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SUBSCRIPTION INFORMATION

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Back issues of Janus and the program books for WisCons 3-5 are available for $2.00 each, except $4.00 for Janus 12/13 and $5.00 for photocopies of Janus 1, 2, 3, 8, and 14. Include $1.00 per order for postage and handling.

WHY YOU GOT THIS ISSUE

Issues delivered by mail have a letter code on the mailing label. Here's what it means: C = you contributed; M = you were mentioned or reviewed; S = you subscribe, and your last issue is indicated by number; T = we trade; and X = some other reason.

PUBLICATION INFORMATION

Aurora is published by SF3. The Publications Committee consists of Peter Therin, Georgie Schnorrich, Richard S. Russell, Diane Martin, Hank Luttrel, Patty Lucas, Philip Kaveny, Steven V. Johnson, Nova Hycraft, Dennis Hackbart, Jeanne Gomoll, Terry A. Garey, Janice Bogstad, Christine Blochynski, and Susan Balliette. // Printed by the Brian Yocom Co., Madison, WI. /// All of the opinions in Aurora are those of their authors and/or artists and are not necessarily reflections of the policies or opinions of the publisher. Any resemblance of any fictional character, written or depicted, to any real persons, living or dead, is coincidental. /// Copyright © 1981 by SF3. All rights revert to the original authors and artists.
About This Issue
This is the first issue of the fanzine published by SF under the name Aurora; the former name was Janus. We are continuing the whole number, so Aurora 19 (this issue) follows Janus 18 in your collection.

"More Than Words"—communication in its many forms—is the theme for this issue. Of course, not all articles are about communication, but it's a recurring topic.

About Future Issues
Themes for future issues are as follows:
✿ 20: The Future of Human Evolution
✿ 21: Technology in an Androgyne Future
✿ 22: Time and Space Travel
✿ 23: Science Fiction and Education

If you are interested in contributing to any of these issues, or if you'd like to suggest themes for future issues, please contact us. If you'd like to write an article, please send a brief description; if you'd like to contribute art, please send a sketch.

Since our beginning in 1976, we have tried mightily to be a quarterly publication, but we have actually achieved that ideal only a couple of times. We have at last bowed to reality, realizing that WisCon takes up too much time early in the year to enable us to put out an issue then, and hereby announce that Aurora will henceforth be published three times a year: Spring, Summer, and Autumn.

All new subscriptions will be based on three issues for $6.00 ($9.00 outside the US); old subscriptions will be honored at the previous rate of four issues for $6.00.

About Previous Issues
Terry A. Carey was inadvertently omitted from the list of SF Publications Committee members in Janus 18. "When It Changed" by Pat M. Kuras and Rob Schmieder was reprinted from Gay Community News; Gene DeWese's review of Shikasta was reprinted from The Milwaukee Journal. In both cases, permission to reprint was obtained. Illustrations on Pages 26-27 are of Chelsea Quinn Yarbro, Sue McKee Charnas, and Elizabeth A. Lynn (1-r).

WisCon
Over 500 people attended WisCon 5. With over 60 programs presented, over 30% of the attendees were either panelists or staff. There were 29 artists entered in the art show, and sales from the art auction totaled over $1,700. The huckster room was also a moderate success. Overall, the convention made a small profit (on the order of $150 to $200), which will be applied to WisCon 6.

WisCon 6 will be held 1982 March 5-7 at the Inn on the Park on Capitol Square in downtown Madison. The writer guest of honor is Suzette Haden Elgin, author of Communitapth World. Hank Luttrell and Patty Lucas are the co-ordinators of WisCon 6. Concom meetings will be held at 11:30 p.m. on the fourth Sunday of each month at Union South, 227 N. Randall Ave. in Madison; all are welcome.

New Moon Rises
In the 20-page inaugural issue of New Moon, Editor in Chief Janice M. Bogstad characterizes it as "a leftist-feminist sf journal" aimed at a "diverse community of sf fans, feminists, independent scholars and academics". She adds, "I want New Moon to contain work of a provocative nature provocatively written, to contain that which excites and educates us [the 16-person editorial board] as well as our readers." New Moon is available for $10 ($12 outside North America) for four issues (Jan/Apr/Jul/Oct); single issues are $3.00. Write Box 2056, Madison, WI, 53701.

SF3 Programs
The SF3 Program Committee, headed by Phil Kaveny, sponsors a program on the last Wednesday of each month (except July and August) at Union South, 227 N. Randall Ave. in Madison. 1981 programs have included:
✿ Mar.: WisCon 5 retrospective slides by Lou Goodman, Dennis Hackbart, and Diane Martin.
✿ Apr.: Lou Goodman's slides and films of the Voyager flybys of Jupiter and Saturn.
✿ Nov.: a NASA film of scenes shot in space; a Star Trek episode ("City on the Edge of Forever"); and Almo the Spacy Ape, who sang birthday greetings to Diane Martin while scooting around on roller skates.
✿ June: the annual review of Hugo nominees, with presentations on the 10 categories by several different folk. In the fall, another similar session will analyze the Hugo results.

On other Wednesdays, the group assembles at Nick's Restaurant and Bar, 226 State St. All SF fans are encouraged to show up for as many of these events as possible. There's never any admission charge involved. The standard starting time is 7:30 p.m.

The SF3 Media Production Committee, headed by Susan Balliette, has also been busy:
✿ Kim Nash and Richard S. Russell have continued to produce The Dungeons and Dragons Game of the Month on Cable 4, Madison's public-access channel, the last Friday of each month.
✿ Richard has been drumming up an audience for the show by giving introductory presentations on D&D at various public libraries in the area.
✿ Eric Larson has also been working the library circuit with his slide show on the Star Wars saga. Hank Luttrell's review of Eric's Madison Public Library presentation was run in Isthmus, the local entertainment weekly.
The 60-minute audio cassette, "Religious Futures in Science Fiction", consisting of oral presentations of several short stories, was produced by the committee for WisCon 5 and will be donated to the Madison Public Library for use by the blind. The next scheduled topic is artificial intelligence. The committee also has slide and/or tape presentations on cats, circuses, symbols in locomotion, and the metric system which can be made available to interested groups.

The SF Book of the Month Discussion Circle has scheduled discussions for the third Thursday of each month at the ubiquitous 7:30 p.m. Here is the summer schedule:

July 16: Epstein Summer by John Crowley, hosted by Chas Kenyon and Deb Schroeder, 2309 S. Park St., 255-1216.

Aug. 20: Communicopath Wonders by WisCon 6 Writer Guest of Honor Suzette Haden Elgin, hosted by Susan Balliete, 4302 Major Av., 222-6642.

Sep. 17: Dream Park by Larry Niven and Steven Barnes, hosted by Dennis Hackbart, 312 Memphis St., 261-1158.

All are welcome; it's not necessary to have read the book, as discussions generally springboard unpredictably from that start.

Former WisCon GoHs Nominated for Hugos

At WisCon, we like to see the stars before they go nova. Susan Wood (WisCon 2) is nominated posthumously for best fan writer of 1980. John Varley (WisCon 3) is up for best novelette ("Beattik Bayou") as well as best novel (Wizard) of 1980. And Joan D. Vinge (WisCon 4) is also contending for best novel with The Snow Queen. Remember, you saw them here first.

Since the time periods for eligibility do not overlap, Suzy McKee Charnas's Nebula Award winner (the novella "Unicorn Tapestry") was not eligible for the Hugo this year. Suzy was our WisCon 3 GoH along with Herb.

Family Matters

On March 28, while dozens of invited guests were regrettably via live TV from the NCAA hockey finals in Duluth (where the University of Wisconsin upset top-ranked Minnesota), Carl Marrs and Julia Richards were married in the Unitarian Meeting House (designed by Frank Lloyd Wright) in Madison. The remaining guests forced themselves to consume about a dozen home-baked cheesecakes at the reception.

On April 26, at 16:07 CDT, Kim and Lucy Nash of The D&D Game of the Month produced another live dramatic presentation (unfortunately not telescoped): Liana Corinne Nash, 3885 grams, 53 centimeters. Is this the pilot for a series or just a fannish one-shot?

Moving Experiences

The fannish household of Richard S. Russell, Diane Martin, and Hank Luttrell has pulled up stakes and moved west—one block. Diane and Richard formed a partnership, Nocturnal Aviation Associates, and joined the landed gentry by purchasing a 50-year-old, three-bedroom, Dutch colonial house at 2621 Kendall Av., Madison, WI, 53705.

Having completely filled their old apartment with books, Perri Corrick-West and Richard C. West found it necessary to move to a more spacious abode at 1629 Adams St., Madison, WI, 53711.

Ken Konkol and Maxine Gibson are also new landowners at 3500 Perry Av. N., Crystal, MN, 55422, 6124-529-4760.

And Don and Phoebe Helley have joined the mortgaged generation at 3709 Goodland Dr., Madison, WI, 53704.

Dennis Hackbart and his family have moved to 312 Memphis St., Madison, WI, 53714.

Career Developments

Bill Hoffman (or William F. Hoffman, PhD, to his friends) has attested his newly earned MD degree into his little black bag and set out for Portland, OR (Department of Psychiatry, OHSU Health Sciences Center, 97201) for his internship.

