When you study a genre, you look for the common features – conventions and tropes – that characterize it and distinguish it from other genres. Now, no one has quite defined the difference between conventions and tropes, but it seems to me that conventions deal with larger structural features of texts, such as openings and plot elements, while tropes are concrete details: particular characters, settings, themes, even objects you find appearing again and again in a given genre. If you've been studying the tropes of science fiction, for example: everything from robots, aliens, futuristic weapons that signal to the reader that he or she is dealing with a work of science fiction. What we do when we're analyzing a genre, then, is look for the conventions and tropes that comprise and identify that genre. Some things stay the same, but most things change in large or subtle ways over the course of a genre's history in accordance with historical and cultural changes.

For example, let's look at the name of this subgenre of science fiction. If I were to ask you what "apocalypse" means, you'd probably say something like, "mass destruction," "global catastrophe," "death on a huge scale." The fact that most people think that's what an "apocalypse" is reflects the culture in which we live. In fact, "apocalypse" is a Greek word meaning "unveiling" or "revelation," and the original Greek title of the last book of the Bible is "Apokalypse" or, as we know it, the Book of Revelation. In that book, the key point about the end of the world is that it will reveal God's plan and purpose for the universe; in our more secular and skeptical culture, the focus of apocalyptic literature tends to be on the end itself.

The Book of Revelation, written about 100 AD by St. John of Patmos, provided the science fiction writers who came much later with many of the tropes – images, figures, themes – that they would use in their works, and so it's important to look at the biblical tradition to see the source of our genre. On the other hand, Revelation wasn't the first apocalyptic text, either; there was a long tradition of prophetic and apocalyptic Jewish writings before it. The only Jewish apocalyptic text that made it into the Bible was the Book of Daniel, and if you want to have some fun get out your Bible and compare the images in Daniel to those in the Book of Revelation, where St. John uses them for Christian purposes. But it was Revelation that was the main model for later SF writers, who secularized the themes and images for their own purposes. The images in Revelation tend to involve polar opposites: light vs. darkness, sound vs. silence, angelic vs. demonic,
and so on. Also, there are strange beasts, and natural disasters like storms and earthquakes. In fact, the entire natural order gets turned on its head, as weird events overtake the Earth and celestial bodies. Fire rains down from the sky, an image that takes on a whole new meaning in our nuclear age. But it's all part of something very positive: the fulfillment of God's plan, ending in judgment and salvation – in other words, the end of the world as a good thing.

It would be beyond the scope of this essay to examine the whole history of apocalyptic writing through the ages, so I'll move forward to the early days of science fiction. In the wake of the scientific revolution and the Enlightenment, we see the secularization of apocalyptic images and themes, as the focus shifts to a possible end of the world but without any theological implications. In fact, during the 19th century there were two periods when writers explored apocalyptic themes, at the beginning and at the end of the century, and they did so in very different ways. During the Romantic period, writers sought to deal not with social, political, or philosophical concepts but with feelings: passion, ecstasy, fear, and melancholy. There was nothing quite so melancholy as contemplating the monuments of a dead civilization, and there was a real vogue during the early 19th century for stories and novels about, for example, the fall of ancient civilizations like Troy and Rome.

As part of that trend, there developed what we call 'Last Man literature': poems, stories, and novels about the last man on earth. Actually, you can see this sort of literature as the basis for post-apocalyptic or post-holocaust fiction, which we'll talk about a bit later. Two of the best-known examples of Last Man literature are Jean-Baptiste-Francois-Xavier Cousin de Grainville's Le dernier homme (1805), which started the trend, and Mary Shelley's The Last Man (1826). In Shelley's novel, a plague wipes out practically all of humanity, leaving one man to wander Europe, and eventually the world, seeking a companion and looking upon the decaying structures that remain. What is worth noting about Shelley's novel is that the end comes not because of some divine action, but because of purely natural events. Generally speaking, the Romantics replaced God with Nature as the object of their awe and even worship, and so natural disasters become the primary cause of the end.

