Science Fiction Subgenres

(http://www.cuebon.com/ewriters/SFsubgenresA-F.html)

(Definitions and Examples A - F) (G - P) (R - X) Science fiction is not meant to be predictive, but rather it develops myriad 'what if' scenarios. Virtually every feature of the 21st century world was anticipated by genre stories, often one hundred years or more in advance. (Some major trends, such as miniaturized electronics, were envisioned by only a handful of authors.)

Age Regression tales involve, not necessarily a long life, but a literal reversal of the physical aging of the body. An old man becomes like a teenager again. This might happen via some virus or serum, or by means of an elaborate multi-step process. Numerous SF tales include a 'regen' process, available to at least some of its characters. A recent example is Robert Sawyer's novel *Rollback*. (Hollywood versions sometimes shrink a person clear into infancy, or even a puddle of goo.)

Alien Invasion stories are self-explanatory. The target is usually, but not always, our Earth. The classic of this subgenre is H.G. Wells' pioneering 1898 novel *War of the Worlds*, followed by Orson Welles' 1938 radio version. Niven and Pournelle's novel *Footfall* is a well-thought-out example. The film *Independence Day*, by Roland Emmerich, has become a cultural milestone. (Most--but not all--of this subgenre's tales depict an eventual human triumph.)

Alternate Histories depict might-have-beens, if one or more crucial situations had been resolved differently. Common themes are: what if the Roman Empire never fell, or the South had won the US Civil War, or Germany won World War Two? The grandmaster of this subgenre is Harry Turtledove. Another example is P.K. Dick's novel *The Man in the High Castle*, which has been made into a (barely related) HBO series.

Apocalyptic (asteroid hit, gonzo apocalypse, nuclear war, pandemic) These stories depict a non-religious 'end of the world' scenario. Usually, a band of survivors endure tremendous hardships. An asteroid is the main villain of Niven and Pournelle's novel *Lucifer's Hammer*, and many others, including Mimi Leder's movie *Deep Impact*. Gonzo Apocalypse tales are rare, and feature a surreal, even comic, element. Most, if not all, are set in the southwestern deserts of North America. Susan Torian Olan's novel *The Earth Remembers* is a good example. Neal Barrett, Jr.'s novelette "Ginny Sweethips' Flying Circus" and Charles Coleman Finlay's story "The Texas Bake Sale" follow suit. Nuclear war ends things in Peter George's novel *Red Alert*, filmed by Stanley Kubrick as *Dr. Strangelove*. A sudden pandemic wipes out nearly all humans in George R. Stewart's classic SF novel *Earth Abides*, and in Rupert Wyatt's movie *Rise of the Planet of the Apes*. (Zombie disasters fall under the 'horror' category, while 'nanotech' overlaps with various others.)

Artificial Intelligence tales assume that one, or perhaps many, artificial minds become fully sentient. They might be mainframe computers, or mobile robots, or more recently,

the Internet as a whole. One famous example is D.F. Jones's novel *Colossus*, filmed by Joseph Sargent as *Colossus*, *The Forbin Project*. Another is Jack M. Bickham's novel *Ariel*. (Bickham's story, and many others, make the error of underestimating the human brain, and/or failing to envision how powerful modern computers would become -- yet still be far short of real intelligence, much less of sentience.)

Astrobiology centers upon alien life. Not necessarily intelligent or technological beings, but the very presence of life that has evolved beyond our Earth. Many such tales involve finding mysterious life forms on Mars or Europa, or floating in the atmosphere of Jupiter. An oft-quoted example is Arthur C. Clarke's short story "A Meeting With Medusa."

Astrosociobiology is an overlapping subgenre that's both narrow and broad. It focuses on the form and function of alien (non-human) civilizations. There are countless examples. CJ Cherryh's "Chanur" novels explore the psychology of a spacefaring feline race. (Giordano Bruno was burned at the stake for, in part, airing such speculations.)

Bigger Than Worlds is a subgenre well-described by its name. Vast artificial megastructures are the setting for these stories; almost characters in themselves. Olaf Stapledon's 1937 novel *Star Maker* is probably the first such tale, with a star-englobing construct of a type later known as a Dyson Sphere. Larry Niven's 1970 novel *Ringworld* introduced that carefully thought-out habitable structure. This subgenre's largest imagined construct (at tens of millions of light years across) is perhaps Bolder's Ring, found in Stephen Baxter's "Xeelee" novels.

Biopunk is a spinoff of the 'cyberpunk' subgenre, involving hackers (and oppressive government agencies) who manipulate human DNA -- their own and/or someone else's. One example is Paul Di Filippo's novel *Ribofunk*. Another is Andrew Niccol's film *Gattaca*.

