People use science fiction to illustrate philosophy all the time. From ethical quandaries to the very nature of existence, science fiction's most famous texts are tailor-made for exploring philosophical ideas. In fact, many college campuses now offer courses in the philosophy of science fiction.

But science fiction doesn't just illuminate philosophy — in fact, the genre grew out of philosophy, and the earliest works of science fiction were philosophical texts. Here's why science fiction has its roots in philosophy, and why it's the genre of thought experiments about the universe.

**Philosophical Thought Experiments As Science Fiction**
Science fiction is a genre that uses strange worlds and inventions to illuminate our reality — sort of the opposite of a lot of other writing, which uses the familiar to build a portrait that cumulatively shows how insane our world actually is. People, especially early twenty-first century people, live in a world where strangeness lurks just beyond our frame of vision — but we can't see it by looking straight at it. When we try to turn and confront the weird and unthinkable that's always in the corner of our eye, it vanishes. In a sense, science fiction is like a prosthetic sense of peripheral vision.

We're sort of like the people chained up in Plato's allegorical cave — staring at shadows on the cave wall, but never seeing the full picture.

Plato is probably the best-known user of allegories — a form of writing which has a lot in common with science fiction. A lot of allegories are really thought experiments, trying out a set of strange facts to see what principles you derive from them. As plenty of people have pointed out, Plato's Allegory of the Cave is the template for a million "what is reality" stories, from the works of Philip K. Dick to The Matrix. But you could almost see the cave allegory in itself as a proto-science fiction story, because of the strange worldbuilding that goes into these people who have never seen the "real" world. (Plato also gave us an allegory about the Ring of Gyges, which turns its wearer invisible — sound familiar?)

Later philosophers who ponder the nature of existence also seem to stray into weird science fiction territory — like Descartes, raising the notion that he, Descartes, could have existed since the beginning of the universe (as an alternative to God as a cause for Descartes' existence.) Sitting in his bread oven, Descartes tries to cut himself off from sensory input to see what he can deduce of the universe.
Or the Scottish philosopher David Hume, best known for questioning whether causation can be empirically proved. As Gilles Deleuze writes about Hume:

*Empiricism has always harbored other secrets... [Hume]'s empiricism is a sort of science-fiction universe avant la lettre. As in science fiction, one has the impression of a fictive, foreign world, seen by other creatures, but also the presentiment that this world is already ours, and those creatures, ourselves... Science or theory is an inquiry, which is to say, a practice; a practice of the seemingly fictive world that empiricism describes.*

And let me just put in a plug for Hume, who's an unusually engaging writer among philosophers, and probably a must-read for science fiction geeks.
And by the same token, the philosophy of human nature often seems to depend on conjuring imaginary worlds, whether it be Hobbes' "nasty, brutish and short" world without laws, or Rousseau's "state of nature." A great believer in the importance of science, Hobbes sees humans as essentially mechanistic beings who are programmed to behave in a selfish fashion — and the state is a kind of artificial human that can contain us and give us better programming, in a sense.

So not only can you use something like *Star Trek*'s Holodeck to point out philosophical notions of the fallibility of the senses, and the possible falseness of reality — philosophy's own explorations of those sorts of topics are frequently kind of other-worldly. Philosophical thought experiments, like the oft-cited "state of nature," are also close kin to science fiction world building. As Susan Schneider writes in the book *Science Fiction and Philosophy*, "if you read science fiction writers like Stanislaw Lem, Isaac Asimov, Arthur C. Clarke and Robert Sawyer, you already aware that some of the best science fiction tales are in fact long versions of philosophical thought experiments."

But meanwhile, when people come to list the earliest known works that could be considered "real" science fiction, they always wind up listing philosophical works, written by philosophers.