Inspired by another poet, Thomas Campbell, Lord Byron wrote "Darkness" (1816), a poem in which he engages in a thought experiment: what would happen if the sun went out?

I had a dream, which was not all a dream,
The bright sun was extinguish'd, and the stars
Did wander darkling in the eternal space,
Rayless, and pathless; and the icy earth
Swung blind and blackening in the moonless air; (1-4)
The poem is a kind of anti-Genesis, as creation reverts to darkness and chaos; its language is full of negations, very unlike the redemptive and moral vision of the Book of Revelation.

[...] The world was void,
The populous, and the powerful was a lump,
Seasonless, herbless, treeless, manless, lifeless,
A lump of death – a chaos of hard clay. (Byron, "Darkness" 69-72)

On the other hand, Edgar Allan Poe offers a vision of the end that seems to be both a natural and redemptive event. In "The Conversation of Eiros and Charmion" (1839) two disembodied spirits in the afterlife discuss what has happened to the world. A comet heads toward Earth and appears to ignite the atmosphere, burning the planet to a cinder. The ending of the story, however, suggests that what is really happening is a kind of spiritual and perceptual rebirth.

For a moment there was a wild lurid light alone, visiting and penetrating all things. Then let us bow down, Charmion, before the excessive majesty of the great God! – then, there came a shouting and pervading sound, as if from the mouth itself of HIM; while the whole incumbent mass of ether in which we existed, burst at once into a species of intense flame, for whose surpassing brilliancy and all-fervid heat even the angels in the high Heaven of pure knowledge have no name. Thus ended all. (363)

As we move to the end of the 19th and the beginning of the 20th centuries, we see the marked influence of developments in science, above all evolutionary theory and the idea of entropy. The end of the world is, more than ever, a purely natural phenomenon, one without any purpose or meaning, and involves such ideas as the heat death of the universe and the triumph of darkness over life. Perhaps the best example is H. G. Wells's *The Time Machine* (1895); at the end of his journey to the future, the Time Traveller visits the Earth millions of years from now, when – as in Byron's poem – the end means darkness and the void.

The darkness grew apace; a cold wind began to blow in freshening gusts from the east, and the showering white flakes in the air increased in number. From the edge of the sea came a ripple and whisper. Beyond these lifeless sounds the world was silent. Silent? It would be hard to convey the stillness of it. All the sounds of man, the bleating of sheep, the cries of birds, the hum of insects, the stir that makes the background of our lives – all that was over. As the darkness thickened, the eddying flakes grew more abundant, dancing before my eyes; and the cold of the air more intense. At last, one by one, swiftly, one after the other, the white peaks of the distant hills vanished into blackness. The breeze rose to a moaning wind. I saw the black central shadow of the eclipse sweeping towards me. In another moment the pale stars alone were visible. All else was rayless obscurity. The sky was absolutely black. (85)

In Wells's short story, "The Star" (1897), disaster falls from the sky in the form of a giant celestial body; in M. P. Shiel's *The Purple Cloud* (1901), a volcano erupts
spewing poison gas over the entire planet. Shiel's novel offers a 20th-century version of Last Man literature, as Adam Jefferson, the lone survivor, wanders the Earth gazing at our human and urban remains, and nihilistically burns everything he finds. In Garrett P. Serviss's *The Second Deluge* (1913), Earth passes through a watery nebula and is entirely flooded.

On the other hand, as we move into the 20th century we find relatively fewer visions of natural disasters – although these do continue – and a growing sense that we ourselves will be the cause of our world's demise. What we see is the revival (if it ever disappeared!) of the Frankenstein syndrome: the idea that our own scientific and technological creations will destroy us. A fine early example is E. M. Forster's story, "The Machine Stops" (1909), which may well be the earliest depiction ever of a network of communication similar to the internet. Centuries from now, most humans live underground in tiny cubicles and depend entirely on the Machine for everything; when it begins to break down, they simply cannot cope. In Ward Moore's *Greener Than You Think* (1947), a scientist develops a breed of grass designed to solve our food shortage, but it grows out of control and swallows everything.