Biorobotics involves the practical intersection of human physiology and mechanical prostheses or enhancements. Robert Sawyer's novel *Wake* depicts a blind girl offered sight by means of an external "eyepod" device that processes her retinal nerve signals.

Christian SF is just that, stories which features an explicitly Christian protagonist. Anthony Boucher's short story "The Quest for St. Aquin," and the novels of Kathy Tyers, are good examples. The protagonist of Timothy Zahn's novel *Deadman Switch* has profound Biblical knowledge and morality. (Such tales are common enough to have their own subgenre, yet they're unusual in the SF genre, especially compared to the English-speaking Christian population. The reasons are open to debate.)

Clerical subgenre tales involve an organized priesthood, such as a religious order, of any human or alien religion. Set on Earth, Walter Miller's novel *A Canticle for Leibowitz* chronicles one sincere and long-lived (basically Roman Catholic) order. Frank Herbert's Bene Gesserit (in his "Dune" franchise) dominates human history, yet without profound expressions of individual faith.

Communalness is a specialized term and subgenre, involving a human future with relationships and communities 'boosted' into enhanced consciousness by cybernetic or other means. The namesake town in Frank Herbert's novel *The Santaroga Barrier* has achieved a kind of drug-induced unity. The disciples of V.M. Smith in Robert Heinlein's *Stranger in a Strange Land* achieve this (along with impressive powers) through learning to speak Martian.

Cosy Catastrophe is a type of postapocalyptic tale, usually set on Earth, in which an isolated group of survivors sets about rebuilding a new civilization according to their own particular ideas. (As with the 'cosy mystery' subgenre, unjust death has occurred, but the characters don't get too rattled about it.) The founding example is probably Mary Shelley's less-well-known novel *The Last Man*. Another is John Wyndham's novel *The Day of the Triffids*, later filmed by Steve Sekely.

Cybernetic Revolt speaks for itself, and is one of SF's oldest and most common themes. Mechanical servants fail, or assert their rights, or go berserk, usually with tragic consequences. E.M. Forster's novella "The Machine Stops," written in 1909, depicts the former.

Cyberpunk is a term that's expanded well beyond the SF community and into popular culture. (It's also spawned a host of other "-punk" subgenres.) These tales are typically set on Earth, and involve a hacker immersed in a cyber-world, interacting (both on line and physically) with similar people. Often they're modified to 'jack' their brain directly into cyberspace. The founding tome is William Gibson's novel *Neuromancer*, and a popular followup is Neal Stephenson's novel *Snow Crash*. (It may be an unwritten law that all such tales must involve preening characters gathered in a flashy night club.)

Cyberspace as a subgenre is very similar to 'cyberpunk,' though broader in form and style. The term was coined by SF author William Gibson, and this subgenre involves characters interacting, not just on line, but fully immersed within a vast worldwide 'virtual reality' medium. Other such tales involve hackers who use more ordinary means of networking.

Cyborg fiction features thoroughly-integrated human/mechanical blend(s) as main characters. The classic example is Martin Caidin's novel *Cyborg*, brought to television as *The Six Million Dollar Man*. John Scalzi's novel *Old Man's War* and its sequels feature soldiers with nanotech blood and mixed DNA. (Caidin coined the word 'bionics,' now a legitimate scientific concept and commonly spelled 'bionic.')

Detective (robotic police, telepathic investigation, etc.) In these stories, often set in the near future, technology aids both criminals and law enforcement. Various short stories introduced robotic police. This was popularized by the eponymous (actually cyborg) character in Paul Verhoeven's film *Robocop*. Alfred Bester's novel *The Demolished Man* depicts a deadly cat-and-mouse game between psychic police and criminals.

Dying Astronuat tales got a boost from the real-life events of the Apollo 13 mission, as depicted in the movie from Ron Howard. With the laws of physics precluding any possible (outside) rescue, these stories can range from tragic to poignant to heroic. In Alfred Bester's novel *The Stars My Destination*, a man abandoned on a derelict spaceship figures out a way to survive. In "Wonders of the Universe," a short story by German author Andreas Eschbach, a marooned woman dies gracefully on frozen Europa. Two excellent new examples, with happier endings, are the Alfonso Cuaron film *Gravity*; and Andrew Weir's novel *The Martian*, filmed by Ridley Scott.

Dying Earth SF tales show the death of the Earth as slower than from an apocalypse, and it can be due to any cause, including natural. A haunting vision of this appears in the farfuture chapters of H.G. Well's novel *The Time Machine*. (Including a 'lost' chapter about a biologically decrepit humanity, originally serialized but not included in the novel and film versions.) Isaac Asimov's novel *Pebble in the Sky* is another example.