Janice Bogstad has received her master's degree in comparative literature and is well on the way to a doctorate in the same field; she has received approval to do her dissertation on some area of science fiction.

Gregory G. H. Rihn is now an assistant district attorney (the chief criminal prosecutor, in fact) for Waushara County. Greg has moved to 35 Highland Villa, Route 4, Waupaca, WI, 54981, 715-258-5034.

Mike DuCharme is the new head librarian (and, he adds, also the foot librarian) in Bloomfield, IA (107 N. Columbia St., 52537), which may explain the 72 new lifetime subscriptions to AURORA from that area recently.

James Andrew Cox, raconteur extraordinaire, had spent nine years as special-education coordinator for the Broadhead School District. He is now one of the many casualties of the Reagan Regime's war on luxury. Undaunted, however, Jim has drawn upon his experience with the Madison Review of Books and SF and gone into business as a professional book reviewer DBA The Midwest Book Review. He has already published two issues of The Midwest Bookwatch, which he mails free to public libraries in a four-state area. He claims he's able to make money doing this.

Summer Excursions

Lynne Ann Morse has again apprenticed herself to metalworker Darlene Coltrain for the summer.

Mary Kean in spending the summer as a forest ranger in northern Minnesota.

(Doesn't sex-role stereotyping just gall you?)
LETTERS

THE GRIM REALITY OF WRITING FEMINIST POST-HOLOCAUST FICTION
...THE GERBIL DOESN'T RUN FAST ENOUGH.

[Write to Aurora & SP², Box 1624, Madison, WI, 53701. Include your name and address on the letter itself. Unless you specify otherwise, each letter (1) is assumed to be publishable, and, if published, (2) is subject to editing, (3) will be listed under your name, and (4) will be listed under your address.]

After the Holocaust
Avedon Carol
4409 Woodfield Rd.
Kensington, MD
20795

...I was particularly interested in the transcription of the holocaust panel [at Norcon 2], printed in January 18 and pleased with the concentration on the probable negative effects that a holocaust would have for women and others who are powerless. And fascinated by Denys Howard's question to the panel—the suggestion that to refuse to create a holocaust is to insist on retaining the status quo is somewhere on the level of looking at the mess in your room (or my office) and saying, "Well, I don't want to burn it down, so I guess I'll just have to stay this way." As if the possibility of just cleaning up the mess didn't exist.

I think what bothers me most about this is the frightening way that some people seem to approach certain situations as if there must always be only two choices: only status quo or holocaust, only capitalism or communism, only a bad relationship or no relationship, only a messy room or no room at all. Goddess knows the situation is pretty terrible, just like the mess in my office is. And there are times when I've felt like I'd rather get a new car than have to tune up the one I've got, but you have to weigh the possibilities and find alternatives. You might really have three choices—or twelve—if you just take the trouble to think of them. So I tuned up my car today... instead of just leaving the timing off and the misfiring and all that or else getting a new car, and in the same way I try to think of ways—whether by long serious talks with individuals, or panels, or my fanzine, or articles in the "real" press, or guerilla theater or whatever—to promote changes in this society which will make it a little more livable for some of us....

[Perhaps the throwaway society has created a tendency toward dichotomous thinking—either old/bad or new/good. On the other hand, pre-technological societies featured monotonous thinking, so we have probably advanced at least one rung on the heuristic ladder. —Richard S. Russell]

Robert Frazier
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Nantucket, MA
02554

Jeanne [Gorman]'s one-two punch at the end of "Out of Context" [January 18] is the type which does not rebound superficially but instead sinks deep and strikes dissonant chords in the
chimera of daily apathy and illusion which guards our minds. Bravo! Post-holocaust rebirth is to be anticipated if you consider the engines of disaster to be irreversibly grinding. However, I believe she is mistaken in her interpretation of Marge Piercy's *Woman on the Edge of Time*; the future in that novel is a real world, not a dream world. I had an opportunity to correspond with Marge on this in early '78. She made it clear that the book was written as deliberately ambiguous, readable either way, which was important to her creation. She also discussed the novel in a manner which illuminates post-holocaust discussion, one not directly confronted by the article... the relation of post-holocaust to utopian/distopian SF literature. Here is a pertinent excerpt from a letter for which I obtained permission to reprint:

Certainly I consider *Woman on the Edge of Time* speculative fiction. I set out to write a non-utopian utopia—that is, the utopia that is quite accessible with very close to present levels of technology. Although with nothing like present levels of political development. It is a place you could get to from here. It would take work, but it is quite doable. That was all intentional. I also wanted to body forth in a real feeling society. A lot of ideas are the best ideas of feminism and some of the best ideas that came out of the New Left. That is what I was aiming to.

Hussain R. Mohamed
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England

I read the ERA debate ["Point/Counter-point" in *Janua* 17] with great interest, primarily to see what political weight your columnists attached to the issue. To call it vital is most certainly an understatement; after all, it does concern a technical majority of population and not—as some would have us believe—a "minority". Those who for centuries have contributed by word or deed to the enslavement of part of the race will not have their guilt expiated by the adoption of a constitutional amendment—only made a little more aware of the enormity of the crime. [Gregory] Rihn argues from a stance perilously close to that which has allowed this unbelievable situation to arise. That such an amendment faces the problems it does in the late 20th Century is little short of mind-boggling. Ethically speaking we never left the caves. It is heart-breaking the number of people I meet who, when challenged on political issues, will plead any excuse to hold them at arms' length away from the immediate situation. Heartbreaking in the way they so sincerely plead for the rational and considered approach, not realizing that they are defusing the line of argument.

If fannish activities can be so damaged by exposure to political reality, then fandom is garbage and not to be mourned when it passes.

Mr. Rihn with his detailed reasoning obscures the most important point, that the issue of equal rights is a damn sight more important than so-called "fannish" activities, and any attempt to treat it as something quite separate and on the same level as gun laws, air pollution, etc. does a grave disservice to fans who are neither rigid nor politically naive. Are they?

The people will go to ChiCon, of course, some to be fannish and exclusive and others to drag the "mundane" world into the arena. I only hope that however those who go make their decision they do not ignore the magnitude of this issue.

"No Such Thing As Tearing Down Just a Little" [in *Janua* 18] I found particularly interesting following my inadvertent involvement in a discussion with a friend smarting from accusations of dueling political issues she received at a recent meeting. She was upset not so much at the accusation as at the realization that she could not decide how committed she really was, and that the more detailed the discussion became, the less clear her feelings. The topic was violent revolution (assumed to be illegal) in the cause of both socialism and feminism and just who had the guts and the drive to go all the way. Implicit was the belief that there would be not only a political collapse by a pretty severe physical collapse also... What was interesting was that at no time was there voiced any feeling that the cost to women would not be worth it and that an alternative should be sought. Nobody apparently thought that bringing society to a grinding halt preparatory to rebuilding it could well disadvantage women back to the Stone Age. Naturally a lot depends on how complete a collapse you envision, what the catalyst is, and in what form you organize to withstand it. One woman stated that it was simply a matter of who was best organized to take power.

Incidentally, there is a post-holocaust theme that seems not to have been tackled in any great depth recently: where the prime cause is proletarian revolution in general and feminist in particular.

Jessica Amanda Salmonson
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Chelsea Quinn
Yarbro suggests (in #18) that "if you want to be reduced to a state of chattel...the best thing you can do is get yourself a holocaust", and gives as her examples of "holocaust" the invasions of Huns and Vandals. I think she has confused migration with holocaust, but either way it means war. Anyway, truisms are usually false when you look at them closely, and Quinn's feeling that war only makes things worse, while a common and neatly liberal concept, is frankly questionable.

In the long histories of Italy, Greece, Germany, it has sometimes been the periods of peace that found women in the worst straits. In Rome, while the Vestals could walk about the streets unharmed, and many matrons of proper lineage had some governmental say-so, for the average woman it was pretty much the pits. It
was even worse in Greece, of course; Oriental seclusion was the rule for female citizens, and only foreign women qualified for the "nobler" status of prostitute, with several liberties attending that dubiously noble position. The best example is Japanese: the genuinely peaceful Tokugawa era was, by the time of its decaying collapse, an era which afforded women practically no liberties whatsoever, whereas every previous era had afforded women every conceivable option! It seems that in time of war, throughout the world, the roles of women are always more varied: Iranian women had more respect during bloody revolution than when things quieted down; American women could choose their own jobs when men were off to war, but were expected to get themselves barefoot and pregnant during the pseudo-peace of cold war and McCarthyism. The heightened wartime status of women can be very cultured, as in France when the men were off Crusading. (A few women went Crusading, too—nuns with a holy book and even ladies, sometimes in company of their courts and troubadours.) Less happily, this heightened wartime status is due to the fact that a people under siege suddenly have less time to subjugate the female part of its citizenry, as during the Spanish War, with its numerous heroines like Countess Burita and her female army at Sargasso against the French.

