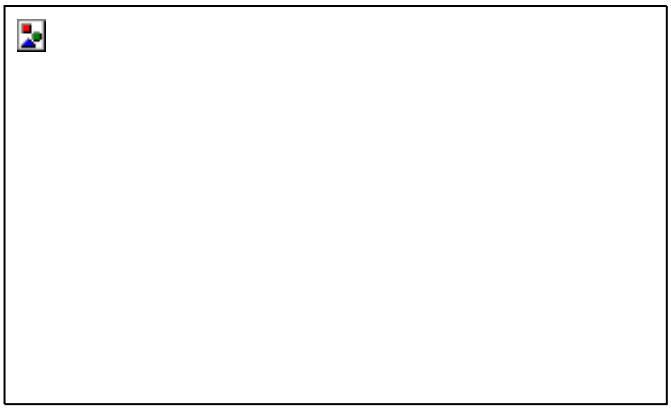


8 MAY 2008

THE FORK:
SCIENCE FICTION VERSUS MUNDANE CULTURE

NEAL STEPHENSON

When the Gresham Professors Michael Mainelli and Tim Connell did me the honour of inviting me to this Symposium, I cautioned them that I would have to attend as a sort of Idiot Savant: an idiot because I am not a scholar or even a particularly accomplished reader of SF, and a Savant because I get paid to write it. So if this were a lecture, the purpose of which is to impart erudition, I would have to decline. Instead though, it is a seminar, which feels more like a conversation, and all I suppose I need to do is to get people talking, which is almost easier for an idiot than for a Savant.

I am going to come back to this Idiot Savant theme in part three of this four-part, forty minute talk, when I speak about the distinction between vegging out and geeking out, two quintessentially modern ways of spending ones time.

1. The Standard Model

If you don't run with this crowd, you might assume that when I say 'SF', I am using an abbreviation of 'Science Fiction', but here, it means Speculative Fiction. The coinage is a way to cope with the problem that Science Fiction is mysteriously and inextricably joined with the seemingly unrelated literature of Fantasy. Many who are fond of one are fond of the other, to the point where they perceive them as the same thing, in spite of the fact that they seem quite different to non-fans.

I also use SF to denote a third thing, which I will call the new wave of historical fiction, which is heavily influenced by SF and clearly aimed at SF fans. To get a quick fix on what this means, consider the recent movie '300', and compare it to its predecessor, a 1962 film called 'The 300 Spartans' starring Richard Egan. Both take as their subject the Battle of Thermopylae, but '300' is quite obviously informed by graphic novels, video games and Asian martial arts film, and therefore, in my opinion, belongs to the SF world, even though it is technically a historical drama. I also need another term to denote things that are not SF, such as 'The 300 Spartans'. Conventionally, one would call this a mainstream, as opposed to a genre film, but the entire thrust of my talk is going to be that it no longer makes sense to speak of a mainstream and some number of genres, so I am going to borrow another term that is used in the SF world to denote all that is not SF and call it 'Mundane'.

I first happened upon this when I saw a mass mailing that was sent out to a number of SF fans who were attending a convention being held in a high-rise hotel in a major city. The document contained a polite request that attendees not brandish swords, battleaxes or other medieval weaponry in elevators and other common spaces of the hotel as some of the other guests were, after all, 'mundanes' who might not understand.

What I am going to call the standard model of our culture states that there is a mainstream and, peripheral to it and inferior in intellectual content, moral stature, production values and economic importance, are some number of genres.

Here, we could get lost in the weeds, trying to enumerate and differentiate between different genres and sub-genres, such as post-cyber-punk. So, to keep things moving, I am going to restrict my comments to four - SF, Romance, Westerns and Crime/Mystery.

Now, I think that the standard model was reasonably accurate perhaps fifty years ago, but I put it to you that if an alien culture sent a xenoethnologist to Earth today with the mission 'observe their culture and submit a report', the xenoethnologist would not perceive or describe anything like the standard model.

First of all, the genre known as the Western no longer exists. Before people send me e-mails, I will happily stipulate that Western movies are still made. I saw the recent remake of '3:10 to Yuma' and enjoyed it, and Western books can still be found in bookstores, but it has been a long time since one could walk into an average, or even an extraordinarily large, bookstore and find a separate shelf labelled 'Westerns' and that is a change from how things were when I was a child. Similarly, when I was a child, many prime-time television series were Westerns; now, none are. Fifty years ago, unless you lived in a very small town indeed, you could probably go to the cinema and see a Western on any given weekend; now, when Western films are made, they are always remarkable or exceptional in some way, and not the routine produce of a genre.

Romance and Mystery most certainly do have their own sections in bookstores and probably will for a long time. So our xenoethnologist might perceive them as genres, provided that all he or she looked at was bookstores. Outside of bookstores, though, something interesting has happened, and I am going to sum it up by saying that it is something like Romance fused with the film industry and Crime fused with the television industry. Not all movies are romances of course, and so if you count the number of films produced, my assertion is very debatable, but if you weight the count by the number of tickets sold or the amount of money that financiers are willing to invest in the production, marketing and distribution of films, I think you will see that almost any prospective film project that does not contain a romance as a major, if not the major, line of its plot is unlikely to find support.

Again, before the e-mails roll in, I will stipulate that there are exceptions. I have already mentioned one: the recent remake of '3:10 to Yuma', starring Russell Crowe and Christian Bale. There are a couple of women in it, but romantic relationships certainly are not a major element of the plot, unless you count the strange kind of seduction that goes on between the two main male characters. What the movie does offer though are hunks riding around and looking good.

Compare the movie stars of fifty years ago with those of today: on average, the ones we have today are better looking. Of course there are exceptions, but the bar has been set much higher than it used to be, and I think that it is all a reflection of the way romance and the romantic sensibility has become. It has stopped being confined to a particular genre and has become an intrinsic part of the modern industrial movie making business. If you would like to know, I think it all started with 'Gone with the Wind', which proved that a story that came out of the romance genre could become enormously successful with sufficiently attractive and charismatic actors. Put simply: romance and violence are two things that easily cross borders and jump language barriers. You can make a lot of money on films that consist entirely of action, but there are only so many young males in the world. Romance appeals to more people. Romance is versatile. All by itself, it is enough to make a successful movie. Added to a screenplay, it works like monosodium glutamate in food, which is to say it does not matter whether the underlying material is poor or excellent to begin with, adding some of this wonder ingredient always makes it better.

What Romance became to the film industry, Mystery/Crime became to the television industry. They are made for each other. A television series needs to tell a fresh story each episode. Romance is not a good fit. You cannot have your lead character fall in love with a different person each week. Westerns worked okay for a while, but eventually, the writers ran out of things that could possibly happen on ranches and began to mix things up with ideas like the 'Wild Wild West'. By comparison, TV shows about detectives have it easy. I will not try your patience by reciting particulars. There has never been a time during my life when there were not several different, very popular crime and mystery series on prime-time television.

Thus Westerns have become too few and far between to constitute a genre, while Romance and Crime have become too ubiquitous to be considered as genres.

2. What are we to think of SF?

Unlike Westerns, SF has grown rather than withered. Unlike Romance and Mystery, it has maintained its separateness rather than becoming a part of the mainstream. Why not then speak of SF as the genre that survived? Because genre connotes features that simply would not be perceived by our xenoethnologist, who would, presumably, gather data and go about the work scientifically.

In movies, SF dominates utterly: by my count SF films count for 57 of the top 100 movies of all time, and nine of the top ten. The only top ten film that is not SF is 'Titanic', made by a director who cut his teeth making SF films.

In television, SF is not nearly as important, though obviously there have been any number of quite successful and more or less famous SF television series.

In books, things are much more diffuse and complicated, and the statistics are difficult to process because of the maddening way in which publishers chop books up into genres. Harry Potter is obviously SF. If you want to know how the latest Harry Potter book is making out in my country, go to the New York Times website, find the page where all of the bestseller lists are listed, and follow the link to 'Children's' and there you will find separate lists for 'Picture Books', 'Chapter Books', 'Paperback' and 'Series' books. Harry Potter is on the latter, and I think he was moved there just because people got sick of seeing his name on the main bestseller list month after month and year after year. Many other books are arguably SF, but not published as such. Whatever you may think of 'The Da Vinci Code', you have to admit that its premises are somewhat fantastic and hence SF-like.

My colleague, Bruce Sterling, has defined a thriller as 'a science fiction novel that includes the President of the United States'. If you agree with Bruce's definition, the size of the SF market suddenly becomes very much larger.

Finally, in graphic novels and video games, SF is of course dominant.

So rather than trying to salvage anything from the standard model, I believe that it makes more sense to speak of a bifurcated culture. Of course the bifurcation is not absolute or perfectly clean, but it is clear that there are two distinct audience groups and that they have different characteristics: one carries swords in elevators and the other does not. That probably sounds merely flippant, but consider the following anecdote.

I was in New York City a few weeks ago and I went out for dinner with friends. Thanks to their hospitality, we dined in a highly civilised, but by no means flashy or famous, Italian restaurant just off of Midtown, where the office buildings begin to give way to townhouses. One of the pleasures of dining in such places is that you get real professional waiters, not just kids trying to make a few bucks or out-of-work actors, but middle-aged people who have done it before, who take it seriously as their life's work and who do it with dignity and grace. Our waiter was one of those, probably in his late-forties, impeccably dressed, knew how to show up when we needed something and to disappear otherwise.

I was telling my companions about a trip I had recently made to Vegas, which is not normally my idea of a place to go but the Sci-Fi Channel had flown me down there to take part in a panel discussion. One of the other panellists was Lucy Lawless. Now, if you are not an SF kind of person, then I will probably have to tell you that she is an actor best known for her title role on the television series 'Xena: Warrior Princess' and, more recently, appearing on 'Battlestar Galactica'. If you are an SF person, you will already know this and much more about her.

