TO THE

FUTURE

Fidelity to science, technology, and certain
conventions will make your sci-fi stories fly.

AND

By Kerrie Flanagan

BEYOND

Science fiction transports readers through time to outer space, introducing new societies. Authors like Mary Shelley, H.G. Wells, and Jules Verne paved the way for this genre that centers around science and technology. Readers love being taken on these futuristic adventures, but there are certain conventions and expectations to remember when writing sci-fi.

Defining science fiction

First, it's important to understand what science fiction is and what makes it unique. This genre is defined as an area of fiction that creatively depicts real or imaginary science and technology as part of its plot, setting, or theme. Many times you will see sci-fi and fantasy lumped together, and although there can be some overlap, there are distinct differences between the two. Fantasy has magic and elements outside the realm of possibility. Science fiction, however, must be grounded, on some level, in actual science and technology. Even if you create a new weapon, travel through space, or create a new universe, there must be some basis in our current science and technology.

That being said, a good story goes beyond the science and gadgets. Adrian Tchaikovsky, bestselling author of the Children of Time series, says, "Whilst the science/tech elements may be key, very often the focus is on social interaction, societal setup, and the way the characters interact. These can be just as speculative and as fruitful a ground for sci-fi exploration as faster-than-light travel."

Bestselling science-fiction thriller author Douglas E. Richards says, "The best sci-fi novels offer big, mind-blowing ideas, accurate science, endless food for thought, and extrapolations of the impact scientific breakthroughs will have on individuals and society."

→ **Origins of science fiction**

Exploring the development of this genre can help you understand how it evolved into what it is today and provide insight into the core of sci-fi and reader expectation.

During the industrial revolution, the world shifted. Technological advances changed how farmers worked their land, cars and airplanes expanded our travels, and scientific developments opened opportunities not possible decades before. The world was changing at a rapid pace, and people, including authors, started thinking about the implications these advances would have on us humans and our planet.

Published in 1818, Shelley's *Frankenstein* is considered one of the first science fiction novels. At only 18 years old, she took the science of her day and created a fictional monster while her

storyline wove in then-current cultural fears and issues. This opened the door for other sci-fi writers.

The turn of the century saw the birth of pulp magazines where many early sci-fi writers got started. These magazines were seen as "low-brow" writing and not respected in the literary community, but they were popular because they could be purchased for a few cents and provided great entertainment.

Writers were paid by the word, and some well-known authors wrote for these magazines under a pseudonym and reserved their real names for their literary work. The 1920s and '30s were the golden era of the pulp magazines. Many respected writers contributed to these magazines, including Mary Roberts Rinehart, H.P. Lovecraft, and Isaac Asimov.

Hugo Gernsback, a writer and author, is credited for coining the term science fiction. In 1926, he created the magazine *Amazing Stories.* It was dedicated to what he called at the time *Scientifiction* stories, which he defined as "a charming romance intermingled with scientific fact and prophetic vision." A few years later, the term became *science fiction*. Gernsback continues to be a voice in sci-fi. The prestigious Hugo Award bearing his name has been given to the best published science fiction novel each year since 1953.

Different Approaches
Although all sci-fi must have some basis in science, there are two different approaches. One is "hard" sci-fi, where there is a strong focus on natural sciences like physics, astronomy, chemistry, and astrophysics, which are an integral part of the plot. Movies that illustrate this include *The Martian, 2001: A Space Odyssey*, and *Gravity*. Science and technology are a main focus in these films.

The other is "soft" sci-fi, which leans more on the social sciences, like sociology, psychology, and anthropology,

that deal more with human behavior. *Star Wars* and *Ready Player One* fall into this category because although science and technology are a part of the story, they are not what drives the plot. These delve more into the relationships of the characters and just happen to take place in a futuristic world.

Tchaikovsky's books are considered hard sci-fi, and he believes this term has a different meaning to different people.

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"For me, it's SF where at least some of the focus relates to scientific and technological processes and principles," he says. "Because you're drawing on real-world science, this tends to increase the amount of research – even if you're going to deviate from our current understanding of the universe, you still need to get your head around what that understanding is."