To look more at the period of history Quinn thinks such a holocaust, it remains that Quinn's truisms are silly. The Vandals weren't such hot conquerors in the long run, and so they weren't allowed to write their own history. They probably do not deserve the reputation for destructiveness that the Roman historians successfully wished on them. The standard of living for the Vandals was lower than that of the Romans; still, while occupying Rome, there is little evidence that they were especially unreasonable in the situation. The position of women among the Vandals does not seem to have been particularly horrible and had no adverse effects on the position of Roman women. While there were moments in Rome when women's status closely approximated that of women in the US today (which, statistically, is far short of parity with men), the deterioration of those rights was not due to war (although historians disagree on that, and theories about Rome's fall are quite diverse, to the point of comedy).

As for the Huns, it seems that women had considerable say-so in policy-making, often took up arms in the most prestigious occupation of the time (conquest), and really weren't too bad off at all. Before the arrival of the Huns, the Saxons and Lombards had descended on much of the same territory, altering status quo but not necessarily altering the status of women, which was very high among the Danish-descended Lombards and apparently high among the Saxons. The Celts and Gauls, displaced by all this, may or may not have had an even higher status for women. Everyone disagrees on that score, but at least one Roman historian thought Gaulish women were the most powerful in those tribes; and by the Irish lore, which may or may not reflect continental Celtic lifestyles, the society approached matriarchy in certain areas. If this was the case, then certainly the status of women was lower after the Northern invaders made their way down the continent as far as Italy, but this was because their society was different and not because of the war per se. It remains that the position of the women in these early societies, which were warring societies, was by no means demeaning. Immediately before the arrival of the Huns, the Germans were harassing the Romans, the Romans were harassing the Moors, ad infinitum, and all of a sudden there were these crazy Huns all over the place, especially in Germany, and the status quo got its best shaking-up yet. The fortunes of princesses were dreadfully manipulated in typical forced marriages and forced alliances between countries, giving the impression that women had it tough; but the average woman—and the average man—didn't have a fortune to get manipulated, and, if anything, the Huns improved their day-to-day lot, for trade was rarely better than when Attila took office.

In summation, eras or areas of relative peacefulness in Europe invariably fell into decadence (in the artistic and architectural sense of repletion, gaudiness, or lack of imagination), and women's status deteriorated. Wherever this happened, war would come along and shake everyone from their apathy, and, though the bloodshed was stultifying, the position of women also rose considerably. After these wars, sometimes women's status held at the higher level for a while, mantling a new decade and a continuation of the cycle; and elsewhere women sank immediately to their previous low status under the frightened, misguided notion that a return to prewar conservatism was proof against more war. In fact, it only invited more encounters, internal if not external. In almost every case, the position of women is never lower and only sometimes just as low as prewar, and women's position is with rare exception much higher during a national crisis.

**Anthropomorphizing Alien Sexuality**

*Cy Chauvin*...

One point in "When It Changed" report from Gay Community News reprinted in January 18 bothers me.

Samuel R. J. Delany described (on one panel) The Left Hand of Darkness by Ursula K. Le Guin as "an example of the doomed homosexual relationship plot, which ends with one of the lovers dying. 'True artistic freedom,' Delany said, 'comes only with the abandonment of such cliches.... Narrative conventions victimize artists.'" (P. 6.)

So do false descriptions of major SF novels. The Left Hand of Darkness is not about homosexuals or homosexual relationships; it is about aliens. Estraven is not a homosexual, Estraven is an alien; Estraven is neither male nor female, but both. There is no way any native of Winter could have a homosexual relationship: their biology would not permit it. It is something outside of our experience, as is much science fiction. To directly translate any event in a science-fiction story (such as calling Estraven and Genly's friendship a "doomed homosexual relationship") into something in our own lives is a mistake in perception. SF has
been condemned many times by those outside it because of their failure of perception. Delany himself has remarked that a phrase like "He turned on his left side," has a couple of meanings in SF ("He rolled over," or "He energized the left side of his body.") but only one in mundane fiction. The Left Hand of Darkness shows (by implication) how false many of the supposedly sex-linked human characteristics are; but if readers don't open their eyes, [if they don't stop thinking] of Gethenians as men and homosexuals, instead of aliens, it is hardly Le Guin's fault....

Mockingbird Mocked

Suzy McKee Charnas

...I was particularly interested in your notice of the memorial scholarship for Susan Wood at Carleton (University in Ottawa), since I've had a few inquiries from people anxious to find some way to show their appreciation of Susan. I'll pass this on to them. And I wondered whether perhaps someone out there in fandom might be interested in continuing the worldcon space for women that Susan first organized under the title "a room of one's own", with perhaps Susan's name included in the title of this space, as an on-going project?... She used to ask for contributions to purchase a room or suite at a worldcon to use for this, and she would organize the people to keep it open with her. It would be encouraging to see feminist fans taking over and carrying on this youthful but valuable tradition, or at least making a stab at it to see how it would go.

I must take issue with Loren [MacGregor]'s review of Mockingbird (in Janus 18), a book which I found trite, pretentious, and wildly sexist in its basic premise. Initially let me note that I did enjoy the one well worked-out idea in the book, that of the incompetency of robots unsupervised by human beings. Mind you, in view of the recall rate in the American automobile industry (for example), there may not be as much virtue as we would like to think in human supervision even of human labor; but let that pass. The notion of the black robot (Spoforth) is an intriguing one that goes absolutely nowhere. ("You write science fiction? Listen, I have this great idea....") All in all, this novel was so stupefyingly dull that I wouldn't have finished it if I hadn't begun to suspect early on where it was headed. Once suspecting, I had to push on to find out whether I could possibly be right. I was.

I started getting uneasy with the slow awakening of Bentley's latent humanity under the influence of Borne, the fey, street-wise urchin/girl. Then he goes to prison, where he firms up his will in the company of the only other tall-walking people in the story, the prisoners, who are all male. Then he firms up his body through the tried and true method of the lone trek through the wilderness, learning to keep yourself alive. (I've used this myself, to other ends.) Then he finds his manhood confirmed by the fact that before he left he got Borne pregnant.

So what happens to Borne, meanwhile? Adventures? Conflicts in the wide world what will teach her what she is made of? Don't be silly:

she's pregnant, remember? So what happens to her is that poor stulte Spoorth first locks her up in his room (shades of King Kong!) and then attends the progress and protection of the pregnancy: 0 pathos, 0 irony! Thus humanly educated, he is ready to accept the central argument of the returned Bentley and of the book: that the reason humanity has lost its will to live, has retreated into individual isolation or suicide and left the world to robots, is—wait for it—birth control! Got that? Birth control, through the drugs that everybody takes all the time, has run amuck.

So, okay, in SF everything ought to be thinkable; and a moment's reflection indicates that indeed involuntary birth control, automatic and unchosen, sounds like a Bad Thing. Only it doesn't exist or even threaten to exist. Rather its opposite—mandatory pregnancy and birth—still obtains in many levels of most societies and will again in our own if the fascist rump has its way. But for the sake of argument, I'll play: let's suppose birth control has run amuck. What is the book's solution to this non-problem? Without a single thought, without a word, on the possibility of providing for voluntary birth control of any kind? However, the robot and his human pal simply turn off the whole process. They rescind birth control as a choice, period. The answer, then, is fecundity en throne; women are reduced to wombs, pregnant forever for the sake of the race (and, besides, what they really want...remember, Borne participates in this decision.)

Bullshit. Better the robots take over the whole shebang. Better almost anything.

It scares me that we are suddenly not noticing this kind of sexism in our reading. Please note, folks, that this vapid farrago of macho junk is a strong contender for the Nebula this year. I can only conclude that here's more evidence, as if any were needed, that (1) advertising can do anything (This book got at least one full-page ad in the NYTBS, among lots more.) and (2) the reactionary '80s are here with a vengeance....

This letter, like Avedon Carol's, laments the tendency to think of alternatives in terms of black and white, ignoring shades of gray in between. Perhaps an operational definition of a holocaust would include such a narrowing of choices, a reduction of alternatives to, ultimately, life or death. And both Suzy and Jessica point out that this process is at work, silently, in our own time, as well as in historical times.

[If Janus 18 outlines the problem, the holocaust, the reduction of choices, is it possible that the solution is somewhere in Aurora 19, in finding a better way to communicate about the available alternatives? This discussion will be continued in the next issue's letter column. Feel free to participate.
—Richard S. Russell]

Linguistics is not so much just about human languages, as about the place of human language in the universe.

"Towards an Alien Linguistics" by Ian Watson
Philip Kaveny

At WisCon we take having a good time seriously. This is the only way to explain why we sit through the long, boring, and sometimes nasty meetings that start taking place almost immediately after the previous WisCon. We have been doing this for six years now. At WisCon 5 we had over 60 different program items, ranging from "Andre Norton: Protofeminist" to "Witches, Wizards, and Jedi Knights". Covering, if not every possible area of interest, at least enough diversity to appeal to anyone from the 15-year-old doper with a safety pin in his nose to the professor of English interested in the evolution of the esthetics of Henry James.

