

Lincroft-Holmdel Science Fiction Club  
Club Notice - 6/25/86 -- Vol. 4, No. 49

MEETINGS UPCOMING:

Unless otherwise stated, all meetings are on Wednesdays at noon.

LZ meetings are in LZ 3A-206; HO meetings are in HO 2N-523.

\_D\_A\_T\_E                    \_T\_O\_P\_I\_C

07/16 LZ: SHADRACH IN THE FURNACE by Robert Silverberg (Ethics)

08/06 LZ: TUNNEL IN THE SKY by Robert Heinlein (Faster-Than-Light Travel)

HO Chair is John Jetzt, HO 4F-528A (834-1563). LZ Chair is Rob Mitchell, LZ 1B-306 (576-6106). MT Chair is Mark Leeper, MT 3E-433 (957-5619). HO Librarian is Tim Schroeder, HO 2G-427A (949-5866).

LZ Librarian is Lance Larsen, LZ 3C-219 (576-2668).

Jill-of-all-trades is Evelyn Leeper, MT 1F-329 (957-2070).

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1. This will be the last Notice for a couple of weeks, so I'll remind everyone of the meeting in Lincroft to discuss ethics. This will center around SHADRACH IN THE FURNACE and will be on July 16. If I had thought to get a blurb early, you'd know more about it, but I'm sure it will be interesting. I may even attend! [-ecl]

2. The next Notice will probably appear July 16 also.

Mark Leeper  
MT 3E-433 957-5619  
...mtgzz!leeper

MAROONED IN REAL TIME by Vernor Vinge  
(Serialized in ANALOG, May-August 1986)

Divergent opinions by Paul S. R. Chisholm and Dale L. Skran, Jr.  
(Some spoilers)

Dale, I read Vinge's novel in ANALOG. Pretty good stuff; thinnish characters, but neat ideas and a decent story. Disappointing, though, how he did so little with the Peacer's coming out (and how exactly did Della Lu escape them?) I see his next novel starts next month. This means something. . . . -Paul S. R. Chisholm

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1) I think this is a major step forward for Vinge stylistically. I point out the handling of the story via the diary, multiple viewpoints, etc. Although you described the characters as thin, I didn't find them any thinner than Brin characters, and I really liked Bad Ass. I also thought the Korlovs were adequately developed.

2) The big character hole is Della Lu, and I have a sneaking feeling that he intends to fill it with another novel. Surely her adventures would require another novel to chronicle. How did she get out of the cliff-hanger at the end of the Peace War? What did she do all those millennia fighting the centaur? How did she finally off Gerrault? Della Lu comes out of Peace War/MIRT as THE pivotal figure in history, essential although not sufficient. I actually like that a lot. Although Della is at various times immensely powerful, she also couldn't win without a supporting cast. What is the title of the new novel?

3) Consider also that the serialized version of the novel is frequently cut to fit, and the "real" version may expand some of the characters.

4) I consider MIRT a major piece of SF because it explores several new ideas and themes, provides a view of awesome sweep, while begin at least adequately told (I would contend more than adequately). -Dale L. Skran, Jr.

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subject: INVADERS FROM MARS - a film review      date: June 20, 1986

from: Estes Slade  
LZ  
x2940 3C-115A

I was eleven when I first saw the original which means I have more of a right to rip at this ridiculous waste of film than my "older" though not necessarily wiser buddy (smile!). O.K., Mark, so it was a bit juvenile (the original) but so were those of us who watched it! And maybe the costumes weren't the greatest, but at least they fit the actors who wore them! Remember some 50's kids are s\_t\_i\_l\_l crying "Wolf! Wolf!" today as full-grown (and sometimes bearded adults!

Of course there are two major differences between this one and the original. First, when someone was taken over by aliens in the original they didn't actually lose their ability to act; they just did what had to be done in those days to be considered a realistic adult from a child's point of view (i.e., ignore them and they'll go away...kids are

to be seen and not heard). Of course today's "latch-key" kids have different ideas about adults.

In the remake people a\_r\_e stoned, which is the only way any good actor would have been talked into accepting the role!

The other difference is that the aliens in the first film were merely prototypes for such standards as L\_o\_s\_t\_i\_n S\_p\_a\_c\_e and T\_h\_e T\_i\_m\_e T\_u\_n\_n\_e\_l (I'm almost sure one of the aliens walks like June Lockhart...). In the remake the aliens are nothing more than, and I quote the pudgy little kid, "Giant Mister Potato Heads!", unquote. (Actually they looked more like microwaved apples.) Also please note: the so-called "head in a bottle" also appeared in the remake--remember...on the shelf in the school basement? The producers obviously needed to jog old memories some way, after finding that pudgy brats and potato skins that walk (a la ARA!) just don't mix! A much better idea would have been to just run the original through a video enhancer (for color), hand-paint new inspection stickers on the cars frame by frame, and intermix shots of downtown Soweto, South Africa, during the battle scenes with the aliens!

See it \_o\_n\_l\_y for the head-in-the-bottle-in-the-basement or the neat telescope in the bedroom \_o\_r if you really enjoyed \_R\_o\_b\_o\_t \_M\_o\_n\_s\_t\_e\_r. I'd give it (at gun-point) a -4 on the -4 to +4 scale.

LZ--ECS-nroff

Estes Slade

THE AMBASSADOR  
GRACE QUIGLEY  
A film review by Mark R. Leeper

Cannon Pictures is a production company formed by expatriate Israelis Manachem Golon and Toran Globus. While they are not the worst names in film production by a long shot, generally they tend to go for

fast-buck productions with an eye for proven formulae. Of late they have shown a tendency to pick up series that other producers are finished with. Cannon made, for example, D\_e\_a\_t\_h\_W\_i\_s\_h\_I\_I\_I and is working on a fourth "Superman" film with Christopher Reeve. Very occasionally they will make a film of some quality. Notable was their production of M\_a\_g\_i\_c\_i\_a\_n\_o\_f\_L\_u\_b\_l\_i\_n, based on the story by Isaac Bashevis Singer. Another film that has some loyal supporters--myself included--is L\_i\_f\_e\_f\_o\_r\_c\_e.

Two Cannon productions have run recently on cable and deserve some mention. T\_h\_e\_A\_m\_b\_a\_s\_s\_a\_d\_o\_r stars Robert Mitchum, Rock Hudson, and Ellen Burstyn. Mitchum is the U.S. ambassador to Israel who wants to single-handedly bring a reconciliation between Jews and Arabs. The film is doubly a surprise. First, it is a reasonably good story with considerably more mystery and intrigue than might have been expected. The viewer is left in genuine suspense as to who is doing what to whom and why, and there are some nice plot twists. The second surprise is that while the film is certainly not anti-Israeli; it is not really anti-Arab either. If anything, it is pro-peace and anti-fanaticism. Moderate dissident Arabs have a positive image in the film. Give it a +1 on the -4 to +4 scale. This is one of Cannon's better films.

