LoneStarCon 2
A convention report by Evelyn C. Leeper

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LoneStarCon 2, the 57th World Science Fiction Convention, was held August 28 through September 1, 1997, in San Antonio, Texas. Attendance was somewhere around 4000; accurate figures were not forthcoming on a regular basis.

Initial Comments

[This report was the first written "as it happened." That is, by the time I left a panel, my report was pretty much written up, rather than just notes. This was necessary since we were doing a five-week trip, and I wasn't going to have much time afterwards to pull it together. Whether this has affected my style-or lack thereof-or informational content-ditto-I would be interested in knowing. It doesn't seem to have affected the length.]

The street between the Marriott Rivercenter and the Marriott Riverwalk hotels served as an excellent wind tunnel, and with the heat one got a passable imitation of a desert sirocco. We talk about terraforming Mars; perhaps we should start with San Antonio.

Registration

There were no lines when we registered, but that was at 3 PM Wednesday. There was also no film schedule, no program participant ribbons, no freebie table, or pretty much anything else. The freebie table, it turns out, was in the Convention Center (early registration was in the Marriott Rivercenter). The program grid sheets appeared Thursday morning. The ribbons were in Program Ops in the Convention Center Thursday.

Programming

Going into this, I found there was at least one item almost every slot I was interested in. In fact, out of the forty daytime slots, I had something thirty-eight of them. Clearly, this was an unmaintainable schedule, and in fact, two items got bagged the first afternoon. This was due to a variety of factors: delays at site selection voting, panels running over their fifty-minute deadlines, consecutive panels being on the first and third floors. (Until I discovered the elevator, the only way to get from one to the other was to go outside, climb a spiral staircase, go inside, cross a hall, take the escalator up, and find the room. This took longer than the time between panels, especially when they ran overtime.) The up escalator was frequently broken.

In a move that generated much discussion, LoneStarCon 2 scheduled twenty other events opposite each of the Guest of Honor speeches or interviews. They also scheduled *no* program items in the evenings opposite the Hugos, Masquerade, etc., or even before or after them. Now even if they didn't want to add more programming, it seems to me that everyone would have been better served by scheduling at least some of those twenty items in the evenings.

There was no film program, and the video program was less than inspired (primarily Hugo nominees). I yearn for the days of seeing obscure silent and foreign science fiction and fantasy films at Worldcon.

Name cards were available (I saw them at one panel), but not well distributed (many panels *didn't* have them). This is a serious problem, although in some of the larger rooms they would have been unreadable from the back anyway.

Panels of seven people with one table that seats five and only one microphone are a bad idea. The single microphone for each panel seemed to be a requirement of the taping of the panels, and was annoying as all getout. Yes, you can record from multiple microphones, but then someone would have had to pay for a mixer, etc., and the convention was on a tight budget. In my opinion, since the taping is a commercial enterprise, the convention should have told them, "We are having multiple microphones in rooms with large panels. If you want to tape, then *you* pay for the mixer." (Mark felt that the tapers were even more annoying, leafleting all the chairs in the room, requiring announcements at the beginning of each session, and forcing the panel to repeat every audience question for the tape.)

Materials

The Pocket Program was the now-traditional spiral book. There were descriptions for some of the items, but not all-even the panelists didn't know what they were supposed to be about. I thought the restaurant listings were pretty sparse, especially for places within walking distance. (Denny's, a block away, was not even mentioned. Another restaurant that was mentioned had apparently been replaced by a Taco Bell a while ago.) Also, there was not always a price range listed. And one occasionally ran into statements such as, "The Riverwalk helps make San Antonio one of the four unique cities in America."

The badges were large, but the names were in fairly small print (about a half inch high). This meant you couldn't see the name of someone you were talking to unless your peered at their badge. Taking up a third of the space on the badge was the LoneStarCon 2 logo; another third was a purple San Antonio logo on the badge holder. The latter was undoubtedly the reason for the small print, and probably put there by whoever contributed the badge holders.

In fact, the print in *everything* was far too small. I had difficulty reading the maps in the Pocket Program, among other things.

The Voodoo Board and the Party Board were in the Exhibits area, which was closed between 8 PM and 10 AM. The Party Board was moved over to the party hotel, but no one could check for or leave messages in the evening or early morning.

Green Room

The Green Room was well supplied with lemonade and iced tea in addition to the usual soda and coffee. They also had a little "medicine chest," with things like aspirin, contact lens cleaner, and so on-a nice touch. What was missing was a clock so the panelists would know when it was time to leave.

Dealers Room

There were some good book dealers, but it seems as though there is an increasing percentage of non-book dealers. And the room was smaller than previous dealers rooms have been. Even so, I have to report that while cargo vests are normally ideal, they are not up to an initial pass through a Worldcon dealers room.

Materials of Tomorrow
Thursday, 1 PM
Catherine Asaro, Genny Dazzo, James C. Glass, Bart Kemper (moderator)

"Skyhooks are just the beginning! The importance of material science in determining our future: buckyballs, buckytubes, aerogel, superconducting wires, dendrimers, etc."

All the panelists had technical backgrounds and have been involved in developing "unobtainium," or as Kemper said, the sort of materials about which one says, "We need something but we don't have it yet please help us God."

Glass said it was all rather cookbook: certain structures seem to favor superconductivity, such as those with chain structures or complex cage-type structures organized in layers. "You just start testing them." "You assign your eight graduate students to it." "It's just trial and error and with luck you'll hit on a superconductor." They have seen some anomalies at room temperature but nothing definite in RTSCs.

Asaro likes to "play" (in her writing) with buckminsterfullerene (so called because the first form found was a buckyball). Buckytubes are a form of this kind of carbon in very strong strings. "You could make a skyhook with these strings." "You can strengthen your spaceship hulls with it." Its bonds are even self-healing! (This sounds a lot like *The Man in the White Suit.*)

Dazzo writes about telecommunications, but works in pharmaceuticals that mimic the body's own materials so they are not rejected. This gets more important with the whole issue of cloning, because it's all tied together in genetics. For example, she can model a lot of this on computers, but that doesn't say what will happen in the laboratory. Working with immune system has repercussions not only for AIDS, but also for cancer and many of the "orphan diseases."

Kemper talked briefly about actual applications. For example, aerogel. Aerogel was developed decades ago and is "super-cooled silly putty." It doesn't transmit heat, and is currently being used for insulating the Martian Rover. But other than that, it hasn't gotten out much. It's silicone gel with lots of air bubbles; when it's perfectly clear, they can put it between your windows and your windows will be better insulating materials than your walls. Why not use aerogel now within the walls? Well, there's an extrusion problem and it's expensive. (It's being developed at Lawrence-Livermore Labs.)

One problem is that when a new material is developed, there's always some new problem (lubrication, temperature, translation, etc.). Part of what helps pay for all the space technology is that vacuum is very important, and "vacuum is very expensive down here, but real cheap in space." As Kemper cited Shakespeare, "Vacuum is much ado about nothing." (Asaro pointed out the many spin-offs from space: Velcro, Teflon, and Tang.)

Someone noted that the June 1997 *Scientific American*, it was reported that spinning a superconductor seemed to result in a different gravitational strength above and below the coil, but that hasn't been confirmed by anyone else. (Can you say cold fusion?)

Glass said some people had wanted to try to get funding for designing micelles that would bond to both cancer drugs and tumor cells, so that it would target just the tumor rather than randomly attaching to cells.

Someone claimed that in Britain they were breeding chimeras between humans and pigs so they would produce spare organs (immune system) and bacon as well. Kemper said that there's a story there vis-a-vis "long pork," but "we won't go there."

"What is the status of the artificial spider silk?" Glass said all he knew was that it was the favorite of German scientists. Dazzo said they were trying to make bulletproof vests from it, but Kemper said it tended to curl up at high temperatures. With this, Kemper added, extrusion technology is the big issue.

Someone asked what the panelists' dream unobtainium is. Kemper's wish is for machinable ceramics that won't shatter. Engines would be lighter and more efficient and that would change everything. Asaro would like to see a closer connection between the human mind and computers. "Pretty soon computers will be able to outthink us. Big Blue has already beaten a human chess master." Glass would like to see development of an organic superconductor: it would be malleable, formable, castable, and a good insulator. Barring that, he would like a metallic superconductor at room temperature. Dazzo would like to see some kind of molecular structure that could be embedded in organic materials that would send that to specific parts of the body to target them so we could work on them from the inside.

Kemper said regarding a question on fasteners, "You don't want something bolted together to fall apart. It's generally something very heavy or something you're in."

Kemper had to work hard to keep the audience/panel interplay from becoming too technical.

This panel ignored the fifty-minute limit, but then most of them did.

John Norman Reading
Thursday, 1 PM

Mark went to this and reported that Norman was a somewhat quiet man who read a humorous short story about an immortal and a psychiatrist which was in the style of Esther Friesner.

SF Films
Thursday, 2 PM
John L. Flynn, Richard Gilliam (moderator), Joe Grillot, Theodore Krulik, Kurt Roth

"The good, the bad, and the ugly-a discussion of the past year's cinema."

Gilliam asked the panelists their best and worst of the last year. Krulik liked *The Fifth Element*, because it had a basic formulaic plot. Grillot enjoyed it also, and thought it was a fun film but didn't take it seriously. He reminded the audience that seeing any film requires a suspension of disbelief. He thinks this year's worst film is *Event Horizon*, and this year's best is *Contact*. Flynn agrees on *Contact*, but thought *Mars Attacks* and *Men in Black* are the worst. ("I know I will alienate half this room." "How about 90%?" responded one audience member.) Flynn said that *Contact* was thoughtful, etc., but *Men in Black* was what Hollywood thought we wanted. Roth thought *Contact* the best and *Event Horizon* the worst, with Fishburne doing a sort of James T. Kirk impression ("Damn it, man, give me answers!") (Grillot later said he really enjoyed *Mars Attacks* and thought they were the bubble gum cards come to life.)

The panelists then spent a fair amount of time trashing *Event Horizon*. But Gilliam thought even worse was *Batman and Robin*. (He thought that *Smilla's Sense of Snow* was the best film of last year.)

Krulik thought John Travolta was very good in *Phenomenon*, but not very good in *Michael*.

Characterization, ideas, and style are what distinguishes the science fiction films we like, according to Flynn, but how many films borrow their style from other films (*Bladerunner*, *Alien*, and so on). Flynn's only complaint of *Contact* was that the use of Clinton fixed it too much in time. He liked that it didn't have aliens per se, although it had an alien presence. This lets us fill in the images. Grillot thought the use of Clinton would help sell the film to non-science-fiction fans.

Grillot thought *Starship Troopers* and *Alien Resurrection* would have a major impact, but wouldn't comment on it. *A Life Less Ordinary* is also coming from the makers of *Trainspotting*.

I recommended *Breaking the Waves* and *The Whole Wide World* as two more good films from last year.

Someone said that all of Sagan's characters in *Contact* were taken from real-life people in SETI.

Gilliam watched *Mars Attacks* with a twenty-four-year-old Buddhist monk on his first trip outside the Himalayas, and though he liked the Taj Mahal blowing up, he didn't completely understand it-and *This Is Spinal Tap* was even worse.

Roth pointed out that how you enjoy a film depends on your expectations, and Hollywood is really good at

shooting itself in the foot (such as "promising" a monster in *Event Horizon* and not delivering).

Flynn liked television version of *The Odyssey*. No one commented on the two versions of *20,000 Leagues Under the Sea*.

Gilliam said, "A romance belongs in *Mimic* as much as giant mutant cockroaches belong in *Sleepless in Seattle*." Gilliam said, "How about the dog who must survive? I want to see them kill the dog." Someone pointed out that they *did* kill the dog, and two kids, in *Mimic*.

Someone asked for comments on *The Lost World*. Flynn responded, "The silent film was really good." Someone else asked about *Sliders*. Gilliam said, "Friends of mine write *Sliders* so I'm not going to comment on that."

Alternate Histories and Alternate Futures
Thursday, 4 PM
Chris Bunch, Brian Burley, Timothy Lane, Evelyn C. Leeper,
William Sanders, Harry Turtledove (moderator)

There was no description for this panel.

Burley introduced himself by saying he had one of the largest collection of unpublished material in this genre, to which Sanders replied, "You'd be surprised." Lane said he concentrates on the historical aspects rather than minor details like literary quality. Sanders responded that Lane "lives in an alternate reality," probably referring to Lane's political views. Sanders himself does mostly short stories on Native American themes these days, though he did write two alternate history novels a while back and had an alternate history in the March issue of *Asimov's*.

The first question the panelists addressed was why alternate histories are so popular. I suggested that it is because alternate histories support the idea that small changes matter, that "one person can change the world." And this gives the reader a feeling of power even if they are actually powerless. Turtledove said he liked to look at alternate histories at the micro-historical level. For example, he got interested in history by reading *Lest Darkness Fall* by L. Sprague deCamp. If he hadn't read that, he would not have gone into history, or met his wife, or ended up writing science fiction.

Turtledove also pointed out that "fiction is not primarily about the fictional world, it's about the real world," and alternate history provides a "funhouse mirror" by which to view the world. Lane said that you see alternate histories in historical studies, but they are called counterfactuals and treated somewhat differently. Turtledove noted that the first alternate history was written by Livy, who asked what would have happened if Alexander had turned west. As a good Roman, Livy assumed the Rome of that time would have defeated Alexander, which Turtledove found highly unlikely.

Lane said that in earlier wars when generals exerted front-line leadership there was a much more even chance that they would be killed versus not be killed, and thus history is much more susceptible to change.

Sanders asked a question that comes up a lot: why is alternate history considered science fiction? He thought it was because science fiction fans like history. I said that at Readercon, Kim Stanley Robinson defined science fiction as "the history we cannot know," and included alternate histories and prehistoric histories in it as well as future histories. Turtledove suggested that alternate history is science fiction because science fiction writers write it. And it uses a very science fictional technique: change one thing and extrapolate from that.

Lane said he wanted to touch on the "Alternate Futures" part of the panel. For example, some authors (such as Heinlein or Asimov) have multiple future histories (hence alternate futures). Turtledove added that some older future histories are now "alternate histories," but felt that one requirement for an alternate history is that it should have been written with that intent. Burley added that Heinlein actually used the concept of alternate history to explain the inconsistencies in his works.

Sidetracking a bit, Turtledove said that Heinlein's future history was now alternate history for four reasons. First, getting into space is more expensive than Heinlein thought. Second, we are more concerned about the effects of radiation than Heinlein was. Third, electronics advanced much more quickly than Heinlein expected (no more *Starman Jones* memorizing logarithm tables). And finally, we are more cautious and less willing to take risks than Heinlein's characters.