When it comes to deciding which direction you want to go with your book, Kat Falls, author of the YA series Inhuman and the Dark Life series for middle grade readers, encourages authors to try to incorporate research that excites them. "By definition, science fiction is fiction infused with science, so investigate what interests you. Your passion for the subject will excite the reader, and, again, they'll be more willing to suspend disbelief."

Worldbuilding
In sci-fi, the vast universe is at your fingertips, but it doesn't matter if you're

writing hard or soft sci-fi; the world you build must be an integral part of the story. Sci-fi readers want to escape to a new world that has ties to what they understand from the "real" world. Falls says to do this, the setting must be more than just a backdrop against which action takes place. "It should be an integral piece of the narrative, more like another character than a prop, offering obstacles and commenting on the story's theme. Characters interact with and are challenged – externally and internally – by all aspects of the world."

Richards believes logic and self-consistency are the most important elements of sci-fi worldbuilding. "Unlike fantasy, science fiction worldbuilding requires ties back to what is known about reality. It requires the author to start with a set of logical rules, no matter how wild or far out. Astonishing feats of imagination can then ensue, but at no point should the author violate the rules or create huge gaps in logic."

Even though your world may be fictional, include tethers to what readers know and understand. This allows them to make connections to their current life experiences and provide some grounding in reality. Falls suggests incorporating your expertise into the story. "A hobby, skill, or experience – something you can write about with complete authority, even if it's simply what it's like to own a dog. If small details ring with authenticity, your readers will be more willing to suspend disbelief in other areas."

→ Creating characters
Building an incredible futuristic or fictional world is important, but you need great characters who face challenges and wrestle through quirks and flaws. This cast of characters allows your reader to connect to the events happening in your story. Jamie McFarlane, author of The Junkyard Pirate series, says if a reader can't see themselves

in the story, they'll struggle to engage. "Believable faults for protagonists are critical, and I fight against fixing those faults as the story progresses."

Your story centers around your protagonist, but without a villain to go up against your main character, there wouldn't be a story. McFarlane finds great joy in building rich antagonists. "I want an antagonist that isn't simply evil but has understandable, if immoral, goals. I spend equal time contemplating my antagonists and their motivations as I do my heroes."

As with any story, you have the power to create great characters, but in sci-fi, you can also get to create aliens. McFarlane finds that the challenge and joy in creating new alien species is balancing their alienness against human morality. He asks himself two questions: How are they like humans? How are they different? This is related more to their personalities, morals, and values, not so much how they look.

He says it's the similarities that make them relatable. "If I'm building a species that I expect to work well with humans, they need to share a good portion of that stuff we learned in kindergarten, or what I suggest is basic human morality." The other aliens, who he refers to as kindergarten dropouts, are the ones who don't have those basic skills of sharing or working together and who don't mind taking away another's free will (and have the power to do it). "That's good stuff," he says, "a la *Invasion of the Body Snatchers*. Or consider *Starship Trooper's* bugs who just want to get all stabby because another, more intelligent bug says it's the right thing to do. For me, it's the moral variance from baseline humanity which energizes the value of a well-thought-out alien."

→ **Theme**

A story that resonates with readers goes beyond creating a unique world, interesting characters, and page-turning plot. To add depth and substance, be aware of the theme in your story. Falls describes this as the issue or subject that's being explored in the story through dramatization. This could be time travel, artificial intelligence, futuristic societies, gender...many themes could be explored.

You may know your theme before you start writing, or it may emerge after a few drafts. Falls says that regardless of your process, at some point you must identify your story's theme and explore it through metaphor, setting, action, imagery, and even word choice if you want your work to have dimension and resonance.

She comes up with the story concept first – before plot or character. "If an idea sparks an emotional response in me, I'll start journaling to figure out why," she says. "That's usually when the theme becomes apparent. For example, in my YA novel *Inhuman*, I started off interested in viruses that carry animal DNA, like swine flu, etc. I played with 'what if's and created a story premise about humans turning into 'manimals.' After chewing over the speculative fiction metaphor, I realized I was most interested in a teen girl, conditioned to be polite and respectful, getting in touch with her fierce side."