Another of Cannon's better films is G\_r\_a\_c\_e\_Q\_u\_i\_g\_l\_e\_y, released to theaters as T\_h\_e\_U\_l\_t\_i\_m\_a\_t\_e\_S\_o\_l\_u\_t\_i\_o\_n\_o\_f\_G\_r\_a\_c\_e\_Q\_u\_i\_g\_l\_e\_y. This film seems like it has aspirations of being another H\_a\_r\_o\_l\_d\_a\_n\_d\_M\_a\_u\_d\_e, a wacky irreverent comedy with a strong bite of social comment. Unfortunately, something is wrong somewhere and the film never quite clicks. The story deals with an elderly woman (Katherine Hepburn) who contracts with a hired killer (Nick Nolte) to have herself murdered, having botched two suicide attempts. It isn't long, however, before she changes her mind and is instead selling a painless death service to her circle of friends. The film is often funny, but is unconvincing and the funny bits don't hang together as a story. The film is much less enjoyable than it should have been. Give it a +1 also, but a lower one than T\_h\_e\_A\_m\_b\_a\_s\_s\_a\_d\_o\_r.

THE CYBERNETIC SAMURAI by Victor Milan  
Arbor House, 1985, \$15.95.  
A book review by Evelyn C. Leeper

Lately, the emphasis in science fiction has been on computers. Starting with Vernor Vinge's T\_r\_u\_e\_N\_a\_m\_e\_s and continuing with William Gibson's N\_e\_u\_r\_o\_m\_a\_n\_c\_e\_r and the cyberpunk school (or "the Neuromantics," as Norman Spinrad calls them), authors in the Eighties are turning to computers the way authors in the late Forties turned to atomic energy. But most of them deal with the enhancement of one's existence through the addition of an electronic alter ego. Milan goes back to a much older idea, that of the artificially created being and applies computer technology. The result is neither an electronically enhanced human being nor an artificial intelligence, but an artificial consciousness.

In T\_h\_e\_C\_y\_b\_e\_r\_n\_e\_t\_i\_c\_S\_a\_m\_u\_r\_a\_i, Japan has become the center of the technological world, thanks in part to a limited nuclear exchange (of which we find out very little). The Japanese, though they still retain feelings of superiority over other races in general, and over Westerners in particular, hire Americans as engineers. Dr. Elizabeth O'Neill is one such American. Her theories about how one could create self-aware programs have placed her in disgrace in the United States, but Yoshimitsu TeleCommunications thinks they have some validity and hires her to build Tokugawa.

O'Neill has grander plans than even Yoshimitsu realizes--she wants to instill a moral sense into Tokugawa, a personality...in fact, to teach him the code of bushido and make him the first cybernetic samurai.

Milan does a good job of portraying the private inter-corporation battles hidden behind the public corporate alliances which are common in Japan today. He does have a major problem however--he doesn't seem to know the difference between Japan and China. He speaks of writing Japanese with Chinese characters and makes references to classic Chinese art and other aspects of Chinese life in such a way as to imply that the Japanese have adopted Chinese culture. This simply isn't true, and it only serves to jar the reader out of an otherwise well-drawn society.

Tokugawa himself (herself? no, I don't think so) is as fully developed as Milan's other characters. And while O'Neill at first seems drawn along the lines of Asimov's Susan Calvin, she rapidly emerges as a unique personality. Whether or not you think the scenario Milan draws is likely, his development of an electronic personality is thought-provoking. The concept of a machine evolving into sentience and perhaps even humanity is in many ways the counterpart of the cyberpunk concept of a human taking on electronic aspects. While we can identify more with the latter (as many have pointed out, eyeglasses and hearing aids are the first step toward our becoming a race of cyborgs), Milan's picture looks at the question of man versus machine from a new

perspective. In fact, he shows us just how similar the two concepts are by portraying them as approaches to the same middle ground from different starting points. There is a single road connecting the human being to the machine and each one can progress toward the opposite end. Perhaps, somewhere in the middle, they will meet.

Intelligent machines have been portrayed before, of course, but as logical machines (a la Asimov's positronic robots--they are totally logical and show no initiative or personality). Tokugawa is a person in the broader sense of the term; he is one of the silicon beings that may one day be campaigning against the "Carbonists" who believe that only carbon-based life forms are entitled to rights. Read this book.

## \_N\_O\_T\_E\_S\_ \_F\_R\_O\_M\_ T\_H\_E\_ N\_E\_T

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Subject: "Heart of the Comet" by Gregory Benford & David Brin  
Path: mtuxo!houxm!mhuxt!mhuxv!mhuxh!mhuxj!mhuxn!ihnp4!raysd!jps  
Date: Mon, 16-Jun-86 10:45:38 EST

In 2061 an international expedition is sent to Halley's Comet to investigate, explore and ride it out beyond the planetary ellipse. The title comes from the expeditions strategy of boring into the comet and colonizing it by living off its ice, iron and carbonaceous material. The expedition would spend the eighty year trip alternating between "the slots" (a cold sleep technique); conducting experiments; and building the equipment that would alter the comets orbit when it returns to the inner system for use as a habitat.

Instead of purely political divisions (the world seems to have gotten over that) the crew is polarized along racial and ideological grounds. The major split is between the "Percells", people who have received the genetic manipulation treatments of Anton Percell, and the "Orthodox's" unmodified humans. Each of these groups is further split into either "Arcists", coming from the conservative (earth first) "Arc of the Sun" equatorial countries (global power has shifted south); or "Spacers" believers that human destiny and earths survival lies in development of space.

The whole expeditions plan go awry after they arrive and dig in. The comet contains virulent native life that is only activated when the comet is at perihelion. These life forms come alive by the colonizing activities of the humans. The Halley life both decimates and factionalizes the crew. In addition, when the earth learns of the plague they abandon the colony and take even more stringent measures to avoid contamination of earth's bio-sphere.

The story is told from the perspective of three people: a genetic engineer, a spacer, and a cybernetist. The two men are also involved in a love triangle with the female cybernetist. The chapters vary from depicting scenes that are either decades or hours apart, the story is about ninety years long. The transitions between the characters was well handled, and the story was technically well written. I had some problems with the "deus ex machina" the authors invoked involving genetic engineering and AI, to save the day. In addition, the ending took on mystical aspects that seem foreign to the bulk of the novel.

If you're a Benford or Brin fan, I recommend reading this book, but I'm not sure that everyone will like it. I like both Benford and Brin, but for different reasons. Unfortunately, I found it difficult to find Brin's contribution to this work. The novel has Benford's usual commitment to hard science and vaguely reminds me of "Across the Sea of

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Suns". Looking real hard, you can find some of Brin's influence in the action and particularly the combat scenes.

|| J. P. Schroeder {allegra,linus,raybed2,brunix}!raysd!jps ||

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Subject: Austin science fiction newsletter (long, but interesting)  
Path: allegra!princeton!caip!seismo!ut-sally!ut-ngp!janeann  
Date: Wed, 18-Jun-86 10:48:40 EST

Here's something I came across that might be interesting to science fiction readers. It's a transcription of CHEAP TRUTH, a newsletter that's put out occasionally in Austin. Comments welcome. (No responsibility taken for typos.)