As it turned out, our waiter that evening, contrary to appearances, was very much an SF person, and as soon as he heard me mention the name of Lucy Lawless, he spun around to face us and came over to join the conversation. Now remember that this man hears the names of the rich and famous dropped all the time, indeed, he probably serves the rich and famous all the time. It is his job to pretend he does not notice, and he does his job very well, in the mundane world, but as soon as he heard me mention Lucy Lawless, the mundane shell dropped away and he turned into a fan. Not quite the same as carrying a sword in an elevator, but very closely related.

Both this waiter and the elevator sword people are displaying a trait that is epitomised, for better or worse, by the cruel

mundane stereotype of SF fans wearing rubber Vulcan ears. In a sense, all SF fans are forever carrying those rubber ears around, concealed in the pockets of our business suits, military uniforms, waiters' jackets, or doctors' smocks. No one knows they are there, but when we find ourselves around like-minded persons, even if they happen to be total strangers, we absentmindedly reach into our pockets, pull out the ears, and slap them on. We identify ourselves as geeks - we geek-out.

Lucy Lawless is one example of an actor with a bifurcated career - a topic I would like to explore for a few minutes. It might sound to you like a trivia game, but I think it works as a kind of natural experiment that gives us information about the bifurcated culture.

I first noticed this when I was watching the first 'Lord of the Rings' movie and the character of Elrond made his first appearance. He looked strangely familiar to me and I looked him up on IMDB afterwards and figured out that he was, of course, the same man who portrays Agent Smith in the 'Matrix' movies. His name is Hugo Weaving. In the mundane world, he has a perfectly respectable career going. It is difficult to make a living as an actor: one has to be very good, work very hard and also somewhat lucky to make a go of it. Hugo Weaving has done this and has appeared in various mundane plays and films. If he had never done any SF work at all, he would have a career that other actors would envy. It is likely, however, that none of us would have seen him or heard of him because, in the mundane world, he is not a huge star. In the SF world, he is one of the biggest stars of all time. Why the difference? What is it about him that accounts for this imbalance?

Once I noticed this phenomenon, other examples came to mind. I have already mentioned Lucy Lawless, and it is by no means a historical curiosity, because there are insipient bifurcated stars. 'The Sarah Connor Chronicles', a new TV series based on the 'Terminator' movies, features two: Lena Headey, who looked familiar to me because I had previously seen her in '300' as the unfortunately named Gorgo, Queen of Sparta; and Summer Glau, who played one of the characters on the SF series 'Firefly'.

Sigourney Weaver has had a bifurcated career. Again, this is not to say that she did not do perfectly well for herself in mundane films and theatrical productions. In 'Alien' and 'Aliens' though, she attained a level of fame that far exceeded her mundane work, and I do not think she would mind my saying so because she took a role in the film 'Galaxy Quest' that made light of exactly this kind of situation.

Is there any common thread linking the actresses I have mentioned? Lucy Lawless, Lena Headey, and Sigourney Weaver are all athletic, statuesque and good at doing action stuff. The cynical interpretation then is that male SF fans like to ogle Amazons. A more generous take on it is that SF is more forgiving towards strong women. I suspect that both of these are true, but they are not enough to explain the bifurcated career phenomenon.

Of course, 'Galaxy Quest' was transparently based on 'Star Trek', which brings to mind the archetypal bifurcated actor, Leonard Nimoy, who attained such perfection in his portrayal of Spock that it led to two unintended consequences: the one that everyone knows about is that he afterwards found it difficult to get non-Vulcan work; the less obvious one is that never again in the ongoing history of the franchise were the producers of any of those films or television episodes able to find an actor who could convincingly play a Vulcan.

Just as an exercise, I spent a while trying to think whether there was any actor, living or dead, who could possibly portray a Vulcan as convincingly as Leonard Nimoy. I assumed that this experiment would end in failure, but surprisingly, the answer came to me immediately: Hugo Weaving. He would make a totally convincing Vulcan, and it is not just because we have already seen him with pointy ears - it is something else. I think that it is the ability to portray intelligence. When I first saw Weaving as Elrond, I didn't think I was going to like him because he looked very different from how I had imagined this character when I read 'The Lord of the Rings', but I ended up liking his performance very much. He was able to convince me that he really was a 3,000 year old elf lord. Part of this is simply that he is a professional actor who is good at what he does, but I am convinced that it also has something to do with the ability to project intelligence.

Consider some of the other characters in the Star Trek franchise. Out of the entire cast of 'Star Trek: The Next Generation', I would say that the two most beloved, successful characters, at least to fans in the SF world, are Commander Data, portrayed by Brent Spiner, and Jean-Luc Picard, played by Patrick Stewart. These are very different characters, but what they have in common is that they are intelligent people portrayed convincingly by actors who are either very intelligent or else good at seeming that way. Some other characters in this series did not ring true for SF fans in the same way.

Going back to the female actors I was talking about earlier, I believe that the same is true. It certainly helps that they are statuesque, beautiful and athletic, but there is more to it than that. It is conspicuous in the first two 'Alien' films, Sigourney Weaver's character is the smartest person in the room at any given time. The only possible exception is Bishop, the android in the second film, played by Lance Henriksen, in another fine example of an intelligence-projecting performance. One believes in this character in the same way that one believes in Nimoy as Spock or that I at least believe in Weaving's Elrond. All of these actors can somehow convey that there is complexity behind the eyes. The intelligence of these characters is not just a slapped on trait. These are not token nerds thrown into an ensemble piece to solve technical problems. Their intelligence is an intrinsic reason why you are supposed to find them interesting, to identify with them. It is what makes them human, even, especially when they are not actually humans. If the actor cannot portray that intelligence, the character fails altogether. This is why I have devoted a bit of time to what might strike some as a fairly low-brow, pop culture analysis, because I think that the bifurcated career phenomenon can tell us something about what differentiates SF from mundane culture.

3. Vegging out and geeking out

The cheap and, since I am an SF person, self-congratulatory answer is that SF is for intelligent people. However, saying that, even supposing it were true, does not actually get us very far, since there are so many different kinds and different definitions of intelligence. And so here is where this talk has to pick its way along the spine of a narrow ridge, if you will, with fatal drop-offs to either side. If I stray in one direction, I end up talking endlessly about intelligence or intelligences and what they mean, and end up defining it out of existence. If I go the other way, I run afoul of invidious class distinctions, since intelligence is still linked in many people's minds with expensive educations and high status jobs. Neither explains SF very well. If the first were true, everyone would be an SF fan. Clearly, that is not the case. If the second were true, the only people who liked SF would be those with PhDs, and though that is slightly closer to the truth, it is still not very close. No doubt there is a sort of vague correlation between having higher education and being an SF fan, but there are so many exceptions, so many PhDs who cannot abide SF, and so many waiters and welders who live for it, that it does not serve well as a model.

The correct way to think about intelligence in this case is as a human quality shared by just about everyone, at least until it gets beaten out of us, not a special gift that is bestowed only on a few; and secondly, that it is a functional trait that most people find some way of using in their careers or whatever it is that they spend their days doing. Sometimes this trait is put to use doing theoretical physics, but much more often, it is used in raising children or building houses or operating farm machinery.

Counter-examples are legion. We have all suffered through movies that were ruined by characters doing stupid things. The classic example is in suspense movies when someone, usually a pretty girl, is running away from a monster or a serial killer when she happens to trip and fall down, whereupon, instead of simply getting back to her feet and running some more, she sits on the ground whimpering until the threat catches up with her. We have all seen bad horror movies in which the protagonists blunder into situations that no one who has ever actually watched a bad horror movie would ever get into. The satisfaction and the solace offered by good SF is that its characters do not behave that way.

Consider how Ripley, the character played by Sigourney Weaver, responds to the threat posed by the aliens. In the second film, once she and the marine she is with have made first contact with the aliens and had a chance to catch their breath, they very quickly agree that they should simply go back to the orbiting ship and nuke the place. It is a brilliant move on the part of the film makers, precisely because it is the obvious and intelligent thing to do. It is exactly what we in the audience are all thinking to ourselves, but because it is a kind of horror movie and we have been conditioned to expect stupid behaviour from characters in horror movies, it is the last thing we are expecting. When the idea is raised and agreed on, we wake up, sit a little straighter in our chairs, and say, 'Oh, this is a movie about real people,' which is to say people who behave intelligently, and for the rest of the film, that promise is largely borne out as Ripley goes on to do a number of more or less intelligent things, such as using a cigarette lighter to set off a fire alarm when she needs to draw the other's attention and so on.

So in SF, intelligence is just how people behave and it is what you expect in a well-wrought piece, but by this definition, intelligence is something that has undergone some changes during the last fifty years or so. The Heinleinian Hero, who knows everything and who can do everything is gone. The world is complicated. No one can be good at everything. I bought a new car a couple of weeks ago, and I still haven't read more than a few pages of the 1.5 inch thick pile of instruction books that came with it. It, like everything else in our lives, has too many features, too many details for our minds to hold. The best we can do is to be good at some one thing or a few things. We come home tired, and we feel the need to 'veg out' - a recent coinage meaning to drop voluntarily into a kind of vegetative coma, typically in front of the

TV.

I should know. In my family, I am infamous for my low-brow tastes in entertainment, my sluggishness to attend art films and theatrical productions. It is actually a miracle that Gresham College was able to get me over here right in the middle of the NBA playoffs.