It is war technology, however, that proves humanity's most frequent undoing. World War I demonstrated our capacity to create death on a mass scale, and I often cite the machine gun as the ultimate example of destructive technology during that period: it was a machine whose sole function was to kill people in large numbers in an efficient manner. Gas and germ warfare slaughter millions in French author Victor Meric's *La Der des Der* (1930), whose title means "the war to end all wars"; here, however, all that can end war is the end of humanity. The novel is full of apocalyptic images of darkness, fire, and the perversion of the natural world, but once again these tropes convey a sense of mindless destruction rather than any hint of redemption.

Then came the atomic bomb at the end of World War II, the ultimate example of the Frankenstein syndrome. The United States dropped atomic bombs on the Japanese cities of Hiroshima and Nagasaki, inaugurating the nuclear age. Suddenly, we became capable of destroying not just ourselves as individuals, but also as a species – and the globe along with us. Science fiction expresses our hopes and our fears, and after World War II our greatest fear was annihilation in a future war that would in all likelihood be a nuclear war.

We can divide 20th-century apocalyptic science fiction into two subgenres: apocalyptic SF portraying the destruction of the world, most commonly through nuclear weapons, and post-holocaust SF, portraying the world shortly or, quite often, long after a nuclear war has wiped out most of humanity. There are surprisingly few novels and short stories about the war itself, maybe (as some have claimed) because the idea is so horrific it's literally unspeakable. Still, we do see
some works about nuclear war as it happens; some of them are fairly pessimistic that anyone will remain, while others are a bit more optimistic that the smart ones, at least, will survive. Nevil Shute's *On the Beach* (1957) portrays people in Australia awaiting the inevitable and inexorable cloud of radioactive fallout that is making its way to the southern hemisphere. Mordecai Roshwald's *Level 7* (1959) portrays the military personnel living deep underground who are physically and emotionally cut off from the nuclear holocaust they inflict on the surface dwellers. Pat Frank's *Alas Babylon* (1959) suggests that those who are prepared to adapt to the primitive way of life imposed by the war do have a chance of making it.

Most of these works portray the effects on entire communities and even nations of a nuclear war, and it is not a coincidence that they are written by men. There appears to be a distinct difference in the way that male and female authors approach the theme, especially during the period immediately following the bombing of Hiroshima and Nagasaki. For women writers, the focus was on individual families, and especially the wives and mothers who have to cope with the effects of nuclear war on their families while lacking the social or political power to prevent what's happening. We see nuclear war from the woman's point of view in such novels as Judith Merril's *Shadow on the Hearth* (1950); another view is Helen Clarkson's *The Last Day* (1959). On family life just after the nuclear holocaust, we have Carol Emshwiller's "Day at the Beach" (1959), in which a mother tries to have a conventional family outing in the face of the horrors of a mostly destroyed world, and despite the fact her son is a mutant.

The list of stories and novels about a nuclear World War III is vast, and this essay does not provide room to name them all, let alone discuss them. But it is notable that some of the same apocalyptic tropes I have discussed earlier appear frequently in them, especially images of fire, darkness, and bright light that represents danger rather than the presence of something divine. Also noteworthy is the contrast authors set up between the deafening noise of the bombing and the deadly silence that follows. For recent writers, the apocalypse is accompanied not by the voice of God but a silence that suggests either absence or indifference.