EDITORIAL. SF notions dominate the current Geneva arms talks. In this issue, CHEAP TRUTH responds to the zeitgeist.

## POP AGITPROP

Since its unlikely birth, SF has been a trash medium, its appeal restricted to a subcultural faithful. But that appeal is widening and is being culturally legitimized. With the advent of the Strategic Defense Initiative, the elements, themes, and modes of thought native to science fiction have become central to worldwide political debate.

One SF splinter group has shown a laudable quickness in grasping SF's new political potential. Unlike traditional SF "movements" this group of writers is not marked by literary innovation but by its radical ideology. For purposes of discussion we will refer to them as the "Pournelle Disciples."

This group has a number of strengths. The first is their solid publishing base in Tor and Baen Books. A second is their claim to tradition, especially the gung-ho technolatriy that has marked genre SF since the days of Gernsback. Another crucial advantage is their ideological solidarity, which gives them the sort of shock-troop discipline that Lenin installed in the Bolsheviks. In this case, their Lenin is the redoubtable ex-Marxist Jerry Pournelle, who wears multiple hats as writer, editor, theorist, and political organizer.

Pournelle's importance to this movement is demonstrated by a reading of his recent editorial effort, FAR FRONTIERS Volume III, (Fall 1985), published by Baen Books. The surprisingly dull stories in this book pale miserably in comparison to Pournelle's numerous bursts of naked political agitprop. These are in every way more intellectually challenging and emotionally disturbing than the fiction.

The gem of this collection is Vernor Vinge's "The Ungoverned," a sequel to his commercially successful novel THE PEACE WAR. In this

ideologically correct effort, radical Libertarians defend their realm from an authoritarian army. Thanks to their innate cultural superiority and a series of fraudulent plot Maguffins, they send the baddies packing

with a minimum of personal suffering and a maximum of enemy dead.

This piece is worth closer study for its standard Disciple elements. First, and very characteristically, it is post-apocalyptic, conveniently destroying modern society so that a lunatic-fringe ideology can be installed as if by magic. Convenient bits and pieces of high-tech are paraded in a flurry of buzzwords. Vinge avoids extrapolating their effects on society, because society is in shambles.

Pournelle's promotion of the moral obligation to keep and bear arms is well known. Vinge carries this libertarian love of personal armaments to amazing lengths. In his scenario, private citizens own, not merely automatic rifles, but chemical weapons and neutron warheads, thus carrying the libertarian argument to a kind of logical \*reductio ad nauseum\*.

The other stories are much worse. David Drake, a Disciple stalwart who specializes in military tales of a purported "gut-wrenching hyperrealism," contributes a silly and utterly negligible short-short about dimensional gates opening in a suburban kitchen. Despite its merciful brevity, it is still unable to make any coherent point. Rivka Jacobs' interminable "Morning On Venus" spoils a vaguely interesting opening with pompous meandering. By making the hero an historian, Jacobs avoids the painful necessity of extrapolating a coherent future, indulging instead in a confusing mishmash of historical sermonizing. Alexander Jablokov contributes a flabby fantasy pastiche, which imitates Niven as slavishly as one can without understanding him. All three of these stories feature much gratuitous offscreen sex, assuring the readership of the authors' with-it frankness without the sticky necessity of actually talking about fucking.

John Dalmas contributes a decent male-adventure Western. Unfortunately this story pretends to be SF. It is set on yet another colonial planet lapsed into barbarism, a fictional convention that allows SF writers to espouse reactionary social values without a blush of shame.

Dean Ing's recent novel for Tor, WILD COUNTRY, takes a similar tack. This book, the last in a post-apocalypse trilogy, is a meandering series of shoot-'em-up. Its hero is an assassin. The villain is a gay heroin-smuggler, as if an America devastated by nukes did not have enough problems. Ing's hasty depiction of future society is grossly inconsistent; ravaged and desperate when the plot requires desperados, yet rigidly organized when Ing suddenly remembers the existence of computers.

The book is a Western, set in a West Texas conveniently returned to the robust frontier values of Judge Roy Bean. Men hold their land, with lasers if possible, while women raise corn and keep the home fires

burning. Ing struggles valiantly with Texas dialect: "'Late, schmate,' growled the aging veterinarian, whose rough cattleman's lingo masked an excellent education."

The book is speckled with maps, diagrams, and lectures on the Second Amendment, which, one learns, "absolutely and positively, guarantees citizens their right to keep and bear arms."

Like his fellows, Ing treasures this amendment, the last remnant of the American polity that he is willing to respect. There isn't much mention of, say, voting, or separation of powers. Power resides in the barrel of a gun, preferably the largest and shiniest possible.

Janet and Chris Morris, who wrote THE 40-MINUTE WAR for Baen, are down on terrorists. The politics of this book are dominated by adulation of the state of Israel, where every sabra carries a righteous submachinegun. The heroes are counterterrorist CIA assassins, whose purported fluent grasp of Arabic only fuels a xenophobic hatred of Moslem culture. They tactfully refer to their murderous work as "greasing rag-heads."

The female protag is a hard-as-nails liberated journalist: "Shit, the world is ending, and you're Ms.-ing me? I'm a Miss, nota Ms., whatever that is."

The prose is often clumsy, dominated by run-on sentences and misplaced clauses: "To most Foreign Service officers, even in the Mediterranean, word came earlier than it did to Marc Beck, who was babysitting a convention of genetic engineers with astronomical security clearances being held at a private estate on the Red Sea when an aide slipped him a note." This was not an oversight; it's the book's third sentence.

Janet Morris is not a gifted prose stylist, but she means business. The most potent political treatise of the Disciples is a work of nonfiction by Morris, David Drake, and Congressman Newt Gingrich, the ultrarightist Golden Boy of the born-again contingent. This book, WINDOW OF OPPORTUNITY, presents the straight gospel of Pournelle's private pressure group, the Citizen's Advisory Council on National Space Policy. It advocates "an effective American monopoly of space," in which laissez-faire capitalists fill orbits with "the Hiltons and Marriotts of the solar system." These space cities will be manned by Christian space-settlers, whose stern faith gives them the backbone for the frontier life. "The rise of high-tech preachers on cable television is accelerating the re-emergence of religion as a legitimate vehicle for explaining the world. Presently there will be religious software for

home computers and a host of modern high-tech efforts to spread a new, electronic gospel...."

With this treatise the gloves are off, and the Disciples come full-circle. This combination of 19th-century values and visionary technolatriy is a potent one which, though easy to mock, is easier to

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underestimate.

SF has power now, and it is our responsibility to see to what uses that power is put. Pournelle, as usual, has put it best, in his argument for the Strategic Defense Initiative. Peace, Prosperity, and Freedom are his watchwords. Peace: as an orbiting Pax Americana over a world requiring American tutelage. Prosperity: for high-tech asteroid-barons, who will watch the disastrous crumbling of communist society from the safety of orbit. Freedom: from any necessity of change or accommodation to other cultures.