Dystopian (**crowded world, gilded cage, jaded society, theocracy, etc.**) The opposite of Utopian, these horrid societies are all too easy to imagine. In most such tales, the protagonist seeks to better his-or-her own life, if not to liberate the entire society. Cyril Kornbluth's novel *The Marching Morons* depicts a cityscape jammed with idiotic yet pampered workers. Often this subgenre depicts inquisitive heroes breaking free of a bottled utopia, such as the sealed city in Douglas R. Mason's novel *Eight Against Utopia*. Another example is the spaceship *Axiom* in Disney/Pixar's movie *Wall-E*. (In both stories the need for protective confinement had, unknown to the characters, diminshed over time.) A.E. Van Vogt's novel *The Empire of Isher* portrays a decadent and sybaritic world-ruling class. Margaret Atwood's *The Handmaid's Tale* and Robert Heinlein's *Revolt in 2100* are novels that depict a puritanical (and rather hypocritical) religious ruling class.

Edisonade* is a subgenre that was named retroactively, and it dates back to the nineteenth century. As the name Edison suggests, they center upon the adventures of some brilliant young inventor. The numerous "Tom Swift" stories, by Victor Appleton, are the best-known examples.

Environmental subgenre tales focus on the ecosystem, usually but not always our Earth's. Often there is a direct threat, caused by humanity or some outside force. A recent example is Bell and Strieber's partly-fictional book *The Coming Global Superstorm*, filmed by Roland Emmerich as *The Day After Tomorrow*. (While this is a serious enough topic, the science in many of these tales is abysmal.)

Erotica refers, in this context, to a science fiction tale with a strong sexual element. Explicit sex might be at the center of the plot, or it plays a vivid role in the character's lives. Norman Spinrad's novel *The Void Captain's Tale* combines these and other SF elements.

Exotic Ecosystems {unusual life forms} Alien worlds offer tremendous possibilities, yet much SF (in print and on screen) populates them with familiar humanoids. Robert Reed's novels, such as his *The Remarkables*, depict truly alien beings and environments; as does Ursula LeGuin's novella "The Word for World is Forest." (Which, along Poul Anderson's 1957 novella "Call Me Joe," inspired James Cameron's hit movie *Avatar*.)

Extraterrestrial Life is a huge subgenre, almost a descriptive category. In many of these tales, the very discovery of life beyond the Earth (or even "just" its signals or ancient artifacts) has a tremendous impact upon current society. Carl Sagan's novel and movie *Contact* are excellent examples. Jack McDevitt's novel *The Hercules Text* is another.

Firm Science is a specific definition, which can be applied to many subgenres. It refers to a midway point between 'hard' and 'soft' SF, and the inclusion of technology and phenomena that are not too fantastic, but may never be invented. (Such as faster-than-light travel, antigravity, and wormholes.)

First Encounters means between humans and intelligent aliens. This could be an alien arriving here, or a human astronaut reaching some inhabited world. There are hundreds of examples in print and film.

First Landings (Mars, other planets; return to Moon) Originally this meant a journey to the Moon, the only 'obvious' world beyond ours. Jules Verne's novel *From the Earth to the Moon* is not the earliest example (that honor goes to Lucian of Samosata, an ancient Roman author), but it's the best known. There are numerous 'first to Mars' novels, such as Robert Zubrin's *First Landing*. There are similar stories involving most of the known planets and nearby star systems. After the short-lived Apollo program, this subgenre began to depict a hoped-for return to the moon. (In many cases, by determined private entrepreneurs who outrun a moribund NASA.)

Frontier (asteroid miners, rough colony, theme park) Most of this subgenre's tales transplant the 'western' genre into outer space. A good example is Peter Hyam's film *Outland*, which is an homage to *High Noon*. There are hundreds of examples in print. Similar to hardscrabble miners, crafty independent spacemen ply the asteroid belt in search of resources to send back to civilization. Alfred Bester's novel *The Stars My Destination* is one such novel. (In many of such stories they're threatened by an aggressive government or big corpration from Earth.) New or cut-off colony planets, left to support themselves, are depicted with a frontier aspect. Joss Whedon's popular "Firefly/Serenity" franchise envisions such rough colonies. In a few stories, the 'western' aspect is recreated as entertainment for tourists. Michael Crichton's film *Westworld* is one example.

Gay subgenre stories include male homosexuals. If not the protagonist, then a major character or two. This theme has become more common since the 1970s, but remains unusual. Lois McMaster Bujold's novel *Ethan of Athos* depicts a planet that's entirely male, and reproduces its population via artificial wombs. In recent times, several genre

superheroes have 'come out' as gay. Another example is Lt. Cmdr. Ro Nevin, in the fan-produced series *Star Trek: Odyssey*.