Nuclear war isn't always portrayed as itself; sometimes, it appears in other guises. For example, in Kurt Vonnegut, Jr.'s *Cat's Cradle* (1963), a nuclear scientist develops a form of ice – Ice-Nine – that forms at room temperature. What that means is that anything that comes into contact with it will instantly freeze, and thereby set off a deadly chain reaction. All that's needed to start a global disaster is some very irresponsible people, and as we've seen, humans in these works are very good at being thoroughly irresponsible. The strain of grass in *Greener Than You Think* and Ice-Nine are fine apocalyptic concepts in their own right, but are also clearly metaphors for the Bomb.
Nuclear holocaust has also been the subject of some excellent satire, as both novelists and film directors have sought to shake us out of our complacency about nuclear weapons by satirizing the whole notion of a nuclear defense. Perhaps the best example is Stanley Kubrick's film, *Dr. Strangelove, or How I Learned to Stop Worrying and Love the Bomb* (UK 1963), which skewers the notion that a doomsday bomb will somehow deter us from launching a suicidal war. More recently, James Morrow, in his novel *This Is the Way the World Ends* (1986), satirizes the renewal of nuclear brinksmanship during the Reagan administration; at that time, the American government spoke of 'winnable' nuclear war and a defense shield against nuclear attack that was aptly nicknamed 'Star Wars', after the not very plausible series of space opera movies.

The other subgenre of apocalyptic science fiction that emerged during the 20th century, but that had its roots in the 19th century Last Man works, is post-holocaust or post-apocalyptic fiction. I prefer the term post-holocaust, since the modern definition of apocalyptic seems to suggest no survivors of the event. Post-holocaust fiction portrays the world shortly or long after some major catastrophe, usually but not always a nuclear war. This subgenre has its own set of common tropes, reflecting our pessimism about how rational and civilized we are. Civilization is seen as a very fragile structure, a thin façade covering up our fundamentally brutal nature, and it wouldn't take much to strip away that façade and leave us exposed as fairly savage creatures.

So, the first major trope of post-holocaust fiction is that the catastrophe throws us back into an earlier, more primitive way of life. In other words, we experience devolution, reverting to a tribal existence with perhaps a few outposts of civilization. We find that as early as Jack London's *The Scarlet Plague* (1912); after a world-wide plague has destroyed civilization, humans devolve into tribalism and brutality. It's difficult to know what exactly transpired years before Stephen Vincent Benét's "By the Waters of Babylon" (1937) is set, but it seems to have been a war involving some sort of weapons of mass destruction, an event known as the Great Burning. Young John is a member of the Hill People and child of the priest; as an initiation rite, he travels to the city of the Gods, which, it turns out, is a ruined New York City. He learns that the Gods were in fact technologically superior men who "ate knowledge too fast." At the end of the story, it seems that John will strive to regain knowledge, and dole it out more slowly and carefully to his people.

That raises another important trope of post-holocaust fiction: the portrayal of knowledge as sacred or demonic. Frequently in such works, knowledge is seen as either something precious to be preserved and regained, or as the cause of the catastrophe and therefore something to be avoided and suppressed at all costs. That is certainly the attitude of the community in Leigh Brackett's *The Long
Tomorrow (1955), which is set many years after a nuclear war. Len Coulter is a boy who belongs to a Mennonite community that punishes anyone who tries to advance scientific and technological knowledge, a restriction he strongly resists. He soon learns that there is indeed a bastion of ancient knowledge, and must wrestle with some weighty moral questions as to whether he should participate in nuclear research or not. Works like Brackett's suggest that our thirst for knowledge is very human, utterly irresistible, and a major cause of our downfall.

I can mention a few other key tropes of this subgenre. One is a cyclical view of time, as authors ask whether we are doomed to repeat our earlier mistakes if we regain lost and dangerous knowledge. Also, there are often two characters representing the opposing sides in the debate over whether people should reestablish the old ways or learn new ones. As we have seen with Benét's story, the past is mythologized; since historical and scientific knowledge have been lost, our descendants know little about us, and we become mythological beings to them. And, lastly, when collecting all the usual tropes of post-holocaust fiction, the list would not be complete without some cannibal mutants running around.