Sanders said that he had recently heard the term "extrapolative fiction" suggested as a replacement for "science fiction." He also said that he was planning on writing a Stone Age romance titled *Hominid Nurse*.

Getting down to San Antonio, Lane said that we know very little about what actually happened at the Alamo. Turtledove expanded this, saying that real history up to the last century or so is often vague, and consists of taking two things we hope are facts and connecting them with what we hope is a reasonable historical inference. Modern history, on the other hand, is taking a drop out, publishing a book, and claiming your drop is representative of the ocean.

Turtledove added that no matter how much research you do, people will find historical errors. De Camp got a letter from someone saying that in his Gothic passages in *Lest Darkness Fall*, "You used the indicative case when you should have used the vocative." Sanders said that the standard smart-ass answer to people complaining about something that was wrong: "In this world, it happened the way I said."

Returning to the Alamo, Burley asked what if the Alamo had surrendered and everyone was executed. I pointed out that Jose Enrique de la Peña claimed that this was what happened. I also mentioned the definitive alternate Alamo story: Scott Cupp's "Thirteen Days of Glory," in which the defenders of the Alamo are all drag queens.

Lane said that S. M. Stirling does logical extrapolations with the occasional unlikely kicker because unlikely kickers are what happen in the real world.

Turtledove mentioned he was editing an anthology titled *Alternate Generals*, which would probably come out next year.

Someone in the audience suggested that alternate histories are a way to correct an injustice of history. Turtledove said that the danger of this was that the author would seem to be engaged in special pleading. From the audience, Stirling said that most alternate histories are actually worse than reality.

Someone in the audience asked about the "surges" of topics. Turtledove felt this was driven by real world. For example, before 1989 it was impossible to write about a victorious Third Reich falling apart later. He also thought the alternate Civil War stories were driven by the centennial (though it seems to me they came much later-maybe after the Ken Burns series). (Turtledove, by the way, noted that his *Guns Of The South* was started *before* the Burns series aired.)

Sanders said that everyone sees this "free-range history" going on, and wants something to make history logical, and alternate history serves that purpose. Turtledove thought that it was a replacement for other types of science fiction. The solar system doesn't look as friendly as it used to, for example, so we look elsewhere. Also, there are more escaped historians writing science fiction, and they tend towards alternate histories.

Regarding all the criticism authors get of alternate history stories, Turtledove said, "Things are hardware. Fiction, to work, is about people, dammit!" And ten-page criticisms of characters would be more valuable than ten-page criticisms of weaponry, but the people capable of writing those criticisms of characterization are busy writing their own fiction rather than letters.

Meet the VIPs Party
Thursday, 8 PM

I spent very little time here. The room was dim-well, dark, actually-and with the small print on the badges it was impossible to see who anyone was. In addition, I think fewer and fewer "VIPs" (whoever they may be) actually show up at these affairs any more. They end up going to publishers' parties or the SFWA suite. Perhaps it should be renamed the "Get Acquainted Party."

Magical Realism: Fantasy from the Other Side of the Border
Friday, 10 AM
Ellen Datlow (moderator), Thomas K. Martin, Mary Rosenblum

There was no description for this panel.

Datlow has been co-editing *Year's Best Fantasy and Horror*, which includes a lot of magical realism. Martin writes fantasy, though not magical realism.

Martin felt that magical realism requires internal consistency, to which Datlow's response was that this is true of all fantasy. Datlow felt that magical realism has a very realistic setting and everyday happenings, and the magic creeps in very subtly. It is usually considered a Latin American subgenre, but is really more prevalent than that. (She mentioned Jonathan Carroll as an American magical realist.) However, mainstream critics still feel that it

must be Latin American.

Gabriel García Marquez was mentioned, particularly "The Most Handsomest Man in the World." Other authors named were John Crowley, the Hernandez Brothers (in comics), John Collier ("Evening Primer"), Alice Hoffman, Lisa Goldstein, Sharon McCrumb, Isaac Bashevis Singer, Charles Finney, and Julio Cortázar.

An audience member suggested that in magical realism you change one thing and then look at not what that changes, but at how people react to that.

The genre became popular in the late 1970s. There was "El Boom" in Latin America even before that, but that was when the genre hit the United States. Even before that, there were influences from Borges and others.

An audience member suggested it was successful with the critics before it was based in a culture that was real: people really believed in spells and hexes and such. But as someone pointed out, Borges and others are from Argentina, which has more European than Indian influence. And there is an entire Brazilian sub-genre as well.

Marcial Souto joined the panel. He was born in Spain, and lived in Argentina and Uruguay, where he published most of the science fiction published there. He wrote the entries on Latin America for Clute's *Encyclopedia of Fantasy*, and researched the term "magical realism." It was coined by a German art critic, Franz Roh, in the late 1920s for painters trying to show reality in a new way. An Italian literary critic, Uslar Pietri, first applied to it to Latin American literature, but it was when Miguel Angel Asturias used it to describe his novels when he won the Nobel Prize that it really caught on, and then it was "used and abused in the 1960s by just everyone in Latin America." But Souto said, "It is not magic. Those countries are just like that. ... Colombia works like that."

Souto pointed out, "Almost all important Latin American writers have written fantasy, and readers don't see it as fantasy." Datlow said, "They're not considered fantasy writers; they're just considered writers."

Martin suggested that Native American fantasy might be closer to what we think of magical realism. People didn't think Tony Hillerman would be a magical realist author, because nothing magical happens.

It was observed that what starts out as "if you like X you'll like Y" results in that group getting a name like cyberpunk or magical realism. And marketing departments like market segmentation.

Datlow recommended *The Club Dumas* by Arturo Reverte, but Souto doesn't like his writing. (Reverte was previously a reporter in Bosnia.)

Ray Bradbury's *Martian Chronicles* sold a million copies in Argentina. He was the Guest of Honor at the 1997 book fair and was the most successful writer there, with people even kissing him on the street! He signed books from 8 AM to 1 AM. Bradbury says his books are one third fantasy, one third science fiction, and one third magical realism. Also popular are Brian Aldiss, Alfred Bester, William Gibson, and other literary authors.

Authors Souto recommended were Cabrera Infante (*Three Sad Tigers*), Juan Rulfo (from Mexico), and Mario Levrero (from Uruguay).

Goodbye, Kris! Hello, Gordon!
Friday, 11 AM
Gregory Benford, Gardner Dozois (moderator), Kristine Kathryn Rusch, Gordon Van Gelder

"The changing of the guard at *F & SF*"

Rusch described herself, saying "I'm yesterday's news," to which Dozois added, "Receding into the ash heap of oblivion."

Dozois started by asking, "Was there a 'Kris Rusch story'?" Rusch said, "Probably. Do I know what it was? Absolutely not." She added that it was a very subjective judgment. "People who read the magazine could probably tell you the slant better than I can." But she noted, "I bought a lot of dog stories."

Dozois continued, "When you took over *F&SF*, did you have any far-reaching plan?" "I really wanted to do the best job I could," Rusch said. "I felt it had gone in a slump, [and] I wanted to make it lively again."

Turning to the New Guard (Rusch was thirty when she became the editor of *F&SF*; Van Gelder is thirty now),

Dozois asked, "Is there a 'Gordon Van Gelder story'?" Van Gelder replied, "If I ever recognize what a 'Gordon Van Gelder story' is, I'll quit." He doesn't want to be that predictable. Someone said, however, that it tends towards "imaginative recklessness and rather high literary standards."

Dozois asked, "Where is *F&SF* going to go under you?" to which Van Gelder replied, "Into the past." By this he meant that he felt an affinity to Anthony Boucher's editorship. (Rusch had no affinity for any particular editor.) The panelists talked about Boucher and Ferman, but when someone mentioned Mills, Van Gelder said that Philip Klass had told him that Robert Mills had no taste and that he had to talk Mills into taking "Flowers for Algernon."

Van Gelder has made some changes in columnists. He has four book reviewers each writing three columns a year, plus columns by Charles DeLint and Van Gelder himself. Pat Murphy and a co-worker at the Exploratorium will be doing a more "hands-on" column about science. Van Gelder will not be running anonymous reviews or competitions, but will probably do single-author issues.

Benford will still do his science column. He said that Asimov once told him that he wrote an F&SF column in an hour because he didn't have to look anything up because "it was just about boron." Benford thought, "Why didn't I think of that?" Benford also said he wanted to open up the field of science columns in science fiction magazines to new branches of science.

After asking what sorts of stories Van Gelder doesn't want to see, Dozois noted, "If I say I don't want to see any vampire stories, someone out there write a vampire story of incandescent beauty and I won't get to see it."

Van Gelder is working from a two-year inventory of stories which will be used in combination with new material. It is both a burden and a luxury to him. (On the other hand, *SF Age* has an inventory of only about a dozen stories.) Some authors are bothered by this backlog; some are not. There is a time limit on publication in the contract.

Someone asked if the number of pages will increase instead of decrease. Dozois would like larger issues of magazines in general, and said that they may be changing the trim size of *Asimov's* to something larger.

Some people apparently were offended by the Esther Friesner cover of *F&SF*. Friesner was not, and phrases like "tempest in a teapot," "too damn much time on their hands," and "get a life" were bandied about. Dozois claimed that Friesner had posed for it.

The panel frequently descended into low humor about vampire chickens, spanking, avocados, and a variety of other topics.

Myth, Religion, and Serious SF
Friday, 12 N
Allison Hershey, Katharine Eliska Kimbriel (moderator), Louise Marley, Jerry Oltion

There was no description for this panel.

Someone on the Internet claimed "religion has no place in science fiction." Marley responded that that makes as much sense as saying "people have no place in science fiction." Kimbriel said that almost every society we have heard of has either a faith or a moral structure that invigorates and comforts people. Oltion said that the question "Why are we here?" is definitely a very primal question that people ask themselves, but more that religion is a great source that you can mine for ideas. Oltion also discussed *Contact*, and said that one question is whether or not we are deluding ourselves. Hershey said that religion in science fiction sometimes adds a richness and a seeking in the story. Authors mentioned were Dan Simmons, Frank Herbert, C. S. Lewis, James Blish, and Walter M. Miller.

There was a discussion of symbolism. Hershey said that we have lost a lot of the symbolism. In Medieval times, a rose, or a pomegranate, or a dog, in a painting meant something specific.

Marley felt there is no conflict between science and religion; "There are plenty of Jesuit physicists."

Oltion points out that to invent an entire society, you have to invent what they believe. He also feels that the dichotomy between science and religion is a dichotomy of degree, and based more on the belief in the relative usefulness of the two.

Kimbriel said that as we find how small we are, she finds it reassuring to think that there is a mind behind it all.

She also said that it is possible that science is a way of giving us the ability to choose what to use and what to do, a way to exercise free will.

Hershey quoted Brin as saying that we're fulfilling God's command to name things; we're just using spaceships to go out and name them.

Someone in the audience felt that non-Western traditions were more common in science fiction than the monotheistic ones. Kimbriel observed that we're overdue for another major new religion: the last to sweep the world was Islam. Someone suggested ecology as a new religion, and also New Age religion(s). Marley felt that New Age believers were desperate to place their faith outside organized religions. Regarding science as religion, Kimbriel said, "I don't go with that, but I can see why people want to throw it in the mix to cause trouble." She also said that a recent major ecumenical counsel came up with twenty-two tenets that all religions agreed on, but she didn't name them.

In answer to the question, Marley felt that it was because science fiction writers are looking for color, and for "exotic," and non-Western religions fit the bill. Oltion said that Islam was not used very much because of what happened to Salman Rushdie. Kimbriel recommended Barbara Hambly's *Search the Seven Hills* for a different look at Christianity.

Someone asked about what will happen to religion in the future, particularly with millenialism. Hershey said that in the 1960s, everyone felt those were the end times.

Oltion noticed people becoming more dogmatic in their beliefs, and asked how the agnostics could get in on this. (Someone in the audience called out, "I don't know and neither do you!") Oltion said agnostics could be very religious in a ritual sense while not having any idea if it will work.

According to Kimbriel, *Vanishing Point* by Michaela Roessner has some interesting insights on how cults start.

An audience member said a religion professor has predicted that within two hundred years there will be an organized Church of Elvis.

In response to a question, Kimbriel said that she needed to address questions of fertility, of diet, and so on in order to make her religion believable. Marley said environment was important, and charismatic leaders can be a major influence. Oltion said one question is what the religion can do for the believers, because people won't believe something that doesn't do them any good. Hershey said that religions give people power beyond normal human capacity and that needs to be explored.

Recent Classic SF/F Novels
Friday, 1 PM
David G. Hartwell (moderator), Patrick Nielsen Hayden

There was no description for this panel.

"Recent" was defined as post-*Neuromancer*.

"Classic" means having a continued use in the minds of people who are not interested in the minutiae of science fiction history.

Hartwell was earlier on a panel on "How do the classics hold up?" For example, "Is *Beyond This Horizon* still a classic?" "No." "Is *Slan*?" "No." "Wait, yes."

Hartwell said that this year *The Stars My Destination* and *The Demolished Man* are back in print. Nielsen Hayden said these were classics even when they were out of print. Hartwell agreed, but said new readers might get the impression that *Dragonflight* was better or more important.

Nielsen Hayden said that a classic has had impact outside of the field. For example, *Snowcrash* by Neal Stephenson has been very influential as a "college novel" and may be a minor classic. It may not be the best writing ever, but there's something there. Another example is *Ender's Game* by Orson Scott Card, which is another novel notably successfully at pulling in mainstream readers. Nielsen Hayden said Robinson's Mars trilogy was yet another example. Hartwell didn't agree that this had an influence outside the field. (I would think being asked to write a column for the *New York Times* would count.)

Hartwell mentioned Octavia Butler's *Parable Of The Sower*, which sold 20,000 in hardcover. Her winning of the MacArthur Grant didn't hurt, of course.

Jonathan Lethem is another author who has broken out, according to Nielsen Hayden, particularly for *Gun, With Occasional Music*.

Nielsen Hayden felt that most Gene Wolfe books are classics; the only question is whether they are major classics or minor ones. The same, he felt, was true of John Crowley.

Hartwell brought up Walter Miller. Reading *Saint Leibowitz and the Wild Horse-Woman*, he asked himself, "How good does this have to be? Who does he have to beat? Well, himself." And while this doesn't beat *A Canticle for Leibowitz*, he feels it is arguably better than anything else this year. But it won't be a classic; it will be "Walter Miller's other novel." (This, by the way, is not a sequel, but a parallel story.)