Gedanken is German for 'thought' or 'idea,' and this subgenre's stories center around a striking concept, often instead of developing their characters or setting. Andrew Weir's popular novel *The Martian* (filmed by Ridley Scott) plunges directly into creative technological problem solving. Tom Godwin's short story "The Cold Equations" has obsessed readers for decades, with its inevitable sacrifice of an innocent human life. Several themed anthologies include this word in their title. Gordon Dickson's "Dorsai" novels feature distilled aspects of human nature, and thus, explore deep philosophical issues.

Generation Ship stories are set aboard that type of spacecraft. Often those ships are so large, and the voyage so long, that (most or all of) its inhabitants consider other worlds to be the stuff of legend. The subgenre was pioneered by J. D. Bernal, with his 1929 novel *The World, The Flesh, & The Devil.* A popular example is Robert Heinlein's novel *Orphans of the Sky.* Another is the original *Star Trek* episode "For the World is Hollow and I Have Touched the Sky."

Gothic SF is an overlapping subgenre that slants toward the macabre, and deeply atmospheric settings, but not outright horror. ('Atmospheric' in a literary and cultural, not climatological, sense.) Mary Shelley's *Frankenstein* is often cited as the first such novel. Algis Budry's novel *Rogue Moon* sets a determined pair against a deadly lunar enigma. Arthur C. Clarke's short story "A Walk in the Dark" is another example.

Hard science fiction is a descriptive term. Stories in this broad subgenre depict technology that conforms to actual scientific knowledge and physical laws, or extentions of them that scientists consider plausible. Arguably, certain exceptions include favored 'tropes' such as antigravity and FTL travel. The works of A.C. Clarke and Isaac Asimov stand out among numerous examples. (One SF genre publication that maintains this 'hard' standard is *Analog* magazine.)

Hollow Earth tales are just that, set within a putatively hollow (or at least honeycombed) planet Earth. The flagship of this subgenre is Jules Verne's novel *Journey to the Center of the Earth*. Michael Flynn's novella "Where the Winds Are All Asleep" is a modern homage. A popular variant is the aquatic-cavern-filled planet Naboo in the "Star Wars" franchise.

Horrific SF is closely linked to the 'horror' genre, and while it's often bloody, science is crucial to each premise. In Sharman DiVono's novel *Blood Moon*, an entire lunar base goes slowly insane. Most examples of this subgenre are short stories, such as Michael Shea's "The Autopsy," Simon Ings's "The Wedding Party," and Terry Bisson's "Necronauts."

Hyperspace stories include that extra-dimensional realm as a setting. The pioneering classic of this subgenre is Edward Abbot's 1884 novel *Flatland*, a *Romance of Many*

Dimensions, although our familiar third dimension is the "extra" one. Greg Egan's novel *Diaspora* includes rigorous, mind-stretching depictions of a fourth-spatial-axis realm. In some tales (often less rigorously), hyperspace allows the characters to travel rapidly between star systems (and/or time periods, etc.), or there might be human dwellings and/or aliens within that arcane realm. A good example is *Star Trek: Deep Space Nine*, with its mysterious wormhole-dwelling 'prophet' aliens.

Immortality is a subgenre featuring humans or aliens with that vaunted attribute. (Characters who live effectively forever, or at least for millennia.) It might be humans with a rare mutation that's allowed them to survive since ancient times, or a future scientific development. Often these long-lived characters allow for vivid depictions of history. A fine example is Poul Anderson's novel *The Boat of a Million Years*.

Invisibility is the central attribute of these stories' main characters. Plato launched the subgenre with his allegorical tale of *The Ring of Gyges*. H.G. Wells made this scientific with his classic novel *The Invisible Man*. 'Cloaking devices' have now become very common in science fiction.

Kaiju or *Tokusatsu* is a Japanese subgenre, long popular in the rest of the world. These epics always feature one or more *kaiju*, meaning big powerful quirky monsters. A major example is the "Godzilla" franchise, and that creature's American counterpart King Kong.

Lesbian subgenre tales feature women with that orientation as main characters. These stories became popular in the 1970s, and are more common than gay male themes. Sherri S. Tepper's novel *The Gate to Women's Country* depicts a planet divided by gender. Nicola Griffith's novel *Ammonite* takes this two steps further, with a colony planet that's entirely female, and which doesn't refer to males even once.

Light or Humorous tales are exactly that. This laugh-out-loud subgenre includes John Sladek's novel *Mechasm*, Douglas Adams' "Hitchhiker's Guide" novels, Rudy Rucker's novel *Master of Space and Time*, and many others.