Naive space enthusiasts believe that humanity will climb into the cosmos on a Pentagon payroll. Many dislike the idea, but feel that an allegiance with the military is a small price to pay for a life of bliss in an orbiting O'Neill colony. The psychological appeal these colonies hold for us in SF is not hard to grasp. An O'Neill colony will be an airtight little world, of technically educated white Americans gazing raptly at the stars. A world soaring far above the heads of threatening mundanes. A world that is fandom's objective correlative.

SF has always been publicly identified with space flight. There is no shame in that. But SDI's backers become the predominant political spokesmen for SF, we will be associated from now on with X-ray lasers. Whether we like it or not.

In the final analysis, it does not matter that they write badly or that their ideas are lunatic. That has never stopped any of us.

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Subject: BRISINGAMEN by Diana L. Paxson (mild spoiler)

The jacket reads:

"Imagine that a shy graduate student has discovered the legendary necklace Brisngamen -- whose wearer bears the powers of the goddess Freyja, mistress of love and war...

Imagine that Freyja's enemy, Loki, has come to San Francisco to steal it back, so that he can release his fiery reign of terror...

Imagine that only Karen Ingold can stop him. Together with her unlikely allies -- a one-eyed biker, a red-bearded carpenter, and a spinsterly Tarot reader -- Karen must follow her enemy to a twilight world of myth and magic ... not unlike our own!"

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This book has a lot going against it in terms of traditional fantasy novels. First, it takes place in the present. Second, by and large, the characters are not the hero types. Third, two of the main characters are Vietnam veterans, and their wartime experiences are ever-present in their current lives.

The author pulls it off, however. There's not all that much magic, so you don't feel that she's taking liberties to move the story along. The story covers a few weeks and the action is paced properly. The background of the main character and her boss make it likely that she would get the necklace and, before too long, recognize it for what it is.

I give this book 3.0 stars out of a possible 4.0. It probably won't appeal to fantasy readers who want a fantasy world, and it's certainly not science fiction, but I enjoyed it.

Duane Morse ...!noao! {mot|terak}!anasazi!duane

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Subject: "Engines of Creation" and Nanotechnology  
Path: allegra!princeton!caip!think!mit-eddie!mit-hermes!mit-prep!tower  
Date: Thu, 19-Jun-86 13:54:16 EST

I have just finished reading "Engines of Creation" by K. Eric Drexler, published by Doubleday, New York, June, 1986.

Drexler examines, from an engineering viewpoint, the likely advances that nanotechnology will bring in the next several decades. Nanotechnology is engineering on the molecular level with precise control of molecular structure. I have appended an introductory article written by the Nanotechnology Study Group at MIT, which briefly explains the technology and some of its implications.

"Engines of Creation" covers the topic with greater length and depth, as well as looking at the likely social implications and ways to control the uses to which the technology will be put. One of the more interesting is the use of Science Courts to resolve the facts and unknowns in a technological disagreement between experts.

Good Reading, Len

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#### Nanotechnology: A Key Advance

Foreseeable technological advances will enable us to build devices to complex, atomic specifications. This will make possible a nanotechnology that includes both nanomachines and nanoelectronics. As microtechnology involves micrometer-scale devices, so nanotechnology

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will involve nanometer-scale devices. These advances will change macroscopic technology as well, because all technology rests ultimately on our ability to arrange atoms to make hardware.

The prospect of nanotechnology forces a reevaluation of our expectations regarding the next several decades. New dangers make foresight vitally important. This paper outlines some basic facts regarding the nature and consequences of nanotechnology. It is condensed, containing more assertions than explanations--its goal is not to provide a thorough

technical discussion, but merely to describe a set of facts and make them plausible to readers with broad technical literacy.

## The Technology

Nanotechnology is synonymous with advanced molecular technology. It includes molecular electronics and the so-called biochip. It may be seen as the culmination of progress in many fields.

Microelectronic engineers construct ever-smaller devices, some only a thousand atoms wide. Chemists know a great deal about molecules, and they regularly design and build small molecular structures. Progress in both synthetic chemistry and microelectronics leads toward the construction of complex structures to atomic precision--that is, toward nanotechnology. Biologists study the molecular machinery of life; nanotechnology will provide them with greatly improved molecular tools and instruments. Through the molecular tools of pharmacology, physicians influence the molecular machinery of life. Nanotechnology will again provide tools of dramatically greater ability.

Researchers in these fields are laying the foundations for nanotechnology. Biochemists are learning to design ever-larger molecular systems, and groups in Japan, at the U.S. Naval Research Laboratory, and elsewhere are pursuing work in molecular electronics.

We can already see much of what this work will make possible, because physicists, chemists, and biochemists understand the laws that govern molecular systems. The behavior of these systems is often amenable to computer simulation, using ordinary mechanics to describe molecular motions and quantum mechanics to describe molecular bonding. The challenge of nanotechnology is one of developing better physical and computational tools, not of developing new fundamental science.

Nanomachines will be the key to nanotechnology. Because molecules are objects with size, shape, mass, and stiffness, they can serve as moving parts in nanomachines. Well-known biochemical systems--the rotary flagellar motor that propels bacteria, the actin-myosin system that powers muscle, and so forth--show that molecular machines exist and function. They prove (and calculations confirm) that thermal noise and quantum-mechanical effects do not prohibit machines with molecular-scale moving parts.

Molecular machines can build molecular machines. Enzymes direct the swift assembly and disassembly of molecular structures. Ribosomes act as numerically-controlled machine tools, assembling molecular devices (in this case, protein molecules) under programmed control. They demonstrate that nanomachines can build specific molecular structures by bringing reactive molecules together in the right orientations and surroundings. Genetic engineers use DNA to program bacterial ribosomes to build natural (but foreign) proteins. The design of novel proteins is an active area of research. Eventually, we will learn to build proteins that, like those in the cell, perform a wide range of chemical and mechanical functions. We will then be able to build ribosome-like protein machines which will in turn enable us to build non-protein machines. Protein engineering thus offers one path to nanotechnology. Physicist Richard Feynman outlined an alternative path as early as 1959.

By one path or another, we will eventually develop tools that enable us to assemble complex structures to atomic specifications. Such tools are called molecular assemblers, or simply assemblers. The development of assemblers will constitute a key breakthrough in technology.

### Some Applications

Comparisons to known physical systems and straightforward design calculations indicate the feasibility of the following:

**Replicators:** Assemblers, if supplied with materials and energy, will be able to build almost anything--including more assemblers and more systems for providing them with materials and energy. Cells demonstrate that systems of molecular machinery can replicate themselves. Replicating assemblers will be as cheap as bacteria. Single cells proliferate and cooperate to build redwoods and blue whales; properly programmed replicators will likewise be able to build large systems.

**Nanocomputers:** If built with molecular components, the equivalent of a modern microprocessor will fit in roughly 1/1000 of a cubic micron. Megabytes of fast RAM and gigabytes of tape-like storage with sub-millisecond access times will fit within a cubic micron. The small size and low power dissipation of nanocomputers will make possible machines with massively parallel architectures.