Nielsen Hayden reminded us again that most science fiction readers don't care about the history of science fiction, but judge books more as independent entities.

Possible classics included *The Diamond Age* by Neal Stephenson (which Nielsen Hayden thinks won the Hugo because people were voting for *Snowcrash*); *Last Call* by Tim Powers ("being read by thousands of serious poker novels, and one of the great poker novels of this century," according to Nielsen Hayden); *Door into Ocean* by Joan Slonczewski; *China Mountain Zhang* by Maureen McHugh; *Doomsday Book* by Connie Willis; *When Gravity Fails* by George Alec Effinger; *Guns Of The South* by Harry Turtledove; something by Iain Banks (perhaps *The Use of Weapons*); *The Child Garden* by Geoff Ryman; *Swordspoint* by Ellen Kushner; *War for the Oaks* by Emma Bull; *Tourists* by Lisa Goldstein; *Beggars in Spain* by Nancy Kress; *A Fire upon the Deep* by Vernor Vinge; *Blood Music*, *Eon*, or *Moving Mars* by Greg Bear; *Only Begotten Daughter* by James Morrow; *Blackburn* by Bradley Denton; and *The Colour of Magic* by Terry Pratchett.

John Barnes, Stephen Baxter, and Greg Egan will write classics, but haven't yet.

Many other books were suggested, but rejected.

Nielsen Hayden said that Glen Cook's "Black Company" books are as "if *The Lord Of The Rings* was being retold by the orcs in the trenches."

Nielsen Hayden also noted that when something like *Neuromancer* makes such a meteor crater impact, if you say it's not a classic, you have to point to the crater and say, "Here's why this is not important." And also that is was quite possible that fifty years from now they will say, "What were they thinking? They didn't mention Leo Frankowski once!"

State of the Genre: Australian and Far East SF/F
Friday, 2 PM
Russell Blackford, Jim Frenkel, Yoshio Kobayashi (moderator)

Blackford is writing a history of Australian science fiction with Sean McMullen and someone else to be published here in 1999.

In the 1980s there were a few successful writers and a few small presses, but nothing conspicuous. The major writers were Damien Broderick, Lee Harding, and George Turner. Turner died earlier this year, Harding has pretty much left the field, and Broderick recently wrote *The White Abacus*, and a non-fiction work, *The Spike* (from Reed Publishing in Australia).

New major writers include Greg Egan, Terry Dowling, Sean McMullen. (I would recommend Peter McNamara's collection of Australian short science fiction, *Alien Shores*.) And HarperCollins Australia and other major publishers are publishing science fiction and fantasy. But not all authors have "crossed the water." For example, one big author there not heard of here is Martin Middleton.

Frenkel added Stephen Dedman as a major Australian writer. Lucy Sussex is another writer who has talked about the problems of publishers and distributors. Paul Collins, Leanne Frahm, Tess Williams (*The Map of Power*, which Frenkel heard as *The Mop of Power*, leading him to say, "I see visions of Mickey Mouse"), Rosaleen Love, and her daughter Penelope Love. He spoke more about Terry Dowling, who "is known in the United States as the great unknown Australian science fiction writer." And A. Bertram Chandler was one of the early forebears.

Frenkel added that we need to talk about "the kiwis": Philip Mann, Cherry Wilder, Lynn McConchie (sp?) and others. There was an anthology of New Zealand science fiction recently called *Rutherford's Dreams*. *Tales Of The Antipodes* is another good "Down Under" anthology. *Dreaming Down Under* edited by Jack Dann will be coming out soon.

Blackford added Sean Williams and Sara Douglass as Australian authors. *Aurealis* and *Eidolon* are the two major magazines. He thought there is a disproportionate emphasis on heroic fantasy in Australia, and said that Egan has said (in an article in *Eidolon*), "We've got to stop searching for this mystical quality of Australianism in our writing."

Frenkel said that the big news of the next few years will be the struggle of publishers and distributors in Australia.

Kobayashi has translated Sterling, Swanwick, Bear, and other authors, and edited slipstream novels. He also has a fanzine similar to *Locus* or *Science Fiction Chronicle*, and writes reviews for other magazines. He mentioned *Hayakawa's*, which is a magazine that usually has three domestic and three translated foreign stories. Major writers today include Chohei Kambayashi and Mariko Ohara. But most science fiction today in Japan is in animation and comics. Most science fiction novels sell 3000 copies in hardcover and 10,000 in paperback, so it hardly pays. (Apparently one of the major publishers also somehow alienated the authors over royalties, and that just makes the possibilities smaller.)

Fiction about Chinese history dealing with dragons and Taoist wizards is very popular with the young adult market. The animated film *Speed Princess* is currently number one in the theaters. (*The Lost World* is number two.) "People love science fiction, but visual works, not [the] written form." Techno-thrillers are also popular.

The readership changed in the late 1980s and early 1990s when the recession came. Before that, people read for an educational purpose, and hard science fiction was popular. Currently, Stephen Baxter, Terry Bisson, and Poul Anderson are popular in this genre. Afterwards, the female readership increased and they read for enjoyment rather than educational purposes. "They buy books, read them, and then throw them away." Fantasy is popular, but not translated fantasy (except for authors like Tolkien). So there are no popular foreign fantasy writers.

Kobayashi recommended Masaki Yamada, Ryo Hanmura, Goro Masaki (emerging cyberpunk writer), and Chohei Kanbayashi. The difficulty in translating into English is that they are fantasy writers and lack the hard science. (I think he meant they write soft science fiction, or philosophical science fiction, which wouldn't appeal to the fans of hard science, or of fantasy.)

Philip K. Dick had cult status in Japan in the late 1980s after he died, but that is regarded as a sort of boom.

Fantasy Debate
Friday, 3 PM
Lynn Abbey (moderator), Tim Powers

"Resolved: That J. R. R. Tolkien inhibited the development of modern fantasy."

Since no sides were assigned, it was decided by the flip of a coin that Powers would take the affirmative, Abbey the negative-but they would switch after twenty-five minutes.

Powers said that after people read *The Lord of the Rings*, they said, "Hey, I can do that. Not Middle Earth, but Back Earth or Under Earth. Not a ring, but a sword or a hat or a napkin dispenser." (Mark Leeper describes these novels generically as "three otters in search of a ring.") The same occurred with Steven King, but Powers was quick to add that neither of these trends were Tolkien's or King's fault.

Abbey said that Tolkien did not write something to be imitated. He didn't try to be the start of something. He was trying to write something to be the mythos of the twentieth century. He was trying to combine Arthurian legend with making sense of what he saw in World War I and (from a greater distance) World War II. It was more to prove it could be done, and to satisfy something in himself. Abbey said he was not writing fiction, but a myth. Powers said it was fiction: "It has dialogue." He also said that Lewis, for example, also had a definite agenda with his trilogy, but it was fiction too.

Helen Armstrong (from the audience-and even right next to someone it was hard to read their badge!) said that everything Abbey claimed was true, but about *The Simarillion*, not *The Lord of the Rings* or *The Hobbit*, which were more side effects and more written for an audience. Abbey said, "I stand illuminated," and Powers added, "I do own *The Simarillion*, but so far I haven't done anything more with it than own it."

There was a lot more discussion of how Tolkien created this world, not entirely germane to the question.

Abbey admitted, "Insofar as it made the genre possible, I owe him a tremendous debt, but I owe more to Robert E. Howard and Conan than to Tolkien." Powers said, "I would have been a real casualty of Steven King if he had come out sooner, but I was already stuck in my rut when he appeared."

Powers reads for Clarion and said, "That gives me a unique perspective on Tolkien's effect on unpublished and unpublishable prose." He sees formal writing such as "Then did he smite the dire wolf," and said he can almost hear the author say, "What was my noun again? I can see the verb coming up...." They usually say, "It's supposed to be Tolkien's style. I didn't want to be lively or colorful." As Powers noted, people mistake the trimmings for the core. For example, when people say they are doing Raymond Chandler, the response is, "Oh, you thought the smart-ass talk was Raymond Chandler. You thought the humorous analogies was Raymond Chandler."

Even outside fantasy, one sees the bandwagon effect: in the 1950s and 1960s everyone had to write like Hemingway. (Someone described Tolkien as having built "this wonderful, colorful bandwagon complete with calliope.") Abbey suggested maybe we should blame Sir Thomas Mallory.

Switching sides in an instant, Powers said, "I would say that Tolkien's example and imitators have added immeasurably to the field. And I bet I could even think of one, given time." Even if the percentage of quality is low, he said, the acreage is vast.

Abbey pointed out that we're emulating a person who was obsessive and a bit driven, and that now in addition to all the bad Arthurian copies, we now have bad Tolkien copies as well.

Someone observed that 90% of everything is crap, and that authors don't think they're aiming for that. Powers observed that franchise fiction is a template to prevent originality, and that copying Tolkien is similar.

The scary part, according to Abbey, is that authors are being told, not to do it more like Tolkien, but to do it more like Brooks or Eddings, resulting in "a Xerox of a Xerox of a Xerox."

I asked where modern fantasy would be today without Tolkien. According to Powers, there would be a lot less published. There wouldn't be publishers like DAW and Del Rey, and the other publishers would be much smaller. Both Abbey and Powers mentioned Howard as the author who might have been the leader in the field.

One of the problems of *The Lord of the Rings* and *Star Wars* was that they showed that you could have a best-seller. So no one was satisfied to eke out a living; everyone wanted to hit the big time. Abbey said she wouldn't blame any one person. Powers said he would, but hadn't decided whom yet.

An audience member said that one positive effect of Tolkien was the "Adult Fantasy" line from Ballantine and Lin Carter. And Abbey noted that the publishers' brawl over the rights to *The Lord of the Rings* made headlines and got attention for the field.

Someone else asked, "To what extent was Tolkien himself derivative?" Abbey said that it was an academic exercise, intended as a mythos of an alternate history, leading Powers to say that the more he heard about this theory the less respect he had for the work. But Powers did say that Tolkien knew what he was working with, and derived his names and else with some authority, while imitators just say, "Gee, that's cool-I can make up words too."

Who are the blockbusters in the fantasy field? Tolkien, Steven King, Stephen Donaldson (who is not entirely Tolkienesque). But Abbey said, "You can write books or you can read books," and hence were not the best sources for answers to this. But most blockbusters are Tolkienesque.

The audience voted overwhelmingly for the negative.

The Alien Autopsy
Friday, 4 PM
Pat MacEwen

"What a real autopsy of a dead alien found in a wrecked spacecraft would be like."

I missed the beginning, but apparently MacEwen is an evidence technician in Stockton, California. Some of the

introductory information was that while the autopsy supposedly took place in 1947, the doctor's suit was made by Dupont sometime after 1960. Also, when the cameraman claims he couldn't keep the range and focus, this is bogus.

(Here began graphic autopsy photographs.)

Other discrepancies and inaccuracies include the Y-cut (it should start on the shoulder, not under the ear). You didn't see the difference in colors in layers, which are very obvious. The wounds on the alien leg were less distinct than wounds usually are.

We learned that doctors sometimes use colored knitting needles to distinguish multiple bullet paths.

There was then a long section on distinguishing entry and exit wounds.

MacEwen mentioned other problems. Brains are not mush; they have a visible structure.

We learned about defensive wounds, and how they differ from offensive wounds. (Cuts on the joints of little finger are usually offensive, because the knife slipped.)

Spaceship crashes are likely to generate injuries that look more like those from a burning car than what showed up in the autopsy.

Regarding what an alien autopsy would really be like, MacEwen said that, yes, there would be isolation suits, in a quiet secluded place, but with a good cameraman and a good camera. There would be more tissue sampling. There would be a toxicology screen. It would be done from a forensic point of view, but you would also dissect the alien further to determine the structure.

Someone asked about Vince Foster. According to MacEwen, everyone who has looked at the autopsy results agrees it was suicide.

Asked about the Kennedy autopsy, MacEwen recommended Michael Baden's *Unnatural Death: Confessions of a Medical Examiner*. She also recommended Douglas Ubelaker's books, but said to go for the trade edition so that you can see more detail in the pictures.

If you have any further questions, you can reach her at **macewen@earthlink.net**.

You Want to Do WHAT with My Genes?
Friday, 5 PM
William Michael Brown, Anne Lesley Groell, John G. McDaid, Robert J. Sawyer (moderator), Susan Smith, Edwin Strickland, Melanie von Orlow

"What good and bad can come of genome editing?"

Most of the panelists are professionally involved in genetics and genetic engineering.

Sawyer said that since most people on the panel are probably pro-engineering, who had some downsides. Smith said the obvious is genetic diversity. We have already destroyed a lot with agriculture ("shotgun genetic engineering"). All the cows in Wisconsin have the same small set of fathers because farmers buy tubes of semen rather than having dangerous bulls on the farm. With all this homogeneity, what happens to disease susceptibility?

Sixty percent of people recently surveyed said they wouldn't eat meat from cloned animals, but forty percent also said they wouldn't eat cloned vegetables, which we have now. And someone said that people think cloning is pressing a button and getting a full-grown sheep. McDaid said that maybe the downside is "we're just too stupid to have this technology."

Brown said another downside is the cost to produce something initially high, but then becomes very cheap to keep making it. Even so, the cost to the end user will be very high.

In Germany, the Greens are opposed (occasionally violently) to genetic engineering and destroy laboratories. (I wonder if this is backlash against Nazi experiments.) The "Flavor-Saver" tomato is still not on the German market, but not much here either.

Sawyer mentioned health insurance in terms of people being unable to get insurance if they are determined to have genetic tendencies toward certain diseases. The whole concept of shared risk is gone, and the insurance industry becomes an elaborate banking scheme. Georgia actually passed a law against insurance companies using genetic information to make insurance decisions.

An audience member asked, "So why is it better to allow insurance companies to charge different rates based on sex or age than on the basis of genetic tests?" Brown felt if everyone was tested for everything, that would be fair, but that doesn't really address the question.

On the other side, using transgenic mice they have determined not everyone can reduce their blood pressure by reducing salt. Genetic screening could help tailor a treatment for an individual. (Mark and his father find Vitamin C a good preventative against colds; I find it useless.) On the other hand, insurance companies won't pay for nutritional customization, even though seventy percent of deaths are nutritionally related.

As Brown pointed out, most of our treatments are based on the patient being an "average" patient for that disease, whereas genetic testing could let you have a much higher success rate. $3000 for a treatment sounds expensive until you compare it with the cost of a series of failed treatment, or the current situation where you basically wait for something like a coronary to begin treatment (because you can't even tell there's a problem).