Lost Worlds (**mysterious islands**) This subgenre is one of the oldest SF varieties. Sir Arthur Conan Doyle's novel *The Lost World*, based upon South America's then-mysterious 'tepui' plateaus, lent its very name to this subgenre. Later novels 'discover' isolated valleys in central Asia or elsewhere. John Darnton's novel *Neanderthal*, which overlaps with 'adventure,' is one example. Television's popular series *Lost*, from J.J. Abrams, expanded the tradition with its bizarre isolated island. (While not SF, the book and movie *Life of Pi* include a strange unknown island.)

Math is a tiny subgenre, similar to 'gedanken' and 'hyperspace' science fiction. These stories center around actual mathmatical concepts. Douglas Hofstadter's scholarly tome *Godel, Escher, Bach* uses short fictional stories as illustrations. Catherine Asaro's novella

"The Spacetime Pool" features life-and-death math puzzles. Vandana Singh's short story "Infinities" is based upon math's most profound concepts.

Media tie-in (game-based, Star Trek novels, etc.) This is a self-explanatory subgenre. Whether originally a book, a video game, or a screenplay, the novel versions build upon these tale's on-screen popularity. These stories must conform to strict rules, like not allowing the main characters to change very much, so that they'll continue to match the series' canon. (Often these books have a huge marketing budget, and they tend to dominate chain bookstore shelves.)

Microbiological SF stories feature tiny life-forms, whether Earthly or alien, as a dominating force. They might cause a disease, or act as a transforming agent, deliberately or not. Greg Bear's novel *Blood Music* is a good example. Janine Ellen Young's novel *The Bridge* is another.

Military is a huge subgenre, with its own specialized publications. Soldiers and warfare are central to these stories. Some are near-future, and depict humans fighting each other. Others span star systems and even whole galaxies, with vast ongoing conflicts with aliens. David Drake and Elizabeth Moon are masters of this field, while Joe Haldman's novel *The Forever War* will soon be filmed. David Feintuch's "Hope" novels essentially translate the 19th century's British Royal Navy into outer space. (Usually the humans and aliens are closely matched, lest it become a rather short Bambi-vs.-Godzilla type story.)

Mind Transfer is what takes place in this subgenre. A conscious mind is downloaded into a computer system, or shifted (or swapped) into another human brain. (Robert Heinlein's novel *Time Enough for Love* ends up with three separate minds within one female body.) Such a transfer might be permanent or temporary, and the process may allow for one or more copies to exist at once. The early *Star Trek* episode "Turnabout Intruder" is a famous example, and Paul Flaherty's film *18 Again!* a lighthearted one. In David Brin's novel *Kiln People*, humans send out temporary/disposable 'golem' copies of themselves, to have specific experiences then return with those memories.

Multiverse stories feature multiple universes, often with differing versions of our familiar Earth. This subgenre assumes that some variant of the Multiverse/Landscape cosmological theory is true. There is always some way (whether secret or common) to travel between the universes, or at least to communicate. Michael Kube-McDowell's novel *Alternaties* is a fine example. The TV series *Sliders* was another.

Mundane SF is a descriptive category. It features near-future stories, without any improbable technologies, or interplanetary settings, at least beyond what known spacecraft can reach. (It's regarded as a controversial 'movement' within the SF community, and magazine issues and anthologies have begun to feature it, sometimes as a book title.)

Mythological stories depict aliens and/or humans using high-tech means to recreate mythological settings, and the seemingly magical powers of the ancient gods. For example, Dan Simmons' novel *Ilium* brings an idyllic Mount Olympus and the bloody Trojan War to Mars--sort of. In Roger Zelazney's classic novel *Lord of Light*, the main characters employ technology to cast themselves as deities from the mythology of India. An example from TV is the *Star Trek* original-series episode "Who Mourns for Adonais?" (Plus a recent web-based followup show, reprising the same actor as Apollo.)

New Wave SF was a movement and a literary style, beginning in England and spreading to the USA and beyond. Michael Moorcock launched the trend in 1964, and Harlan Ellison's two "Dangerous Visions" anthologies are now viewed as its high point. This subgenre rose and fell with western society's embrace of 1960s radicalism, and desire to 'shock the bourgeoisie.' (Echoes of the movement have affected SF, and literature in general, ever since.)

Nanopunk is a narrow subgenre, and one of cyberpunk's many offshoots. It explores to effects of advanced nanotechnology on humanity. Linda Nagata's novel *Tech Heaven* is the principal example, while Michael Crichton's novel *Prey* introduced the concept to the mainstream.

Occupational (accountants, drivers, plumbers, sales reps, etc.) This subgenre encompasses a wide reach, and yet remains unusual. It features blue collar protagonists, on Earth or in recognizable circumstances, rather than hifalutin scientists or astronauts. The hero of John DeChancie's novel *Starrigger* is a truck driver. Piers Anthony's novel *Hard Sell* realistically depicts several workaday occupations. Most other examples are short stories.