**Cell repair machines:** Molecular machines in cells sense, make, rearrange, and destroy cellular structures. During cell division, they build whole new cells. Advanced nanomachines will be able to do likewise. Since typical human cells have a volume of roughly 1,000 cubic microns, they hold room enough for cell repair machines directed by on-site nanocomputers and wielding an extensive set of molecular-scale sensors and tools. Cell repair machines will bring surgical control to the molecular scale, enabling physicians to repair tissues that are unable to repair themselves, and to reverse the molecular disorders that cause aging. Replicators will make cell repair machines inexpensive.

Superstuff: The performance of systems depends on the pattern of atoms composing them. Assembler-built composites based on diamond fiber will have tens of times the strength-to-mass ratio of present structural metals, and excellent fracture toughness as well. Assembler-built screens, made from nearly-microscopic lens arrays, will display high-resolution, full-color, three-dimensional imagery. Assembler-built batteries with finely interleaved electrodes will have very low internal resistance and high power-to-mass ratios. This list could be extended almost indefinitely: assembler-built materials, components, and systems will advance virtually all fields of technology, making possible improved chairs, cars, spacecraft, and so forth.

Superweapons: Superior hardware will have superior military potential. Replicating assemblers will permit swift construction of such hardware. Programmable replicators will make possible a more controlled and practical (and hence more threatening) form of "germ" warfare. This list, too, could be extended.

#### Our Situation

These prospects raise certain questions about nanotechnology and its effect on our future:

Is nanotechnology good or bad?

Nanotechnology raises obvious issues of life and death. Replicating assemblers will enable us to create material wealth of unprecedented quality and quantity; in much of the world, this is a life-and-death matter. More directly, cell repair machines will enable medicine to create and maintain health. Yet through the same capabilities that make these benefits possible, nanotechnology will also make possible new forms of warfare and oppression.

Could it be stopped?

Advances in fields as diverse as medicine, weaponry, and chemistry will (intentionally or not) move us along the path to nanotechnology. Military motivations will be strong, and the verification of limits on research will be virtually impossible. In a world of competing

technological states, local actions and local laws cannot stop such a technology. In the absence of means for verification, international treaties likewise offer little hope. Thus, regardless of the balance of its benefits and risks, nanotechnology seems virtually inevitable. We can only guide advances, not stop them.

When will it arrive?

Present physical knowledge enables us to foresee some of what nanotechnology will (and will not) be able to accomplish, but estimates of when nanotechnology will arrive are far more speculative. Such estimates must reflect the possibility both of unanticipated shortcuts

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and of unanticipated delays. They must take account of obvious synergies, such as the application of expert-systems technology to computer-aided design, and the application of both to molecular engineering. Further, they must take account of research trends such as the commencement of "full-scale research efforts" on molecular electronics by NEC, Hitachi, Toshiba, Matsushita, Fujitsu, Sanyo-Denko, and Sharp. Finally, military interest in nanotechnology seems likely to eventually spawn an effort as urgent as the Manhattan Project.

In light of these considerations, a plausible guess for the arrival date of molecular assemblers is twenty years, plus or minus ten. For some purposes (e.g., planning for medical care) it is safest to assume that nanotechnology will develop slowly. For other purposes (e.g. preparing for dangers) it is safest to assume that it will develop swiftly.

What is to be done?

The prospect of nanotechnology raises a host of policy questions. Depending on the preparations we make, nanotechnology could bring either great benefits or a final disaster. Because nanotechnology will build on known principles of science and engineering, a measure of foresight seems possible. Because advances in nanotechnology seem easier to steer than to stop, a measure of foresight seems necessary.

The study of nanotechnology crosses disciplinary boundaries. To judge the possibilities requires engineering thought guided by knowledge in such fields as physics, chemistry, biology, and materials science. The

basic technical facts in turn raise issues of social, political, and strategic importance. It seems that past expectations must be revised, perhaps drastically. We need to know more about nanotechnology and its implications, and we need to have that knowledge spread widely. The growth of knowledge is best served by critical discussion and by presentation of the results.

Further Reading:

Richard Feynman, "There's Plenty of Room at the Bottom." In Miniaturization, H. D. Gilbert, ed. Reinhold, New York, pp 282-296 (1961).

K. Eric Drexler, "Molecular Engineering: an approach to the development of general capabilities for molecular manipulation." Proceedings of the National Academy of Sciences (USA), 78:5275-5278 (September 1981).

Molecular Electronic Devices, Forrest L. Carter, ed. Marcel Dekker, New York (1982).

K. Eric Drexler, "When molecules will do the work." Smithsonian, pp 145-155 (November 1982).

- 11 -

Kevin Ulmer, "Protein Engineering." Science, 219:666-671 (11 February 1983).

Jonathan B. Tucker, "Biochips: can molecules compute?" High Technology, pp 36-47 (February 1984).

K. Eric Drexler, "Engines of Creation." Doubleday, New York, June, 1986.

Len Tower

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Subject: THE BREAKING OF NORTHWALL by Paul O. Williams (mild spoiler)

The jacket reads:

"To the Pelbar, the sentence seemed a living death -- exile to distant Northwall for a year, isolated from the security and order of Pelbarigan society, facing the barbarian tribes of the Shumai and Sentani.

But the rebellious Jestak embraced his punishment -- for only with the lore of Northwall and the battlecraft and bravery of the wild tribes could he accomplish what he sought. The woman he loved was a captive in Emerta, fabled city of the slaveholding Emeri. Jestak meant to free her -- and, if he had to, destroy utterly the power of the Emeri."

This is another instance in which the jacket summary probably wasn't written by a person who had read the book. Perhaps someone gave this person a three minute precis, from which the teaser was written.

The book is a lot more interesting and complex than the jacket makes it out to be. Jestak doesn't know where his girl friend is when he goes to Northwall, and he's never heard of Emerta.

The location is central United States, and the time is some hundreds of years in the future, after a nuclear war has killed most of the population and destroyed all large cities. Different cultures have sprung up, each having different levels of technology and different mores. The Pelbar are the most sophisticated from a technological standpoint, but they tend to isolate themselves in a couple of strongholds. The Shumai and the Sentani are Indian-like groups that fight each other and the Pelbar except during truce weeks. Jestak is an unorthodox Pelbar: he has a taste for the open spaces and the knack for landing on his feet in bad situations. Previous to this story he had a number of adventures, the outcome of which is that he is a blood brother

to one of the Sentani tribes.

You never know what you'll get in a novel about post nuclear war Earth.

This one is pretty good. Though Jestak's ability to make peace between warring groups is, perhaps, a little hard to swallow, I liked the character very much, and I got caught up in the adventure. Once the story gets started, it doesn't slow down.

I give this book 3.5 stars out of 4.0: it's very good. I'll keep it and look for more books by this author.