Sawyer noted we're in an interesting time between when we can identify a tendency towards a disease (such as Huntington's) and when we can treat it.

The target date for sequencing an entire human genome's worth of genes in 2005. In another quarter-century we will probably be able to write out an entire genome, and we already have mammalian cloning. Potentially we can design species as will, according to Brown, but Smith responded, "Why would we?"

Smith explained that there are two technologies for cloning used for Dolly the sheep and Gene the cow. Dolly was made by taking a nucleus from an adult sheep and placing it in an de-nucleated sheep ovum. Gene was cloned by taking a bovine embryo about thirty days old and "teased out of it some cells that we still pretty primordial" and grow them in culture. These cells replicate themselves (how to do this is the big secret), and then you can manipulate their DNA. This relies on doing a lot of them and then selecting the ones you want. Rather than the perfect copy of Dolly, you can develop a lot of similar but not identical copies. As Smith summed it up, "Dolly is what you use if you want to make yourself; Gene is what you use if you want to make an army of slaves."

Smith re-emphasized that genetic influences are causes for maybe ten to twenty percent ("tops") of the diseases we are seeing.

When we have the ability to write a gene, we can destroy a gene we think is harmful, knowing we can recreate it, but it also means terrorists (or kids with chemistry sets) can reconstruct them, according to Sawyer.

There was some discussion of "nature versus nurture" and a discussion of the nature of intelligence.

An audience member thought the California Supreme Court had ruled that a person had no rights to their genetic code, but Brown pointed out that the patient signed a release and the University of California spent a lot of time and money developing a treatment from it. This area is still in turmoil.

Someone said there is a lot of "junk DNA" in our genes and thought this would be what we edited out (as Strickland said, "slush pile DNA"). Sawyer noted birds have much less junk DNA, and this is part of what makes them lighter.

Parties

I started out with the Tor party-and finished with it two hours later, having talking to Eric Van about neurobiology; Kevin J. Anderson, Rebecca Moesta, and Mark Tiedemann about *War of the Worlds: Global Dispatches* and other works; Esther Friesner about whether she posed for the cover of *F&SF*; Russell Blackford about Australian science fiction and the value of carrying a corkscrew with one; and both Nielsen Haydens.

Kate Pott and Mark Leeper reported that the Z'ha'dum party was fun, and the balcony view from the Boston party was impressive. The candy sushi from Boston didn't impress Mark, but he thought the chile ice cream from Philadelphia interesting.

Is SF Relevant Any More? Was It Ever?
Saturday, 12N
Gregory Benford, Maya Kaathryn Bohnhoff, Ginjer Buchanan (moderator), Kathleen Ann Goonan, Betsy Mitchell, Richard Parks, Walter Jon Williams

There was no description for this panel.

Before this panel started, Buchanan gave me a chance to announce that Walter Jon Williams had won the Sidewise Award (Short Form) for "Foreign Devils." Later Williams said this was the first award he had ever won-hard to believe, isn't it?

Buchanan started by holding up Friday's *USA Today* headline: "NASA, reaching for the heavens and beyond."

Buchanan started by saying, "Hard science fiction is of decreasing relevance because science has caught up with it." Goonan disagreed, saying, "Science fiction is the only literature today that is relevant because of all the scientific advances that are happening now." She added, "This is the bridge between making what is abstract to a lot of people real and putting it in human terms so that they can relate to it."

Williams straddled the fence a bit by starting, "Science fiction was once very relevant and isn't so relevant any more." He explained that "the world sort of caught up to science fiction, particularly with the Apollo program." He also said that now "the only space station we have seems to be manned by the 3 Stooges." But he added that science fiction *could* be relevant.

Bohnhoff agreed with Goonan that science fiction was "more relevant today than ever."

Benford said that scientists are science fiction readers, so change is being driven by people who read us, so science fiction is relevant. He then spent a lot of time describing plans for future space programs, connected only remotely to the topic except for the fact that what sells Mars to the masses is not NASA but Ray Bradbury.

Mitchell said she was "one of those people whose lives were changed by science fiction." She said that the twelve-year-olds ("the golden age of science fiction") are not watching CNN or reading *USA Today*; they're reading science fiction. Buchanan pointed out that twelve-year-olds aren't reading; they're on the Internet.

Parks claimed, "We are living in a science fiction age." Getting your science from science fiction is a bad idea, but getting the idea that the future is coming and that it will be different is what science fiction does best.

Bohnhoff observed that it used to be that all science fiction was in the future, but now we have science fiction that is part of our past. So we are in the middle of it all.

Goonan said that one important question was what "SF" are we talking about. For example, the Star Trek novels seem the parallel of the comic books that used to come out regularly. But these use standard tropes. She feels that the science fiction that uses science and gets us excited about possibilities and the nature of reality is what is relevant.

Mitchell suggested that the question should be, "Is science relevant to science fiction?" She pointed to the surge of fantasy and the decline of science fiction over the past couple of decades.

Williams said that the heart and soul of science fiction was the space opera, and that has been taken over by *Star Trek*, available twenty-four hours a day everywhere on the world ("on the Trek Network," someone added). As he put it, "The glorious heart and soul of the field has been stolen and debased by television."

Buchanan said that most of the population will step into the future without understanding it, and that is what keeps science fiction marginal: people don't care about understanding new stuff. (Do you understand your VCR? Your car?)

Benford, as an identical twin, says that the statements of ethicists regarding cloning strike him as ridiculous. In part this is because none of these people have read any of the literature about it, and don't realize anyone has thought about it before. "We should act as a constraint and a break upon the public perception of these problems," he said, "[but] I don't know quite how to do that."

Bohnhoff added, "The popular culture responds to sound bites and little snippets of visual subjects they see on

TV." No one understands what cloning is, but their excuse is that they don't have time.

Buchanan said after she explained cloning to someone at work, this person asked, "You mean I get a baby that I have to raise and it becomes a teenager?" "Yes." "Then what's the point?"

Williams admitted to having written stories in which cloning produces an adult, but in his defense he said that he had a whole lot of technology to explain it.

In response to an audience member who felt that people should know how their car works, Buchanan said, "My life is full and rich without understanding how my car works." Benford disagreed, saying, "To the extent that you fail to understand a portion of human culture you will be the victim of people who try to misuse that culture." But Buchanan rebutted that there are only twenty-four hours in a day.

Bohnhoff pointed out that people have found every new technology threatening, but they do eventually get used to it.

Someone asked if good science fiction stories could be promoted as text books. Williams heard this as "sex books" and said they would sell better, but the audience would be disappointed.

Customers don't care about how beautiful and elegant the code is; the question is, "What will this computer do for me?" Williams said this was the "Aunt Matilda" principle of new technology: make it relevant or meaningful to Aunt Matilda.

Mitchell suggested that SFWA should be more proactive with giving correct information to the media when science stories break. Buchanan said that *The Boys from Brazil* had cloning pretty much correct years ago.

After the Takeover
Saturday, 1 PM
Brenda W. Clough (moderator), Lawrence Person, Bruce Sterling

"How will Hong Kong fare under Chinese rule?"

Person said that ten years ago there was glasnost (openness) and perestroyka (restructuring). The former was a success, but the latter was a failure. The Chinese saw this, so they decided to do things differently. They have perestroyka without glasnost. And all the new business ventures are controlled by the gerontocracy. Hong Kong added a fifth to China's gross national product. So he feels that the short-term answer is that China will not kill the Golden Goose.

Clough likes Hong Kong because she feels that it could all happen there. She contrasts it to Minnesota, which is not a place that leaps to mind as one of the world's hot spots.

Sterling thinks there's a 65% chance that Hong Kong swallows China, and a 35% chance that they can't get along and China has to "tiananmen" them. He contrasted the liveliness of Hong Kong with Singapore, which he described as "grimly autocratic." But in the 1930s Shanghai was a lot like Hong Kong is now, and China didn't hesitate to kill that Golden Goose. He pointed out that Madame Mao was a film star, and said it was as if Bette Davis had taken over the United States. As he put it, "Madame Mao and the Gang of Four emptied the Chinese skull and filled it with concrete," so having pop icons doesn't prevent disaster.

Clough thinks the new generation of leaders doesn't remember the Long March, or the massive famines and cannibalism of the early years. "They think about Communism the way George Bush's kids think about Episcopalianism: it's something we do, but it's not important."

The anti-Sino attitude is a strange coalition of labor and burned-out Cold Warriors, according to Sterling, worrying that "China is the next Commie threat and besides they make goods cheaper than we do." He felt this was strange, given that Mexico is really very similar, and we are supposedly friendly with them, "though we've boosted our border guards this week and we seem to be shooting them with more vim instead of just sending them back in a white truck."

Someone in the audience asked, "What if they go after Taiwan?" to which Clough responded, "That would be a lovely thing." She pointed out that we do have defense treaties with Taiwan. Person thinks the Chinese would lose, because the Chinese military is not very good, and the Taiwanese are very well equipped. There's also a lot of

business between the two, making war less likely.

Person pointed out that the reason there isn't the Cold War tension with China is that they don't have global ambitions. An audience member claimed that was true of Japan also right before World War II.

Someone suggested that China might take their land forces to someplace easier, like someplace in eastern Europe, leading the panelists to point out that they would have to go through Russia. However, Vietnam or especially North Korea might be targets for "liberation." In fact, the idea of the United Nations asking China to send Chinese troops into North Korea seemed not entirely far-fetched to the panelists.

Sterling said that there is a science fiction magazine in China with a readership of a quarter of a million.

Person thought that there could well be ethnic fractures in China. He reminded us that no one predicted how quickly the Soviet Union would ethnically fracture, or Yugoslavia.

Sterling reminded us that the Chinese have both a tremendous cultural heritage and a tremendous background of suffering (which makes their current problems seem, if not unimportant, at least not an enormous worsening of conditions). They have an enormous diaspora ("they are the Jews of Asia"). They have a lot to offer the rest of the world.

Sterling said there is some Chinese science fiction in translation (e.g., *The Sword and the Willows* (?)), but it is pretty potboiler. "There's no Aristotelian logic to the plot; it's like an enormous span of wallpaper."

Sterling said of the Chinese institutional corruption, "The gears of the power structure are hidden. People have to spend enormous amounts of time finding out who to bribe. And the guy you bribe isn't even sure he's the right guy to bribe."

Alternate Space
Saturday, 3 PM
Stephen Baxter, Michael F. Flynn, Richard Garfinkle, Stanley Schmidt,
Allen Steele, John E. Stith (moderator)

[Thanks to Mark for taking notes at this panel.]

There was no description for this panel.

Before this panel started, I was able to announce that Stephen Baxter had won the Sidewise Award (Long Form) for *Voyage*. This made the second year Baxter has won; last year he won for short form for "Brigantia's Angels."

In an alternate universe, we would have had more than one microphone.

As far as credentials, Steele has written *The Tranquillity Alternative* (with an alternate history for the space program), Flynn has written *Firestar* (with a private space program), Garfinkle has written *Celestial Matters* (with a space program in an alternate universe where Aristotelian science is correct), Stith has written *Redshift Rendezvous* (with space travel in a hyperspace where the speed of light is ten meters per second), Baxter has written *Voyage* (with a different alternate history for the space program), Schmidt edits *Analog* (a bastion of space program stories), and me-I just read the stuff.

Steele began by talking about the funny thing being that old space travel is becoming alternate history. "*Destination Moon* is a first-class example," he said. Heinlein wrote it, Willy Ley was the technical advisor, and it was the first United States depiction of a realistic space flight. "I watched three times while writing *The Tranquillity Alternative*." And he also mentioned Heinlein's *Man Who Sold the Moon*, which you can see either as obsolete or as how it could have happened; it was set in 1975 and it still holds up.

Getting the microphone, Flynn said, "Actually I was going to mention that, so what he said." He went on to say that Truman had decided to stop working on long-range rocket ships even though space scientists like Oberth were pushing for low earth orbit and space stations. Kennedy decided we would beat the Russians to the moon, and turned program from X-planes into a political stunt.

Garfinkle followed the trend by saying, "I thought of what Allen said...."

Baxter talked about William Barton's "In Saturn Time," about an expanded Apollo program. He also said that in his novel *Voyage*, they get to Mars and that's all there is, so it's strangely suffused with nostalgia in a way.

I mentioned *Frau im Mond* as an even earlier realistic space flight movie. Steele pointed out that the movie was responsible for the countdown-they needed a way to build dramatic tension.

I then admitted to a certain fondness for strange methods of space travel, and mentioned the swans that Lucian proposed, or De Bergerac's morning dew, or even Han Wu's rockets. Garfinkle, who had done something very like this in *Celestial Matters*, said that in *Orlando Furioso*, someone went to the moon in some strange fashion to recover Orlando's wits, which had been lost there.

Schmidt said that he would mention his first published story, "A Flash of Darkness," with a Martian rover sending information back to Earth in 1997. He also recommended Paul Levinson's "Loose Ends," and finally (if you can get a copy) Poul Anderson's "Bicycle Built for Brew" (also released as *The Makeshift Rocket*). Stith mentioned a Frederic Brown story where the Martians are watching a rocket approach, on the rocket the Earthmen are wondering if there's life on Mars, and then the rocket crashes into the Martians, destroying all life on Mars.

Regarding alternate methods of propulsion, Stith asked how Superman flies. He jumps to take off, but it space he seems to be rocket-powered or something. I said Allen should answer that, because he's the man of Steel(e). Groans ensued.

Someone pointed out that no matter how ludicrous all the early methods were, they did indicate that the authors conceived of the Moon as a place to go to, rather than just a light in the sky. Baxter added that some of the old propulsions were satire, and that he would like to think our time travel stories will look weird in a thousand years.

Flynn said that there were two other alternative means. One was in an article by Zubrin about using magnetism in super-conducting loops. And there is another story about how subspace is a landscape and you can walk to the stars. Schmidt added that Andrew Offut and Richard Lyon wrote a story called "Rails Across the Galaxy." And John DeChancie has "Starriggers," about space truckers.

Baxter asked why all these alternate space stories we are getting are coming out now? Steele said that he and Baxter do almost the same thing with their alternate histories, and it was an irony ..., leading Flynn to break in and say something about "Steele talks about ironies."

Resuming the train (or rocketship) of thought, Steele said that both he and Baxter wrote about space frontier, and the two books would go well together. He suggested an Ace Double, though he said given the size of the books, it would be "the mother of all Ace Doubles." (I suggested a more practical two-volume slipcased edition.) But as to why, Steele felt that the writers of the post-Apollo generation grew up expecting a space frontier and felt left down when it didn't happen that way. (This implies that the woman who spoke at the previous alternate history panel about alternate histories as a way to correct injustices of history was perhaps not far off the mark.)