→ **Weapons**

In your sci-fi adventure, there may come a time when your characters must

SCIENCE FICTION SUBGENRES

Under the umbrella of science fiction are many subgenres that each have their own unique nuances. Here are some of them.

→ **Military science fiction**
Stories that have a distinct military theme. Military sci-fi author Craig Martelle defines it as, "universal truth about military and how they work with each other. Firepower. Maneuver. But in the end, it's about outwitting and outfighting your enemy."

→ **Science fiction thriller**
Stories with elements of thriller and sci-fi. Sci-fi thriller author Douglas E. Richards says a good sci-fi thriller combines the mind-blowing ideas, accurate science, endless food for thought, and extrapolations of the impact scientific breakthroughs will have on individuals and society with high stakes, breathless action, life-and-death peril at every turn, and protagonists who win the day despite incredible odds against them, through a mixture of skill, daring, and resourcefulness of thrillers.

→ **Space opera**
Long-running sci-fi series with big story arcs, space battles, and relationships. *Star Wars* is considered a space opera.

→ **Time travel**
Stories where the main character can go back and forth in time. The actual time travel is accomplished through scientific or technological means. *Dr. Who* is a classic example of this.

→ **Space exploration**
Stories that take place primarily in space or involve space travel. *Star Trek* and *The Expanse* fall into this subgenre.

→ **Dystopian**
Futuristic stories centering around societies in devastating decline with characters battling environmental ruin, technological control, and government oppression. *Hunger Games* and *1984* are examples.

SCIENCE FICTION AUTHORS SHARE WHAT THEY ENJOY MOST ABOUT WRITING SCI-FI.

→ Craig Martelle
"Taking the issues of today and discussing them 'in secrecy' within the sci-fi backdrop. I can change the world to address how I think things will play out or create an alien world where we can explore the results of different histories. We are the decisions we make, and so are the aliens."

→ Adrian Tchaikovsky
"Giving spaceships funny names and then exploding them. Seriously, though, aliens, uplifted earth species, non-human points of view. And whilst this is also something that can be done with fantasy fiction, I think it works most effectively with SF because of the implicit convention that 'this could happen in the future' that SF tends to bring with it. Things can feel more real."

→ Jamie McFarlane
"Writing science fiction gives writers license to explore grandiose ideas. I once buried a massive spaceship and had it wake up and unbury itself with my characters inside. I write by outline and by the seat of my pants, both. While writing, I didn't realize the spaceship was going to take off until my crew was inside. Few genres allow for this kind of freedom. Further, I love exploring how people or aliens thrive in extreme environments. What have they adapted to overcome the dangers of rogue asteroids if they live in an asteroid belt, or where do they get their water or fuel? How have these environmental changes shaped the characters, both good and bad? The troubles are endless, just as are the solutions."

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defend themselves or go after the villains. They will need weapons, and you get to construct them. Richards creates future weaponry for his novels, which are extrapolated from current science, making them plausible, but he does caution authors not to rely on the weapons to save their main characters. "No matter how remarkable the weaponry, I try to always have my protagonists prevail, not due to superior forces or weaponry but due to superior guile and creativity. Even in the future, even with fantastic weapons, a fight/battle scene is always better when the protagonists outwit and outthink their enemies rather than outgun them."

Writing a great sci-fi series

Sci-fi readers enjoy getting immersed in a series. Think about the popularity of *Star Wars, The Mandalorian, Star Trek*, and other television shows and movies. The same thing happens with readers; they get caught up in the world and care about what happens to the characters.

Craig Martelle, author of the Battleship Leviathan series, says that to write a great series, you must build a world the audience is interested in and can understand. "Then you have to add likable characters who don't share all their secrets up front. They have issues that they're working on. The sustainable part of the series is how the world and characters grow with each new volume. The readers have to stay on board because it's interesting. The secret is that the first book has to be a great story." Some of the story elements wrap up, but there are overarching themes and storylines that continue with each book.

Writing science fiction allows you to boldly go where no human has gone before as you create stories that blend science, technology, unique characters, and intriguing storylines. May your books live long and prosper. Ⓦ

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