Duane Morse ...!noao!{mot|terak}!anasazi!duane

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Subject: STARSHIP DEATH by Randall Garrett (mild spoiler)  
Path: allegra!princeton!caip!ut-sally!seismo!hao!noao!terak!anasazi!duane  
Date: Thu, 19-Jun-86 11:26:30 EST

The jacket reads:

"They were in deep space, past the point of no return, when the saboteur struck. There were plenty of suspects, including an experimental robot, and many possible motivations. But when they found the first body, they knew they were facing a ruthless killer who would murder them all if he was not caught -- and blow up the ship if he was."

Based on the summary above and my familiarity with the author's Lord Darcy detective SF novels, I started reading this book, expecting a nice mystery, different, perhaps, than the Lord Darcy genre, but still of a high caliber. I was very disappointed.

The book has a short introduction by someone other than the author; a little information about Randall Garrett is given, and a comment is made which leads one to believe that the book is of somewhat recent vintage: the writer states that the climax of the book has elements in common with the recent Star Trek movie. Well, the copyright is 1962, so a lot of time passed between writing and publishing.

The story starts out quite well. The main character, Mike "the Angel" Gabriel, is introduced. He runs his own high technology engineering company and is a hulk of a man. The time and place are not-too-distant future US. Before long Mike joins a spacecraft crew to take an experimental robot to an isolated planet, and that's when I started losing interest.

There are a number of problems with the plot and the characters. There are two conflicting plots, one having to do with the robot, and the other having to do with sabotage on the spaceship. Instead of supporting each other, the two themes dilute interest and suspense. The characters

are somewhat poorly drawn, and I didn't develop much of an interest in any of them. I like the way the author attempted to explain some of the technology involved, but the three parts -- plot, character development, and technology -- just didn't hang together very well.

Much as I enjoyed the Lord Darcy books, I can only give this book 2.0 stars out of 4.0 (its fair, but I went through the second half somewhat fast just so I could finish it).

Duane Morse ...!noao! {mot|terak} !anasazi!duane

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Subject: REVIEW: The Manhattan Project  
Path: ihnp4!seismo!rochester!bullwinkle!uw-beaver!fluke!moriarty  
Date: Mon, 16-Jun-86 13:09:23 EST

Theoretically, anyone can build an atomic bomb, given a little horse sense and the ability to read technical documents. The trick is, of course, to get something really fissionable for the thing to go boom. The Manhattan Project takes care of that little problem in an interesting way; it has a high-grade plutonium factory set up in secret in a small New England suburb. John Lithgow plays a brilliant, pleasant physicist who has spent the last four years coming up with a way to make plutonium so pure that a jar of it could wipe out a state. Upon being moved to his cover headquarters, he rents a house and asks his real estate agent out for a date. Coincidentally, she has a bright teen-age son who is interested in lasers. Lithgow invites the boy to see his work (which use lasers, supposedly) and tries to fool the kid into thinking that they're making something other than plutonium. And that's where the plot really gets started, because this kid is a \*lot\* brighter than Lithgow thinks...

I won't go into the plot any farther than to say that you can take this film in two ways: as a straight adventure film or as a message movie. It works in either case, coming up with some surprisingly good analogies to the current nuclear arms race and the situation we find ourselves in. It also has a fair-to-good technical sense and an excellent sense of political realism, I think. The film has two really great things going for it: a script which provides suspense, humor, great dialogue and believability; and John Lithgow, who has stepped up (in my estimation) from one of my favorite actors to one of the best character actors working in film today (hope you saw "Resting Place" a few weeks ago on TV -- great performance). Lithgow plays his role to perfection; I particularly liked his performance when an Army Col. points out that

he's just as much of an S.O.B. as the people who use his weapons -- just because he doesn't use his discoveries for warlike purposes doesn't mean he can build them without getting his hands dirty. It's a good moment, and Lithgow's performance is nothing less than perfect. It's also a nice point ("'Vonce the rockets go up, who cares where they come down? That's not my department' says Werner Von Braun").

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There are problems: The ending is a trifle sappy, though Lithgow does much to salvage it (few others could do as well); and the early parts with the kid tend to be rather pedestrian. The soundtrack is somewhat annoying; while the kid is putting together the A-Bomb, the music sounds like Walt Disney background music for Son\_of\_Flubber. Finally, though the break-in scenes are well done, the kid has that chronic plot problem, The Mr. Spock Syndrome. Remember on all those episodes when an Alien mechanism was going to a) destroy the Enterprise b) destroy a planet c) kill a main character, Kirk and Spock would find the main control panel. And Kirk would say, "Mr. Spock, I need you to decipher this Alien control panel, which has icons in a language you've never seen, and is written by a culture completely alien to both Earth and Vulcan, and is far more complex than any technology we've ever encountered. And once you've done that, I need you to find the 'OFF' switch among those 70 billion lights." And Mr. Spock would say, "Certainly, Captain.", and hit a switch without blinking, and the lights would go off. Mr. Spock is able to do this because Mr. Spock is a very smart man, but more importantly, because there are only 40 seconds until a Ford commercial and Captain Kirk still hasn't told the beautiful alien woman that he will always remember her, but that he's married to The Enterprise. This kid doesn't have quite that much against him, but he manhandles two or three high-tech panels pretty handly. It's not unbelievable (he probably picked up a lot from his prior visit with Lithgow), but it seems a little too quick. I find it far easier to believe that he could build a atomic bomb over a few weeks than decipher a security panel in 5 seconds.

Full Price recommendation. Probably better in large weekend crowds.

Moriarty, aka Jeff Meyer

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Subject: SEATTLE INTERNATIONAL FILM FESTIVAL: Home of the Brave  
Path: ihnp4!seismo!rochester!bullwinkle!uw-beaver!fluke!moriarty  
Date: Mon, 16-Jun-86 12:58:19 EST

HOME OF THE BRAVE (USA, 1986)

DIRECTOR: Laurie Anderson

PRODUCER: Paula Mazur

SCREENWRITER: Laurie Anderson

CINEMATOGRAPHY: John Lindley

MUSIC/CAST: Laurie Anderson, Adrian Belew, Joy Askew, Richard Landry,  
Dollette McDonald, Janice Pendarvis, William S. Burroughs

I am not a concert movie person. In fact, I'm not much of a concert person; for 90% of the performers I listen to, I prefer to listen to the music at home on my headphones. The only concert movies that hold any facination with me are ones which I relate to my checkered past; The Last Waltz still has moments which remind me of other moments when

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I was watching the film, and etc., etc., etc. But friends of mine who know my taste in film have kept telling me that I would LOVE Laurie Anderson, and with her new film on the Seattle Film Festival Schedule (and since I had a pass to all the films), I thought, what the hey?

Well, first: this is the best-made concert film I've ever seen. Most concert films seem to be shot by someone who used to work with 60 Minutes and was used to breaking down doors for their best shots. Home of the Brave is imaginatively shot and edited, with great composition and a knowledge of where it's going. Anderson's band's visual nature certainly adds to the effect, and you never feel like the editor is saying, "OK, we haven't shot Dollette in a while, let's go to her". Of course, the biggest advantage this film has is Anderson herself; she is animated with about 20,000 volts of electricity, all visible at one glance of her face, with a type of glowing intelligence and craziness behind the eyes and eyebrows. There are some optical effects here that are just plain fun to watch. Altogether, I wonder if Laurie Anderson was the model for Buckaroo Banzai. Anyone happen to know is she's a nuerosurgeon or a particle physicist on the side?