Steele noted his was not about Mars; it was about the moon. After he wrote it, he thought, "Maybe I should write about project Ares." But his first reaction when he heard about *Voyage* was, "Oh, thank God, I don't have to do this. I can read it; I don't have to write it." He said it was like all the Mars novels that came out in 1992, and thought that the interesting thing about "the great Martian land rush of 1992" is that it produced so many great novels.

Baxter said he had a theory of why now. We grew up with Apollo when the voices of caution were subdued. Then we grew out of that. (He observed that he is now the same age that Armstrong was when he walked on moon.) We had the rush with the early years, but we slowly absorbed that Mars is different. It's not a place like a cold mountain top where all you need is a warm suit and some small oxygen mask; it's much more demanding than that.

Schmidt observed that he doesn't always know what causes trends. He once got a bunch of stories about kudzu taking over the world, and couldn't find any news story or other single source to explain it. (I asked about cloning stories. He said they had started and it would get worse.)

Regarding alternate methods of propulsion, someone in the audience asked about the Dean Drive. Schmidt immediately responded, "Apparently it doesn't work." Steele described the history of it briefly, about how Campbell was taken in by a bogus perpetual motion machine for a very long time (the last Dean Drive article in appeared in *Analog* in the 1970s). Schmidt added, "I can tell you this: hardly a month goes by when I don't get a variant on the Dean Drive."

Someone asked about stories based on the Soviet space program. Steele mentioned "Fellow Traveler" by William Barton. Baxter said he had some forays in that field, such as "Zemlya," in which Yuri Gagarin secretly goes to Venus and dies there (the plane crash was a cover-up). He did an Internet novelette named 'Irina' as well, in which cosmonauts sent to the moon with the understanding that the Apollo program would bring them back became stranded there when we canceled the Apollo program, and it all became a Cold War secret. But then it got caught up in the whole scandal about the bogus "Irina virus" and has sort of quietly disappeared. (Though he said, "There's no point in being a science fiction writer if you can't cause a global panic once in a while.")

There was a discussion of which particular brand of spaceship models inspired Steele's novel.

I noted, "We now have a space station staffed by the Three Stooges." When we read it, the problems were never the people. Baxter said the Mir was "make do and mend and try not to kill yourself in the process." He said it has influenced him, because this is what life is like in Antarctica, but people with the American space program think they have to have everything perfect. Flynn thought this was all being done on purpose as practice for the Mars mission. (Stith said they would take more duct tape.)

There was some discussion of the Iraqi space gun, and how the inventor (as someone described it) "was committed suicide." Flynn said that the basic idea was a RAM accelerator (a jet engine inside out).

I mentioned *Salvage-1*, where ordinary folks just do space flight from the back yard. Baxter said it was a tragedy that we don't live on the moon; there you could have a much smaller engine. I asked, "Why not write a story where humanity is on the smaller of a two-planet system?" Schmidt said someone had written a story of teens in a low-gravity environment building a spaceship as a school project.

State of the Genre: Latin American SF
Saturday, 4 PM
Roger MacBride Allen (moderator), Patricia Anthony, Charles N. Brown, Marcial Souto, Don Webb

Allen had just returned from a long time in Brazil, but felt he knew nothing at all about what was going on.

Souto said that the science fiction field in Argentina started in the 1950s with magazine *Mas Alla* (*Beyond*) which published all the important authors in conjunction with *Galaxy*.

Buenos Aires has Minotauro Publishing, which was started by the discoverer of Gabriel García Marquez and Julio Cortázar and started "El Boom." In the 1960s there appeared three major writers (which Souto didn't name), but they were connected with magazines. It is very difficult to publish a book in Spanish-speaking South America, and no one makes a living as a writer. (The last part is not so different from here.) Anthony said that the same in was true of Brazil.

From 1964 to 1968 there was a Spanish-language edition of *F&SF*. In the late 1970s and 1980s there were a few magazines; the most successful has twenty-four issues. Souto did a series of Spanish-language science fiction (ten books in three years), and one even won an award as the best book published in Argentina that year. But nothing is happening any more except in amateur magazines.

Allen talked about how Sao Paolo is 18,000,000 people, and is the largest city in South America. Relative to Argentina's size, it is bigger than combining New York, Chicago, and Los Angeles would be here. But his experience was in Brasilia. "Brasilia's the science fiction city [as a completely planned city], but it's so sterile and un-Brazilian." Anyway, he saw a bookstore in Brasilia advertising a "Science Fiction Festival." He was very interested until he discovered it was all translations of *Star Trek* novels and that was it. Anthony thought this might be a function of which bookstore he went into, and the fact that there isn't as much categorization of books. The biggest publisher in Brazil is GRD and they're basically semi-pro. Allen said he thought all this was because the readership are people who have seen science fiction on television with subtitles and then see media tie-in books.

Allen noted that some of the television-movie *The Martian Chronicles* was shot in Brasilia.

Webb said he had very little to say about Mexico because there's no science fiction scene because there's very little money. And in addition, you couldn't get published in Mexico without being published in the United States or Spain first. A sale of 2000 copies is considered a huge sale. Basically, all that's marketed is translations of United States writers. Anthony claimed it was similar to the fact that "you can't do magical realism in the United States." (The earlier panel on magical realism seemed to contradict this.)

Allen said they were starting to do something like the Penguin 60p books-smaller and cheaper. (This reminds me

of what I saw in Mexico many years ago for twenty or twenty-five cents, except they were pulp rather than classics.) Souto said that this whole trend was the Spanish publisher Alianza who started it before Penguin.

Because of the problem of inflation (inflation of 100-120% per month in Argentina), books are not priced, but bar code readers are provided so the customer can check the current price.

Souto said there is a much bigger readership for fantasy than science fiction and said the most popular writers were Theodore Sturgeon, J. G. Ballard, J. R. R. Tolkien, and Ray Bradbury. Ballard sells 1400 copies in Spain, but 25,000 in Argentina. See the panel on magical realism for details on Bradbury.

One interesting stumbling block is that publishers have to do two translations, one for Spain and one for Argentina. In addition, the publishers are not as advanced technologically. For example, the publishers don't have email, but the fans do. For that matter, publishers don't have editors-and writers need editors.

Souto observed that libraries were not a good source for science fiction. "Libraries can't buy books, so all they have are old books. You miss a decade, sometimes two or three." Publishers are supposed to give the libraries books, but they somehow get lost on the way.

Anthony noted that the literacy rate in Brazil was much higher than Portugal (which he said had a 25% literacy rate in 1969). And according to Souto, Buenos Aires has a long tradition of reading in cafes, and bookstores stay open all night.

In Latin America, there are some conventions and clubs, but no writers workshops.

Slides and Update on the Galileo Mission
Saturday, 5 PM
William Barton, Bill Higgins (moderator), Carol Redfield, Henry Spencer

Given that this was in a room without a stage, it was hard to see the slides.

After a description of the Galileo probe itself and a recounting of the goals of the mission, Higgins talked about how it sent back information on the asteroids Ida and Gaspra, and the Shoemaker-Levy comet.

There has been funding for further Europa encounters after the end of 1997, and possibly also an Io encounter at the end of that. Because Io is very close and very high in radiation, it makes sense to save it for the end of your hardware life. Given the radiation level of the Jupiter system, only the outer-most, Callisto, could be explored by humans using current suit technology.

Unfortunately, there was so much time spent on recapping the early part of the mission that I had to leave before the new information was given.

Hugo Awards
Saturday, 8 PM

And the winners were:

- Best Novel: *Blue Mars* by Kim Stanley Robinson (HarperCollins Voyager; Bantam Spectra)
- Best Novella: "Blood of The Dragon" by George R. R. Martin (*Asimov's* 7/96)
- Best Novelette: "Bicycle Repairman" by Bruce Sterling (*Intersections*; *Asimov's* 10/96)
- Best Short Story: "The Soul Selects Her Own Society ..." by Connie Willis (*Asimov's* 4/96; *War of the Worlds: Global Dispatches)*
- Best Non-Fiction Book: *Time & Chance* by L. Sprague de Camp (Grant)
- Best Dramatic Presentation: *Babylon 5* "Severed Dreams" (Warner Bros.) Directed by David J. Eagle, Written by J. Michael Straczynski, Produced by John Copeland
- Best Editor: Gardner Dozois (*Asimov's*)
- Best Professional Artist: Bob Eggleton
- Best Semiprozine: *Locus* edited by Charles N. Brown
- Best Fanzine: *Mimosa* edited by Dick & Nicki Lynch
- Best Fan Writer: Dave Langford
- Best Fan Artist: William Rotsler
- John W. Campbell Award: Michael A. Burstein

Button seen on the way in: "If Windows 95 is Y2K-compliant, why isn't it called Windows 1995?"

The layout of the stage was strange, leading to long delays between people being called and when they finally appeared at the podium. The seating was odd as well; they were the Hugo nominees to sit on the three seats at the each end of each row, and their guests further in on the row. Most people sat with their guests anyway.

Neal Barrett, Jr., was the Master of Ceremonies. He started with a joke: "Rene Descartes goes into a bar. The bartender asks, 'What will you have, Monsieur?' 'A beer.' He drinks the beer. 'Another, Monsieur?' the bartender asks. 'I think not,' Descartes says, and vanishes."

Barrett said he was so well-known that he was Topps author card number 3749. Early on, it was just him, Chad Oliver, and Nat Hawthorne, sitting around talking about how jealous they were of that Hank Thoreau.

"Friedrich Nietzsche walks into a bar. The bartender asks, 'What will you have, Monsieur?' 'A beer.' He drinks the beer. 'Another, Monsieur?' the bartender asks. "What?! Didn't you hear what happened to Descartes?"

The Seiuns were presented by someone new this year, who was more into the humor and I think moved it along a little faster. The Short Story in Translation winner was Greg Bear's "Heads"; the Novel in Translation was Robert Sawyer's *End Of An Era* (the Japanese title of which would translate as "Good-bye Dinosaurs" or "Bye-Bye, Dinosaurs"). The award was a rice spoon, which looks like a large paddle and led to a fair amount of risque comment.

The First Fandom Award had been given at Dragoncon; it went to Hal Clement. The Big Heart Award went to John L. Coker III.

After Eggleton won for pro artist, presenter Pat Cadigan asked, "Bob, do you use a conditioner or a de-tangler?" I wonder if people vote for Eggleton just to see him do his hair thing. (Just kidding.)

In accepting his Hugo, J. Michael Straczynkski said, "Television offers too many easy answers and not enough good questions."

Barrett made several comments about established authors, but I thought his dissing of George Eliot for her "fast-paced writing and snappy dialogue" was unfair.

The ceremony was over in slightly less than two hours.

Personally I thought some of the best works were not even nominated this year, but so it goes.

The Most Important Events of the Second Millennium
Sunday, 10 AM
J. R. Dunn (moderator), Andrew C. Wheeler

There was no description for this panel.

Dunn started by listing the invention of the scientific method, the destruction of the horse barbarians, and the work of the "Founding Fathers."

Wheeler said his first reaction was that all the interesting stuff was in the first millennium: the Big Bang, the expansion of material into space, etc. The second millennium was far less interesting. Then someone told him they probably meant the second millennium *Christian era*.

Roger Bacon, Francis Bacon, and Thomas Aquinas were the major contributors to the development of the scientific method. The Bacon's influence is more obvious, but Aquinas contributed by systematizing all knowledge up to the 13th century which gave people a base to work from.

Wheeler thought the really interesting thing about the scientific method is that the Greeks' thinking was very different: they wanted a beautiful theory and that was what a theory was judged on. "The scientific method made theory have to conform to facts of the world. ... It means the ethical world and the physical world are inextricably linked."

Regarding the second item, every three hundred years the tribal horsemen (Huns, Vandals, Turks) would sweep

across Europe and destroy civilization. The destruction of this cycle was broken by the Romanoff Czars in the 18th and 19th centuries (the only book on this seems to be *The Caucasian Battlefields* by Allen Muratoff). In addition to the obvious threats, these invasions were also the vector for the plague.

Wheeler said that had the native American horses not been made extinct, and the native population had generations of horsemen, the Europeans might never have been able to expand westward. Even with only a few generations of horsemen it was a difficult process.

Wheeler also said that up until recently war was a very amateur effort, and it has only recently become a scientific study. (This is not to say there weren't professional soldiers, but there was no training in military strategy or planning.)

There are theories now that general war is done, and war will turn entirely into terrorism. The "body count" will be lower, but it could be the end of privacy and of democracy (or at least the suspension of many of the rights guaranteed under it).

Lerner asked how this "state of siege" would be different from the Dark Ages, where the threats were disease, bandits, and so on. Dunn said probably not very much except for the technology.

Someone asked about James Burke's *Day The Universe Changed* and *Connections*. Although Wheeler thought Burke's later work had gone downhill, he thought that Burke was a very interesting historian who looked at the accidental and interactive nature of change.

Wheeler thought that we might tend to list the printing press because we're "booky people," but also that the printing press was a major, critical development in spreading knowledge. Fred Lerner (from the audience) pointed out that the key change was the idea that knowledge *should* be disseminated, and that knowledge was not something special for the few. Tied into this was the fact that most of the early books were religious texts. But Dunn said the printing press meant you no longer had to rely on monks and the religious orders for what you would learn.

Lerner also said that the printing press regularized language, and whichever group got the printing press first had their language become the dominant language of the area.

It also changed the notion of authorship, creating a notion of individual authorship. And it standardized texts by having everyone have identical texts ("we're all reading from the same page"-even though page numbers weren't invented for fifty years).

Dunn also mentioned "Mute Inglorious Tam" by Fred Pohl and C. M. Kornbluth about a 14th century science fiction writer who doesn't have the base to build on. I found this interesting, because I just read it a few days ago in Resnick's anthology *In the Funhouse*!

Dunn thought one of the big events of the third millennium could be managerial and recommended reading Drucker, who has a non-adversarial concept for business.

Dunn got to his third event, the work of the founders. By this he meant the founders of the United States, and pointed to the Declaration of Independence and the Constitution. The ideas here were very new and radical. Not all agreed. Hamilton would have liked a permanent overlord class. Jefferson wanted a more pure democracy. Partially, the decision to include more people was to make themselves more legitimate than saying "it's just us." But as far as making rules and then following them themselves, they did fairly well, unlike the Mexican Revolution or others.