Being intimately involved with the convention, it is hard for me to give a journalistic account. Instead I will give what might be thought of as a geological core sample: the evolution of one of those 62 program items, a panel called "Nihilism, Narcissism, and Numinescence in Selected Science Fiction Works". Going backwards, a definite pattern appears, weaving together all the disparate circumstances that caused the panel to happen. Initially the idea came to me as I listened to Fannie Le Moine's science fiction course broadcast on WBA radio. I like Walter N. Miller's writing and Le Moine's lecture suggesting that Miller's work had greater depth than I had previously suspected.

The next chain in the link of causality was the appearance of a collection of Walter Miller's short stories at the Madison Review of Books office. I jumped on this Gregg Press edition. Reading the story "Crucifixus Etiam" (originally published in *Nab* writing in 1953) about a Peruvian worker who struggles to save his lungs as he labors on Mars, I sensed something different about the flow of the story, something that made it stand out from other works of the period. It was almost as if Miller were committed to some transcendent morality, a quality which I label "numinescence". (A term which I lifted from a philosophy of religion course I took almost 15 years ago.) I saw this in contrast to the nihilism of the later Kurt Vonnegut, or to what I would think as the simple narcissism of some of Simack's work (particularly the story "Beachhead").

I mentioned to Richard West that I would like to discuss these ideas at a Tolkien Society meeting. At this point it was no longer simply my idea—it became the product of what I call the interaction of creative intelligences. Anthony Boucher's name was added to the list of authors, a list which kept getting longer as more people became involved. At the Tolkien Society meeting Richard West suggested that we do a WisCon program dealing with this theme.

(I think that this was also the point at which Richard Russell, who proudly wore his "Fuck the Church" T-shirt, began producing a half-hour audio tape dealing with religious futures in SF. This tape was played in the convention media room, and used in conjunction with as a spring board for the N, N, & N panel.)

It is hard to summarize the actual panel discussion at the convention. I wish I could say that we discovered some great truth. Perhaps we did. At the very least we allowed an idea to evolve, and came up with some new ways of looking at certain SF writers. By interacting we were able to define and use some new terms. Donald Wolheim was in the audience, and spoke carefully, using the terms we had created to describe the works of "Doc" Smith, Kurt Vonnegut, and Tom Disch. He emphasized that we must look at the effect the age in which they were written has on these works. We discovered that it is not that one author is nihilistic to the exclusion of everything else, and another narcissistic, and yet another deals strictly with a numinescent
vision of the world—all these concepts interact.

Stepping back from this biography of one panel, I want to emphasize that this process happened at least 60 different times, in many different ways, with each of the program ideas developed for WisCon. This is what I mean when I say that we take having a good time seriously.

Majorie Roberts

At 2:00 in the morning, speaking with acerbic candor, Marjorie Roberts harangued, "I enjoyed hearing the critic guest of honor (cate McClanahan) speak, since she expressed concerns that I share. But some of the academic folk in the audience bothered me a lot in the way they talked. They think they own criticism. And what happens? You get five people talking to each other in an air-conditioned room.

"But that's not criticism. Criticism is fun! It's something everyone does. A reader picks up a book and BAM! immediately thinks, 'I like this character!' 'I don't understand why this scene is here.' 'Was that rape scene really necessary?' S/he runs into a friend who loved the book. They get into a fight, square off, thump tables, and make noises in their throats. That's criticism."

Diane Martin (photos)

UW Extension liaison, George Hartung

Costume by Anne Chancellor

"St. Germaine, Again!", a play in two acts by Greg Rihn

St. Germaine and Louisa (Greg Rihn and Antonia Petniunas)

3 Deprogrammers (Kim Nash, Lynne Anne Morse, and Don Helley)
One thing that seems to be characteristic of science fiction fans, no matter what their other differences, is their incredible and scrupulous fanaticism about scientific accuracy. You locate some minor star three feet from where it originally was—you realize, those stars you look at aren't there anymore—but you put that star three feet from where it used to be and you will be deluged with letters demanding to know just what kind of cockamamy science that's supposed to represent, anyway! Readers want their science up to date, preferably up to the minute, and they don't mind letting you know that.

Except—and here's an amazing contrast—except when it comes to linguistics, which is the scientific study of language. If you look at most SF dealing with language, you find that not only is it hundreds of years out of date, but nobody cares. I could put the most unutterable garbage into my own SF novels (which deal primarily with problems of communication and of language) and no one would say or write a single protesting word.

I think it comes partly from carelessness, and partly from the fact that although not everybody can fly a spaceship everybody can and does use language, thus becoming an expert through familiarity alone. And it comes from the fact that people are accustomed to thinking that Language (upper case) has nothing to do with Science (upper case). When linguists bill themselves as scientists, people chuckle.

The linguistics problems that should be dealt with in SF are as numerous as those in any other area, but they fall into four broad classifications, as follows:

1. Human-to-human communication through space.
2. Human-to-animal communication, anywhere.
3. Human-to-animal communication on Earth.
4. Human-to-human communication, I'm not going to talk about the human-to-human through space problem because I've dealt with that in my books, and because it is basically technological.

I'm not going to talk about the human-to-animal problem, because that one is primarily ethical. We can communicate in a rough but adequate fashion with primates and whales, now. We aren't ready to discuss quantum mechanics with them yet, but we sure have the capability of ridding ourselves of all the shitwork problems that we have. We need only bring in the chimps and tell them to tote that bale, scrub that pan, clean that toilet, fire that rifle, etc. I'd be here a week if we took that up.

The human-to-human on Earth problem and the human-to-alien problem are the ones left over, and I had trouble choosing; so I left it to my students, who said: "Oh, talk about talking to the bug-eyed monsters!" I will defer to their judgment in this, as I do in many other things.

Now, how does most SF handle the matter of Terran/Allen communication? There are two basic choices made by our writers: (1) a machine that translates, like Star Trek's "Universal Translator"; or (2) a human being that translates, like a linguist. The machine is a computer, or it's a helmet that you put on your head, or it's a Dick Tracy wrist radio device, or something of the kind; its effect is always the same. Whatever language you happen to be a native speaker of is the one you hear coming at you, no matter what language is actually being spoken. The linguist in SF is not what a linguist really is most of the time today, but a kind of glorified interpreter, who may also do translations and perhaps give language lessons to his or her colleagues.

Please keep in mind that both of these methods require a human being initially, because someone has got to analyze the language to provide the data to feed into the computer that runs the universal translator. More importantly, neither alternative would be likely to work.

I've got to do just a little linguistics here, to make all this clear. Although a complete analysis of a human language would not be easy it has never yet been done for any language. The sort of basic analysis intended by SF writers along this line would be a rather trivial task for a decently-trained linguist. It would take three years also. But there's an excellent reason for that, which is: a linguist knows, in advance, what a human language is going to be like at the level of analysis we are considering here.
The set of possible things that a human language can contain is extremely small, and it is very severely and rigidly constrained.

A linguist approaching a new human language knows it will have a way of asking questions, a way of giving commands, a way to indicate number and gender, and so on—this is predictable. The linguist knows what range of alternatives exists, to a pretty adequate degree; the task then is only a matter of eliminating those alternatives that the language being analyzed has not chosen from the universal set.

This didn't just happen by coincidence, by the way, although scientists who don't see any major difference between people and pigeons disagree with me. Linguists of my denomination will tell you that human languages are as they are because the set of things a human language can contain is part of the specifications—the biological specifications—of the human brain. The necessary equipment, the perceptual and cognitive equipment, for learning human languages, is innate in the human being in the same way that legs and lungs are.

Which is precisely why there is such a problem in writing about an alien language. My students, whether they come from the people-like-into-pigeons disciplines or not, will agree with me for the sake of the argument; and then they say: "But then, what would an alien language be like?" And I have to tell them that if I could answer that question I would not have a human brain; there is no way I can step outside my humanness and imagine what an alien language might be like. About the best I can do is suggest what it probably would not be like.

Now, what does this mean for someone who wants to write about encounters between Terrans and aliens? There are a couple of immediate possibilities. You could make it a given that the only aliens to be encountered would be humanoid and of essentially the same proto-genetic stock that Terrans are—even many thousands of generations removed. If you do that, there is a minimal possibility that a skilled linguist with a good computer could do something useful. If, on the other hand, we run into life forms that are gaseous or crystalline or vegetable, the chances of a linguist being able to analyze their languages are miniscule. How do you suppose you would go about working with a language that has no subjects, no verbs, and no objects? Or a language that has no mechanism for asking questions or replying to them, or for making things negative? Or a language that lacks the concept of either word or sentence?

If you assume the latter situation, with the non-humanoid aliens, there is an alternative that is simply boring. That's the one where you say: we just accept it. We're never going to be able to communicate with these creatures—so be it. They're in the universe, we're in the universe; as we fly by each other, we'll wave something. Out of that would come the ultimately tedious tale of star-crossed lovers, the beautiful Terran and the handsome gas cloud. I don't see that as especially interesting.

A number of my students have pointed out that mathematics is alleged—by eminences like Asimov and Sagan, for example—to be universal. And they want to know if that couldn't be the basis for a logical system of communication. They have a point, and we could assuredly work out some kind of system for a stop sign between two cultures so that our space freighters wouldn't collide in space—that sort of thing could be worked out. But that is about all such a system would get you, even if you are willing—and I am not—to accept as an absolute that in no universe could two and two ever equal more or less than four.