So, you wonder, it's a really good film, right? Yes, it is definately a

good film. And did you enjoy yourself, you ask? No, I didn't. Actually, I kept falling asleep during the middle of the musical numbers. You see, the one problem with a concert film is this: if you don't like the music, it doesn't matter how good the rest of the film is -- there's no plot or story to keep you going through the slow spots, as in a musical. And I'm afraid that I didn't like the music; the majority of it just left me cold.

My final analysis would be this: If you like Laurie Anderson music, I cannot see how you could be disappointed with this film. However, if you don't, it's a toss-up.

Moriarty, aka Jeff Meyer

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Subject: Short Takes (reviews) from the SEATTLE INTERNATIONAL FILM FESTIVAL  
Path: ihnp4!seismo!rochester!bullwinkle!uw-beaver!fluke!moriarty  
Date: Mon, 16-Jun-86 13:03:55 EST

#### THE TOXIC AVENGER (USA, 1986)

"He was 98 pounds of pure nerd until he became... THE TOXIC AVENGER!! (The First SuperHero from New Jersey!)" Well, it sounds better than it is; this is a soft-porn soft-gore picture with some pretty funny sight gags, as ultra-geek Melvin gets dunked in toxic chemicals and is transformed into a monster in a tu-tu. He (of course) has some biological need to maul evil people (he also has some \*other\* biological needs, but luckily the heroine is blind...). This is so low-budget that they probably made it with a car loan. Those who enjoy drive-in movies

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should check it out; otherwise, forget it. A Joe-Bob Drive-In movie nomination for the special effects used in simulating a paper boy on a bike being run over, and a seeing-eye dog being blown away by a sawed-off shotgun -- both for about \$2.50. And they say there is no innovation left in America... I wonder what the Cannes audiences made of it? :-)

#### SLEEPING BEAUTY (USA, 1959)

They got a 70MM print and showed it at the Cinerama, the best 70MM theatre I've ever seen. Great stuff, as it still had moving backgrounds and a rather unusual modernistic style of drawing. This is the way this was meant to sound, and the evil fairy is just about the best villainous, personality-wise (the witch in Snow White looked better), Disney ever did.

SHADEY (Great Britain, 1985) American Premiere

I've noticed that my favorite films at Seattle Film Festivals are the ones which are not heralded by much acclaim in the programs. It often seems that the ones which ARE claimed to be one of the best of the year are usually the worst. Case-in-point: Shadey, a supposed-comedy about a man who has the ability to read minds and see distant vistas using telepathy. In exchange for his services, he wants the money to be able to get a sex change. This has the potential for a good comedy, but it is marred by extremely violent action that is somehow supposed to be funny (the removal of an ear, Shadey finally getting his operation by inducing a crazed matriarch (Katherine Helmond) into stabbing him in the groin). I wish I'd been in an aisle seat so I could have left during the last hour. Enough said about this...

BOMBS AWAY! (USA, 1985) American Premiere

Don't worry, it's unlikely that this will ever get out of Seattle. It's bad slapstick around an interesting comedic premise -- what if an A-Bomb got misplaced and shipped to a Seattle Army Surplus store? They did very little with it, other than a halfway-neat chase scene through Seattle Center at the end. The crowd was cheering, but that's because all of the cast and crew were at the showing and the Market Theatre is very small.

Moriarty, aka Jeff Meyer

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Subject: Trailers, Teasers and promotion: seminar at SEATTLE FILM FESTIVAL  
Path: ihnp4!seismo!rochester!bullwinkle!uw-beaver!fluke!moriarty  
Date: Mon, 16-Jun-86 12:39:23 EST

I don't know about you, but one of my favorite parts of any movie is the "coming attractions" section preceding the film. I always try to get to

the theatre early enough to catch these, as some of them are more entertaining than the film I've come to see (case in point: the teaser for The Golden Child which preceded Top Gun). More often than not, the trailer makes the movie look better than it is. Well, this year's Seattle International Film Festival held a seminar bringing in two people who have become legendary in the film industry for coming up with effective trailers for films: Paula Silver (of R/Greenberg Associates) and Pablo Ferrer, the "father" of the innovative trailer. The evening specialized in the use of "teaser" trailers (where scenes from the movie are not shown -- instead, original material is used), along with various icons and poster images, to promote a film, and was one of the most interesting and educational events of this year's festival. Below is a condensed version of what was shown, and should be of particular interest to film buffs (and especially Sci-Fi buffs) -- lots of wonderful trivia and inside information.

It opened with an hour's worth of clips and a discussion by Paula Silver of the nature of film promotion and a breakdown of "teasers" into her own rather distinctive classes. She emphasized that the idea of any film promotion is to whittle away at the finished film until a single idea or concept is found that will sell the film. It may not be the concept which is at the heart of the film; in fact, it may be manufactured and be totally alien to the nature of the film. However, it is up to her and her associates to make sure it is the right concept to sell the picture, and from R/Greenberg's record (and quality level -- they've done some of the best trailers I've ever seen), you can see why they're so well known. After the concept, a second item is usually conceived: an icon, somehow related to the concept picked. This Icon can be an image or a phrase; prime R/Greenberg examples of icons would be the Ghostbusters symbol, the Egg in alien, "In space no one can hear you scream.", "You'll believe a man can fly", etc.

Silver then went on to classifying promotional styles (and particularly "teasers") in an interesting way: she filed them according to how the studios wanted the film promoted. As she puts it (she is from New York City, with all the good and bad that implies), in Hollywood, you don't ever want to say "no" to the person who wants you to promote a film; they think they'll label you as a "negative" person. Better to work creatively within their guidelines or, better yet, wait until a new regime takes control at the studio -- they change every three months. I'll list several of the categories below, with example films and their corresponding anecdotes.

The first category is the film where the studio comes in and says "Here's a film about X; however, we don't want you to mention X anywhere in the promotion." The first example of this was "Kramer Vs. Kramer", where the person pushing the movie said "This is not a film about divorce. This is a film about a positive change in several people's lives." So R/Greenberg developed the now-classic developing Poloroid image with the voices of Hoffman, Streep and Bateman in the background. Another film that did this was All That Jazz, which was supposed to be

played up as a musical instead of a semi-autobiography of Bob Fosse's life; the lighted ALL THAT JAZZ sign was viewed while voices and songs from the movie were played in the background. Universal handed down the law that Tootsie was absolutely not to show Dustin Hoffman dressed up like a woman, for the fear that audiences would think it was a movie about transvestites. This is why the ads sum up the entire plot of the movie during the trailer: it is emphasized that Hoffman is only doing this because he can't get a job as himself, and Tootsie only appears in the last shot. Finally, it appears that more than once an edict has been handed down that "no black people are to appear in the trailer", because audiences would think it was a film about racism, which is supposed to "turn audiences off", at least as far as the studios are concerned. Sugar Babies and A Soldier's Story were mentioned by name; early teasers used the Kramer VS Kramer method to fit the bill.