In response to a question, Dunn said that it was a myth that the Constitution was based on the Iroquois model, and that this myth arose when people starting feeling guilty about what they had done to the Indians.

Lerner said that one of the important examples set by the founders was that at the end of his second term, Washington left. Someone else said that he had also turned down a crown after the Revolution.

Someone suggested that the founders' model was the Roman republic, not the Athenian democracy. The question of what caused the downfall of either, and why the founders chose what they did was debated but not resolved.

The rise of democracy in two hundred years is remarkably fast, according to Dunn, and we still don't know where

it will go in the future.

Wheeler said that we're living in a period of intense ideologies. Ten years ago we would have been talking about Karl Marx and his importance. And the successful governmental model is not necessarily liberal democracy, but market capitalism. Dunn thought that may be true, but it's short-sighted, and pointed out that someone said that democracies do not have famines (Ireland was a colony in 1850, as was India in 1943), and democracies do not go to war against each other.

Dunn quoted an ancient philosopher as saying, "The strong do what they can; the weak endure what they must," and given the way the panelists talked about world history up until the present, this seems to sum it up pretty well.

At the end, there was a discussion of India and China, where Wheeler said that China only wants to rule China, but they have changing ideas of what China is, which ties in with the take-over panel yesterday.

The Science in SF Today
Sunday, 11AM
Catherine Asaro, John G. Cramer, Jay Kay Klein, Michael Swanwick, Malcolm B. Wood

There was no description for this panel.

Cramer began by saying that at the panel on science fiction's relevance yesterday, a couple of panelists seemed to equate science with space, and he felt that was grossly incorrect.

Wood wondered if authors sometimes get so involved in telling a great yarn that they sort of say, "The hell with accurate science."

Swanwick said that Soviet science fiction always had very pompous scientists, because popularizations of science there always had a heroic aspect, while here we are more folksy.

Klein complained, "There is very little amount of biological science in science fiction." He felt this is somewhat surprising, especially with all the recent developments in the biological sciences. (I suspect this will change because of these developments.) Benford said that not only is there little biology in *Analog*, and what is there is usually "excruciatingly wrong." He'd like to think this is because the biologists are too busy. Benford thinks that the developments in biology will focus on reproductive technology, and hopes that all the new women scientists-writers will pick up on this. Someone said there was a good article in *Reason* magazine (by Nick Gillespie) a couple of months ago, pointing out that identical twins were clones. Asaro said that what was interesting is that normally when you publish you get more money; the cloners published and immediately had their funding got off.

Wood entered a plea to talk about something other than cloning. He said, for example, he has heard about a cheap fusion bomb that didn't require a fission triggers, organic transistors, organic diodes, semi-organic polymers, and microchips in the brain. Swanwick said that these are all engineering, and while scientists tell you how everything will work, engineers tell you how things will fail. And since stories are usually about things fail, you find more engineering in science fiction than science.

Cramer said that someone (Gail Nordley, wife of author G. David Nordley) said yesterday, "I learned my science from reading science fiction." Cramer's reaction was "This is a bad thing to do." When writing hard science fiction, authors use the science for a different purpose than to teach science.

Asaro said that the science in the panelists' science fiction is based on extrapolations of what we already have. Others suggested "they make sense" and "they do not violate anything we know."

Benford said that he likes the moment in science fiction when you realize you got the scale wrong, and said that science has done that for humans. He said that Stapledon took the ideas of science and used them outside the science fiction community in a way that does this.

Benford said he hated to say the field should be more proactive, leading someone to suggest more active pros, leading someone else to ask for more active prose.

Klein pointed out that you are often stuck in your own belief system, and also that whenever you extrapolate beyond a few years, whatever you think will happen, won't.

Wood said what irritates him is science in science fiction that is just plain wrong. Fossilized high-speed bees in *Beowulf's Children* gets the time-frame for creating coal wrong as well as the hydrogen content, and the book also had a flitter flying at 120 kilometers a second.

Leinster was mentioned. When most of the audience knew the name, Cramer was impressed and said, "I love this crowd!" According to Swanwick, Leinster used to work on inventions. If it worked, he'd patent it. If it didn't, he'd "putty over" the problem and write about it.

Cramer emphasized the value of science fiction in getting people used to dealing with change, even if the science is wrong that drives the change. "The change is the important element."

"Science fiction reflects the personalities of scientists," said Asaro. "Scientists solve problems." Science fiction is therefore a very optimistic genre. Asaro said, "Science is a dialogue of change," and what really typifies this are the three totally dissimilar introductions to *The Ascent of Wonder*.

Benford noted, "The scientific frame of mind is a form of enlightened imperialism." He said that the federal system was initially argued on the basis that each state could be a separate laboratory.

Benford admitted, "Watching science at work is remarkably like watching paint dry," but said that there is a fascination about reading about "science as she is done."

An audience member said he learned more, not from science fiction, but from Asimov's columns and popularizations than he learned from school.

Regarding *Contact*'s error of scale in the number of possible civilizations, Benford said that he was told, "It's too late to lip sync it and anyway, all we want is big numbers."

Science writers recommended included E. O. Wilson, Lewis Thomas, Steven Jay Gould, John Casti, John Gibbon, Freeman Dyson, and John Horgan (the author of *The End Of Science*).

An audience member asked about cognitive science, which Benford said had been used. Swanwick compared it to medical science in that it was a contradiction in terms. Science is experimentation, and we can't experiment (well, successfully) on human beings. Asaro said, "It is science in that you set out with a hypothesis," to which someone responded, "But that's the problem."

Typical exchange: "No one's ever seen a neutrino." "No one's ever seen a photon." "That's all we see."

Cramer's old "Alternate View" column is now available on the Web.

One button I saw in the audience said, "The larger the island of knowledge, the greater the shoreline of wonder."

Religion in SF
Sunday, 12 N
E. Susan Baugh, Dan Gallagher, Janice Gelb, Pamela Hodgson,
C. J. Mills (moderator), Mary Doria Russell

There was no description for this panel.

Gallagher is a practicing Catholic. (He also unilaterally added himself to this and several other panels, and then tried to hijack the discussion to what he wanted to talk about, even if that had nothing to do with the topic.) Gelb is a conservative Jew. Mills is an observant Protestant. Russell described herself as "an ex-Catholic atheist who is now a Reform Jewish agnostic."

Mills said that in science fiction fandom, "There a belief that people who believe in God and actively worship someone are fools."

Gallagher said that most of the religions have restrictions that annoy people in the modern world (e.g., attitudes toward homosexuality). Gelb added, "I've from the poster child of restrictive religions."

Russell said that she got a lot of flak for converting to Judaism, not because of Judaism, but because she was picking a religion at all. "I no more feel that science and religion are in conflict than I feel that science and music

are in conflict." You can have a stroke that affects your speech, she said, but still be able both to recite prayers and to sing songs.

Baugh and her husband separate churchianity from religion. They were trying to get married in a Lutheran church, but he was Catholic and they were having problems until they announced to their families, "We are living together on August 16; you can help us make it legal if you want." Then the problems got solved.

Mills claimed that the best discussions about religion she has had were at science fiction conventions but, "You cannot have a religious discussion with a militant atheist or a militant anything else." (I don't know; Mark has a good time with the door-to-door missionaries.)

Gelb felt that a similar level of observance is more important to a meaningful discussion than agreement in a specific religion.

There was an attempt by Gallagher to get people in the audience to talk about religious experiences, but Mills insisted that the panel stay on topic, and asked what level of religion one can put in a book without offending the publisher. Russell's first editor took all the references to religion out of *The Sparrow*, resulting in what Russell said was "Methodists go to Mars"!

Hodgson said it seemed to be easier to put religion into science fiction short fiction than in mainstream short fiction. Baugh said that the Christian fiction genre is splitting into subgenres, and one is Christian science fiction. Baugh recommended Robert Don Hughes; other named were Stephen Lawhead and [someone] Pirelli, who writes horror for Christians.

Gallagher suggested, "The use of religion in science fiction has to either haunt or terrify or fascinate."

I asked what science fiction has used religion well. Baugh said what she thought had used religion well is *Babylon 5*. Hodgson said Dan Simmon's *Hyperion* and Russell's *The Sparrow*. Russell mentioned *A Canticle for Leibowitz* by Walter Miller. Gelb mentioned Jane Yolen's *Briar Rose*, and Gallagher recommended T. J. Bass's *Half Past Human*. Mills said *A Wind in Cairo* and others by Judith Tarr. An audience member suggested James Morrow, who criticizes church while saying that spirituality is part of what we are. Gelb added *The Mists of Avalon* by Marion Zimmer Bradley.

An audience member said that many of his friends read *A Canticle for Leibowitz* and they "didn't get it." Did people need a religious background to understand it? Gallagher thought it required a Catholic background, or at least Christian. Gelb (and I) completely disagreed. Mills thought it was cultural literacy rather than religious training. Russell felt part of what she had to do was explain the "alien culture" of the Society of Jesus. Hodgson compared it to writing about Japan for an audience that had never been there. Baugh said she was probably the only panel member who hated *A Canticle for Leibowitz*. Mills said it reminded her of *A Separate Peace* by John Knowles. She said when she finished that book, she wanted to be Catholic-for a little while anyway.

Gelb said what creates dissonance for her is absolute belief in people that their faith is the one true faith. Is there any one thing that all religions abhor? Russell said selfishness, except for the Ik of Africa (Colin Turnbull did a study of them). Hodgson finds the inconsistency of beliefs and actions to fit this question.

How is your science fiction writing accepted in your religious community? Gelb was in an Orthodox group one day talking about tarot and witchcraft and, forgetting where she was, said, "Actually, most of the witches I know are pagans." Russell's rabbi is a fan. Hodgson said, "I'm an Episcopalian; anything goes."

But one problem was that the panel dwelled more on religion in fandom than on religion in science fiction. One audience member thought Mills controlled the panel too much. Of course, he was one of those who wanted to keep adding comments that were not always on topic.

Does Anyone Read Critical Magazines?
Sunday, 1 PM
Charles N. Brown, Nick DiChario, David G. Hartwell,
Lawrence Person, David Truesdale (moderator)

There was no description for this panel.

Hartwell said critical magazines are those which publish principally to contain criticism, reviews, etc., but he also includes Norman Spinrad's critical essays in *Asimov's* and essays in *F&SF* and the essays in *Interzone*, among

others.

Brown said there used to be more critical magazines, but they failed because people wanted them, they just didn't want to buy them. Brown felt *Foundation* was good, but the rest of the academic magazines are awful because they start out with a theory they want to prove, and the critics have no background in the field.

Person referred to the recent Internet thread in which someone was reviewing Christopher Priest's *Last Deadloss Visions* and said that he had been reading science fiction and hadn't heard of Harlan Ellison, so why was this book important?

DiChario likes the fact that there are magazines devoted to criticism, and feels that is one of the strengths of the science fiction field.

Hartwell said, "It is a preconception that we should say out loud that an educated reader is better than a non-educated reader." (Is this why the field is not as accessible to twelve-year-olds any more, as was noted at Readercon?) This generates a conversation of informed disagreement and argument, and has been a characteristic of the field from the pulp days.

However, it used to be that you were paying for the stories and got the criticism for free. (As Person said, "Criticism always comes free.") So people publishing critical magazines are in an awkward position.

Brown said, "One of the things that we do that the academics don't do is that we do things we shouldn't be doing at all." Reviewers and readers are different. Reviewers and critics are different also. "Most books shouldn't be reviewed," and half of what's left are useless to critics. Hartwell felt too many books were reviewed in *Locus*. Brown agreed, but said the difficulty is trying to cut it down.

Hartwell said *New York Review of Science Fiction* talks about the strengths and weaknesses of good books, but doesn't review bad books at all. His professor once said, "A novel is a work of prose fiction longer than a short story that has something wrong with it."

Brown felt that critical magazines were valuable only to about ten percent of the readers, leading Hartwell to say he wouldn't mind having ten percent of Steven King's readers.

One of the strengths of fanzines, Hartwell said, is that "they cover the stuff." Brown said that the best critical fanzines he sees are from outside the United States: England, Australia, and even China.

Truesdale, addressing why he covers everything in the short form, says in the world of short fiction, one doesn't have to say much about any one work, and it provides needed feedback to writers in an area that gets less coverage than novels. But he says there is an art to reviewing, and has had to turn away middle-range writers who wanted to write reviews. Brown agreed, "Oh, they're the worst."

Person said he sees a splinterization of the field. Where before someone might like *The Mote in God's Eye* and not *The Left Hand of Darkness*, or vice versa, it used to be that everyone would have read both. Now, readers of Bujold don't read Sterling, and vice versa. He feels this is why critical magazines are so important in keeping people informed and interested in the field as a whole.

DiChario said that part of being a writer is that you don't have enough time to read everything, and the critical magazines do the sifting for them. (Ninety percent of Truesdale's readers are writers, but only ten percent of Hartwell's.)

Brown listed *Speculations*, *Inside* (*Riverside Quarterly*), *Skyhook*, *Warhoon*, *Australian SF Review*, and *SF Commentary* were earlier critical magazines that have lapsed.

"Some of the worst readers of critical magazines are enthusiastic fans," Brown said, who want discussions of their favorite books. They can't review the third volume of a seven-volume fantasy series, for example, or even "Andre Norton's latest four books."

An audience member said her problem was that she could never find the magazines on the newsstand. Hartwell said that was one of the facts of life of small-press distribution is that these magazines aren't going to make it to most bookstores. Even the specialty stores are a problem, because they can't pay their bills promptly. ("A relentless drive to break even" is how Hartwell described his job once. "Being in small-press for the big bucks is like being a

Trappist monk for the hard drugs and sex," according to Person.) Even Ziesing will no longer carry magazines.

Person thinks the Web will help, but "nobody's found a way to make money there yet."

Hartwell said that neither he nor *Locus* will be going out of business in spite of all that has been said.

An audience member said that he wants to read about books he has read rather than books he hasn't, because it's the next best thing to discussing it with someone. Hartwell responded, "Reviewing is for people who haven't read the book; criticism is for people who have read the book."

Brown said that to talk about books you have read, the best place is the Internet. Brown thinks that in five years most of the critical magazines will be on the Internet; Hartwell thinks it will be at least ten years. "[The Internet] is an enormous hotbed of first drafts," according to Hartwell.

Person noted that while *Tangents*, *New York Review of Science Fiction*, and *Locus* were broad views of the field, *Nova Express* is much more targeted, and with a stronger agenda. Hartwell disagreed somewhat, saying, "Any magazine worth its salt has an editorial stance behind it."