But many people, after they have vegged out long enough to recharge their batteries, derive fun and profound satisfaction from geeking out on whatever topic is of particular interest to them. Choose any person in the world at random, no matter how non-geeky they might seem, talk to them long enough and in most cases you will eventually hit on some topic about which they are exorbitantly knowledgeable, and, if you express interest, on which they are willing to talk enthusiastically for hours. You have found their inner geek. Sometimes the inner geek may be hidden very deeply indeed. The gristled, taciturn machinist who normally speaks in sentences of one or two words will light up and deliver an extemporaneous dissertation about his favourite alloys of steel and how they are made. The forklift operator at Wal-Mart will turn out to be a Civil War re-enactor, who can recite the full history of the Battle of Shiloh, down to the level of individual squads and soldiers. This is how knowledge works today, and it is how it is going to work in the future: no more Heinleinian polymaths; instead, a web of geeks, each of whom knows a lot about something. Twenty years ago, we called them nerds and we despised them. We didn't like the power that they seemed to have over the rest of us, and we identified them as something different from normal society. Now we call them geeks and we like them just fine because they are us. Nerds were limited to math and science and computers. Geeks also do those kinds of things, which is not saying much because everyone works with computers all the time now, but geeks can also be experts on welding or Civil War battles or fine cabinet making. Everyone gets now that this is how society is going to work, and as long as geeks bathe frequently enough and don't commit the faux pas of geeking out at the wrong time, in the wrong company, it's okay. It is better than okay; it is desirable. We are all geeks now.

But we are all geeks in different subject areas, and so the only thing that links us all together is what we watch on the Tube when our geek energies have been spent and we feel the need to veg out - the lowest common denominator stuff. Almost everyone knows and agrees that this material is idiotic. It does not reflect the way the world actually works because it does not contain as many geeks as the real world that we all inhabit. In that sense, it is more unrealistic and fantastical than the material that actually gets tagged as 'fantasy'. It is when we turn on a movie or a television show and observe people behaving intelligently that we sit up a little straighter in our seats and get interested. It is here that we begin to take the story and its characters a little more seriously.

It would be a little too simplistic and, again, self-congratulatory to say flat-out that the first category of entertainment, the veg-out stuff, is mundane, and the latter type, the geek-out stuff, is SF. It would be like saying that people from the United States drink coffee and people from the UK drink tea. But there is a more than faint trend that bears thinking about, and that I believe helps to explain the bifurcated career phenomenon that I mentioned in part two of this talk.

4. Genre

In this, the last and shortest part of this talk, I am going to revisit the genre question. Despite the fact that this seminar is supposed to be about literature, I have devoted most of my time so far to speaking about movies and television. That is because I believe that certain movies and TV programmes that almost everyone has seen can provide insights into SF culture that translate directly into the literary side.

In part one, I mentioned that, in the standard model, some of the traditional markers of genre-hood were its low intellectual content and depraved moral stature. In the literary world, as it existed back in the days when the standard model was still operative, this would presumably mean that real literature was written by respected authors with credentials, while pulp genre novels were churned out by semi-anonymous hacks in cheap hotel rooms. All of this is just a set of stereotypes of course, and I do not mean to suggest that we should take them too seriously. Let's instead look at how things are today.

As I mentioned, the bestseller lists have been exquisitely tweaked so as to ensure that the books that show up on the main lists are... what exactly? It is easier to say what they are not. Most so-called genre fiction is in paperback, so it does not taint the hardcover list. Young adult books get shunted to a different list so we do not have to know how many copies Harry Potter is selling. Other special categories such as Business Books, or Series Books, or Media-Related Books, further winnow the field. I gather that the people who make these lists have got an idea in their heads as to what constitutes a proper book: a hardcover work of fiction, written recently, not too genre-esque, and so on. Literary fiction is the closest

thing this has to a name.

Now, people who aspire to write literature often study it first. It is logical: if you want to build bridges, you study engineering, so, if you want to write literary fiction, you study literature. The lecture halls, the editorships, the endowed chairs that might have been occupied fifty years ago by academics and intellectuals of a more traditional stripe are now occupied, and have been for decades, by insurgents who gained sway beginning in the 1960s. Ever since then, this new breed have been teaching a kind of approach to literary criticism variously called 'post-modernist' or 'post-structuralist' or 'deconstructionist'.

What literary theorists, post-structuralists anyway, are teaching might be fascinating and encouraging to people who aspire to be critics, but it must be just a bit unsettling to people who would like to become authors. One of the founding documents of post-structuralism is 'The Death of the Author' by Roland Barthes. I am not here to try to explain post-structuralism or to argue with it, but I will say that if I were a would-be author studying literature 100 years ago, from professors who were willing to grant that authors actually created, understood, and controlled the meaning of their own work, I would feel more encouraged than I would studying it from post-structuralists. Or perhaps it is more accurate to say that I would feel more sanguine writing certain types of fiction than others. I have not been in this situation myself, but based on what I read of post-structuralism, I would imagine there would be a weeding out effect. It is fun to imagine a comedy sketch with Robert Heinlein in a writers' workshop having the first draft of 'Starship Troopers' evaluated by a circle of earnest, young post-structuralists. I don't imagine that there is anything like out-and-out censorship, but I do suspect that people who write about relationships, who write autobiographical, introspective fiction from a subjective point of view, are going to have an easier time of it in this environment from those who write SF.

On the science-fiction side of SF, such writers are working with abstract ideas from science, and scientists who believe and who can prove that they are right are notoriously at odds with post-structuralists, who are always looking for ways to bring science into the realm of what is called 'criticisability'.

On the fantasy side, writers are creating entire worlds inside their brains and populating them with species and civilisations and histories, an undertaking that seems fantastically arrogant from a post-structuralist standpoint.

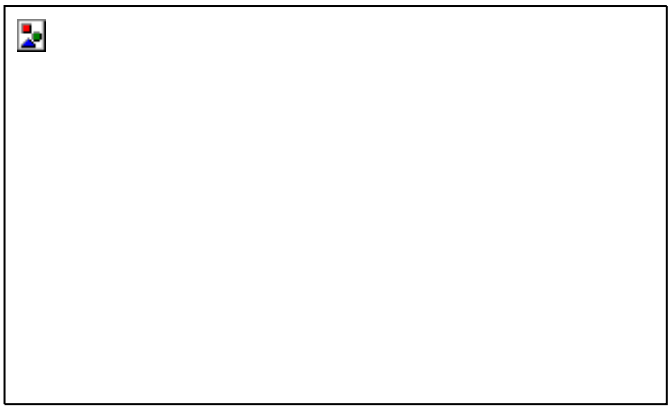
The characteristics I spoke of earlier that lead SF fans to want to see intelligence at work in the faces of movie characters, when rolled over into literature, mean that they want ideas. They want to learn something or to join with the author in speculating about a future or about a fantastical other world. Naturally, they will see the aliens as dangerous, predatory creatures that have to be killed, while literary theorists would say that perhaps the real reason we are afraid of the alien other is because it represents the eruption into our discourse of heretofore subjugated knowledges. Post-structuralist critics, assuming they have the courage of their convictions, would say to the young Heinlein, 'I see that you are intelligent, that you know a lot, that you have worked hard, and put a lot of ingenuity into this book, but the whole thing is pre-theoretical and therefore naïve, and as such, simply of lesser intellectual stature than something that was written taking into account the intellectual trends of the last half-century.'

This is the same attitude, for completely different reasons, that the occupants of those lecture halls and editorships and endowed chairs 50 or 100 years ago would have taken towards the pulp genre fiction of their day, namely that it was intellectually inferior to literary fiction. The author of a fantasy or a science-fiction novel may be an Oxford linguist, like J.R.R. Tolkien, or a PhD astrophysicist, like Gregory Benford, but by taking their own ideas seriously enough to write fantasy or science fiction about them, they reduce themselves, in the eyes of critics, to pre-theoretical knuckle-draggers. A curious inversion has taken place in which the very intellectual credentials that back in the heyday of the standard model might have given such authors the credibility needed to escape from the stigma of genre-hood, today consign them irrevocably to the same.

Another feature of genre-hood in the standard model is moral depravity. This was easy to talk about back in the day when universities were strongly linked to churches, and professors, among other responsibilities, were the guardians of a religiously-based moral code. It might seem more difficult to talk about now because we no longer have a shared idea of what it is to be moral, and yet post-modern academics are nothing if not censorious. Mind you, I don't mean to say that all SF writers are oblivious to the last fifty years' developments in critical theory or that there is no SF literature that is alive to those changes. But there are entire swathes of SF, for example a whole vast sub-genre called military science-fiction, that I am pretty sure would be considered not only intellectually naïve but morally bankrupt as well by many members of the Modern Language Association. The incredulous hostility with which the movie '300' was greeted by a good many film critics serves as an especially vivid and entertaining example.

So, having gone to some lengths in part one to dismantle the idea that there are genres and that SF is one of them, I conclude part four in this talk with the observation that, in the current critical theoretical environment, SF does possess at least two of the classic markers of genre-hood: namely, intellectual disreputability and moral salaciousness. SF thrives because it is idea-porn.

Thank you again for giving me the opportunity to participate.



8 MAY 2008

HORROR MOTIFS

JOHN CLUTE

The remit I have been asked to address is broad, and I'm going to have to narrow it. I am going to eliminate from this discussion of "Horror Motifs in SF" any reference to that heavily populated category of tales in which supernatural figures or devices traditionally deemed horrific -- vampires, werewolves, rings cursed by Egyptians, lamias, Liliths, Shes, Arks of the Covenant, ghosts, ravenous old gods -- are translated into SF by some form of scientific explanation of their nature and origin. Over and above the convenience of eliminating at one stroke from this brief talk perhaps 90% of all SF stories that might be thought to contain some element of horror, there is a further consideration. If horror is to be described as the conveying of overwhelming affect, or (preferably) as an epiphany in which the true nature of things is grasped or recalled, then almost no traditional horror motif that has been coordinated into an SF frame will generate stories that could really be described as horror.

To rationalize horror is to tolerate it.