At which point you have to ask: then what do you do with this in writing science fiction? Without boring your readers out of their skulls? And that will lead us back into a tad more linguistics.

If you ask people how human infants learn their native languages, they will usually tell you that they learn them from their parents or the other people around them, by trial and error. Linguists of my denomination dispute that; remember, we are prepared to claim—and to prove—that the human infant is born with a set of innate perceptual and cognitive strategies that enable that infant to perform a specific task. And that task is: to extract the rules of their native language from the raw data in the environment around them. That's why very tiny children are able to acquire several languages simultaneously, without the slightest trace of an accent in any of them, with no sign of any significant difficulty, and with no help whatsoever from Berlitz. Adults cannot do this. It is a specific biologically innate characteristic of the human infant, which begins to decay somewhere around puberty, and which we in American education respond to by teaching foreign languages in the secondary schools and in college after that decay has already begun. The evidence for this is voluminous, and readily available.
And that gives the SF writer something interesting to do. The one possibility that might be productive, and not boring, is to hypothesize that what the human infant has is not just the innate specific capacity to learn human languages; maybe, just maybe, it is the capacity to learn any language at all, including an alien one. You would have to make the additional assumption that the alien also understood the problem and was interested in cooperating to solve it. And you would have to construct an environment in your hook that both the alien and the human infant could share, and still survive.

Let's assume that you've devised an alien willing to cooperate, and solved the technological problems of the shared environment, and that the Terran baby is beginning to talk not only in the human language it hears around it but also in the alien one. (It would have to hear both, as multilingual children hear both, or you would only have produced a Terran child that spoke only in Alien, which wouldn't be much help.) If all these things could be worked out, could we assume that we would be communicating with the aliens when the bilingual child interpreted for us?

I'd like you to consider an example from two Earth languages. Assume that we have a monolingual Navajo speaker, a monolingual English speaker, and an interpreter fluent in both languages. The Navajo says: "le' shi naaldoosh nt'ee'e." The interpreter turns to the English speaker and says: "I was riding a horse." Now the interpreter has indeed done what interpreters are expected to do: he or she has produced in English a sequence equivalent to the sequence in Navajo, in that they are what the two individuals would say in equivalent real-world situations. However, there is a very significant difference here. If you think about what it means in English to say "I was riding a horse", it means that you—the Master—were doing something to the horse. You have a power relationship to that horse, and it is the object of your action in the way that if you hit a table with a hammer the table is the object of your action. The Navajo sentence isn't like that at all. What it says, in the most literal translation I can manage, is this: "The horse was animal ing—about with me." There is no Master/Object relationship there. If there's any power involved, it belongs to the horse, because the verb in question is one that can only be carried out by animals...but if you ask a Navajo about it, you'll be told that the relationship is considered to be a matter of willing cooperation, not dominance.

And then there's the Navajo verb "sida". You have to translate it into English as "he (or she, or it) is sitting", but it's a past tense verb. Literally, it means in Navajo that someone has ceased to move about and has taken up a sitting position—and that's over and done with, so it's past. But the English equivalent is not only supposed to express present time, it's also what is traditionally called "progressive—that is, not over and done with yet—aspect". REMEMBER that we have been discussing two Earth languages, now, and move the problem on out into space...At least it isn't boring.

There is one more thing that always comes up when I discuss this. Always, somebody says: "Oh well, the baby and the BEM would just use telepathy!"

My personal opinion is that all of us are born telepathic and that our culture then systematically and unequivocally trains that out of us. But if we set my personal opinions aside and just assume telepathy to be possible, human-to-human and human-to-alien, under the conditions I have outlined above, would it help? We're talking about real telepathy now, not glorified mental Morse Code, which means that the moment the infant and the alien were telepathically in communication, they would share the same set of perceptions. I don't care to hazard a guess about what would happen to the alien, but my guess regarding the human infant is that it would be as our society's standards go stark raving mad before the age of six months. As for an adult...there you would get instantaneous burn-out.

Maybe it could be set up so that the infant could, in the process of learning an alien language through its innate language—learning mechanisms boosted by its innate telepathic capacity, also learn to tolerate the different perceptual systems. (Whether this would involve automatic sacrifice of the sanity of the alien, the alien not being an infant, will have to wait for some other talk.) Perhaps the infant would be exposed in tiny flashes at first...just an instant at a time. It would be a gradual desensitization, much like that we are acquiring to violence and sex in the movies and television.

More interesting to me would be the idea of exposing the human infant from birth to powerful natural hallucinogens that would provide him or her with a more varied perceptual experience and teach the following principle: "Anything whatsoever may very well come along; and if it does, how very interesting." You could imagine a system in the future where—and this would please me greatly—1in-
guists would be the most powerful individuals in the universe. Because they would be the only ones who knew how to pull this off, as well as the only ones sufficiently icy to use their own offspring in the way I've been describing. (The things linguists can do already would make your average human's blood run cold, by the way; everybody's worrying about genetic manipulation and mutated E. Coli loose in the streets...ever wonder why you hear so little about linguists?)

So you see that there are some ways of writing good SF with good linguistic science included, despite the handicap that comes of having a human brain to work your plot out with. There are stacks of books to be written from the material I've been discussing, and if you want to write them, god bless you. If you do your homework. Otherwise, it's much like me deciding to write about a space warp, abut which I know nothing at all. You know how I handle that? I use "asterisks": I write: "He got on the rocket ship." And then there's this space. And then: "He got off the rocket ship." I handle it just the way that sex was handled in Victorian novels for ladies.

What fascinates me is not that most SF writers know little or nothing about linguistics—why should they? What fascinates me is that they don't seem to let that hold them back at all from writing about linguistics in intricate and abominable detail. I wish they'd either get their facts straight or use asterisks, and I encourage readers to demand that they do one or the other.

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STERNE WARNING

if a woman does not
  drive the crebblesteps away,
  keep the packiwogs at bay,

if she fails to flush
  the bittletraps from their nest,
  along with cittersnaps and the rest,

if she is careless about
  the thundersnouts upstream
  or chokibouts that steal dreams,

if she dares to forget
  wunderwittles up so high
  and berriskittles in the sky,

then she will become
  the slave of swiddleclutches
  or the mistress of swiddlewitches.

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(The following is written in my capacity as a member of Aurora's editorial committee, but in personal terms.)

To find good poetry which is also feminist science fiction seems close to impossible. We have received either and we have received or but rarely have we received the whole. This may be because people are not aware of what it is we want.

I define "good" poetry by strange and peculiar notions and prejudices that reside deep in my soul. Those notions change constantly as I read, think, and write. It would take many pages and much folly to tell how I arrive at the judgement of "good". Therefore, I won't.

Science fiction I will also let slip. I will have to assume that the subject has been discussed enough other places, fanzines, prozines, conventions and letters, so that I think we can tolerate a good cross-section of opinion and let it go at that.

Feminist science fiction, on the other tentacles, stirs up all sorts of controversy and anguished howls of dissent. Some of it is printable. The best I can do here is say that feminist science fiction assumes that women have an important place in the realms of science fiction, in the writing, publishing, reading, plot structure, and characters.

Feminist science fiction assumes that men and women characters will transcend in some way the traditional cut and dried philosophies and roles. It presupposes that women will dominate the pages of the work and that these women will be of the striving variety, the kind who work and sweat to obtain a goal or solve a problem.

Feminist science fiction believes that the future has just as wide and exciting a realm of possibility for women as it does for men, scientifically, socially, mentally, emotionally, and every other kind of "ally" with which one can come up.

At this point, usually, the 'buts' start creeping in. Some people feel that in feminist science fiction motherhood is a dirty word. Others feel that blue eyeshadow has no place in the 22nd century. Still others get up tight about lesbianism. And then there are religious aspects, social structure, sex, morals, laws of nature (love them laws of nature) and so on. Most people go off into the sunset shouting and making rude gestures, pushing their own special vision of the future and how women should fit into it. I am one of them.

So let's say that feminist science fiction poetry has a very wide scope. Certain things, however, must be kept in sight.

1) Please don't gussy up an old SF plot, cut it into shape with rhyme and meter and present it as a poem. It may sound really new and astounding to you because you finally managed to rhyme "orange", but it won't dazzle those who edit.

2) "Well, it looks poetish." Prose is prose and poetry is another thing entirely and rearranging the words doesn't help.
Prose is prose and poetry is another thing entirely and rearranging the words doesn't help.

3) Using the word "she" instead of the word "he" doesn't make a poem feminist. Well, sometimes it does, through sheer shock value, but most of the time...no. She dug potatoes has no more real significance than he dug potatos, except that we might tend, out of sheer prejudice, to feel more sorry for one person than the other, out there in that cold field digging potatoes.

Perhaps you might want to avoid the male pronoun entirely. OK. I try to as much as possible, myself. But it doesn't make it feminist.

4) Give the poem your best. Please don't send us something because you feel we'll take anything. Believe in poetry. Give it the thought and love you would give any other piece of writing and more. Wendy Rose once told someone at a literary party that she was a writer as well as an artist. The person asked what it was that she wrote. When she said poetry, the person said, "Oh, I thought you said you wrote."