The second category involved Sci-Fi and horror movies, where the studio either does not want the monster revealed, or doesn't want it to be thought of as a "typical high-brow Sci-Fi movie".

- Silver mentioned that she and Bob Greenberg saw Alien before anyone else (Ridley Scott was apparently very gratified by how far she jumped out of her seat -- no one outside the dailies had seen the film before that). However, they wanted something that didn't provide scenes from the movie: hence the classic "egg" scenario. By the way, a neat piece of trivia: they did the Egg promo in one day. The next time you see it, note the surface of the planet that the teaser pans over. Look closely. Wonder what that stuff is? It's a brownie! To simulate the alien landscape for the teaser, they baked a bunch of brownies and then panned over them with a special lighting. Boy, those expensive special effects. When the promo was shown after that fact, we probably became the first audience ever to laugh through an entire Alien trailer.

- Another example of this is the teaser for An American Werewolf In London; the teaser is made up of cuts of a swamp, and as it proceeds, blood begins mingling with the water. The whole thing climaxes with a huge hairy paw freeze-framed as it hits the water, and the slogan "From the director of Animal House: a different kind of animal". Apparently New Jersey

was used for the swamps, almost all of them behind supermarkets (does this mean that supermarkets in NJ are built on swampland?), so they had to be careful not to catch the reflection of the Safeway signs in the water. Well, you work an honest day, and you want an honest deal, Grrrrr....

- Lifeforce was not supposed to describe too much about the film (which Silver agreed with, after having been shown the final product), and so the eye over the world was used. However, a doctor told them that getting a closeup of a human eye that close would blind the eye. However, a camera worker knew a blind friend who had beautiful blue eyes; and thus, the eye that looks down upon

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the globe ironically couldn't see it for the stars.

- Finally, you may remember that the early Superman commercials showed clouds flying by while the cast of the picture flashed by in those distinctive Superman credits (R/Greenburg created and produced them for the movie); this was done to try to make the film palatable to adults.

The final category that I can remember was the one dealing with images, where the audience is to be taken in with a single image. Examples of this included The World According To Garp and the flying baby sequence (done by placing the baby on a no-glare glass plate and shooting under the plate, moving the camera to simulate the kid being tossed). Apparently this was not easy, as the little tyke seemed to enjoy urinating onto the panel during takes, which rather ruined the effect. And Ghostbusters led off with those mystery posters that littered most major cities months before it premiered (just the No Ghosts Icon and the words "Coming to Save the World This Summer").

After that, Pablo Ferrer came on stage. Ferrer started working for Stanley Kubrick back on Dr. StrangeLove. His trailers are famous for quick cuts and text between images. His most famous work is probably the Clockwork Orange trailer, with the 1-second cuts and the electronic "William Tell Overture" running behind it. While Paula Silver is definitely in the mainstream of the business, Ferrer continues to work on trailers for independent films, where he has a bit more creative control over what he does (his latest is for The Talking Head's

film \_Stop\_Making\_Sense\_). Particularly interesting was the version of the trailer he did for \_Harold\_and\_Maude\_, which was never used because it (\*GASP\*) showed Harold and Maude kissing and falling into bed. Not to mention it had the classic "FUCK WAR" sign (the one Harold's crazy one-armed Hawk uncle tears down).

All in all, an interesting evening and one which discussed how Hollywood really sees its audience.

Moriarty, aka Jeff Meyer

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Subject: Why remakes are different

Path: topaz!caip!think!mit-eddie!genrad!decvax!decwrl!glacier!cascade!asente

Date: Mon, 16-Jun-86 19:36:27 EST

Several people have faulted "Invaders from Mars" for not being the same as the original movie. There is a good reason for it not to be--it's a horror movie.

Good horror movies always reflect the current fears and worries of the population. In the 50's, we were worried about Communists, and the horror films were full of people being taken over and becoming

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emotionless pawns to some other power (Invaders from Mars, Invasion of the Body Snatchers). We don't worry about that any more, so for the film to have punch it has to find some other fear to capitalize on. When Invasion of the Body Snatchers was remade, America was in the midst of the 70's--the "me" decade--and this colored the film.

Think of the flood of "nature strikes back" films in the 60's (e.g., Frogs). What were we worried about then? Pollution. The ecology. The Disaster movies of the 70's tapped into our fears about runaway technology and being caught in a world we could no longer control, be it a burning skyscraper, a capsized ship, or an out-of-control airplane. The early 80's brought the teen slasher movies, full of people being attacked by psychotic killers. With the current fears about terrorism, I wouldn't be surprised if these made a big comeback soon.

\*\*\* Minor spoilers about Invaders from Mars follow \*\*\*

What do we worry about today? Poltergeist capitalized on missing children and the importance of family togetherness. Invaders from Mars also emphasized the latter; think about how each film spent time at the beginning establishing that these are united, happy families--the kind that are becoming rarer and rarer as families dissolve. Fear of authority was another theme in Invaders. All the controlled people that David (?) interacted with were authority figures, right down to the girl who was put in charge of the class when the teacher took David to the nurse.

And now a question about the movie. Did the Martians come to earth to get copper, or did they come to conquer the earth and required copper to do it? I think the latter, several friends though the former.

-paul asente

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Subject: notes on The Manhattan Project  
Path: ucbvax!hplabs!sdcrcf!ism780c!ism780!steven  
Date: Wed, 18-Jun-86 20:04:00 EST

Supersmart Paul Stevens (Christopher Collet) finds out that his mom's new boyfriend, supersmart Dr. John Mathewson (John Lithgow), is not quite what he seems. After seeing a lot of lasers and what looks suspiciously like a plutonium refining operation in Dr. Mathewson's "medical" research laboratory, Paul puts his brain and his bag of tricks into gear and swipes enough plutonium to build his own atomic bomb.

Here's the real project: add an interesting premise for a message movie, one great performance, and leach it through a couple of bad acting jobs and a lousy edit. Presto, it's "The Manhattan Project"!

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Brickman directs his story badly. The pacing is too slow; sequences go on too long because needless detail and dead time is included (establishing shots, walking down corridors, lingering on actions like

screwing the top on a bottle, etc.). Collet generates no sympathy as Paul; his dialogue sounds like it came fresh (or stale) out of the typewriter, something that the legendary Lithgow somehow manages to avoid. Other supporting characters fare worse than Collet, in that they create absolutely no impression. A fault for Brickman to share with co-writer Thomas Baum: not enough humor, an unexpected downfall for a former collaborator of Woody Allen's.

Scientifically accurate? Hell if I know, but it "seems" accurate. The filmmakers do manage to give the project a sense of verisimilitude. Phillippe Sarde generates wildly inappropriate music for this thriller; it sounds more like music for a Sunday stroll. Good points: Lithgow achieves what Meryl Streep can't seem to do (play a normal person with as much authenticity as when playing a wacko role). Gives its message without being didactic. Does display a streak of cleverness in providing interesting and somewhat unexpected plot complications.

Two stars out of four.

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