To explain vampirism, for instance, as an ancient mutation on human stock (or human stock as a mutation on the vampire) is to substitute history for revelation, dietary requirements for the desanguination of the soul. Good stories -- good sequels, good sagas -- can be written in this mode: but I think they are not horror.

So. Is there any form of horror capable of surviving exposure to forgiveness?

1. We need to start with a plunge into the past, from which point I hope I can get to the heart of what I want to say about horror at the present moment. I would to like focus on an SF novel published in the first decades of the last century. Like most SF novels, it is set in the future, and like most SF it displays the stigmata of the era in which it was written, a time when the trauma of World War One had intensified the ambivalence felt by many writers about the modernizing of the world. I do not believe this book has ever been described as horror.

We are in the year 2151, a century after the Second World War -- fought between Germany and the Brotherhood of Man -- has locked into a paralyzed stalemate which has persisted, entropically, ever since. A young chemist named Lyman de Forrest leads a team into a potash mine in Europe near the vast steel-coated impregnable city of Berlin, which continues to defy the rest of civilization. The mine itself had been subject a century earlier to a German gas attack, and is still shunned because of the poison which continues to seep from it and which has turned the surrounding region into "a valley of pestilence and death". De Forrest hopes to dissipate this miasma with a device he has invented which applies "certain high-frequency electrical discharges" to the corrupt air. This SF solution seems to work. At the very lowest level of the now-accessible mine, however, De Forrest and his team discover a borehole out of which poison gas continues to seep from even further below. Beneath their feet, they can hear the sound of machinery. They neutralize the gas and drill downwards through the rock towards the sound. Eighty eighty metres down, the drill breaks through into a huge lower level. Gutteral shouts can be heard, so De Forrest and his team "heave . . . gas bombs" into the vacancy.

After two days, assuming nothing can remain alive down there, De Forrest descends the shaft alone; but the cable holding

him snaps, and he falls several metres into the abysm, knocking himself unconscious. He awakens eventually in a huge and desolate cavern. It is dead silent in the bowels of the earth. The air is unnaturally cold. He must move or die, and forces himself to crawl through passage after passage, until he comes to a strange underworld barracks full of human corpses, great bulking creatures, all identical, their faces uniformly blanched. At the far end of this chamber he sees a desk, and a dead man in finery.

"The body was frozen. As I tumbled it stiffly back it fell from the chair exposing a ghastly face. I drew away in a creepy horror, for as I looked at the face of the corpse I suffered a sort of waking nightmare in which I imagined that I was gazing at my own dead countenance."

In a kind of daze, De Forrest dresses himself in his Double's strange clothing, which is woven from "cellulose silk". He then discovers a document in German which identifies him in highly bureaucratic detail as a chemist named Armstadt, in the Imperial Office of Chemical Engineers. Fortunately, De Forrest speaks German with dreamlike fluency, and when troops finally arrive -- it is at this point that the proto-Lovecraftian horror that has infused the tale changes into something else -- he is able to impersonates Armstadt by faking a state of dazed amnesia. He is taken through a labyrinth of enclosed passages to a hospital, which is also underground, or far from the sun, and is soon released into the vast claustrophobic sunless hive of fortress Berlin. No one suspects him. No one in fact seems to know anyone else personally. He moves into his double's flat, where he soon finds a map detailing the 60 levels of the catacombs, buried beneath the world, in which he has been imprisoned. He now explores the endless corridors of this termitarium, which contains nearly three hundred million inhabitants but seems infected by silence, by an uncanny vacancy. Every face he sees is blanched and blank and male.

"I now passed by miles of sleeping dormitories," he tells us, "and, strikingly incongruous with the atmosphere of the place, huge assembly rooms which were labelled 'Free Speech Halls'."

But he is forbidden entry to these Halls, learning later that only memorized slogans can be spoken there, in unison. The population as a whole is divided into several physical types, running from huge Percheron-like workers with small brains up to slender intellectuals like Armstadt, with larger craniums. All members of each class are essentially identical. Workers -- for whom the Free Speech Halls are intended -- almost invariably speak in unison.

"I was walking in Utopia," De Forrest concludes, "a nightmare at the end of man's long dream -- Utopia -- Black Utopia -- City of Endless Night. . . "

De Forrest continues for some time his covert role of visitor to Utopia, in the course of which he learns that women are chattels segregated into two classes: breeders, who service those declared fit for paternity according to eugenic precepts; and painted whores, with names like Bertha 34 R 6, who occupy the Weimar-like Level of Free Women -- another Orwellian tag, as their only freedom is to charge for sex. All life in Berlin is ordered according to the demands of a rigid hierarchy; information is strictly controlled; there are almost no books in the entire world (except for the Bible); non-blond races are deemed subhuman. The only hint of sun comes at an annual event featuring the current monarch, the mildly Caligula-like scion of two centuries of Hohenzollern rule; he is a living God, according to the Bible, which has been rewritten to incorporate this claim. In a scene of frozen grotesquerie, the living God celebrates his birthday under the pale fire of a fake but blinding sunbeam that for an instant pierces the endless night that shrouds the 300,000,000 walking dead.

The novelty of City of Endless Night, by the American writer Milo Hastings -- first published in True Story Magazine in 1919, and in book form by Dodd, Mead (1920) -- resides in in its first 150 pages, as De Forrest disovers the nature of the world within Berlin. Though told in a style that -- except for the introductory sequence -- lacks most of the instruments that most traditional horror writers employ to convey a sense of immanent abomination, De Forrest's narrative more than adequately conveys the message that Berlin is a perversion of the utopian principle, with its lightless catacombs choked to the brim by vacant-eyed monsters, its governance exercised by the kind of bureaucracy which would soon come to be described as Kafkaesque, and the top of the political hierarchy occupied by a mad godling who rules by virtue of a kind of Necronomicon. Nor is it possible to avoid thinking of De Forrest himself -- a man whose human impulses are palsied by priggishness -- as an impostor in a dead face. A traditional horror tale -- a story devoted to the exposure of some pre-existing terrible truth about its protagonist -- might sooner or later rip De Forrest's false face off, force him fatally to recognize that he and Berlin are identically vacant; and City of Endless Night might conclude with the implosion of the false Berlin, like the Fall of an enormous House of Usher, upon the doppelganger within.

But Hastings moves away from any dread isomorphy of the outer and the inner life, away as well from the line L P

Lovecraft might have taken a few years later, with Berlin replaced by the house of Cthulhu. The second half of City of Endless Night segues fairly tamely into an adventure thriller with a princess and derring-do and gnashing teeth and a magic submarine and a Great Escape and, after the good guys split, the routine collapse, like a house of cards, of a Berlin no longer capable of fomenting its deadly dream of modernization. The tiresome conventionality of this climax may have contributed to the book's subsequent obscurity, and I do not know if any other twentieth century writer of note ever actually read or was directly influenced by City of Endless Night. But all the same Hastings's novel does vividly prefigure two forms of the argued fantastic, or SF, which flourished during the twentieth century; I would like here to treat both of these categories -- non-exclusively -- in terms of horror.

The first category is the dystopia, a term which did not come into common use until J Max Patrick, whose seminal Utopia course I remember taking at New York University, re-coined it in 1952. City of Endless Night seems to be the first extended negative utopia to appear in English after the end of World War One, and it therefore stands at the head of the parade of aftermath dystopias which has so heavily marked the past hundred years. Prefigurations in this nightmare tale of Evgeny Zamiatin's We (written 1920), of Aldous Huxley's Brave New World (1932), and of George Orwell's Nineteen Eighty-Four (1949), are obvious enough not to need underlining here, though I might emphasis a similarity in the telling of the Hastings and the Orwell texts -- over and above the astonishing Free Thought Halls. The first 150 pages of the Hastings, as we've suggested, and the whole of the Orwell, are told in a heightened, suffocated, heated narrative voice whose primary effect, beyond intensifying the tale, is to create a sense of almost weird apprehension that some terrible revelation is about to shatter our hearts. As we've seen, Hastings eventually shies away from deep immurement in his world, though Orwell, as we know, certainly does not: but perhaps we should note the specific element they do both share: that both can be read as terror, that form of horror which anticipates things to come: that both hint at some deadly sublimity within the workings of their tales, some devastation to the grammar of the world.

The second category is the Hitler Wins tale, Hitler Wins being a descriptive rubric first used in The Encyclopedia of Science Fiction in 1993. The glaring sans-serif monumentalism of Hastings's Berlin clearly prefigures Fascist dreams of urban planning of the sort partially enacted by Albert Speer, and the racial and eugenic theories held by the Germans are conspicuously proto-Nazi, as is the bureaucratic exactitude with which these theories are imposed. Moreover, remarkably, City of Endless Nightprefigures three central motifs dominant in the first genuine Hitler Wins novel to reach print, the nightmarish and terrifying Swastika Night (1937) by Kay Burdekin writing as Murray Constantine: 1) the treatment of women as whores or breeders, with the latter accorded suffocating reverence as mothers of the race; 2) the hellish duration of the regime, for in both novels the horror seems to stop time dead for centuries; and 3) the deification of the Fuhrer in terms specifically parodic of the Christian god.

Texts like Nineteen Eighty-Four or Swastika Night clearly express deep unease about the nature of change in recent history, change which Orwell and Burdekin narrate in modes it is fair to describe in terns of horror or terror; their texts are central to our understanding of how to grasp the history of our times. Milo Hastings (1884-1957), on the other hand, could not be described as a significant figure in his own right; he is of interest partly because he comes so early in twentieth century SF, and partly because his seeming ignorance of any inconsistences or ambivalences in his work only exposes them the more clearly.