5) Avoid clichés. Ghod, I hate to put it that way. A truly great poet can take what most of us would consider a cliche and turn it into a unique piece. Most of us are not truly great poets.

So, good-bye to...

telepathic priestesses in white, grey or black robes saving whole worlds with a single thought...gorgeous blonde-haired and wasp-waisted amazons dehauling the unwashed barbarian hordes...heroes fighting off the evil Galactic Emperor only to faint to the brawny arms of tall male saviors...princes preserving the sanctity of a herd of unicorns with the help of a magic lion, horse, bear, dragon, bugglywhip, or Osterizer...alien visitors discovering that women are wonderful and men are pigs...bitter wicked witches wreaking deserved havoc upon helpless villages because of something nasty in the closet...

6) A near relative of the above is throwing a word like "star" or "telepathy" or phrases like "winged ships from afar" and "mysterious winking lights" into an otherwise ordinary poem and calling it science fiction. It doesn't work. It is a contrivance. "Ya gotta have a sensa wonda" said somebody very dear and famous. And she was right.

7) Experimentation is necessary for creation. Be willing to think hard, to dream far and wide, to talk with other poets, to read, write and occasionally fail. But please understand that for a poem to be printed it has to be comprehended by other people. Sometimes the problem is that your poetry is 20 years ahead of its time and the rest of us are unseeing clods. Sometimes the problem is that you have not left enough recognisable structure for anyone but yourself to understand. There have to be some experiences common to the reader and the writer. If you make up a whole new world and language, put it in a poem and let no one else have the key, it will remain locked.

This is very sad, and a perfect waste of time.

Perhaps that is the most difficult thing about science fiction generally and science fiction specifically. How can you describe something the way a poem must when you are talking about something that doesn't exist yet or hasn't occurred? Where are the common experiences?

Carefully, like an excruciating xrtihn balanced with cg and softest haleb she formed a grip across her breasts and wiped in the ywrrl night. They aren't there. You must make them. You must teach a new artform, create a new seed, and you must do it with skill.

So there you are, I am sure that I have left out a lot, and that people will send letters telling me in great detail what, why and how. I would rather see poems telling me than letters.

I want to see stirring, thoughtful poems about women and even men leaping for the stars, glorying in their skills and individuality: wrecked with passions, good and evil, doubt, fear and the pain of growth. I want laughter, bitterness, tears puns and jokes, blood and guts and skin and velvet. I want strange and familiar places, revelations, truths, beauty, homelessness, stars, comets, potatoes, and strength and weakness and I want it from all over, from the farthest stars to our own backyards and yes, even Kansas, damn it.

I want to see good feminist science fiction poems. And I want to see them soon so we can print them.

So, get to work.
Non-Human Communication

John P. Alexander

Communication consists of perception and codification. Human perception dichotomizes the universe into the part where our bodies end, and the part where everything else begins. Hence, we define the external world in human terms. All phenomena beyond our consciousness is coarsely sifted by our perceptions and arranged by our "common sense" into categories that we accept as reality. Since no two phenomena are identical, we codify them into classes of similarity, because our minds are incapable of operating in a universe of total chaos. The transmission of this codification from one mind to another is communication. Codification itself prevents us from perceiving beyond our common definition of reality. The Sapir-Whorf hypothesis is an anthropological premise which holds that our ability to perceive the universe is inextricably bound to our ability to describe it. In essence, if we don't have a word for something, it doesn't exist. Different cultures agree to perceive different realities. Eskimos have no single word for snow, they have many. Japanese have but one word for "green" and "blue" which translates to "sea-color". To a Japanese, the sky and sea are but different shades of the same color. What one culture may perceive as distinct, another may find indistinguishable. Human eyes and brains are basically identical the world over, yet no two people will agree exactly on anything. With such a state of heterogeneity within our own species it may be difficult for us to even comprehend the perceptions and codifications of other lifeforms.

Simply because humans are confined to five miniscule segments of the electromagnetic spectrum does not mean that other organisms share the same number and range of senses. In the grey mists of our biological ancestry vertebrates had seven. Near the juncture of the sagittal and lamboidal sutures of your skull there is a tiny pinprick called the pineal foramen. It is the vestige of a third eye. It was probably used to detect predators passing overhead when the earliest armored fish floundered about the Devonian ooze. It has long since ceased to perform this function, but have you ever had the feeling you're being watched?

All vertebrates evolved from fish which possessed lateral lines used to detect low frequency vibrations in the water. By having "ears" down the length of their bodies, sharks can detect the thrashing of fish kilometers away.

All organisms are in tune with the cycles of the Earth and celestial objects. "Senses" of gravitation, magnetic fields, and circadian rhythms predate that of touch. Salmon use the orientation of the Sun and the Earth's magnetic field in their migration. Many birds use the stars for navigation. Human menstrual cycles
are in step with the lunar tide.

In 300 million years of vertebrate evolution, certain senses have been developed in favor of others, and some lost altogether. Our sense of smell is but the puniest analog to the means by which cecropia moths communicate. Their feather-like antennae are in fact molecular sensors which can detect a potential mate's odors in parts per million over a distance of kilometers. Humans, too, conduct aromatic communication. For example, women in close association have a tendency to synchronize menstrual cycles due to the positive feedback of vaginal odors. A great deal of our mood perception has to do with such unconscious olfactory perception.

The biochemical nature of life is such that random evolution would preclude the replication of exact terrestrial patterns, even on Earth-like worlds. Although the potential for human-like organisms with our form of intelligence, perception, and codification is remote, it does not mean that we have a monopoly on these attributes. In fact, we share this planet with a number of organisms who rival our status as beings who are aware of themselves and their environments.

Until recently, language, sentience, and humanity were almost considered synonymous. Science is a systematic means of explaining the universe, and it has been supplanting classic Western philosophy. The Aristotelian "Great Chain of Being" considered life to consist of immutable types, each with a specified role to play in the cosmos. Thinking was something that was done only by humans, angels, and gods. Hinduism, in contrast, considers life to be a seamless continuity from inert matter to divinity. Only since Darwin and Einstein has Western thought begun to dispense with absolutes.

For decades, primatologists had mistakenly equated human speech with communication when attempting to communicate with great apes. Apes are capable of understanding spoken words but lack the specialized brain centers and motor capacities for speech. They are capable of using the visual word symbols of sign language in all their proper meanings and contexts. An adult ape is scarcely more intelligent than a human three-year-old, but who is willing to say that a human child is less than human? Either we redefine language, or we redefine human. Apes are capable of thinking in past and future tenses, can refer to abstract concepts, and may even be aware of their own mortality. The problem we have encountered in attempting to communicate with other species is the application of our human codifications of reality to non-humans.

Although our first attempts at interspecific communication were with our closest biological relatives, we are more likely to find comparable intelligence among the cetaceans. Along with humans, dolphins have the largest brain-to-body-size ratio of all animals. Their brains are also comparable in structural complexity. Human standards cannot be applied to cetaceans. They don't have sentience and communication in the way we understand it. Unlike land dwelling humans who make strong distinctions between their bodies and their environment, cetaceans are tactically immersed in a womb-like environment. They may not make the same distinctions that we do. To them, their bodies and the sea may seem to be a single gestalt.

Cetaceans communicate by regulating air pressure in their nasal passages. They set up ultrasonic impulses which radiate into the sea for thousands of kilometers. It is possible that each individual might be in constant communication with every other member of its species. Their world view must be very different from ours. To them, we may seem to be incredibly solitary creatures.

Our humanness is very much a matter of our ability to express ourselves by
manipulating our environment. This is also how we adapt and survive. Since whales have no hands, they have little inclination to do this. An analog for our arts and philosophy may be found in the songs of whales. These songs are both unique to individuals and shared collectively by herds. They suggest immense complexity in form. Phrases may be repeated or left unfinished for years. Whales may be "speaking" at a periodicity perhaps too long for us to comprehend. There were whales in the sea 50 million years before there were humans on the land. They may have turned their intelligence inward, much as we have directed ours upon the landscape. They may have a racial memory across millions of years, while our written records extend but a few millennia.

Cetacean complete-specific communication approaches telepathy in its scope.

With such diversity of perception and codification on Earth, it cannot be overstated that many forms of extraterrestrial communication will be stranger than we can imagine. Uncontemplated until the advent of cybernetics, there may exist superconducting crystals which live near absolute zero, zipping thoughts to each other by radio. Their speed of thought and awareness would be millions of times greater than ours. They might sit on some lonely iceball orbiting a dim red dwarf contemplating the chatters and wisps of distant quasars across billions of light years in the way we might gaze upon twinkling stars on a summer's evening. To us they might seem to be microscopic snowflakes, to them we might seem to be some strange phenomenon like ball lightning.

How beings communicate reflects how they think and how they perceive. There may be beings that "hear" gravity, "taste" cosmic rays, or "smell" magnetic fields. Perceptions do not reflect any particular reality. There are as many realities as there are modes of perception. The galaxy may be ringing to the harmony of millions of sentient species, each a party to particular segments of the electromagnetic spectrum. The linkage of such a multitude would enable all the thin segments of reality to be pooled into a single all-encompassing perception. They would become a single collective entity like colonial insects, which individually have hardly the intelligence of carrots. It is possible that our own intelligence may be vegetable-like in comparison to what we might achieve through universal communication.