An audience member said that Bruce Sterling claims there is no science fiction novel in the Western Canon because they don't deal with the question of existence, but Person pointed out that *1984* by George Orwell *is* canonical. Also, *The Stars My Destination* by Alfred Bester came out under the Vintage Contemporary imprint. John Updike said that science fiction can't be important because it doesn't deal with the nuances of daily life, which are what are really important. But his next book will be science fiction.

Bill and Kelly Higgins's Wedding Reception
Sunday, 2 PM

Normally, I wouldn't include this item, but since it was advertised in the daily newszine, I figured I would mention it. Bill and Kelly were married August 23, and even had a listserv for the wedding.

Mazel tov!

Why Do People Believe What They Do?
Sunday, 3 PM
Rob Chilson, Don Gallagher, Hal Clement (moderator), Paul Preuss, Lynn Ward

There was no description for this panel.

Clement pointed out that "believe" has multiple meanings (believing in God has different connotations that believing that if you hit the brakes, your car will stop).

Clement asked the panelists to give an example of something they don't believe it. His example was Counter-Earth. Gallagher spent a lot of time talking about UFOs versus spiritual experiences, but eventually said that he doesn't believe that UFOs are from outer space, but he thinks there is something there. Preuss said he doesn't believe in UFOs, and doesn't think there's anything there. He also doesn't believe in levitation over a superconductor or in cold fusion. Ward doesn't believe that anyone has a monopoly on the truth or on accuracy. Chilson doesn't believe in telepathy.

Clement said he is basically skeptical when it comes to believing anything because he has been wrong so many times in his seventy-five years (and hopes to be wrong for a few years more). Clement says he writes hard science fiction, but said, "I am deeply hooked on Terry Pratchett's Discworld series." He likes to fantasize and put the rules back in the drawer for a while to enjoy fantasy.

Ward pointed out that "the willing suspension of disbelief is a conscious act of will." And she finds that suspending disbelief often provides imaginative solutions to problems.

Chilson pointed out, "We're not born rational." Small children are very imaginative and will dream about flying and all sorts of strange things. All children can sing and dance until they are told they can't.

Preuss said that it is important to have imagination. Neils Bohr spent three days a week coming up with the craziest ideas he could and three days a week tearing them apart. Preuss added that we simply don't have time to

research everything, so we believe a lot of things because we were told it was so. Letting go of what you always believed when you find a reason to do so is one of the hardest things we do.

Clement talked about a very clear memory that he has of a horseshoe on an airplane which conflicts with evidence. So his belief is that this is a false memory. (Someone suggested it might have been a joke.)

Clement expressed a problem with the word "proven." "Proof" is defined as "a preponderance of evidence bringing belief." What does that mean? Gallagher said that Charles Pellegrino felt that since he could "prove" the parting of the Red Sea was a natural phenomenon, he had "proved" there was no God, while Gallagher saw it as a "proof" that God used natural phenomenon. Your predispositions color your interpretations and hence your new beliefs when you examine facts.

Heisenberg said that the sentence "Besides our world there exists another world with which no connection is possible" is grammatically correct, but meaningless. He used this in part of a discussion of whether quantum mechanics destroyed the concept of cause and effect as a rational base.

An audience member asked, "Is all belief ultimately subjective?" Clement said his snap answer was yes. Ward said, " don't know," leading Clement to say, "She's more objective than I am." Chilson said we perceive the universe only through our senses, so all beliefs are subjective, but this does not mean they are equally valid. Gallagher said, "I think truth is immutable ... but our perception of truth varies with our society."

I asked about the importance of a matter affecting a belief. Preuss said that the importance of the belief was certainly an inverse factor in how easily we would believe it. Ward said how well it fits into your current beliefs affects it as well. And Chilson said the credibility of the source matters a lot.

Preuss closed by saying, "I touched on Hegel; I never got to Kant, so this panel's been a failure." And Chilson said, "We believe a lot of what we believe because it makes us feel real good."

Debunking Pseudoscience
Sunday, 4 PM
Maya Kaathryn Bohnhoff, Dan Gallagher, Karen Mermel, Anne Phyllis Pinzow, Susan Smith (moderator), Andrew C. Wheeler

"The impact of pseudo-science on the public and society, title from Sagan's book"

Pinzow writes for a non-fiction occult publisher, such as a book on how to choose a tarot reader and how to know which are charlatans and which are really gifted. She said that she believed in astrology, but in modern astrology, not sun sign astrology She defined science as something that can be proven and repeatable.

Bohnhoff saw the problems as being misinformation, the inability of people to reason their way through an argument, and fear.

Wheeler said that pseudo-science is what tries to look like science but if you look at the thinking underneath, you find "magical thinking." Homeopathy, for example, seems to have some scientific basis but violates basic laws such as "for a molecule to have an effect, that molecule must be present."

Gallagher felt that pseudo-science shouldn't include things like yetis or sasquatches, because strange animals occasionally are found.

Smith said that science asks how, but does not ask why. On the other hand, pseudo-science often gets involved in why.

Bohnhoff said that science is a paradigm for how we go about gathering knowledge. "Our job as skeptics is not to debunk but to prove." Wheeler said that both skeptics and pseudo-scientists feel that they are a beleaguered minority.

Every major breakthrough of the time sounded nuts then. This of course doesn't mean that the pseudo-science claims are true now. "Extraordinary claims require extraordinary proof."

Gallagher said that the first edition of *The Celestine Prophecy* offered to read your sun and moon signs for $30, but future editions dropped that offer. Pinzow said that modern astrology requires an accurate time of birth (this

seems like a very easy way to explain away any errors). But she says it has not been scientifically defended, but claims that things like the "Saturn return" are based on evidence. This is when Saturn returns to the same place in orbit that it was when you were born. This happens when you are thirty, and Pinzow sees this as being the basis for the idea of not trusting anyone over thirty.

Pinzow asked how much study people had done in astrology and tarot. Smith responded that she didn't need to study everything. If it's reproducible and accurate, it's valid. And when other experts have studied it, they have not found it to be reproducible or accurate.

Someone suggested that tarot and other related fields work the way Rorschach tests, in letting us use a random pattern for our subconscious to put something on.

Wheeler said that you always have to ask, "What is the mechanism by which this works?" For astrology, he has heard that it's gravity. But the gravitational effects of the rest of the universe other than earth are less than the gravitational effect of the delivering obstetrician.

Someone said that even "real science" can't get published if the results are too strange. Smith and Wheeler said that the way an experiment is designed and carried out is tremendously important. Ctein (in the audience) pointed out that science is a very conservative enterprise. The sin is not in failing to be right, but in being wrong. It is more important to prove something wrong than to prove something right.

Smith did a good job of keeping the rather rambunctious and annoying audience under control.

Showcase: Mary Doria Russell
Sunday, 5 PM
Mary Doria Russell

Early on, Russell said she didn't want taping "unless I'm getting royalties." "You're not." "Then screw 'em."

She apologized for her voice problems after doing all her panels: "I'd have had a really great career as a mute, but I can't shut up."

She also brought chocolate for the audience, saying some people have their fans bring them chocolates, but she does it differently.

She never met a Jesuit until after selling the book, but now she even had a Jesuit based in Nepal tell her, "You have been a Jesuit in a past life." (To which she responded, "It's time for you to come home. You've been among Buddhists too long.") She found a Jesuit to proofread the book before it was printed: "The Vatican had a web site. Who knew?"

Russell said that the Vatican has a policy if aliens are discovered, but hasn't released it yet. "They got into real trouble with Galileo and have been real good since then."

Jason Rothenberg wrote the screenplay for the movie of *The Sparrow*. It was pitched as "*The English Patient* meets *Casablanca* with special effects." ("You're getting on that spaceship...." "We'll always have Cleveland.")

Russell quoted Bertrand Russell as saying, "Mere indication of scale would tend to indicate we are not the sole purpose of creation."

She said Anne's biography is hers up to a point but, "She is willing to go to another planet whereas I won't even go camping. If there's no room service, forget it."

She read excerpts from *The Sparrow* and its sequel, *Children Of God*. "[The cover of *Children of God*] is by Giotto because they don't have to pay him royalties."

Masquerade
Sunday, 8 PM

There were about two dozen costumes, a manageable number. There was also no problem with long lines, etc., though the large-screen projection was not designed for costumes and did color reproduction poorly.

There were two or three "Men in Black" costumes, leading me to suggest that costumers think at least twice before designing a costume based on the latest hit science fiction movie. (There were no "*Contact*" costumes, however.)

Will Reading and Writing Survive Another 100 Years?
Monday, 10 AM
Kathy Ice, Alison Sinclair, Lynn Ward

There was no description for this panel.

The room wasn't even unlocked at 10 AM, so it didn't start until 10:10 AM.

As an electronic publisher, Ice said she is either the root cause of making reading and writing survive, or the last best hope to keep publishing alive as we move into the electronic age.

Ward thinks that reading and writing will survive, but not with books as the dominant medium of literacy. She also doesn't believe that there was a "Golden Age" when people sat around reading great novels.

Sinclair asked what could replace reading and writing. "Images for some purposes are much, much better than words. But what you can't convey with pure images are abstract ideas, opinions, personalities." There isn't as strong a consensus about what images mean than there is for words. "Could you replace the written word with the spoken word?" There is additional information in the spoken word over the written word. Now, recording technology is clumsy-it's not random access, for example. But speaking is slower than reading. The faster speaker was clocked at 390 words a minute; readers can read at 1000 words a minute.

An audience member said that we have much poorer audio distinction than visual distinction, so she thinks images (and written language) will remain dominant. Sinclair thought this might be because we were trained better in hearing. But the response was that we obviously felt a need for writing even when we were depending on the oral tradition. Ward pointed out that in the audience there were people listening, people taking notes, people with laptops, and people with recorders.

Someone suggested that children today are much less likely to engage in the active process of reading rather than the passive process of watching television. Ward said that interactive games are really a version of reading, and an active version of it.

Ice said that the complaint that children aren't reading has been around for generations, even if the substitution media are different.

Someone thought that computer technology will get rid of reading and writing in thirty years. Someone else pointed out that reading is much faster than hearing.

Someone noted that about 600 of the 3000 eligible voters voted for the Hugo for Best Dramatic Presentation, and about 400 for best novel. (If true, this is the first year dramatic presentation out-pulled the novel.) Ice noted that all the members attend for different reasons: art, dealers room, costuming, and so on. Sinclair thought the common element was that we all like to talk and we all have opinions.

I had to leave early for the next panel, since I was on it.

Ethics in SF: Repressive Societies and Resistance
Monday, 11 AM
John Gibbons (moderator), Pamela Hodgson, Evelyn C. Leeper,
Bradford Lyau, C. J. Mills, Mike Resnick

[Thanks to Mark for taking notes at this panel.]

There was no description for the panel, but it was apparently part of an ethical track.

Resnick began by saying that the archetypal science fiction repressive society is that of George Orwell's *1984*. Hodgson agreed with Resnick, but added that repression is not just about dictators but also about lifestyles and religions. Gibbons said he was picked for his story "Voice of the People," based on "a classic theme that Heinlein used." Lyau was trained as historian, and taught in Albania the year of 1995 to 1996. He reminded us that Albania was the only Muslim country in Europe, and was also the poorest country in Europe. It managed to be repressive

because it was completely closed off from outside influence since the late 1940s.

I said that I was the token "I have no idea why I'm here" panelist, although I have been involved in some political activity on a small level. I also said it would be interesting to discuss how technology has changed resistance. Mills said that she writes science fiction and that it would be interesting to discuss how ethics affect resistance.

Gibbons asked if science fiction has said much constructive, or whether it was just wish fulfillment. Resnick said that it was pretty much the latter: "science fiction sets up straw men and knocks them down." Authors tend to use Nazi Germany or Soviet Russia, but there resistance is futile, because it's well after the point at which repression can be successfully opposed. (This overlooks the fact that resistance did have some effect in Soviet Russia, I suppose.) "How about a government that says you must wear a seat belt, or that knows cigarettes cause cancer and doesn't do anything> These are the facets of our daily lives. We don't go direct to Stalin."

Hodgson said that "most of the repressive societies [portrayed by science fiction] are not very subtle," and the morality is clear. It is tough to address repression in a more subtle way, a much harder task.

Gibbons thought that some science fiction may come from adolescent wish fulfillment, where we see ourselves fighting against our parents.

I commented that seat belts and cigarettes are opposite sides of repression. Making us wear seat belts for our own good is repressive, but letting us smoke harmful cigarettes is *not* repressive. In fact, if the government banned cigarettes, *that* would be repressive. I also added the requirement for photo IDs for air travel as another step in government control that we just seem to accept. Also, though we think of ourselves as a very free society, we are seen by most Europeans as very repressive in the area of sexuality: the government tells us whom we may love, how we may love them, and so on.

We also think of the science fiction community as being very accepting, but it's not. As others have pointed out, we are not very accepting of fundamentalists (particularly Christian fundamentalists), conservatives, and so on. And that is also repression, albeit of a societal rather than a governmental nature. (This drew some applause from the audience.)

Lyau talked about two authors on somewhat opposite sides of the fence. In *Things To Come*, he said, Wells felt he had *the* answer to how things should be run. On the other side, Eric Frank Russell wrote about individualism, and working against systematized government.

Mills said that as far as individual resistance to the Soviet Union, it was prayer vigils in Leipzig and Berlin started by one person that brought the Berlin Wall down. She liked Hodgson's observation that we don't deal with the subtle.

Resnick responded, "I don't think art mirrors life; it simplifies it." In general, he felt that one person overcoming tyranny is a juvenile image. In particular, nobody stood up and announced that they would overcome in Leipzig. If one person has an effect, it is usually a small victory. (I think Resnick was talking about the direct effect of one person. Obviously if someone starts a movement that many others join gradually, that can have a major effect. But the image of a lone individual standing up and saying, "All who would be free, follow me" and instantly having an army of thousands of support him, or of a single person infiltrating and bringing down the government, is not realistic.) As he noted, "There is usually not a big payoff to individual acts of rebellion."

There was a side discussion of various models of government and whether humanity was the most successful species. (I claimed the dinosaurs long outlived us. Resnick said we were the only species that had the power to destroy all the others. That makes us powerful, but I'm not sure I'd equate that with successful.)

Gibbons continued, "I would like to follow up on repression developing gradually and being in the eye of the beholder," adding that repressive societies got in with some degree of popular support, and that perhaps science fiction should spend more time on this aspect.