In 1910, Hastings was an enthusiastic modernizer in cahoots with Thomas Alva Edison, and eagerly publicized a proposal fathered by the eccentric urban planner Edgar Chambless to construct a web of great Linear Cities. These "Roadtowns" -- continuous structures hundreds of miles long but only as broad as two shops placed side by side -- would be built over monorail lines, and each individual Roadtown would connect with its mates at ganglion-like intersections, creating a spiderweb utopia capable of lacing the whole of America into one endless suburb with shops; only malcontents could possibly demur, Roadtown's supporters, like Hastings, claimed. Less than a decade later, of course, he was describing a not entirely dissimilar dream of modernization as "a world of rigid mechanistic automatism", a world he could only conceive of entering through proto-Lovecraftian passages of horror.

But the ambivalences soon surface. Any negative analysis of the new world is restricted in City of Endless Night to an accusation that the morally deficient rulers of Berlin have engaged in the wrong kind of modernization. The horrific and universal incessancy of the principles that transform Berlin, an incessancy Hastings conveys with very vividly in the first 150 pages, is personalized into Hohenzollern arrogance. Once Berlin is destroyed, as Hastings makes clear, the rest of the world is freed from paralysis, and becomes a paradise subject endless transformation at the hands of men like his hero, the modernizer De Forrest, a figure readers a century later are likely to think of as monstrous, as a man who gasses unseen foes on a whim; as a moralizing prig responsible, in the end, for the cleansing of Berlin at a cost in lives Hastings leaves primly untold; as a developer.

But Hastings built better than perhaps he could possibly know. His terror at the face of the fully modern world (a terror he cannot properly narrate) is too vivid to forget, too saliently emblematic to ignore. In its inescapable concreteness, his image of the poisonous incessancy of Berlin provides us with a very early example of the Serpent's Egg, a term only really useful when the planet is in view; it may roughly be defined as an image which condenses the future. I take the term from Ingmar Bergman's underappreciated SF horror film of 1977, The Serpent's Egg, which is also set in Berlin, and which also focuses on the sighting of a diseased destiny. Hastings's and Bergman's images of Berlin are aliquot samples of things to come, proleptic visions of planetary terror.

They are, I believe, good physics for amnesia.

2. "Genres," Jonathan Lethem tells us in his introduction to The Vintage Book of Amnesia (2000), are like "false oases, only visible in the middle distance." He then reveals his discovery of a brand new one, which he has uncovered in the course of assembling his anthology: the genre of "fiction that, more than presenting a character who'd suffered memory loss,enter[s] into an amnesiac state at some level of the narrative itself." Lethem is clarly having fun here; but I think we should keep in mind something he obviously knows, that genres (or oases) are indeed useful devices if you keep your distance; that they are only false if you think they are real; that they are tools for seeing, but that they are not what we ultimately see.

Lethem's own new found genre is a convenient heuristic tool, a light to read his selection of tales by, from the proper distance. I make the same claim about my own use of genre vocabularies; and would only add that my own preferred description of twenty-first century horror (or terror), as a form of wrestling with the amnesias that characterize our era, points exactly to the kind of amnesia fiction that Lethem properly excludes from his remit, as he is interested mainly in bodily horror, in stories about the cavitation of individual souls. After instancing the counter-examples of Orwell, Huxley and Zamiatin, he excludes from consideration any "version of amnesia" that "points to theories of social or institutional knowing and forgetting, to theorists and critics like Michel Foucault, Marshall McLuhan, Frederic Jameson, Alan Bloom, and G W S Trow." I would add, to this short list of thinkers who have shaped my own intuitions, the name of Marshall Berman, author of All That Is Solid Melts Into Air: The Experience of Modernity (1982); any hints I may drop that I understand the modernizing of the world over the past two centuries, in terms that Goethe, Marx and Baudelaire may have used to articulate that process, are coloured by a recent reading of his unfailingly intelligent study.

My understanding of the literatures of the fantastic in general -- what I like to call fantastika, for reasons of concision and point -- is built from an assumption many of us share: that they begin to take on conscious and subversive shape somewhere between 1750 and 1800, a span of time during which the inhabitants of the West begin to understand that the world is in fact a planet, and begin almost immediately to develop the planet they have grasped. The world we who are their children can no longer affirm may have been sacred; the planet we have come to inhabit is a site.

The various genres of fantastika -- gothic, supernatural, SF, fantasy, horror -- dance attendance upon this brave new world, for it is inescapable. SF can be seen as a set of melodramatic enactments of the transformation of the matter of things into manipulable information. Fantasy may be seen as a set of enraged enactments of the dream that the holy land can be recovered. Horror, the blanket term I started with, can be seen as a set of insider enactments of the fear that sooner or later we're going to be fragged by the souls we have left behind. "The Fall of the House of Usher"(1839) by Edgar Allan Poe is perhaps therefore the paradigm horror story. I think the term may currently best describe the work of a writer like Stephen King, whose main subject is the encased soul, and whose stories test to the uttermost the blood body.

The central distinction for me between horror so described and contemporary terror is that, in the latter, the planet replaces the body. A paradigm tale of terror would therefore be something like "The Last Flight of Doctor Ain" (1972) by James Tiptree Jr. Terror, as I've been using the term here, dramatizes the struggle to remember ourselves and our history in a planet whose meaning for humans has been evacuated by the engines of incessant transformation. Terror is about the planetary amnesias that are disappearing our home. It is what City of Endless Nightshies from embracing. It informs the dystopia, and the Hitler Wins story, and the tale of apocalypse or post-apocalypse or Ruined Earth, and any story written since the year 2000 or so which is set in the near future.

Physics? Or placebos?

A wrestling with planetary amnesia -- whether or not articulated in such cartoonish terms -- marks a recent novel like W G Sebald's Austerlitz(2001), which I described at some length in a talk I gave last year called "Fantastika and the World Storm" (a version of the talk has been printed in Foundation #102). In this tale about the psychic suicide of Europe after

the Zero Hour of 1945, two protagonists search through edifice after edifice -- prisons, catles, encampments, spas, rail termini, state libraries -- in their search for a central epiphanic onrush of memory, some madeleine cake of anamnesis, which will recoup the true story of their lives as Europeans. Perhaps unsurprisingly, the edifice they are seeking within all the other edifices is Auschwitz. More interesting perhaps is the fact that the labryinthine heart of each vast construction they visit is in fact a monument or tomb for something which is not there: Europe remembering itself through monuments whose exteriors proclaim sacred meanings but whose insides are empty of memory. The increasing terror they feel in their traversal of a Europe thus transformed into cenotaphs, a Europe built to lock absence from view, is a terror of amnesia we should be able to share whenever we enter a shopping mall, or read about Josef Fritzl.

A list of recent novels which evoke the cenotaph at the heart of planetary terror might include J G Ballard's Super-Cannes (2000), William Gibson'sPattern Recognition (2003), Thomas Pynchon's Against the Day, or The Book of Dave by Will Self, or Michel Houellebecq's The Possibility of an Island (all 2006); or Brian Aldiss's HARM --almost a tale of body horror in its description of the British government's torture of an innocent Muslim -- or Jamestown by Matthew Sharpe, or The Carhullan Army by Sarah Hall (all 2007); or David Herter's The Luminous Depths (2008), which sees the fate of Europe in 1942 as so terminal that the spiritus mundi cannot face continuing that far up the century.

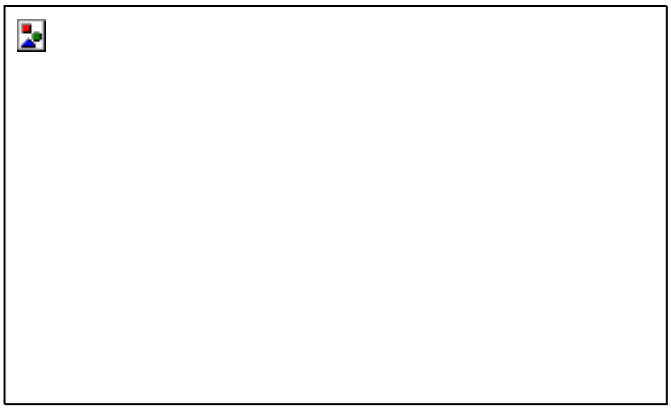
These novels are haunted by and wrestle to make us perceive the meaning of our time: malls, monuments, Millennium Domes, motorways circling the husks of evacuated cities, war memorials to unfound soldiers, marriotts, camps, monitors: darkening gardens from which the salitter has drifted, salitter being a term that designates something like the quintessence of the salt of the earth, God-salt, the divine substance of God as expressed through the entities of the world. It is a word Cormac McCarthy uses in a stunning passage from The Road (2005), an SF tale of terminal planetary terror set in a world which is entirely cenotaphic; his protagonist sees

Something imponderable shifting out there in the dark. The earth itself contracting with the cold. It did not come again. What time of year? What age the child? . . . The silence. The salitter drying from the earth. The mudstained shapes of flooded cities burned to the waterline. At a crossroads a ground set with dolmen stones where the spoken bones of oracles lay moldering. No sound but the wind. . . . He is coming to steal my eyes. To seal my mouth with dirt..

But no one comes, of course. The silence of salitter drying from the earth condenses the future into one sight. There is no home. The mouth is sealed with dirt. Though the story wrestles with the void, there is no physic here.

The Serpent's Egg of terror in 2008 is the cenotaph.

This is the kind of fiction I can think of comfortably as being defined in terms consistent with the title of this talk.



8 MAY 2008

THE OVERLAP BETWEEN SCIENCE FICTION AND OTHER GENRES

ANDY SAWYER

Thank you for inviting me to talk here.

Many people listening - certainly those on the panel - have read exactly the same books about the history and definition of sf as I have; in some cases will have written them. So I'm not going to talk in depth about sf's history or start defining it, though I'm going to flirt with both. Those who know what I'm talking about when I say "cognitive estrangement" can take a break for a few minutes. I will try to be brief.

