**Science Fiction: The Literature of Ideas**

**by Marg Gilks, Paula Fleming, and Moira Allen**

Science fiction has come a long way since its early days, when Isaac Asimov defined it as "that branch of literature which is concerned with the impact of scientific advance upon human beings" (*Modern Science Fiction, 1953*). By the 70s, the genre of science-based ideas had grown; it wasn't just concerned with science, but with consequences. It asked "what if?" What if a world existed in which this or that were true? Pamela Sargent dubbed it "the literature of ideas."

Fortunately, you don't have to be a "techie," or have a degree in quantum mechanics, to write for this genre. Good science fiction, like all other forms of fiction, is about people. It examines the human condition, perhaps in a whole new landscape, perhaps from an "alien" perspective. But it has to be about people, or readers will have no frame of reference, nothing to relate to. Even if there isn't a human anywhere in your story, you're human, and your readers are human. To create that all-important empathy between reader and character, you'll be describing your aliens (or robots, or artificial intelligences) through human perceptions.

For the core of your idea, therefore, you draw on the world around you. Then you ask: What if? How would the world be different with the introduction or expansion of a particular technology? What if humanity encounters aliens? What if a particular event in history had turned out differently? What if a current social issue takes a particular direction? In science fiction, even the most controversial, contemporary topics can be examined under the guise of an alien culture or a distant future.

While science fiction often addresses contemporary issues, that doesn't mean you should scour today's headlines for ideas. Current events become old news very quickly. Instead, let ideas come to you by keeping your mind in "what if" mode as you experience the world around you. Be well-read but also widely read, in fiction and nonfiction, in news articles and magazine features covering a broad spectrum of topics (not just those relating to science and technology). Use television news programs and documentaries as a springboard for "what if."

While much science fiction focuses on the future, history is also a great source of inspiration. Many science fiction writers are also history buffs; it's no coincidence that L. Sprague de Camp wrote the nonfiction *Great Cities of the Ancient World* and the time-travel novel *Lest Darkness Fall*. Folklore and mythology also hold a trove of ideas for science fiction stories. Hard science fiction writer Larry Niven uses the unicorn myth in *The Flight of the Horse*, while Alan Dean Foster utilizes Navajo sandpaintings in his novel *Cyber Way*.

Ideas can germinate from the smallest seeds. Become a people-watcher. Pay attention when someone asks, "I wonder what they'd do if...?" Tuck weird facts into the back of your mind. Study pictures -- some of Earth's creatures are weirder than anything science fiction writers have dreamed up. Collect those seeds, and let them grow in the back of your mind. You may be surprised by what finally blooms.

You've got an idea? Good! Now it's time to do your research.

**Researching SF: Blending Fact and Fancy**

One of the most common questions would-be science fiction writers ask is "Do I have to know a lot about science?" The answer is "not necessarily." If you're writing a "hard" science fiction novel about black holes, you'll need more than a high-school grasp of math and physics to pull it off. Today, however, only a small percentage of science fiction is "hard" -- and the other subgenres (see [The Subenres of Science Fiction](http://www.writing-world.com/sf/genres.shtml), by Marg Gilks and Moira Allen) offer infinite possibilities even for the least scientifically inclined writer.

Often, the best place to begin your research is within your own areas of expertise. If you're a history buff, consider spinning a tale around one of your favorite historical events. If you're a folklore enthusiast, try incorporating your knowledge of a particular culture's beliefs into your story. Consider telling your tale from the perspective of someone who shares your background -- if you're a teacher, for example, tell your story of planetary colonization from a teacher's perspective, rather than spending endless hours trying to find out what it would be like to be a starship pilot.

Other types of research can be as simple as looking up the answers to one or two basic questions -- and for this, the Internet is the perfect resource. Need to know the temperature on the dark side of the moon? Just type "lunar temperatures" into a search engine like Google (www.Google.com) and you'll soon learn that the moon's temperature ranges from -250Á F in shadow to 250Á F in sunlight. Want to know the atmospheric pressure on Jupiter? Another search will reveal that it is about six times the atmospheric pressure on Earth at sea level. Such searches will also turn up scores of sites that can help you find additional detail.

If you're looking for more in-depth information, you'll find that as well. A search on "quantum mechanics," for example, quickly turns up "Quantum Mechanics Made Simple" -- just what you need to get started. A search on "time travel" brings up sites from Nova and PBS, as well as discussions of Dr. Who, a Time Travel Institute, and the catalog of an individual who purports to sell time machines (which might be worthy of a story of its own).