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**A Trip to the Moon in the 2nd Century**

Plenty of works of fabulist writing are referred to as "the first piece of science fiction" here and there. But the earliest to make that claim is probably *A True History* by Lucian of Samosata, who was a Syrian philosopher. Lucian wrote *True History* in the 2nd Century, to satirize the ideas of Sophist philosophers and the tendency of many thinkers to engage in flights of fancy.
In *True History*, the narrator takes off on a sea voyage — but then a waterspout lifts his ship into the air, and it eventually flies to the Moon, where Lucian spends a lot of time describing the all-male Lunar society. The Moon is also full of giant creatures, including giant insects, giant birds, giant vegetables and huge "cloud centaurs."

Another candidate for the first work of science fiction is a philosophical treatise by an Islamic physician named Ibn al-Nafis (1213-1288) — who's most famous for discovering pulmonary circulation, the notion that the heart pumps blood into the lungs. (Contrary to the long-accepted theories of Galen, who believed the body has two separate circulatory systems.)

Ibn al-Nafis' contribution to science fiction is a text called *Theologus Autodidactus*, or "al-Risala al-Kamiliyya fil-Sira al-Nabawiyya." Its main character is "spontaneously generated" on an island, and has to deduce the nature of the world around him through pure observation, thus proving that Islamic teachings are compatible with science and empirical observation. Along the way, he introduces ideas like restoring someone's body from a single part (a process akin to cloning), and ends the story with one of the first fictional accounts of the apocalypse.
And then there are early accounts of utopian societies — starting with Thomas More's *Utopia* in 1515, which is the "trope namer" for the whole concept of utopia. More explores a society that might not seem utopian to many of us — criminals are enslaved for life, and sexuality is repressed — but it's a notable thought experiment. Roughly a hundred years later, Francis Bacon writes *The New Atlantis*, in which Europeans land in a fictional country called Bensalem full of strange inventions, such as the submarine and the microscope.

And then there are the great satirical travelogues of the 17th and 18th centuries — including the many, many novels about traveling to the Moon by various means. When these didn't involve the Moon, they involved strange lands on Earth, with weird customs. (Like Francis Bacon's Bensalem.) And more often than not, these travel stories are poking fun at politics and religion — and essentially, satires on human nature.
Take, for example, Daniel Defoe's *The Consolidator* (1705), in which a ship called the Consolidator (possibly the first spaceship to have a name) visits the Moon. The author of *Robinson Crusoe* uses the Lunar society to poke fun at international politics. He also makes fun of schisms between Anglicans and other Protestants and Catholics versus Protestants, with the Antepredestinarians at odds with the Universal Soulians. There's also a long passage where the main character meets a Lunar native who refuses to believe that the protagonist came from Earth, and this turns into an object lesson in how easy it is for two people to be right, and yet have a falling out. You can read the whole thing here.

And then, of course, there's the most famous travelogue of them all — Jonathan Swift's *Gulliver's Travels*, most recently made into a regrettable Jack Black movie. When I first read *Gulliver's Travels*, the satirical elements kind of went over my
head, with all the tiny people and big people and horse people — but basically the man who once wrote a poem about the fact that everybody poops is trying to expose how base and terrible people actually are, in spite of our fancy social graces.

Gulliver's Travels will make you seasick in the cineplex
Gulliver's Travels is neither a movie nor an adaptation of Jonathan Swift's fantasy yarn. ...

Lilliput, as The Victorian Web puts it, is literally society in miniature, creating "a satire on the universal human tendency to abuse political power and authority, to manipulate others and deceive ourselves." The final section, with the Yahoos, "suggests that the aspects of our lives of which we are most proud are merely slightly more complex versions of the activities which, when they are engaged in by Yahoos, we recognize as being foul, brutal, and disgusting."

So when people are listing the earliest examples of science fiction, or reaching for the genre's direct antecedents, it's pretty much all thought experiments and fables aimed at illuminating philosophical ideas. You have to look at much more recent works to find stories that are more concerned with technology and science, for their own sake, than philosophical notions. And even a number of stories that are considered part of the science fiction "canon" were largely aimed at illuminating philosophical notions.