Parallel Universe SF is quite similar to the 'multiverse' subgenre. What makes this subgenre distinct is that the other universe(s) can be very strange, with differing physical laws, etc. Isaac Asimov's novel *The Gods Themselves* is a classic example, with its utterly strange intelligent aliens. Greg Egan's novel *The Clockwork Rocket* (and its sequels) depict the strange physics of an alternate cosmos, with rigorous charts.

Pastoral or Small Town SF takes place in that sort of setting. (Most SF is urban, at least when taking place on Earth.) Clifford Simak's classic novel *Way Station* is set entirely in rural Wisconson, while the heroine of Kay Kenyon's novel *Leap Point* is a small-town lass.

Planes of Existence (altered consciousness) This subgenre also resembles the 'multiverse' category. In this case, the other planes are often 'psychic' or 'spiritual' in nature, and are reachable by altering one's state of awareness. The novel *India's Story*, by Kathlyn S. Starbuck, depicts its young heroine India experiencing multiple states of consciousness via meditation, drugs, etc. Another example is Howard Hendrix's novel

Standing Wave. (In most such tales, this goes beyond passive experience, into 'granting' the characters special powers.)

Planetary Romance is an operlapping subgenre that shades into the vast 'romance' genre. In this case, the love story is embedded in futuristic (or fantastical) technology, and the striving lovers can be separated by more than Earthly distances. Edgar Rice Burroughs' "Barsoom" series features luscious Martian princesses, while Andrew M. Greeley's novel *Final Planet* does a good job of fusing these often disparate literary styles. Lee and Miller's "Liaden" series has a devoted following.

Post-apocalyptic stories are set well after some vast upheaval. Rather than showing the immediate aftermath, these tales depict a new society that has arisen from the ashes, usually here on Earth. Often the survivors remain leery of technology, as in Edgar Pangborn's classic novel *Davy*. (Its Holy Murcan Church maintains a ban on gunpowder, along with "anything else that might reasonably be construed to contain atoms.")

Postcyberpunk describes a narrow and indistinct subgenre. These stories break with the tropes (such as cynical young hackers in garish night clubs) that dominated the cyberpunk trend. Usually set on Earth, these stories make a conscious effort to be more positive. One example is Greg Bear's novel *Queen of Angels*.

Posthumanism is a subgenre tied to a philosophical type movement. (Going beyond the percieved limits of traditional Humanism, as expressed in fiction.) In practice it's very close to the 'transhumanism' subgenre, and is controversial even to define. Charles Stross's novel *Accelerando* is one example.

Progenitive SF is a small subgenre, which features humans and/or aliens who create science fiction of their own. One example is Vernor Vinge's novel *Grimm's World*, in which seagoing humans on another planet operate a respected science fiction magazine. "The Garden: A Hwarhath Science Fiction Romance," by Eleanor Arnason, is a short SF story told by aliens. In the *Star Trek: DS9* TV episode "Far Beyond the Stars," Sisko is shown as a 1940s SF author, imagining his future starfaring self.

Pulp SF is a purely descriptive category. The old SF magazines were one of many varieties of 'pulp fiction' literature, with a distinct style and format. Usually their cover art was garish, featuring brutish monsters, heroic spacemen, and scantily-clad women in distress. "Amazing Stories" was perhaps the subgenre's best-known publication. (This subgenre has been revived again and again over the decades, and in our current politically-correct times it has produced much controversy.)

Recursive SF is comprised of stories that include direct references to the SF genre, and/or SF authors. A mind-bending example is the novel *Venus on the Half Shell*, "written" by Kilgore Trout, a pseudonym of Philip Jose Farmer. Trout is actually a fictional SF writer created by author Kurt Vonnegut. The protagonist makes frequent mention of his own favorite writer, a galactically-famous SF author. (*Venus*'s first edition

does not mention Farmer at all!) Another example is HG Stratmann's short story "Wilderness Were Paradise Enow," which mentions plenty of SF-genre trivia.

Religious (alien faiths, Hindu, Islamic, Jewish, etc.) These stories involve characters with a distinct religion, which gives meaning and motivation to their lives, although this isn't always explored in much depth. ('Christian' tales are common enough for a separate category.) Kay Kenyon's well-thought-out novel *The Braided World* describes a strange alien priesthood (and biology), which the human visitors must struggle to understand. Islamic tales center upon characters, and/or entire societies, of that faith. Donald Moffitt's novel *A Gathering of Stars* features an interstellar Muslim civilization, while in Nancy Kress's novel *An Alien Light* the derivation is more subtle. Ahmed Khan's recent anthology *A Mosque Among the Stars* has a fine variety of stories. Jewish SF features characters of that faith. WR Yates's novel *Diasporah* is set in a huge orbital colony which has replaced a destroyed Israel. Hindu tales center on that faith, but remain quite rare. (India itself has a growing native-languages SF market, however very little has been translated into English.) A few subgenre stories focus on other human faiths, whether current, in the future, or via time travel.