Whatever a sentient organism may wish to communicate, whether thoughts or perceptions, both are the products of the codification necessary to delineate a comprehensible "reality" from the chaos that even a limited scope of senses perceive. In Aristotle's "Great Chain of Being" humans were considered to be lower than the angels. By sharing in the thoughts and perceptions of a wide spectrum of species, one day we might ourselves become the angels.

Chaos, I've held you in darkling embrace
Only to find you changeful as mist,
My love: dense as darkness, light as the space
Mournfully left between us 'ere we'd kissed.
Unless I take you wrongly, my heart,
No promises, no, nor vows with hot breath
In my cold bed did you make me, nor part
Clingingly, swearing aught more sure than death.
And yet I braid sure, certain fantasies—
Tethering dreams with artful deception—
Inescapably bound to ecstasies
Ordered beyond your care or conception.
Not long have I earnestly played this game;
Soon will I wax wrathful, and you turn tame.

© 1981, Bill Hoffman

"The Babel fish," said The Hitchhiker's Guide to the Galaxy quietly, "is small, yellow and leechlike, and probably the oddest thing in the Universe. It feeds on brainwave energy received not from its own carrier but from those around it. It absorbs all unconscious mental frequencies from this brainwave energy to nourish itself with. It then excretes into the mind of its carrier a telepathic matrix formed by combining the conscious thought frequencies with nerve signals picked up from the speech centers of the brain which has supplied them. The practical upshot of all this is that if you stick a Babel fish in your ear you can instantly understand anything said to you in any form of language. The speech patterns you actually hear decode the brainwave matrix which has been fed into your mind by your Babel fish."

The Hitchhiker's Guide to the Galaxy
by Douglas Adams, Harmony Books, New York, 1979
OTHER DOORS
Women's Small Press Reviews

Cheryl Cline

Before I get down to the actual reviews, let me point out some of my biases and criteria for choosing the particular journals for review. This is just so you can figure out if you should follow my advice, you see. Since what I'm asking you to do is to plop down $2.50 to $5.50 on a magazine, you should at least know why I did it. I bought all of the magazines reviewed in this column, by the way, which tells you three things: (1) I am not a big-time reviewer; (2) the magazines are bound to reflect my tastes; and (3) they were chosen very carefully because my economic resources are limited.

My biggest interest is in women's history (herstory, if you will), and I am a passionate student of women's autobiography, especially in the form of diaries, journals and letters. I'm also interested in literature and literary criticism and the more avant-garde art—surrealism, dada, "mail art" and artist books. And I should mention that I'm a compulsive bibliographer and compiler of information, so naturally enough, I value very highly publications that emphasize access and resource information.

In keeping with the above philosophy, I am reviewing magazines I think people should know about, magazines I think are worthwhile, useful, aesthetically pleasing, informative and fun.

Chrysalis, subtitled "a magazine of women's culture", is one of the best feminist journals being published. Quite a bit of pathbreaking feminist scholarship has appeared in its pages, such as Nancy Sahl's fine analysis of female friendship before 1900, "Smashing: Women's Relationships before the Fall" (Issue #8). The quality of the contributions is extremely high, which is not surprising when you take a look at the list of contributing editors: artist Judy Chicago, theorist Mary Daly, poet Susan Griffin, artist and critic Lucy Lippard, and poet and critic Adrienne Rich, among others.

Chrysalis is a very good resource magazine. Two of its editors, Kirsten Grimstad and Susan Rennie, edited The New Woman's Survival Sourcebook (Knopf, 1975) and they've continued their efforts to bring information about the women's movement and the feminist press to women in Chrysalis. Past issues (all available) contain "catalogs" of feminist presses, self-publishing, and women's spirituality.

Helicon Nine is a newer magazine, also very concerned with women's culture. It's a bit flashier-looking than Chrysalis. It is perfectbound, printed on slick paper and contains full-color photographs (all of them of women's art). In addition, Helicon Nine always contains an article on some aspect of
women's music and includes as part of it a small, flexible record. The quality of the writing and artwork is very high, and the broad range of subjects make one really feel the extent to which women have influenced history, culture and the arts.

Letters is an irregular journal edited by Carole Bovoso. It is a very personal journal, with emphasis on personal writing—letters, journal entries, autobiographical writing, one books and personal essays. The feeling of intimacy of the magazine is heightened by the fact that some of the contributions are reproduced in the author's own hand. Letters is simply but nicely laid out, with every piece ending naturally—no "continued on page 11" anywhere in the magazine. I was struck by the changes of mood and tone as I read, as well as the changes from type to calligraphy to hand-scrawled sentences, while at the same time I felt a sense of unity among the pieces, because they were all different facets of women's lives. The sometimes fragmentary nature of the pieces, strangely enough, also add to this feeling of wholeness, like reading someone's diary.

For those of you interested in the work of avant-garde women artists, I recommend Vile #6, the Fe-Mail-Art issue. Vile, a spin-off of the Canadian dada magazine Fila, is a magazine devoted to dadaism and mail-art edited by Bill Gaglione (دادالاند) and Anna Banana. Vile will cease publication with issue #8 (#1 has just been published) but back issues are available. All issues are perfect bound and meant to be considered as books. The Fe-Mail-Art issue is an anthology of mail-art from over 100 women from all over the world, including Anna Banana, Leavenworth Jackson, Cosi Fanni Tutti, Giula Niccolai, Lisa Baumgardner, Dlean Antin and Yoko Ono. Their work embraces rubber-stamp art, collage, artist's postal stamps, photography, performance art, xerox art, drawing, prose, postcard art, letters, manifestos and posters.

Three very good resources for those interested in the feminist small press are Umbrella, Motherroot, and Booklegger Press.

Each issue of Umbrella is an encyclopedia of information about the current art scene, concentrating on the underground and small presses and mail art and performance art. It contains reviews of books published by establishment publishers, artist books, exhibition catalogs and new periodicals. It contains deadlines for mail art exhibitions, news about video, photography, architecture, performance art, artist conferences, bookshops, artist groups, museum news, international art events, and of course umbrellas in the news. Umbrella also features articles on individual artists and on art events, such as the editor's "con report" of the International Dada Festival held in Eureka last year. A first look at this magazine is much like looking at a fanzine for the first time—you realize there's a whole subculture of books and postcards in the world, with its own idioms and activities and nonfiction— and it may take a while to grasp it all (or even part of it). Umbrella is not a feminist publication, or geared only to women, but it always contains information about women's art exhibitions, publications and artist books that you won't find anywhere else.

Motheroot is a small tabloid publication devoted to in-depth reviews of current books by women published by small presses. Most of the reviews are article-length, and some are focused on the entire work of one writer. The Winter, 1980 issue, for example, contains an overview of poet Toni Ortner Zimmerman.

Booklegger is the name of a wonderful resource-oriented press. It is devoted to publishing the "sporadical Booklegger Magazine. Booklegger Magazine" contains bibliographies on subjects such as health, energy, women and religion, radical periodicals, poetry and children's literature; small press reviews; reviews of non-print media; and short articles (always with a bibliography) on a variety of subjects important to women. The magazine was lovingly put together with a zany, humorous, sometimes almost surrealistic spirit that gave the definitive feeling that the editors loved what they were doing and gee-whiz, it must be fun to be a librarian. Booklegger Magazine is no longer being published but some back issues are available. Write for a list or check your library.

Booklegger Press is still going strong with book-length projects, the most recent being Booklegger's Guide to the Passionate People of Publishing edited by Celeste West and Valerie Wheat. This is a very fine guide to self-publishing, the small press, the feminist small press, "kid's liberation literature", and the "library free press." It also contains West's expose, "The Literary-Industrial Complex", an analysis of the workings of the establishment publishers, including a chart of publishers owned by conglomerates and publishers owned by other publishers.

Presently in the works is a "fantastic, fat book" called Works in Our Pockets, the Feminist Writer's Guild handbook on how to get published and how to get paid. Characteristic of something published by Booklegger, the book will also include recipes for starving artists and write-their-blocks.
in the issue. Gerry-Anne Perlett writes on how science fiction helps her "escape into reality". There is a fine feminist critique of Joanna Russ' *Kittatinny* and *The Two of Them*, and a useful "Reader's Guide" by Debbie Notkin, which includes a bibliography of women's science fiction with additions by Susan Wood.

Susan Wood's editorial ability—not only the ability to choose wisely, but to help women find their voices as science fiction and fantasy writers, and to generate excitement about women and SF wherever she went—will be sorely missed. This issue of *Room of One's Own* is, as the editors say on the inside cover, "in every way a tribute to her".

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- **Motherroot Journal**, 214 Dewey Street, Pittsburgh, PA 15218. $1.00/copy.
- **Room of One's Own**, PO Box 46160, Station G, Vancouver, BC, Canada V6R 4C5. $4.00/copy
- **Umbrella**, PO Box 3692, Glendale, CA 91201, $2.50/copy
- **Vile**, 1183 Church Street, San Francisco, CA 94114. $5.00/copy.

