

Issues in Earth Science

“Topics for Debate”

Issue 7, July 2017

This is part of a series of essays from writers and scientists on the topic “At What Point Does Science Fiction Turn Into Fantasy?”

Spaceships and the Force – How Exactly are Science Fiction and Fantasy Different?

by

S E Jones



Science fiction and fantasy both fit under the very broad category of "speculative fiction". But what exactly is the difference between the two? When you have

ships flying at light speed (impossible, and thus magic-like), but cyborgs showing up in some steam punk

novels (science fiction elements within a fantasy world), is there really much difference?

There are two ways to categorize science fiction and fantasy. One is based upon how plausible the new "speculative" element of the book is. The other is based on the use of familiar elements and themes—in other words, on the “feel” of the book.

The Continuum of Speculative Fiction

If we wanted to, we could order all speculative fiction from the most impossible to the most probable. It would range from reality, which we know exists, to magic, which we know is impossible.

Every step that speculative fiction takes away from what currently exists is a step into the fantastical. Cybernetics? We have basic versions in the real world. Very plausible. Space ships that use wormholes to travel? Plausible, but not currently scientifically possible. A spaceship that jumped from planet to planet, through some kind of hyperspace? Less plausible, but it gets around the fact that you can't travel faster than the speed of light.

Faster than light speed? Reading people's minds?

These things are not just implausible – they are impossible.

Then we move very quickly into things that are very identifiably impossible – magic, curses, spells. People identify these as fantasy, especially when they're accompanied by words such as "mage, magician, witch."

But then what about Star Wars? Jedi is a name for a being which can read minds and throw people across the room with "the force". What is that if not a wizard using magic by another name? What about space aliens that can morph from one body to another? Or the idea of sentient space ships? What happens when you have cyborgs or flying cars in your fantasy adventure? What about time travel? What then?

The Idea of Science Fiction and Fantasy

And that leads us to the second way to define science fiction and fantasy. Definitions have many purposes, but in books and movies, the main reason is recognition.

Books and movies are categorized as science fiction or fantasy to let people find what they like. If you liked Star Wars, you'll probably like Star Trek. If you like Captain America, then Iron Man is also probably for you. If you like Pirates of the Caribbean, then Fantastic Beasts and Where to Find Them might be something that you'd enjoy.

Many of the things that people like about science fiction and fantasy are the trappings – the way the world looks, the ideas inside, how the world feels. So on a general level, when someone says science fiction, they want technology, space ships and other worlds. Whether or not there happen to be things in there that aren't scientifically plausible is not really relevant.

Similarly, often when someone says fantasy – they're thinking of fantastical worlds that are entirely different from our own. They want societies built around magic, hidden worlds, and a sense of wonder. If a cyborg happens to walk into that, or someone has a computer that can do far more than our computers today can – again, that doesn't matter, because the elements that communicate the “feel” of the story - “fantasy”.

So What Does This all Mean?

Science fiction and fantasy exist on a sliding scale from the real to the impossible. For people who study books and movies their definition of science fiction and fantasy is based on plausibility of the speculative element. If it could be real, then it's science fiction. If it's impossible, then it's fantasy.

People make up other words to explain the movies and books where some things could be real, but some are impossible. To them Star Wars is "science fantasy". It has the trappings of science fiction, but the science is about as possible as magic. There are entire books written about the in-between stories – stories which are a mix of the real and the impossible. Academics, reviewers and librarians often have a whole range of terms that identify these type of stories: "science fantasy", "space opera", "steampunk".

But do people go around calling Star Wars science fantasy? No. Because people don't base regular definitions on what experts say. They base their

definitions on what they know. And people don't go into a story going "oh, how possible is this thing, how technically impossible is that." They go to a story for entertainment. To feel for the characters. To learn something about themselves and other people.

Except, even when we're not thinking about definitions, we still categorize things. It's human to put things into categories, it's how we order the world. So while you might not be thinking about how probable a thing is – you know it has space ships. And so your brain decided that it's science fiction.

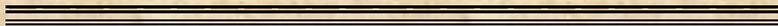
It might not be, not technically. The weapons the characters are using might be scientifically impossible, thus making them more like wands than actual guns. But you're spending your time wondering if your favorite character is about to get shot, not thinking about how plausible the ray gun is.

True Definitions?

We define things to categorize them. To talk about them with other people, to analysis stories in the context of other stories, to find things that we like.

If the goal is academic analysis, then categorization is for the purpose of parsing the mechanics of a story – the “how” of it. To look at how things work, at their wheels and cogs, definitions become precise – the definition becomes about what is possible vs what is probable vs what is impossible.

If people are talking casually – to friends, to family, in a blog-post review – then definitions are about how a story feels. Does it have energy weapons and time travel, or does it have wizards and dragons? This is a broad definition, comparing the story to other stories that people know, useful as a heuristic for identifying the things we do and do not like.



S. E. Jones has been writing since she can remember. Luckily other people seem to like her stuff, leading to short story and essay publications in Strange Horizons and Clarkesworld. When she's not writing, she's studying, or running around in an ambulance. She can be found on [twitter @sechapara](#).

Image Credit: Russ Colson

This is part of a series of essays from writers and scientists on the topic “At What Point Does Science Fiction Turn Into Fantasy?” You can link to the other essays at [Issue 7 essays](#),

or link directly below.

- [At What Point Does Science Fiction Turn into Fantasy?](#)--by S. L. Card
- [Fantasy versus Science Fiction: A Curious Divergence](#)—By Alex Stargazer
- [Science Needs Fantasy](#)—by Tabb C. Prissel
- [Seed Thesis for 'At What Point Does Science Fiction Turn Into Fantasy?'](#)--by Russ Colson

Find more essays and stories at [Issues in Earth Science](#).

©2017 Issues in Earth Science