1 - We all know sf when we see it

SLIDE 1 - "ODD JOHN".

BUT

we disagree about how to classify it.

Brian Aldiss considers Mary Shelley's Frankenstein (1818) to be the first novel that we can unambiguously point to and call science fiction. Adam Roberts pushes the beginning-point further backwards, suggesting that the moon-voyage in Lucian's True History, or medieval imaginary voyages - what Peter Nicholls in an influential essay called "Proto-science fiction?" were much closer to "true" sf than we tend to think, and that the Reformation and the Enlightenment had a lot to do with setting the parameters for what we call sf. Others are more particular. Gary Westfahl, in Mechanics of Wonder: The Creation of the Idea of Science Fiction suggests that the man responsible was Hugo Gernsback, who first used the term "science fiction". (Or rather he didn't, but the man who didwasn't actually talking about science fiction.) Gernsback certainly published the first magazine dedicated to science fiction, or at least the first in English. Except that he didn't call it "science fiction".

Are we confused, yet?

All this is very interesting, and we can certainly argue that we can point to something which we can call science fiction (if we agree who "we" are in the first place). But even if we take on board literary-critical discussions about "hybridity" "permeable boundaries" or "fuzzy sets", I think assuming that we have to assign a particular literary text to a named genre works only in so far as we take on board that we're engaging in ideological argument as much as literary classification. And it certainly doesn't help in any informed discussion. When a major British author writes a science fiction novel and tells us that she hates science fiction, but that her next project is going to be a children's book about a robot, there's a problem somewhere. I want to start by thinking about classification, and suggest that something might be really quite close to sf when on the surface it isn't. Then I will move on by taking a quick look at the one moment in time when you can point to something which we might call science fiction and consider it as a genre (at least from the viewpoint of sharing specific

conventions of content), and move to the point where people started recognising it, and asking whether whatever it was that they recognised could be called genre anyway.

1a - Classification

As a librarian, I'm interested in classification, but the classification of knowledge is tricky. Those of us who grew up with British Public Libraries will be familiar with the Dewey Decimal Classification - a fine attempt to organise the entire body of knowledge.

[SLIDE 2 - DEWEY SUMMARY]

Melvil Dewey (1851-1931) devised in the 1890s the system of dividing knowledge into ten classes (technically, nine, from 100 (Philosophy), 200 (Religion), 300 (Social Sciences), 400 (Language), 500 (Science), 600 (Technology), 700 (Arts and Recreation), 800 (Literature) to 900 (History and Geography). A separate category 000 (General or Miscellaneous) picks up entire bodies of knowledge, such as those built around computing, which are difficult to slot into a system which basically assumed that we knew more or less everything.

The result was that "Miscellaneous" was cunningly renamed "Computer science, information & general works". You can see the logic in this; the progression in the DDC sequence moves from the general (great wide all-encompassing things like Encyclopedias and the Internet), through Religion and Science to the particular (History, which of course is about specific things like dates). We can see that there's an interesting science-fiction Fourth Dimension aspect to this whereby Geography (space) is essentially subordinate to History (time), but we can also see that it's curiously associated with what we as human beings (and human beings living in a particular subset of that great classification 900) think is central to us.

Classification of literary types (genres) is similarly complicated.

It is MORE than allocating a space in a sequence on the shelves for a book on a particular subject. There is the (sadly apocryphal) story of how D. H. Lawrence's Lady Chatterley's Lover was dismissively reviewed by a country sports publication because it didn't say much about actual gamekeeping. What we call genre is as much commercial marketing as literary taxonomy, and genre comes and goes with public taste. Most general (rather than specialist literary-historical) reference to Wilkie Collins's The Moonstone, for instance, would nowadays use the language of the detective novel or draw attention to its relationship with colonialism rather than use the apparently more nebulous term "sensation novel".

Many of the basic tropes of sf - artificial intelligence, time travel, faster-than-light travel - are certainly scientific extrapolations but also re-invent in terms of the modern, technological world basic folk-tale motifs: the demon or golem, the dream-vision, the magic carpet. We've got some useful theoretical models by people like Rosemary Jackson (Fantasy: the Literature of Subversion) and Tzvetan Todorov with his tripartite spectrum of the **marvellous** (where the supernatural is seen as a distinct "other realm" of angels, devils, gods and fairylands as real as the world we live in, the **uncanny** in which a rational explanation is eventually given (so, for instance the ghost I see or the alien that abducts me is a projection of my own psychological state) and between them the **fantastic**, the region of hesitation between the two that submits to no explanation at all, but the actual practice of **readers and writers** seem shut out of the dialogue here.

I want to contend that instead of trying to "fix" sf we recognise, in practice, that it is usually something else as well as sf - which is one of the reasons why discussing what sf is, is so thorny - or so interesting. There is, for example a wide range of sf/fantasy romances (see http://www.specromonline.com/index.cfm?pg=1). I was tempted to say that this is a kind of marketing expansion into new territory for the romance until I delved a bit further and found some very familiar names, like Anne McCaffrey and Catherine Asaro. I think it very possible that many readers of this category will be reading it for reasons entirely other than the reasons I'm going to (at least subliminally) attribute to people who think of themselves as predominantly **science fiction** readers. However, I think it very probable that many readers of the sf romance will be reading it because they a) like romances and b) like science fiction rather than because they simply want soap operas in space rather than Brighton.

2 What do we do when we sf?

[SLIDE 3 - What do we do?]

Paul Kincaid recently published a book entitled after one of the essays in it, What It Is We Do When We Read Science Fiction. In it, he considers the "family resemblances" between the various sub-divisions of the kind of fictions we claim fall under the banner of sf. This is not a misheard plagiarism of that (although it may be a knowing homage). I want to explore sf as a process, and how this makes things messy when we consider it as a discrete, single entity.

Darko Suvin's comment on pastoral on p. 9 of Metamorphoses of Science Fiction is interesting. Suvin is talking about his definition of science fiction as

[SLIDE 4 - COGNITIVE ESTRANGEMENT]

"a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alter-native to the author's empirical environment."

Vargo Statten's SF Magazine may not be the best example of how this process is done, but if we examine the cover of the April 1928 Amazingwe get some idea.

[SLIDE 5-CLOSEUP OF Amazing April 1928]

The eye - of the reader, or perhaps the writer - is full of a set of images which can be considered as the "march of humanity" from primitive days towards the freedom and liberation science and technology brings. Close observers will note that these wonders are virtually all weapons of war. Science fiction, according to Suvin, is a way of contemplating and interrogating these wonders, using, in a large part, cognitive models drawn from the very subject it examines. Other literary modes - myth, fantasy, the folk tale, horror - possess what Suvin calls "estrangement" or the positioning of the world of the fiction in a world which is not, and not meant to be, ours. But only sf (Suvin argues) uses this positioning as a means of understanding (cognition), reflection and arguing. Folktale and fantasy

"use imagination . . . as an end sufficient unto itself and cut off from the real contingencies".

Being a third son and therefore bound to win the princess in a folk tale is a wish-fulfilment fantasy, not an engagement with the question why poor sons of woodcutters never actually get princesses, or why there are woodcutters and princesses at all. Fantasy and horror, and ghost stories, are even less congenial to sf. The introduction of magic or the supernatural to the real world undermines what seems to be the fundamental sense that the sf world is the real world in some sense: that its laws are, or are extrapolated from, our laws. In other words, there is a connection between the real and the imaginary- this is an imagined future, an imagined place in our universe, an imagined (alternative) history. We are here and we can imagine not only there but how we got there. It's not altogether clear why the formal distinction (an imaginary location like the planet Mars can be used to comment upon our world) is, necessarily, so separate from the generic distinction (if Mars, why not Middle-earth?). Why should fantasy be "cut off from the real contingencies?" Although it's arguably the case (in formal terms) that an imagined future such as Kim Stanley Robinson's Mars is a different use of the imagination from an imagined past such as Tolkien's Middle-earth, while a ghost story that "explains" its spooks might well be an interesting sf story but will not, usually, chill us.

It's safe to point out that Suvin has somewhat modified his views here. [see "Considering the Sense of 'Fantasy' or 'Fantastic Fiction'"inExtrapolation 41 (Fall 2000)] A fantasy where someone engages with the laws of thaumaturgy, as in China Mieville's Perdido Street Station or (for satirical effect, any of Terry Pratchett's "Discworld" fantasies involving Ponder Stibbons and the wizards of Unseen University) is closer to this definition of science fiction than a spaceships-and-aliens shoot-em-up likeStar Wars.

And Suvin specifically notes something that puzzled me for a long while: that "The pastoral, on the other hand, is essentially closer to SF . . . This approach relates to SF as alchemy does to chemistry and nuclear physics: an early try in the right direction with insufficient foundations."

This seems very odd, but, I think it is (broadly speaking) right, and if we unpick it, it suggests something about what sf does and why something like this

[SLIDE 6 - Shepherd's Calendar]

Has a family resemblance to this.

[SLIDE 7 - ROBOT]

The pastoral as writers like Spenser and Philip Sydney developed it, building upon Classical Greek and Roman models, seems wholly unlike even proto-sf. Pastoral is full of homespun shepherds competing with other to see who could create the most tuneful love-songs, poignant laments, and witty attacks on rivals for the hand of a fair shepherdess, but both its poets and its readers saw it as essentially allegorical. We can look beyond Arcadia and its rival lovers to the real world of Spenser's or Sydney's England and the detailed and specific controversies over the shape of the Church, or the duty of the Monarch to the Realm. Suvin says that pastoral's "imaginary framework of a world without money-economy, state apparatus, and depersonalizing urbanization al-lows it to isolate, as in a laboratory, two human motivations: erotics and power-hunger." The pastoral writers or readers are not interested in the kind of things that interest the science fiction writer or reader - technological and social change, knowledge and understanding - but they are doing the same thing:

"isolate[ing], as in a laboratory".

