left its rivals behind. For the next twenty years, *Astounding* would define what science fiction was, and it would be essential reading for anyone interested in the genre.

The magazine would take another leap forward in 1937, when Street and Smith would hire a writer named John Campbell to take the reins at *Astounding,* and his editorship further shaped science fiction. For Campbell, science fiction was not merely about science. It was itself a science. It was a tool that could be used to probe the unknown, just as science was, and it was a tool that could shape the world. Today's science fiction dreams would be tomorrow's technological reality. The role of science fiction was to ponder how and why to use these new technologies, even before they appeared. As Campbell himself put it in a 1938 editorial, "We presuppose, in these stories, two things: that there is yet to be learned infinitely more than what is now known, and that Man can learn it."

Modern science had revealed how big the Universe was, both in time and space. I've traced those developments here in the podcast. The Universe was huge, but it wasn't full of unknowns. It was full of facts not-yet-learned. It was the destiny of the human race to expand beyond this Earth, fill the Universe, and subdue it. And science fiction was the first step in this process: people thinking about the ways humanity might accomplish this.

Here's how Campbell himself explained it, when he was asked his thoughts on the place of science fiction in the larger field of English literature. Campbell stretched his arms out wide and said, here is science fiction. It encompasses the Universe, from before it began, through the formation of stars and planets, through their destruction and on until the end of the Universe. And what comes next. Then he held up his thumb and forefinger, separated by a tiny gap. "This," he said, "is English literature. A microscopic fraction of the whole."

Campbell frequently suggested story ideas to his writers and was responsible for nurturing a generation of the biggest names in the field: writers like Lester del Rey, A.E. van Vogt, Theodore Sturgeon, Isaac Asimov, and Robert Heinlein.

Campbell came to *Astounding* at a propitious moment. In the final years of the Great Depression came a renewed sense of optimism, even excitement about the future, as we saw in the 1939 New York World's Fair last week. Science fiction was a beneficiary of this trend, and helped sustain it. By 1941, there were no fewer than 21 science fiction magazines being published in the US.

Science fiction fan groups grew. They held meetings and sponsored conferences, culminating in 1939's First World Science Fiction Convention in New York City. This period came to be known as the "Golden Age of Science Fiction."

Science fiction fans largely adopted Campbell's perspective on their favorite genre. Most readers and students of English literature outside science fiction fandom disdained science fiction as pulp fiction, no more worthy of serious consideration than were the stories that appeared in *Detective Story Magazine* or *Buffalo Bill Stories*, both of which were sister publications of *Astounding*. But to the science fiction fans, science fiction was the only literature that really mattered, because it was the only literature seriously examining the future toward which we are all hurtling.

The rise of atomic power seemed to confirm this belief. I'm getting a little ahead of myself here, but by the time Otto Hahn first demonstrated that the radioactive decay of uranium might make possible a chain reaction which would unleash tremendous energy, science fiction stories were already glibly talking about "atomic power" in their vision of the future.

In 1940, when the US was still neutral in the war, Campbell published a story by Robert Heinlein titled "Solution Unsatisfactory." In it, scientists in the United States develop a means of producing large quantities of lethal radioactive dust. You can think of this as skipping over the atomic bomb and heading straight for fallout. In the story, the US ends the war by dropping this dust on Berlin. There is a brief moment when it appears the world might now live under an American-enforced peace, but then comes word that the Soviet Union can also produce this dust. A character then declares the world's future will now look like this: two people who don't trust each other, each with a loaded pistol, trapped together in a locked room. The end. Wow.

In 1944, Campbell published a story by journalist Cleve Cartmill, titled "Deadline," that imagined atomic bombs. Not only imagined them, but spoke of the challenges of isotope separation and depicted the scientists in charge of the project debating among themselves the moral problem of striving to build such a destructive weapon. The story created a stir at Los Alamos, because it closely tracked what was actually going on in the Manhattan Project, right down to the atomic physicists debating the ethics of the project, so much so that the FBI began investigating Cartmill, Campbell, and *Astounding*. Campbell, for his part, had already deduced that the US government had some kind of secret research project underway at Los Alamos, simply because of the large number of *Astounding* subscribers from all over the US who had all submitted address changes to the same post office box at a remote location in New Mexico.