Another way to find information is to join an e-mail discussion group for writers, or one relating to your topic area. Bob Nailor, a member of the Internet Fantasy Writers Association, notes: "Where else could I find out all the possible ways a knife or gunshot wound bleeds? The speed of light and its possible ramifications? The bites of different creatures? How to handle a sword, gun, rifle, knife, or club? Addresses for sites on any subject, no matter how obscure? Where to submit manuscripts, and how? Plus a (cyber) pat on the back for an accomplishment?" Similarly, members of the rec.arts.sf.composition newsgroup have discussed such topics as the composition of Mecca's Ka'aba stone and whether you can hear a bone break.

Discussion lists give you access to writers with a vast range of non-writing expertise. The IFWA group includes police officers, paramedics, weapons-experts, sword-masters, physicists, and more. A question put to such a list will not only generate a wealth of personal responses, but a list of URLs where you can find more information. But don't expect members to do your homework for you; while most are happy to answer questions and point you toward resources, you'll quickly get the "cold shoulder" if you simply pump the group for information you could easily find out on your own.

**To Market, To Market**

Once you've selected an idea and conducted your research, the next question is: Where should you submit the story? In our decade, changes in the audience for SF and fantasy are stimulating a preference for certain themes, characters, settings, etc. When choosing markets for your work, here are some factors to think about.

**Format:** A few years ago, online publishing was an experiment. Today, you'll find just as many professional-rate markets in electronic format as in print. About 40% of semi-pro magazines are in electronic format.

For writers, epublishing means more markets. Susan Marie Groppi, fiction editor for *Strange Horizons* ezine, points out that, "Publishing on the web keeps our overhead costs extremely low, allowing us to provide content to readers free of charge." Also, ezines can use color artwork and music at no additional production cost.

One limitation of offering content on a screen, however, is that, "people's patience for reading long works is fairly low, so we're limited to shorter stories." Groppi adds that "We're interested in things like hypertext fiction, but so far haven't seen any of a high enough quality."

**Diversity:** Responding to cultural change and initiatives within the field, such as the Lambda Awards, science fiction has gone a long way toward throwing off the "straight, white male" label. Sharon Lee and Steve Miller, editors of the forthcoming anthology *Low Port*, say, "Writers are now more willing to deal with gay characters, or characters of ethnicity, as characters rather than using them for shock value, or as placeholders."

A glance through market guidelines finds many requests such as this one from *Realms of Fantasy*: "New settings, exotic mythologies." John O'Neill, editor of Black Gate magazine, complains, "Despite our stated desire for 'exotic' settings, I receive almost no fiction in foreign lands, and much of what we do get, as far as I can make out, takes place on the set of an old *Xena* episode."

**Genre Expansion:** Speculative fiction is often described as the literature of ideas, yet characterization, prose style, and plot play a role in storytelling too. Groppi sees "an undercurrent of discussion in the community on the question [of] quality of ideas vs. quality of writing." Some writers complain that the genre is becoming indistinguishable from mainstream, emphasizing beautiful prose over startling ideas. Strange Horizons embraces slipstream work that doesn't fit neatly under a genre label, and Groppi doesn't apologize for stretching the genre's bounds.

On the other hand, John O'Neill started *Black Gate* magazine as a retro concept "to hearken back to the days of the grand adventure tale." *Black Gate* features "the unapologetic, adventure-oriented serial fiction that hooked an entire generation in the 1930s and 1940s."

Sharon Lee and Steve Miller report "a growing penetration of science fiction themes among romance readers." Lee and Miller see this as "a great time to push the envelope," writing a literature of emotions as well as ideas.

So -- should you write pulsating passion, pell-mell plot, or pretty prose? Answer: write what's in your heart. The genre is expanding, and there's a definition for everyone.

**The Timeline of Science Fiction Ideas**

**by Marg Gilks**

**Space Travel is synonymous with SF**

Space ships and space travel go back even further than the 1950s, when most of us think stories containing those elements first appeared.

* **2nd century BC:** Lucian of Samasota describes voyages to the sun & moon while spoofing Greek romances
* **1657 / 62:** Cyrano de Bergerac describes the first space rocket in his Voyage dans la lune and L'histoire des etats et empires du soleil
* **1835:** Edgar Allen Poe sends a man to the moon in a hot air balloon in his hoax, "The Unparalled Adventures of One Hans Pfall."
* **1865:** Jules Verne sends them by cannon in *From the Earth to the Moon*
* **1900:** H.G. Wells' characters travel in a steel & glass sphere powered by 'Cavorite' in *The First Men in the Moon.*
* **1926:** Hugo Gernsback publishes 'scientification' stories in A*mazing Stories* and launches the era of pulp fiction rocket ships
* **1966:** the TV show *Star Trek* offers 'warp drive' to explain faster-than-light travel (FTL)
* **1969:** Sf becomes reality-Neil Armstrong walks on the moon
* **1977:** The movie Star Wars calls its faster-than-light travel 'jumping to hyperspace'; meanwhile, the movie Capricorn One (1977) postulates that contemporary space exploration is a hoax
* **1995:** Real space exploration has been around long enough to get historical in the movie Apollo 13
* **2012:** The 1st manned flight to Mars is scheduled to launch.