Restored Eden tales are set in the mid-to-far future, here on Earth. In this subgenre most of humanity has gone on to other worlds, and the Earth has healed (all or in part, and naturally or with subtle help) into a renewed paradise. Arthur C. Clarke's novel *Against the Fall of Night* decribes the technological redoubt of Diaspar and the natural haven of Lys. Clifford Simak's novel *City* populates the wildlands of a future Earth with speaking dogs and intelligent ants.

Retro-futurism is a subgenre that celebrates the 'pulp' SF stories of the past. Most of these depictions are in comic books, and revive the garish cover art and 'fifties' style of the past.

Robot SF tales are self-explanatory. In a sense, the concept of robots predates SF itself. The ancient Greeks told of the smith Hephaestus and his bronze guardian Talos, and the Chinese of Yan Shi's clever artificial man. Isaac Asimov's many "Robot" stories are a preeminent modern example. One of the earliest novels is *Adam Link*, by Eando Binder.

Science Fantasy is an overlapping subgenre, comprised of stories that meld the SF and Fantasy genres, and tilt toward SF because they feature advanced technology such as spacecraft. Many of the works of Andre Norton, and Anne McCaffrey's "Pern" franchise, fit this subgenre.

Science Tales are intended for children. They depict common futuristic activities such as space travel, but without so much scientific rigor. A famous literary example is the book *The Little Prince* by Antoine de Saint-Exupery. Some of the "TinTin" graphic novels, by Herge, fit this category.

Scientific Romance* is an old description, primarily British, that predates the wide use of the term Science Fiction. It has seen occasional revivals, making it a subgenre.

Shapeshifting tales are a staple of speculative fiction. As an SF subgenre, this ability is explained in scientific terms. It varies from gradual cellular alteration to a near-instantaneous ability to change size and form. John Campbell's 1938 short story "Who Goes There," filmed several times as *The Thing*, is a stellar example. (Many such tales ignore the issue of mass. The creature becomes an elephant, then a mouse, so how much does the mouse weigh?)

Shrinking/Enlarging Humans (endless, episodic, giantess) This subgenre is self-descriptive, and has a long tradition, merging back into mythology. In the short story "He Who Shrank," by Henry Hesse, the protagonist keeps right on shrinking, visiting a succession of 'atom-as-galaxy' worlds. Lewis Carroll's novel *Alice in Wonderland* depicts Alice growing and shrinking in a mysterious fashion. Giantess stories are epitomized by the film *Attack of the 50 Foot Woman*, from Nathan Juran. (They often feature a sexual element, though in that film the woman's clothes grew along with her.)

Social SF is a wide subgenre, which combines anthropology with futuristic themes. Its focus is on the social aspects of a distant society, rather than fancy technology. Isaac Asimov's short story "Nightfall" is a classic example.

Soft SF is cast as the literary opposite of 'hard' SF. More precisely, it focuses on the future development of the 'soft' sciences (the humanities), rather than gadgetry. Ursula LeGuin's "Hainish" novels are good examples. Isaac Asimov's "Foundation" novels feature a predictive social science called Psychohistory.

Space Opera (noir) This is a huge descriptive category. The subgenre features swashbuckling action, set in a vast panorama. There are countless examples, and almost all of the most popular SF novels and films, such as *Star Wars*, are usually included. Often they have elements resembling 'fantasy,' which are assumed to be technological, but there's no explanation provided. Noir tales are an homage to darker-toned tales of the past, such as Raymond Chandler's distinctive style. Ron Goulart's SF novels do this well.

Sports SF is a tiny subgenre, represented mostly (if not exclusively) in short stories. In a few stories, an alien visitor shows a love for baseball. Most of the others depict the impact of modern science, and genetic engineering in particular, on professional sports. *Analog* magazine has run several of these in recent years. (Jack Haldeman, brother of the better-known Joe, has written numerous short stories in this subgenre.)

Spunky Heroine tales feature one as their protagonist, to the point they're usually referrred to "by" her, more than by their plot or premise. David Palmer's novel *Emergence*, featuring young Candy Smith-Foster, is a great example, as is its long-

awaited sequel *Tracking*. Another is Alexei Panshin's novel *Rite of Passage*, with the adventures of young Mia Havero; plus *Reefsong* by Carol Severance, with its transformed Angie Dinsman.