As far as science fiction fans were concerned, these developments constituted the clinching proof that science fiction demanded to be taken seriously. It was a literature for people who wanted to think deeply about science, technology, and their consequences. It was a literature that pondered the Universe, and humanity's place in it.

Of course, it was also a literature published in pulp magazines behind cover illustrations that still included plenty of lovely young women whose clothes seemed about to come off. From these facts, you can deduce who constituted science fiction's core audience: on the one hand, scientists and engineers; on the other hand, precocious teenage boys.

We'll have to stop there for today. I thank you for listening, and I'd especially like to thank Richard for his kind donation, and thank you to Caleb for becoming a patron of the podcast. Donors and patrons like Richard and Caleb help cover the costs of making this show, which in turn keeps the podcast available free for everyone, so my thanks to them and to all of you who have pitched in and helped out. If you'd like to become a patron or make a donation, you are most welcome; just visit the website, historyofthetwentiethcentury.com and click on the PayPal or Patreon buttons.

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I'm going to be at the North American Science Fiction Convention in Winnipeg, Manitoba over the weekend of July 22. I don't know yet if I'll be presenting, but if any of you are planning to be there, do look me up. And I'm pleased to be able to announce that a short story of mine will appear in the forthcoming fantasy anthology, *Artifice and Craft*. It's a collection of stories about magical artifacts. The release date has been moved up. I told you last week it would be September 1, but now it's July 15, which is almost upon us. The ebook is already available for pre-order at Amazon, and I understand there will be a trade paperback edition as well.

And I hope you'll join me next week, here on *The History of the Twentieth Century,* as we look at other kinds of pulp fiction, such as Westerns and detective stories, and the one form of pulp fiction that is still with us today: comic books. Caped Crusaders, next week, here, on *The History of the Twentieth Century.*

Oh, and one more thing. After the Second World War, new science fiction magazines appeared that published new kinds of stories, and for the first time, book publishers became interested in releasing science fiction in book form. This resulted in Campbell losing his influence over the field.

John Campbell would change the name of *Astounding Science Fiction* to *Analog Science Fiction/Science Fact* in 1960. The magazine is still going in our time.

In his later years, Campbell would take an interest in pseudoscience, to the detriment of his magazine and his reputation. When pulp fiction writer L. Ron Hubbard introduced Dianetics, Campbell was one of the few editors willing to publish articles about it. The same was true with the Dean Drive, a supposed reactionless drive that would make space travel much simpler, if it worked. Perhaps most notably, Campbell believed humans had unexplored mental powers: ESP, telekinesis, mind reading, that sort of thing. Campbell liked to call it psionics, because that makes it sound more like science. Because of Campbell, psionics featured regularly in science fiction stories long after real-world science had debunked it.

Campbell was undeniably racist, including against aliens. He loved stories in which clever and plucky Earth people outsmart aliens, even aliens from cultures far older and more advanced than our own. With regard to our own planet, Campbell promoted racist ideas about the inborn superiority of white Europeans over other kinds of humans. As with psionics, scientific racism persisted in science fiction long after science had debunked it, also due to his influence.

Campbell edited *Astounding*, and then *Analog*, until his death in 1971, at the age of 61. After his death, the University of Kansas established the annual John W. Campbell Memorial Award for Best Science Fiction Novel, while the World Science Fiction Society independently established the annual John W. Campbell Award for Best New Writer.

In 2019, the John W. Campbell Award for Best New Writer was given to Hong Kong-born fantasy author Jeanette Ng. Ng used the occasion of her acceptance speech to denounce Campbell's racism and sexism, which sparked a movement to change the name of the award to The *Astounding* Award for Best New Writer, and it is now known by that name.

[music: Closing War Theme]