What may be the best illustration of these tropes, and what is unquestionably one of the greatest science fiction novels ever, is Walter M. Miller, Jr.'s A Canticle for Leibowitz (1959). The novel is divided into three parts, separated by hundreds of years, and each deals with the question of our moral responsibility for our own knowledge and creations. The focus of the novel is the monastery devoted to St. Leibowitz; the monks know little about our world, and don't realize they are praying to a Jewish nuclear scientist. They comically misunderstand the "holy" documents they find, including a fairly banal shopping list, and keep and copy books that mean little to them. The world around the monastery is primitive and brutal, inhabited in some places by – of course – cannibal mutants. In Part Two, Thon Taddeo is a scientist who wants to revive lost forms of technology, and debates with Dom Paulo, the monastery's abbot, over who should possess and be allowed to use knowledge. By Part Three, humanity has learned once again how to build nuclear weapons, and seems determined to use them. Miller seems to be suggesting that humans are fundamentally flawed creatures, and if there is any salvation it won't come from ourselves; we need the intervention of a higher power.

Another impressive achievement is Russell Hoban's Riddley Walker (1980). Also set many years after a nuclear war, the novel portrays a young man's initiation into knowledge and the need to make moral choices. The novel is narrated by Riddley in future English; words and place names from our time have changed, and some of the things we take for granted have become myths and legends. Hoban's text is full of puns that are sometimes playful but often satirical, and no summary can do justice to the work as a whole. It is not an easy read, but a very
rewarding one, and highly recommended for those seeking to understand what post-holocaust fiction can be.

These apocalyptic visions are largely, but not exclusively, about the power of atomic weapons. With the collapse of the Soviet Union and the rise of genetic engineering, our fear of nuclear war has waned and our fear of the things we might produce in the lab has increased. Since science fiction dramatizes our fears as well as our hopes, many works, especially those published recently, deal with biological apocalypses. A great example is Greg Bear's *Blood Music* (1985), in which a scientist injects himself with some nano-machines he has developed; the changes they make in his body are frightening, yet by the end you can't help wondering if he and the rest of us have only found a new way of being. Peter Watts's *Rifter* series (starting with *Starfish* from 1999), however, is unquestionably a negative vision of what can happen when we release things that should have remained where they are. In addition, Hollywood has offered a number of films of the bug-that-escaped-the-lab variety, from *Outbreak* (US 1995, Dir. Wolfgang Petersen) to *28 Days Later* (UK 2002, Dir. Danny Boyle), although the number of victims varies.

Humanity had to face numerous other disasters over the years: alien invasions, such as in John Wyndham's *Day of the Triffids* (1951), overpopulation in John Brunner's *Stand on Zanzibar* (1968), and pollution in Brunner's *The Sheep Look Up* (1972), and so on. Each disaster forces the novel's characters to make moral choices, but when the looming catastrophe is not extraterrestrial in origin, humanity as a whole is ultimately responsible for what happens to ourselves and the world.

In this article, I have been examining science fictional works that portray the apocalypse in fairly materialist and concrete ways. In other words, these texts treat the apocalypse as a physical event. On the other hand, 20th-century novels and stories portraying nuclear holocausts hearken back to the biblical roots we began with, in the sense that they once more bring a moral vision to depictions of the end-times. St. John, the author of Revelation wrote about the end of the world as part of God's plan, and therefore a moral act; science fiction writers portray the end of the world as an immoral act by human beings. These authors are every bit as much interested in moral questions, but approach them from a different angle. Their focus is not on God's plan but on our own choices. In fact, more than ever before we now have the power to play God, but as SF has shown over the past couple of centuries, from the time of Mary Shelley's *Frankenstein*, we make terrible gods.

But not all apocalyptic science fiction is so straightforward in the way it handles visions of the end. Sometimes, the apparent apocalypse is more symbolic or even personal than one might assume. Some authors have used apocalyptic tropes to engage in the same sort of spiritual and philosophical speculations that St. John
engaged in. J. G. Ballard, the British surrealist author, wrote a number of novels portraying supposedly natural disasters that are actually symbolic journeys into the self. *The Wind from Nowhere* (1962), *The Drowned World* (1962), *The Burning World/The Drought* (1964), and *The Crystal World* (1966) depict the Earth being engulfed by various natural forces – including global warming in *The Drowned World* – but the real subject of each is the main character's compulsive journey through a primitive landscape representing his inner being. The apocalypse is presented as a physical event, but with psychological and spiritual meaning.