Suvin's model of pastoral as an "early try" towards the science fiction mode seems a bit like praising stone age shamans for prefiguring modern theories of climatology in "Thunder god" myths. But I do think he is correct in suggesting that pastoral is in some way operating in a manner later to operate in many forms of science fiction. Pastoral and sf (and fantasy, despite Suvin) operate in a number of parallel ways. Among them are the use of an imaginary or "estranged" setting, the presence of a set of thematic and verbal conventions which the reader is well aware ofas conventions, a detailed attention to language especially language which evokes highly visual responses (what Wolfe calls the "icons" of sf).

These are areas of literary thought-experiment.

SF is something that happens in a literary text when one or more stimuli are present. It is a process. A verb, even?

Suvin's title - Metamorphoses - is important. I have a suspicion that few readers of the book ever get beyond "cognitive estrangement", but the implication of the title is there, always, as a reaction to something that happens to a greater or lesser extent in the world. It's dealt with using specific literary techniques - here, those of the realistic novel and various narrative modes rooted in the late 19th century - but also increasingly, despite Suvin's obvious unease, those of what for convenient shorthand I'll call post-Tolkien fantasy. There is some fascinating late 17th/early 18th century sf if you look for it, including Kepler's Dream written in 1630, Bishop Godwin's The Man in the Moone (1634), and Cyrano de Bergerac's L'Autre Monde (1657), plus Russen's Iter Lunare (1703) and Defoe's Consolidator (1705).

Allan Chapman's Gresham College talk of October 2004, "The Jacobean Space Programme - Wing, Springs And Gunpowder: Flying To The Moon From 17th CenturyEngland" sets the background to this and is a useful introduction to that great man Bishop John Wilkins of Chester.

The pastoral writer, though, is not interested in creating new versions of Arcadia, on the earth or the moon and I think this is an important difference. I want to illustrate this difference by looking at something which I hope doesn't overlap too much with the later discussion of 19thcentury sf, because I think it leads us into what I mean by my subtitle.

3. The Woman Who Built Science Fiction

[SLIDE 7 - THE MUMMY]

In 1827 an interesting thing happened. A young woman named **Jane Webb**, recently orphaned and hoping to earn a living through literature, published **"a strange, wild novel"** called **The Mummy! A Tale of the Twenty-Second Century.**

The action begins in 2126. England has gone through numerous political changes and is now Catholic in religion and ruled by a despotic Queen. The complicated plot involves an invasion from Ireland, the strange electoral politics by which the next queen is to be chosen, and the revived mummy of the Egyptian Pharoah Cheops, who acts as a kind of moral chorus to the events of the story. Central to the argument for suggesting that this weird Gothic romance is a science fiction novel

are three factors.

First, it is set in the future. This itself is innovative: at that time fiction set in the future was rare. I. F. Clarke's The Tale of the Future gives 1664 as the first date in which a "future-fiction" was composed, and it was well into the second half of the 19th century before such fictions became anything like commonplace. The techniques of the historical novel need to be developed before we explore the future: the pastoral is not a territory of the past.

Second, the revival of Cheops' mummy is not (as might possibly be expected) by supernatural means, but through "new technology": specifically electric current from a "galvanic battery".

And third, the recent technology of **ballooning** is extrapolated into the normal mode of transport.

[SLIDE 8 - BALLOONS]

The first flight in a hot-air balloon was in 1783. By the early 1820s, the popular press was printing images showing how this new technology would appear in the future. Jane Webb would probably have seen some of these. Almost certainly, she would have read a novel published the year before The Mummy! appeared: **The Last Man, by Mary Shelley**, the author of a much more famous novel, Frankenstein (1818). In The Last Man Shelley had also written about a future England where ballooning was common:

[It is the year 2073, and the narrator is concerned with the health of his friend Adrian in Edinburgh.]

"this very hour I will engage a sailing balloon; I shall be there in forty-eight hours at furthest, perhaps in less, if the wind is fair." (Last Man)

By page 24 (of the abridged version of The Mummy) we hear the Duke of Cornwall ordering "get a balloon ready and let us be off directly!" More so: Edric, who has ambitions to revive the dead, is planning on travelling to Egypt by balloon.

In her introduction, Webb presents her account of the 22nd Century as an answer to her search for literary novelty. **"[T]he deep mine of invention cannot be worked out; there must be some new ideas left, if I could but find them,"** she writes; to be answered by the spirit of her inspiration offering a "Chronicle of a future age." Writing the future is something unknown, untried:

"I read your thoughts,"[says the spirit] "and see you fear to sketch the scenes of which you are to write, because you imagine they must be different from those with which you are acquainted. This is a natural distrust: the scenes will indeed be different from those you now behold; the whole face of society will be changed; new governments will have arisen; strange discoveries will be made, and stranger modes of life adapted"

This - the idea that the future is very much a legitimate area of literary speculation, and that the future will be very different indeed from the present - is the heart of many forms of what we now call science fiction.

But there's more to it than that. The creation of artificial life by means of passing electric currents through dead tissue is, of course, the means by which Victor Frankenstein created his "monster". Furthermore, Frankenstein's creature acts as commentary upon humanity's moral failings in very much the same way as does Cheops in The Mummy!

If, as some have suggested, the crystallisation of science fiction is the point at which one can point to other, similar works, then 1827, the year of a novel which bears such remarkable and obvious homage to Mary Shelley, must be that point. Here, if anywhere, sf becomes a genre.

Although The Mummy! did not make Webb's fortune, it changed her life. In 1830, a reviewer and landscape architect named John Claudius Loudon asked to be introduced to the anonymous author of the novel that had so impressed him. Shortly afterwards, they were married, and Jane Loudon became a best-selling author of handbooks on gardening and horticulture. It is tempting to speculate, however, what would have happened if she had remained a writer of popular speculative novels. Could she have been an earlier version of H. G. Wells? Or would The Mummy! with its acute summary

of the very nature of science fiction, have remained a one-off?

This idea presented to the readers of Shelley and Webb - that **FLIGHT**would be the new mode of transport of the future - was taken up towards the end of the 19th century. I think that this idea of flight as a kind of shorthand of "the future" is one of those rather obvious ideas that we accept without fully understanding what an interesting notion it is. It certainly is a kind of shorthand for the series of quite fundamental changes in the social order opened up by, say, the coming of the railway in Europe and America. At the beginning of the century, Mary Shelley and Jane Webb with their balloons were suspecting this ; by the end, writers of scientific romances like **George Griffith's** melodramas, The Angel of the Revolution (1893) and Olga Romanov (1894) or **Kipling's** "With the Night Mail" (1905) had much clearer and much less cosy suspicions of what might happen.

Without going into great detail, I'd like to argue that the whole series of flight narratives starting with Shelley and Webb, and stopping by Edgar Allan Poe's satires of the craze like "Hans Pfaal" and "The Balloon-Hoax", we get a kind of default imaginary otherworld which is getting very close to the way twentieth century science fiction assumed well before the fact that space travel was possible. Both are kinds of Arcadia, in which we can set questions which trouble us, but once again, the SF view of Arcadia is one of fascination with the possibilities set up by constructing it. Arthur C. Clarke's Prelude to Space , for instance, isn't about predicting space travel, but it is about encouraging the idea. There was no doubt, by the end of the 19th century, that powered flight was going to happen and it would change the world - indeed quite a number of writers had, well before the success of the Wright Brothers, anticipated Arthur C. Clarke and the British Interplanetary Society in assuming space travel as well.

Wells pulled many of these images together. "I suppose they have flight", wonders the protagonist of The Sleeper Awakes (1910: originallyWhen the Sleeper Wakes, 1899). Wells's career generally can be seen as a matter of establishing the ground rules for science fiction, even though quite a number of its exponents, arguably including Wells himself, seem unwilling to be identified with it.

In the introduction to the 1933 collected Scientific Romances, Wells refers to fantasy rather than anything like "science fiction" as the central "mode" within which he is writing. His stories are not meant to be "possible":

"They belong to a class of writing which includes the Golden Ass of Apuleius, the True Histories of Lucian, Peter Schlemil and the story ofFrankenstein [which Wells actually misreads here]. . . . They are all fantasies . . . they aim indeed only at the same amount of conviction as one gets in a good gripping dream."

But he also went on to write

"For the writer of fantastic stories to help the reader to play the game properly, he must help him in every possible unobtrusive way todomesticate the impossible hypothesis. He must trick him into an unwary concession to some plausible assumption"

Words like "hypothesis" and "plausible", and phrases like "an ingenious use of scientific patter" are keys to how Wells is considering this relationship between science, or the scientific method, and fiction. Wells's insistence upon a "rigorous adherence to the hypothesis" is perhaps what he is flagging as new, even though he firmly places what he is writing as part of the tradition of literary fantasies used as satire. Science, especially the biological implications of evolution and the political metaphors which arise from that, gave Wells and others a whole new range of subject matters and literary devices.

4 - The Man Who Took SF Apart

However, what we call science fiction had other roots. Technically, the**first science fiction magazine appeared in 1923**.

[Slide 9 - Science and Invention]

Hugo Gernsback was a Luxembourger who emigrated to the USA in 1904 and became involved in the then cutting-edge technology of Radio. He founded the magazine Modern Electrics in 1908 and became interested in the vast range of science-oriented fiction which was being published in the magazines of the time. Originally, he devoted his own magazines to far-fetched speculation about new technologies like **television,** but became more and more interested in the way fiction

could explore how the world would be changed by these technologies.