SpyFi is a descriptive category that brings espionage into the future, with clever hightech duels. Often the technological gadgets are "way over the top," in a spoofish fashion. The Daniel Mann film *Our Man Flint* is a fine example. (By some definitions the 'fi' means general fiction, and this category is defined more broadly.)

Steampunk (clockpunk, gaslamp or gaslight, weird west) This is a rapidly-growing subgenre. Such tales are usually set in the Victorian era, and presume that its characters have developed a form of high-tech at that time. (Some of these tales include a sort of restrained magic.) The novel *Anti-Ice*, by Stephen Baxter, includes a newly-discovered heat source much more potent than coal. Gaslight stories are defined a little more narrowly. Ron Miller's anthology *Astronauts By Gaslight* has five stories which actually date from the Victorian era. Weird West tales are set in the frontier USA, and many feature real-life pioneers and inventors. Michael Piller's short-lived TV show *Legend* starred John de Lancie as Nikola Tesla. (The Steampunk subgenre has spawned an entire artistic and cultural movement, with functional custumes and more.)

Sword and Planet SF brings a medieval aspect to interstellar space. Poul Anderson's "English Empire" novels literally transport English knights into rulership of alien worlds.

Synthetic Biology stories feature artificial life forms. It's a small subgenre, and its protagonists are often biologists who crack the secret of creating life. Linda Nagata's novel *Limit of Vision* depicts a created-then-evolving new lifeform called LOVs.

Terraforming SF centers around vast projects, with the characters busy altering whole planets (such as Mars) to make them more earthlike and habitable. Kim Stanley Robinson's epic "Mars" series is a good example. (The term itself was coined by SF author Jack Williamson, back in the 1940s.)

Time Travel (timepunk) This is a vast subgenre, whether or not its protagonist travels in space as well. In these stories, this capability is possible, and is put to use by the characters -- in secret or in public, easily or with great difficulty, and rarely or often. The effects of such temporal ventures vary in each portrayal. (With paradoxes, new timelines, historical immutability, etc.) Poul Anderson's novel *The Time Patrol* is a prestigeous example. Neal Asher's *Cowl* and Paul Levinson's *The Plot to Save Socrates* are novels which depict the extreme complexities implicit in time travel. As a spinoff of cyberpunk, timepunk is more outrageous.

Transhumanism is the philosophy which embues this subgenre. It depicts the possible transformations that humans beings may experience in the future, from helpful

improvements to total alterations. Bruce Sterlings's "Mechanist and Shaper" novels are a pioneering example.

Undersea SF takes place in such an environment, usually here on Earth. For this subgenre, Jules Verne's *20,000 Leagues Under the Sea* is a cornerstone. Several of Arthur C. Clarke's early novels fit this category.

Utopian (19th century visions*, ideological, New Age, etc.) This thought-provoking subgenre got its name from Thomas More's 1516 novel *Utopia*, though by modern standards that eponymous country has plenty of drawbacks, such as penal slavery. Edward Bellamy's 1888 novel *Looking Backward* is imaginative--and eerily prescient. Charlotte Perkins Gilman's 1915 novel *Herland* is a feminist classic, and depicts a remote, ideal society comprised entirely of women. In Ernest Callenbach's novel *Ecotopia*, the west coast has become in independant 'Green' paradise. Thea Alexander's novel *2150 AD* is a classic in New Age circles. (There are many other utopian novels in print, though for debatable reasons, modern SF is often more cynical and jaded.)

Voyages Extraordinaires* was a descriptive attached to the groundbreaking novels of Jules Verne, and then to several of his imitators (also French).

Wetware Computer SF is a narrow subgenre, featuring 'wetware' (living biological) technology, as opposed to 'hardware computer' devices. These stories depict the invention and/or the actions of an artifical thinking brain.

World-building stories are exhaustively researched, and feature unusual planets as a setting. Usually exotic aliens have evolved there, and humans can visit only with difficulty, if at all. Hal Clement's novel *Mission of Gravity*, and Robert Forward's novels *Rocheworld* and *Dragon's Egg* are extreme examples. Jack Vance's novel *Big Planet* is set on exactly that, though most unusually, without a huge amount of mass-thus-gravity.

World Government SF features a world (usually Earth) ruled by a unified government. In many stories it's a monarchy, and often a corrupt one; however there is plenty of variety. Robert A. Heinlein's novel *Starship Troopers* depicts a federation governed by military veterans. (It bears little resemblance to the movie version!) In the "Star Trek" franchise, contact with aliens prompts humanity to unite at long last.

Xenofiction is a subgenre that features cultures extremely different from our familiar ones. For example, Iain M. Bank's novel *Excession* features huge sentient spaceships. Ian McDonald's novel *The Broken Land* has disembodied human heads (supported by an advanced if undescribed technology) acting as willful characters. *The Star Trek* canon's Borg are another popular example.