Resnick said, "I think it is essential." He said that he lives in Cincinnati, the home of the Catholic Legion of Decency, and the first city to sue an art gallery for obscenity. Recently the local high school banned *The Red Pony* by John Steinbeck. You can't wait until they ban *The Red Pony*, he warned; you have to start fighting for *Hustler* and *Screw*, even though you may not like them or the people who publish them. It's insidious how these things begin, and if you wait for *The Red Pony*, you may have a lot of legal precedents against you.

Hodgson agreed, saying, "Absolutely. What is the job of the writer? To take a stand-yes, it is. If not, why bother?"

Lyau said he was card-carrying member of the ACLU, and remind us that Octavia Butler once said that the worst censorship is self-censorship.

I noted I was also an ACLU member, and said that a lot of people left because of the Skokie case. I also noted that someone I know who is a supporter of the ACLU and is for gun control wants the ACLU to be against gun control in order for them to be consistent and diligent. Regarding fighting censorship, I said, "You don't have to like the people; you have to like the idea [of free speech]."

Gibbons said that something I had said about technology seemed to relate to *Wired* magazine saying information wants to be free, and asked the panelists to comment on this. I started by saying that Arthur C. Clarke had talked about this in the 1950s with "I Remember Babylon," with the Chinese broadcasting all sorts of sex and violence via a communications satellite. Clarke realized there would be no way to keep information out. China discovered this during Tiananmen Square, with the information flow in both directions being impossible to stop. Singapore Internet users today who are faced with restriction just dial across the strait to Malaysia. And I also pointed out that "information wants to be free" did not originate with *Wired* (and I suspect that if you tried to make their information free, they would object mightily). On the other hand, South Africa used to register typewriters so that if a subversive leaflet were printed, they could tell which typewriter had produced it.

Mills said that technology was another cause for the fall of the Berlin Wall, because the government could not keep out information about the West. Lyau noted that on the other hand Albania cut out technology altogether and still had donkeys in the markets. He waited five years to get a telephone put in and had to go to the post office to make all his phone calls, which certainly was not conducive to speaking freely over the telephone. I said that it worked for Albania, but most countries waited a bit too late. (This is certainly connected to Resnick's notion that you have to catch trends early.)

Resnick said that Robert A. Heinlein's "Solution: Unsatisfactory" also claimed that you cannot embargo knowledge, but this was simply wrong. The best tyrannies and most repressive tyrannies in Africa are countries where the electricity goes off at 7 PM. There *is* no flow of information. Malawi until very recently had no telephones, so there was no way to build a resistance. You could talk to your family, but you couldn't communicate with people in even the next village.

Hodgson said, "We think of Canada as the good guys. Their national slogan is 'We're nice.'" But they also have some very strong censorship laws and there are books that are hard to get into Canada. Also, when one says "all information wants to be free," we forget that some people cannot afford computers.

Resnick said, "One of the problems with science fiction in America is our antecedents. We are the bastard stepchildren of Hugo out of Edgar." In addition, American science fiction is rather simplistic about good and evil. For example, everyone meant well during Vietnam, but somehow it worked out badly. Unlike science fiction, not the all people who hide information are bad guys. (I later said that Resnick's own "Kirinyaga" stories are an example of this.)

Someone in the audience said that although most hard science fiction has Earth in the future being repressive, the Internet is a perfect example of unregulated information. He said that one way or anther kids are seeing too much and something needed to be done. I pointed out that Congress did something (the "Communications Decency Act") and the Supreme Court slapped them down (and rightfully so, in my opinion). Hodgson said that this was not the first time we have had this argument about free speech; it dates back to Jefferson.

Resnick felt that science fiction is probably not going to look at the guy who thinks he is wrong, but at least ought to be addressing "the guy who's right and is going to do something for your own good." G. David Nordley (from the audience) mentioned Jules Verne's *20,000 Leagues Under the Sea*, in which Nemo was a prince who complained about being repressed by governments, yet ruled over the Nautilus and repressed Arronax in much the same way.

Someone said that we were talking mostly of the majority being repressed by a minority, but there is also the repression of a minority by the majority. Hodgson said that this was a good point but is not as futile as it seems, and that racial minorities do have hope. I added that the example I would give is the gay rights movement, where a minority has convinced many of the majority of the rightness of their cause. Maybe this is because I believe that people don't start out to be mean. They genuinely believe in what they're doing, and on the whole are amenable to reason.

Lyau talked about how we react to people who use the term "sci-fi." (Someone said that anything that bugs Harlan Ellison can't be all bad.) But Resnick said, "If you know it's offensive, why do it?" Hodgson said that it's the same

reaction to when you hear an older person use a racial term that is degrading (the example she gave was "colored guy"). You're pretty sure that they don't mean anything by it, but it still grates.

Gibbons asked for closing comments. Most of us recapitulated what we had said. Resnick wrapped it all up by saying that it's fun to talk about, but "*Common Sense* was the last American book that made a serious difference in what people did or how they lived." (Has he considered *Uncle Tom's Cabin*?) Ten years ago "liberal" was "the L-word," and very negative. At one time unions were good, now they're bad. History is cyclical and what is ethical at one time often becomes less ethical down the road.

Quantum Physics Weirdness: The Best Game in Town
Monday, 12 N
Ron Collins, John G. Cramer

There was no description for this panel.

Cramer is the author of the Transactional Interpretation, which is an alternative to the Copenhagen or Everett-Wheeler Interpretations (see below).

Einstein said quantum mechanics had spooky actions at a distance, and so must be wrong. But every test confirms quantum mechanics.

Einstein didn't like wave-particle duality or the uncertainty principle, or wave-function collapse, or non-locality. The last is when you take two pieces of a system that are entangled in some way, when you send them in different directions, measuring one affects an aspect of the other. This is the EPR (Einstein-Podolsky-Rosen) Bridge, and seems to imply faster-than-light information transfer.

Collins said that once you believe that you can transport information instantaneously, you ask whether you can transport matter as well.

Eberhard's Theorem says that the operators for two widely separated elements of an entangled system always commute. In other words, there is no possibility of information transfer.

Steven Weinberg proposed a non-linearity of quantum mechanics which people seemed to disprove, but this non-linearity would break Eberhard's Theorem. If the Copenhagen Interpretation is true, this would also let you send information between universes.

Normally, people start with a picture and design the mathematics to match, but Heisenberg and Schroedinger came up with the mathematics with no underlying conception of what they meant.

The Copenhagen Interpretation says that the quantum mechanical wave function is in the head of the observer. This leads to "observer-created reality." Logical positivism ("don't ask, don't tell") says only ask questions you can make physical measurements on.

The Everett-Wheeler Interpretation says that the wave function didn't collapse, the universe split. It explains wave function collapse, but does a miserable job of explaining non-locality.

The Transactional Interpretation has a normal wave from a source to a receiver and an advance response wave going back, "ensuring all the bookkeeping for quantum mechanics is properly enforced." (Eugene Wigner said to have time run backwards in a system, complex-conjugate it.)

Someone asked about quantum computing. Cramer said, "There's a lot of noise about quantum computing because there's a lot of money going in to it." The idea is using entangled communication links between parts of the computer in a sort of a parallel computer using uncollapsed wave functions. Cramer thinks it may be a nifty way to factor large prime numbers, but not very useful otherwise.

Hawking believes nature abhors a time machine and that nature would destroy a time machine when it came on line. Cramer did it differently-the time machine destroys the universe back to the beginning, and it all starts over, or as he said, "Time travel the hard way."

Collins said, "To have a theory is to understand the universe. How does the universe work? How would I like it to work?" He also said that there has to be some hand-waving: "Proving that you can't do something-nobody wants to

read that. They want to read that you can something."

Regarding teaching "junk science" like time travel, Collins said he needs people who know their science for his job, but the kid at Burger Chef who's trying to decide what he wants to do with his life-that's who his science fiction is aimed at.

Someone suggested that in science fiction, "Introducing junk science is part of what we do," while such books as *The Dancing Wu Li Masters* which are trying to form an "unholy alliance" between science and Eastern religions are the real dangers. Cramer said, "We are taking the roots of real science and grating on top of it some rubber science ... and this joint should be as invisible as possible." But Cramer includes appendices explaining which are which in his books.

Someone asked Cramer to reconcile relativity and quantum mechanics. Someone else said, "In fifty words or less." I added, "For the layman." Cramer said there are tools and gave an explanation in more than fifty words which I didn't follow. However, he added that "the only thing we know about quantum gravity is its name."

Dale Skran asked about Greg Egan's use of quantum mechanics, but Cramer hadn't read enough Egan to comment on it. Collins said that Egan was using the Copenhagen Interpretation, at least for some of his work.

Cramer said that some interpretations of Everett-Wheeler say that two identical universes fuse back together, so this answers the question of micro-reversibility. (Whatever that means.)

An audience member sagely noted, "The experimental verification of the non-existence of non-linear elements in quantum equations has been observed only in this universe."

Someone asked for the quantum mechanical explanation for Casimir Effect (if you have two parallel conducting plates and bring them closer together, the energy density of the space between them goes down). If you believe the energy density of a vacuum is zero, then you can get negative energy densities and this can be a source of energy. Someone calculated that this also resulted in faster-than-light photons.

From a writer's standpoint, Collins said when he sees an idea he always asks, "What can I do with this?" Here you could have a weapon that could blow you up before you can see it. Someone asked, "Is a weapon that can blow you up the instant you see it good enough?" "No, by God, it isn't."

"There is one universe where Copenhagen is true, but you could go back and fix that," suggested one person.

SF Musicals: All Singing! All Dancing!
Monday, 1 PM
Janice Gelb, Walter Jon Williams, Connie Willis, Lori Wolf (moderator)

"The big effects and cinema techniques that help make today's sci-fi extravaganzas."

Willis was involved in a musical version of *Alien* for her high school, of which the only thing she remembered was the theme song: "I've Got You Under my Skin." Gelb suggested using the filk song, "Pop Goes the Alien."

Musicals mentioned included *Little Shop of Horrors*, *Brigadoon*, *Return to the Forbidden Planet*, *Shock Treatment*, *Phantom of the Paradise*, *Spaceship*, *The Wizard of Oz*, *Young Frankenstein*, *Just Imagine*, *Green Pastures*, *Blows Against the Empire*, and anything by Busby Berkeley.

Williams said that all musicals seem to take place in fantasy worlds with invisible orchestras, etc.

What science fiction would make a good musical? (Well, other than Willis's *Remake*.) Willis thinks the medium is still viable even though people say, "Well, I just can't do musicals, because people don't just burst into song." "Well, in real life, Mel Gibson isn't your taxi driver." Another argument is that we are no longer innocent enough, but Willis doesn't think this isn't true.

Gelb thinks *The Foundation Trilogy* would make a good musical. Stalin was a fan of musicals, according to Williams, and there were great Stalinist musicals about the future. Williams explained that the Soviets couldn't produce decent undergarments and the image of large Soviet female singing stars cavorting about the stage ..., to which Gelb said, "Thank you for sharing, Walter." Gelb also suggested *The Day the Earth Stood Still* and Willis's "Blued Moon." I suggested something like Spider and Jeanne Robinson's "Stardance," which already had a

musical theme. Wolf suggested Frederick Pohl and C. M. Kornbluth's *Space Merchants*, though someone thought this would require Billy Wilder.

Willis said that today's films are driven by the special effects available. (This is very much, she noted, what happened with the early talkies.) She thought that the special effects in *Men in Black* served the story (which not everyone agrees with).

General Technics did a science fictional filk version of *West Side Story*.

Sunset Boulevard, someone suggested, has nothing going for it except the set design, which is special effects run amuck. Willis said there was a period of minimalist set design, and in that time, the tunes did have to be good because that's what people will be paying attention.

Musicals and special effects movies share the "spare" plot.

Gelb thought *Les Miserables* was overblown, but I suggested that Wagner was overblown in the same way, and Williams said that *Les Miserables* was not a musical, it was an opera. He also said, "The Hollywood musical is doing very well, but they don't have live actors."

(I would note at this point that the opera is also doing well, but they don't call it opera. "Opera" is defined as a dramatic presentation that is entirely sung, with no spoken dialogue. By this definition, *Les Miserables* is definitely an opera, and I think *Phantom of the Opera* and *Miss Saigon* are as well. Just because the common understanding of "opera" is whatever is done in an opera house, and "musical" is whatever is done on Broadway does not make it so.)

Gelb said that Egyptian films are all musicals; I added that Indian films were also.

Someone mentioned Jeff Rice's *War of the Worlds*. Someone else said something about Pink Floyd's "Dark Side of the Moon" and *The Wizard of Oz*; Williams said it also worked for *Metropolis*.

Williams said that *Return to the Forbidden Planet* was the most risk-free musical produced: everything in it had been successful elsewhere.

Recommendations and warnings for musicals ensued. Willis recommended *1776* (also popular with fans-SMOFs were going to do a version for the WSFS Business Meeting), and warned against *Tea For Two*. Wolf warned against *At Love Last Love*. Gelb really likes *Pippin* and hates *The Magic Show*. Williams recommended *The Band Wagon* ("Oh, yes, that's Fred," screamed Willis) and warned against *South Pacific*.

I would recommend *Cabaret* as a different kind of musical, or *Heavenly Creatures* as another offbeat (possible) musical.

Willis liked the musical version *Goodbye, Mr. Chips*, and also *Paint Your Wagon* even though no one could sing.

For that matter, the movie *Journey to the Center of the Earth* was a musical.

Final Comments

Many amendments were passed, mostly of a housekeeping or clarification nature. The most notable was changing the name of the category "Best Non-Fiction Book" to "Best Related Book." An amendment adding an ezine category was defeated.

In my opinion, LoneStarCon 2 suffered from a variety of problems: overloaded scheduling during the day and skimpy scheduling at night, microphone inadequacies, some confusion as to the scheduling and even definition of panels (most had no description other than their title), and an incredibly poorly designed convention center (at least for this convention). I won't say I had a bad time, but it was definitely one of the lesser Worldcons I have attended.

In a hotly uncontested bid, Chicago won the Worldcon for 2000 and will be called Chicon 2000. They can be reached at Chicon 2000, P. O. Box 642057, Chicago IL 60664, **chi2000@chicon.org**, or **http://www.chicon.org**. The Guests of Honor will be Ben Bova, Bob Eggleton, and Bob and Anne Passovoy, and the Toastmaster will be Harry Turtledove.

Anaheim won the bid for the 1999 NASFiC (the Worldcon being in Australia). It will be called Cornucopia and held August 26-29, 1998. I have no information on Guests of Honor.

Next year in Baltimore!

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