[SLIDE 10 - AMAZING NO 1]

Gernsback's launch in 1926 of **Amazing Stories**, the first English-language magazine specifically devoted to what he called "scientifiction" (scientific fiction) and later "science fiction", was well overdue "there were already magazines devoted to Detective Stories, Westerns, Railroad Stories and **Weird Tales**, as well as general story magazines like**Argosy**. As a niche market, sf was seemingly late in finding its niche: many of the specific genre magazines published stories which we would now call sf, suggesting, possibly, that what we call sf is more than just a simple category but a way of thinking which goes beyond category. By the beginning of the 20th century readers of popular and serious fiction alike were well prepared for speculations about powered flight, life on other worlds, the social implications of mass technology and urban living, and evolution through biological or mechanical manipulations. Why bother to hive this off into a marketing category, when we didn't seem to need a specific genre category for fiction influenced by the implications of current science and technologies'

But this Gernsback did, partly through a belief that this would prepare his readers for the best of all possible worlds - one in which everyday life was transformed through the appliance of science while remaining resolutely the same in essentials.

[SLIDE 11 - AMZ EDITORIAL]

In the editorial of the first issue, Gernsback wrote "By "scientifiction" I mean the Jules Verne, H.G. Wells and Edgar Allan Poe type of story - a charming romance intermingled with scientific fact and prophetic vision . . . " and went on to claim instruction as perhaps the most important quality of these fictions:

An engraving of "Verne's tombstone at Amiens portraying his immortality" heads the contents page. "Extravagant Fiction today . . . Cold Fact Tomorrow" is the masthead of the editorial promising a "new sort of magazine": a magazine that will entertain, instruct and, well, amaze. "[T]hese amazing tales make tremendously interesting reading-they are always instructive. They supply knowledge . . . in a very palatable form."

This sounds like "science fiction as easy learning", and it's easy to misunderstand. Gernsback's defenders have noted that he stressedinspiration - the visionary quality of his authors" stories. His detractors have called this a mere marketing ploy to make readers of his magazines - or their parents - feel good about gosh-wow adventures.

Naive - even cynical - Gernsback may have been but he was not altogether wrong. In the emblem for science fiction he published on the cover of **Amazing, September 1928** a series of cogs link "fact" and "theory" against a symbolic universe to create "scientifiction". The "symbol for scienctifiction" printed on the front cover of AmazingSeptember 1929 and, in logo form, in several subsequent issues, showed us what Gernsback understood by the term: fact and theory (science and fiction) linked by cogwheels into the imagination of the writer, whose pen gives us the apotheosis and summary of this mechanism; "scientific fact and prophetic vision".

[SLIDE 12: AMAZING SEP 1928]

There is a sense in which this hybrid kind of fiction links the two cultures of Humanities and Sciences. It does this in a number of ways:

by being in some ways about the sense of wonder instilled by contemplation of the physical universe,

by suggesting that it's somehow understandable and that we can play literary games with our understanding of it,

by use of thought-experiments

and by extrapolation.

But the biggest problem is how - in literary terms - it does this, and Gernsback, and subsequent editors and writers, found

this a problem.

Gary Westfahl says that Hugo Gernsback's Ralph 124C41+ , serialised 1911-12 in Modern Electrics was "the first conscious attempt by an author to write science fiction." (Westfahl, Extrapolation, Summer 1994, 113) Gernsback, according to Westfahl, in his Amazing editorial and other writings, some way identified a kind of writing which hadn't so far been described.

[SLIDE 13 - Ralph 124c41+]

Even its strongest defenders would not deny the limitations of this early form. Notable features of Ralph are its wooden style and clumsy plotting. Aldiss (Trillion Year Spree) calls Ralph a "tawdry, illiterate tale". Despite the claims that he was describing the future, Gernsback's technology is almost indistinguishable from magic. The point of the story is to show off marvels with a little melodrama and romance to keep the reader reading. The girl is in trouble but Ralph's know-how saves the day. Gernsback slows down to describe the various inventions: the "Language Rectifier," the "Telephot", the "Teleautograph" (fax?). There is weather control. Ralph is a gadgeteer, an engineer rather than a speculative scientist. This is technology rather than science.

The final chapter has Ralph bringing Alice back to life. He needs the "rare gas" Permagatol but there is none. Naturally, he invents a substitute. "The gas he evolved was Armagatol . . ." (181) You might just as well write, "And then we were saved . . ."

The climax here is the power over life and death, the same theme asFrankenstein;but unlike Frankenstein there is no agonising over its morality. The science is equally glossed over, but Mary Shelley is perhaps deeper involved in the scientific background to her story. What exactly does this teach about science? Does Gernsback even consider questions of ethics?

The fact that Ralph 124c41+ is a serial, very possibly composed without any overall sense of structure other than a desire to show what could be done and entertain readers with marvels, is key to its failure as a novel. Westfahl writes "Ralph fails to satisfyingly fulfil any of the generic models - melodrama, travel literature, the gothic novel, the utopia, and satire - that it draws upon . . . Nevertheless, Ralph is an exciting book." (p 112).

It had the value of novelty, of "attempting to combine features that had never been combined before and achieve goals that had never been attempted before." "[L]ike a mechanic, Gernsback had taken apart the engine of science fiction to see what made it work - but he could not put it together again." (Westfahl, 93) The story, says Westfahl, involves prediction, the utopia and the travel tale, melodrama/horror and scientific education and entertainment; the problem, for Gernsback and for science fiction, was to balance these often competing elements and make them work. He tried again with Amazing Stories.

Consider the stories in Amazing no 1.

The cover (by Frank R. Paul), which appears to show a party of fur-clad skaters against twin mounds of ice topped by sailing-ships, over which ringed Saturn looms, illustrates Verne's "Off on a Comet" (aka Hector Servadac).

The names of Verne, Poe, and Wells were prominent inside and outside. Verne's story is one of his comparatively few space stories although, as we read in the introduction, "the author here abandons his usual scrupulously scientific attitude" as he gives us the story of how a comet knocks a piece off the earth, flies it and its inhabitants around the solar system, and replaces it again. Wells's "The New Accelerator" is a "scientific romance" in the original sense of the word - a playful speculation on how we might vary our perceptions of one Wells's favourite subjects. Time. A drug speeds up the protagonist's perceptions. Amazingspent the next couple of years reprinting Wells, and although he was well-known already the result was that he was - and still is - central to the sf field. The Poe story is one of his best. "The Facts in the Case of M. Valdemar" fuses genuine sf and horror as the narrator describes an experiment to see if hypnotism can carry consciousness beyond the point of death.

None of the other three stories are well-known, although two at least are worth remembering. Austin Hall's "The Man Who Saved the Earth" is an interesting take on the "Martian Invasion" theme, set in a "period of Utopian quietness" but its verbose and rather pompous style means that you have to work hard at discerning the (perhaps unintentional) coldness

at its heart. G. Peyton Wertenbaker's "The Man From the Atom" (written, apparently when the author was 16) deserves notice for its Wellsian impact. Clearly influenced by The Time Machine it tells of an invention that shrinks or grows the subject so that he is travelling through the macrocosm - solar systems on our scale are atoms on a vaster one. Returning, the traveller finds that time on our scale has shot by and he is stranded in the future. George Allan England's "The Thing From Outside" is a horror tale about a mysterious being in the Canadian wilderness which references Charles Fort to good effect. It manages to come both within Hugo Gernsback's definition of the speculative ("everything in the universe is a natural force") and argue with it ("But how about thingsoutside the universe?")

The most interesting thing about Amazing no 1 is the fact that there are no original stories in it. True, Gernsback is making a point in featuring the three "giants" so prominently, but the other three stories are all reprints, two from Gernsback's own Science and Invention and the third ("The Man Who Saved`the Earth") from All-Story. Imagine launching a new magazine today consisting entirely of fairly recent reprints! Gernsbackwas trying to break a new market, and to many of his readers all if not most of these stories will be being read for the first time. Nevertheless it's this as much as his rather earnest justification for charming romance, scientific fact and prophetic vision all stirred together which strikes you when you read the magazine. Gernsback was saying, it seems, "Look, here's what I'm talking about. It's a new form taking shape. Let's have some more!"

There's also a definite mixture of generic forms. The Poe story is, perhaps the more obviously an "overlap" story : it's frequently published as a horror story, with its reliance upon classic images of horror centre around mortality and the body, but Mesmerism is a genuine if fringe science and the idea of hypnotising a dying man has an appalling fascination. "The Thing From Outside" is also horror. "The Man From the Atom" and "The New Accelerator" are scientific romances focussed around the excitement and intrigue of an idea, something also to be found in the Verne story. The utopian element in "The Man who Saved the Earth" reminds us that there is a fourth name in Gernsback's editorial, Edward Bellamy, author of the late 19th century utopian Looking Backwards. But would we be able to find a common denominator in these stories if they had not been brought together in an accident of publication'

What we now call SF, the histories tell us, crystallised out of several genres, including the general adventure romance re-interpreted under the influence of the era of inventions. We see the result of speculations about the future, but but also influence of other modes such as the 'lost race' sub-genre, and especially another "new" genre, the detective story in which a savant also discovers the truth about the world. The Detective - Edgar Allan Poe's Monsieur Dupin, or Arthur Conan Doyle's Sherlock Holmes, is the person who finds things out, who solves a mystery. From Dickens, The Mystery of Edwin Drood and

Wilkie Collins The Moonstone we get a vast range of stories which are completely generic, in the sense that we know exactly what to expect, but also demand to receive it in the dress of novelty. We have stories in which the detectives are medieval monks, classical Romans, contemporaries of Ben Jonson, cats, or robots - the tone or plot of the traditional detective story is perhaps the most obvious area of overlap with science fiction.

BUT - by the time Gernsback identified a new kind of writing - Poe, Verne, Wells, it was already impure. What we recognise as SF starts in the blender, as a mixture, and it continued so.