**Mars - The Space Traveler's Plant-of-choice**

Mars, for years the only planet in the solar system that could be viewed clearly from earth, has always held a special fascination for writers.

* **1758:** Emanuel Swedenborg, heavily influenced by reports of the New World here on earth, offers a fanciful description of Mars and its inhabitants (along with Venus and Jupiter) in *De telluribus* (Concerning Other Worlds).
* **1895:** Scientist Giovanni Schiaparelli reports seeing 'canali'-channels, or grooves-while studying Mars through his telescope. He publishes his theories about life on the planet in Mars.
* **1897:** H.G. Wells writes science fiction classic *War of the Worlds,* describing the invasion of earth by Martians.
* **1906/08:** Amateur astronomer Percival Lowell seizes on Schiaparelli's reports and theorizes about life on Mars in *Mars and its Canals* and *Mars As the Abode of Life.* Pulp fiction magazines and newspapers elaborate his ideas into wondrous stories.
* **1912:** Edgar Rice Burroughs writes a series of science fiction novels set on Mars, beginning with *A Princess of Mars.*
* **1938:** C. S. Lewis writes the first in his trilogy of Mars novels, *Out of the Silent Planet;* Orson Welles' radio broadcast of H.G. Wells' *War of the Worlds* sends American listeners into a panic
* **1950:** Ray Bradbury writes *The Martian Chronicles,* perhaps the best-known of an explosion of stories about Mars.
* **1960 to present:** space probes and orbiters are regularly sent to Mars, no doubt by those who cut their teeth on sf novels as kids.
* **1992:** Kim Stanley Robinson writes a trilogy of Mars novels beginning with *Red Mars*
* **1996:** NASA announces the discovery of fossil life on Mars
* **1998:** Perhaps in a case of coming full-circle, Robert Charles Wilson puts the canals back on Mars in his novel, *Darwinia*.
* **1996 to present:** Hollywood gets involved, with movies *Mars Attacks!* (1996) and *Mission to Mars* (2000).

**And What's SF without a robot/android/cyborg?**

Our desire to create life by unconventional means goes back a long way.

* **Greek mythology:** Cyprian king Pygmalion falls in love with the statue of an ideal woman, asks Aphrodite to bring the statue to life, and marries the woman.
* **1883:** Carlo Collodi writes *The Adventures of Pinocchio,* about a wooden boy who comes to life.
* **1976:** Isaac Asimov writes *The Bicentennial Man,* about a robot that so wants to be human, it does what sets humans apart from robots-it dies.
* **1984:** In the movie *The Terminator,* robots disguise themselves as human beings to hunt their prey-humans.
* **1987:** A mortally wounded policeman cheats death by becoming a cyborg-half man, half robot- in the movie Robocop
* **1989:** *Star Trek: The Next Generation* borrows on Asimov's theme with the episode "Measure of a Man," in which the android Data is put on trial to determine if he's property, or a free agent.
* **1999:** In another case of coming full-circle, Asimov's *The Bicentennial Man* is made into a movie.

**More Information:**

**The Subgenres of Science Fiction,** by Marg Gilks and Moira Allen

<http://www.writing-world.com/sf/genres.shtml>

**General SF Links and Information:**

<http://www.writing-world.com/links/sf.shtml>

**Discussion and Critique Groups:**

<http://www.writing-world.com/links/critique.shtml>

**Market Information:**

<http://www.writing-world.com/links/sf.shtml>

<http://www.writing-world.com/links/guidelines.shtml>

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**Marg Gilks'** short stories, poetry, and articles have been appearing in newspapers, newsletters, magazines, and e-zines since 1977. She considers writing fiction, especially sf/f, the ultimate form of escapism -- in what other field can you create your own universe? Contact her with feedback and queries through Scripta Word Services, her freelance editing business: <http://www.scripta-word-services.com/>.

**Paula L. Fleming's** science fiction and fantasy have appeared in a variety of publications, including [*gothic.net*](http://www.gothic.net/); [*Tales of the Unanticipated*](http://www.totu-ink.com/) #20, #22, and #24; Meisha Merlin's *Such a Pretty Face* anthology; and Lone Wolf Publishing's *Extremes 3: Terror on the High Seas* anthology. By day, she's a human resources generalist at the Wedge Community Co-op. To help her, she has three big dogs, two cats, and one husband. Visit her home page at [http://home.comcast.net/~paulafleming/index.html](http://home.comcast.net/%7Epaulafleming/index.html) or her blog at <http://paulaleafleming.blogspot.com/>.   
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