Artificial Life and the Machine Stops
Leaving aside Lucian and Ibn al-Nafis, the work most often listed as the first official piece of science fiction is Mary Shelley's *Frankenstein* — which, like many works of Romanticism, is a response to the writings of Descartes, Rousseau and other philosophers on human nature and the nature of existence. Frankenstein's monster famously speculates about what life would be like in a state of pure nature, saying "If our impulses were confined to hunger, thirst, and desire, we might be nearly free; but now we are moved by every wind that blows and a chance word or scene that word may convey to us."

Shelley may also have been influenced by the 18th century French philosopher Julien Offray de La Mettrie, who believed the human body was a machine, with no soul — La Mettrie speculated that a craftsman could create a mechanical man that could have human traits, which La Mettrie called "a new Prometheus," the same phrase Shelley uses for Frankenstein's creation.
Jumping ahead, arguably the first depiction of a false utopia and of a world ruled by a computer is E.M. Forster's "The Machine Stops," published in 1909. In "The Machine Stops," people live underground, in little individual "cells," without having any direct contact with each other. Forster introduces the notions of television screens and videoconferencing, as well as a society where everybody's needs are met via computer. Unfortunately, the Machine is breaking down, and the story's hero, Kuno, realizes that people need to live on the surface of the planet and reconnect with nature.

But among other topics, Forster is poking fun at the notion that direct experience is less important than studying second- and third-hand accounts of things, because knowledge (like air underground) is endlessly recirculated. "Let your ideas be second-hand, and if possible tenth-hand, for then they will be far removed from that disturbing element — direct observation."
And then there's Aldous Huxley, author of *Brave New World* — another famous work about a false utopia and a world ruled by science. Huxley considered himself a philosopher and social critic first and foremost, writing tons of essays on topics that are adjacent to his famous novel. (He even wrote a whole book revisiting the themes of that novel, *Brave New World Revisited*.)

It's worth reading Huxley's 1930 essay "The Boundaries of Utopia" in its entirety. He talks about the notion that all of our individual "rights" in modern society come from owning property rather than from anything innate — because the more money you have, the more you can exercise your rights. And then Huxley asserts that any post-scarcity utopia, in which everybody has equal property, must by necessity curb "excessive enjoyment of liberty."
And finally, philosopher Bertrand Russell wrote a short story in 1953 called "Satan in the Suburbs," about a mad scientist named Dr. Mallako, who posts a big sign saying "HORRORS MANUFACTURED HERE," and inviting people to apply within. Dr. Mallako preys on the weak-minded and the bored, implanting them with horrific memories and suggestions — each of Dr. Mallako's nightmares comments on current issues or philosophical ideas, but also allows Russell to explore the notion that the unconscious mind could lead people into irrationality and possibly doom the human race.
So it’s not just that science fiction happens somehow to be an ideal literature for exploring ideas about the nature of reality, ethics and humanity — these ideas are built into the core of the genre, because they’re where science fiction came from. We first needed stories about artificial life and going to the Moon to explore questions about who we are and how to lead a good life, going back to the earliest myths and fables. And without these questions, we wouldn’t have science fiction, as we know it.

Note: This article overlaps slightly with our article on the roots of science fiction from Sept. 2008.

The Roots of Today’s Science Fiction Go Back Centuries
Click to viewScience Fiction came of age in the 19th Century under the talents of writers like Mary ...

Teleny
8/08/12 11:47am

I’d add Campanella’s City of the Sun (favorited by Edgar Allen Poe) and Huxley’s OTHER utopian novel: Island.

Charlie Jane Anders
8/08/12 11:48am

Thanks for the recommendation — I hadn’t heard of that, but now I’m going to look it up!

Ghost in the Machine
8/08/12 11:49am

What’s that top image from? I’d like to see the full cover.

Charlie Jane Anders
8/08/12 11:52am