One novel can perhaps be classified as a conceptual apocalypse – in other words, "the end of the world as we know it": Ursula K. Le Guin's *The Lathe of Heaven* (1971). The main character is a man named George Orr who engages in something he calls "effective dreaming": what he dreams comes true, even if it means the world completely changes. Only he is aware of the change – to everybody else, the world has always been this way. He sees a psycho-analyst, Dr. Haber, who has developed a dream-manipulation device. With the best of intentions, Dr. Haber decides to use Orr's dreams in order to make the world a better place, but like all Victor Frankensteins before him, he only ends up creating more problems. We can see the novel as apocalyptic to the extent that the world is destroyed each night, only to be reborn in an entirely different form the next day. The novel becomes a struggle between the passive but wise George and the aggressive but spiritually empty Dr. Haber, with the entire universe in the balance. Le Guin examines the extent to which we can and should change the world, and the degree to which utopian dreams represent a real effort to improve things or just an expression of our pride and egos. Canadian author Robert Charles Wilson's *The Harvest* (1992) presents a very different kind of 'apocalypse.' Aliens come to Earth with an entirely benign offer: humans may, if they wish, become immortal and join the aliens in exploring the galaxy – it is entirely a matter of choice. For some characters, however, mortality is in part how they define their humanity, and surrendering it would entail losing a fundamental feature of their identities. Humanity, therefore, is not so much physically destroyed as changed beyond recognition; it is the end of our species as we know it. So what we have here are works that use the tropes of science fiction in order to portray something that is not entirely physical but is more spiritual and more meaningful in a very personal way.

We might also mention here a short story by Arthur C. Clarke called, "The Nine Billion Names of God" (1953). In this story, a couple of scientists hired by a Buddhist monastery to discover all of the nine billion names of God. A computer can do it in minutes as opposed to the monks working for centuries on this problem. As the computer does its work, one scientist tells another that he has
learned something disturbing: "they believe that when they have listed all His names – and they reckon that there are about nine billion of them – God's purpose will be achieved. The human race will have finished what it was created to do, and there won't be any point in carrying on" (429). As soon as the computer establishes the possible names of God, the universe begins to experience a kind of entropy. The story includes what is perhaps the most famous ending line in all of science fiction. I won't spoil it for you, but the story seems to bring us back full circle; like its religious counterpart, science fictional apocalyptic literature sometimes suggests that the end of the world can be a good thing.

What we've seen, then, throughout these texts is that the apocalypse as envisioned by writers from ancient times and in science fiction changes over the years as cultural changes take place. Our visions of the end change as our visions of our own selves change. And so we see that a genre has a development, has its own history, in accordance with the history around it. Regardless of whether the science fiction or indeed non-science fiction work portrays the end of the world coming through divine action, through a natural event, or through our own stupidity, apocalyptic science fiction and apocalyptic writing generally puts the onus on us as human beings as to how we are going to respond to the apocalypse or indeed whether we can prevent the holocaust from coming in the first place.

**Works Cited**


Apocalyptic Science Fiction books at E-Books Directory: files with free access on the Internet. These books are made freely available by their respective authors and publishers. E-books in Apocalyptic Science Fiction category: 2120 Titus by Razor Blade - Smashwords, 2018 A 17 km wide asteroid named 2120 Titus is heading towards a collision with Earth. Apocalyptic science fiction is a sub-genre of science fiction that is concerned with the end of civilization, through nuclear war, plague, or some other general disaster. Post-apocalyptic science fiction is set in a world or civilization after such a disaster. The time frame may be immediately after the catastrophe, focusing on the travails or psychology of survivors, or considerably later, often including the theme that the existence of pre-catastrophe civilization has been forgotten or mythologized.