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**Exobiological Language**

**Thomas J. Murn**

We have to cease to think if we refuse to do it in the prison-house of language; for we cannot reach further than the doubt which asks whether the limit we see is really a limit...

_Nietzsche_

One of the major accomplishments of modern SF has been to give humankind a true measure of their humility and meaningfulness on a cosmic scale. Nevertheless, fans have been slow to realize the real implications of our cosmic obscurity. A kind of world ethnocentricity still prevails in this young body of literature which we call SF.

How is it possible to look beyond this "limit" of our understanding?

An answer may be found in examining the form which languages take on our world. Besides the written and spoken Romance and slavic language systems, there are the pictographic Chinese, and the strange disjunctures of the Basque, the Icelandic, and other tongues and scripts whose origins blur even in our race's short history. There is the untranslated language of the predecessors of the Aztecs—untranslated in part because it carries concepts which died with that particular race, and can no longer be assimilated. And also there are the languages which consist of whistling in various tones—this and nothing more.

These examples, however, are still not a sufficient base of data upon which SF writers can speculate on alien language.

A look at the body of SF yields posturings and inadequacies. Delany's *Babel-17*—or any similar examination of language interplay with extraterrestrial connections—is rooted too deeply in our own world culture, in our own limits of understanding, to reach escape velocity. Lindsay's *Voyage to Arcturus*, circa 1920, makes some progress when it portrays the growth of "extra" sensory organs, that is, extra capacity beyond those organs such as eyes and ears which we normally employ. However, Lindsay's book is so arbitrary, and so boring in execution, that I hesitate to mention it.

Let me add some personal observations. First, an advanced and sophisticated extraterrestrial society may not need "language" if they have conquered problems of "communication." Now, there have been uncounted millions of ESP and mind-to-mind communications stories in SF. But the very implication carries with it the burden of formulation—what is being formed, what is the form which it takes when as it enters another's mind? Again, these are things beyond our limits.

Other life-forms could easily grasp information on a large or small end of a relative scale, which would render communication with other-scaled civilizations meaningless. As we know, laws of physics distort for the atom, the ant, the elephant, and the star-system. How can we share information with giants or ants whose structural parameters and perspectives are so far removed from our own?

The sciences of exobiology, exogeology, and anthropology are still in their infancy. Until we know ourselves, our own beginnings and our own limits, to speculate on an alien "language" is futile. We see the barrier, the horizon which is the limit of our own comprehension, the limit of our own universe until we mature enough to be able to picture what may lie beyond our prison-house.
The Embedding
by Ian Watson
Bantam, 1977
217 pages, $1.50

Cy Chauvin

Self-Embedded Language

Ian Watson's The Embedding is one of the most interesting science fiction novels about linguistics and communications. The novel (Watson's first) has three interconnected stories to tell. One concerns Chris Sole, a linguist who works in an experimental hospital in England. Three groups of children are kept in special environments, isolated from all contact with the outside world and taught specially-designed languages. One group is in a logic world; another, in an alien world; and a third (Sole's) in an embedded world. They are taught a special "self-embedded" language. "To embed" means "to set in among another mass; fix in the mind, memory."

Language processing depends upon the volume of information that the brain can store short-term. (In order to make sense of this sentence, for instance, one must remember each word temporarily until you reach the end and complete the idea.) Each sentence is a fresh creation, unlike the signals animals use, which are fixed and unvaried. Each sentence is new because of language's recursive feature—we have rules for doing the same thing more than once in a sentence. ("The dog and the cat and the bear ate.") This is a self-embedding process, and one that the children in Sole's special environment are taught, only to an extreme degree. In a sense, it is an attempt at a totality of meaning. The children are also given a drug (PSF) to help speed up their learning functions.

There are moral questions raised by the children's isolation, which bothers Sole, who loves his experimental group, seemingly more than his own son. (He calls the group "my children"). One of the other scientists tells him to think of "all the children that are going to be born before today's over—or wiped out tonight by accident! Do you think it matters one scrap that a dozen...are brought up...in somewhat unusual circumstances?" The children, incidentally, are war orphans. When a visitor asks if the children's brains have been surgically altered for the experiment, Sole explodes in anger. "Christ no!...That's a bloody immoral suggestion."

In Brazil, a French anthropologist (and friend of Sole's), Pierre Darriand, has discovered an unique South American Indian tribe, the Xahoba. This tribe has two languages, one for everyday and one for special religious ceremonies. The latter is spoken under the influence of a fungi-drug. This
second language (Xemboha B) has some relation to the artificial language Sole in studying with his experimental subjects in England. A "self-embedded" poem, Nouvelles impressions d'Afrique by Raymond Roussel plays a role here, too, for Darriand has been attempting to understand it for years, and believes he might do it if he learns Xemboa. An American-Brazilian dam project threatens to engulf the Indians' homeland, however, and destroy both their way of life and the special fungi they need for their religious rituals.

These two stories come together when contact is made with the Sp' throne, extra-terrestrials, who offer the secrets of space travel in exchange for "the widest possible knowledge of language". Chris Sole is among the special delegation that makes contact with the aliens. The aliens' quest is in part mystical: "You might say we trade in realities.", says Ph' theri, their spokesperson. The aliens are building a "language moon", and compiling the "reality programme" of all languages. They are driven to their quest by "the Brefet Love we feel for the Change Speakers." These change-speakers have passed beyond this reality. "The universe here embeds us in it. But not them." The Sp'thras hope to follow the change speakers in some way, once having completed their task.

"The change speakers desired something when they phased with the Sp'thras—what it was we did not understand. They themselves were hurting with love. Our signal trading quest is to cancel the great sense of sadness, so that we and the Sp'thras can be left alone again—without that vibration in our minds, imprinted centuries ago by their passage.... We are haunted by the change speakers, by this ghost of love, which is pain."

The Sp'thras and Sole negotiate, and in return for some information, the aliens want six "language units" from as widely scattered areas as possible—"language units" being a euphemism, it turns out, for an adult human brain. The moral aspects are downplayed by some of the negotiators: "The prospect, after all, was no more terrible—far less terrible indeed—than X or Y or Z happening in the world in Asia, Africa, or South America." Again, the same argument used by the scientist who argued with Sole is repeated here: the fate of a few individuals doesn't matter when so many humans perish every day anyway. Sole also happens to have the letter from Darriand with him when he meets the aliens, and the Sp'thras become enthusiastic about this tribe with its self-embedding language. They see the possibility of ending their quest here.

"Our reality," "Your reality," "Our reality"—the mind's concepts of reality is based on the environment it has evolved in—all are slightly different. Yet all are part of "this reality"—the overall totality of the present universe. All are searching for a "totality of meaning"—the Sp'thras, the Xemboa, Sole's children, Darriand, and Sole through language. Watson breaks new ground in SF, and he understands humanity's quest for meaning without letting it become a mystical cop-out. The Embroidering almost collapses under dead prose and a storyline spread amongst too many characters, but Watson's understanding of the role of language in shaping thought makes it a landmark.

"The Persistence of Vision"
by John Varley
Dell Books, 1980
45 pages, $2.25

Lyn Paleo

Persisting the Vision

It seems to me that science fiction is not writing about the future, but rather it describes now in the future tense. Just as I enjoy writers who maintain their science's consistency in science fiction, I also enjoy science fiction that delves into future social issues while still keeping touch with reality.

Radical social solutions are many times the only solutions. No amount of amending or altering will dissolve some problems. John Varley's Nebula Award winning short story, "The Persistence of Vision" is wonderful and warm. In it 55 of the most capable people, born deaf-blind, break away from institutionalization's economic control and socialization to form a peaceful, isolated commune in the Southwestern desert. It is apparent that Varley is aware of the very real and very grim situation of the "rubella generation" born during the 1960's; his story fantasizes a radical solution for their situation.

"Persistence of Vision" is based in reality. Varley's description of the problems faced by 85% to 95% of the 5,000 deaf-blind individuals severely disabled as a result of German measles is the harsh truth. They were put into beds, cleaned up once a day by a few overworked nurses, and generally allowed the full blessings of liberty: they were allowed to rot freely in their own dark, quiet private universes. ["Persisting of Vision" by John Varley, in The Magazine of Fantasy and Science Fiction, March 1978, p. 11]

Varley's presentation of where the remaining 5% to 15% could go to maximize their freedom is beautifully said, but it does not deal with certain repercussions of the condition of deaf-blindness. This is not surprising.

Deaf-blindness is a unique disability. The sensory deprivation is almost unimaginable to the normally hearing-sighted individual as well as to the person who is
either deaf or blind. Some consequences of that deprivation are obvious—limitations of communication and mobility. The scope of the limitations and their psychological implications, however, may be more far-reaching than those who are not deaf-blind realize. [Living With Deaf-Blindness: Nine Profiles, by Carol Yoken. Washington D.C. The National Academy of Gallaudet College, 1979. p.1]

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Exception for the fact that they did not stop and talk or even wave as they approached each other, I would never have guessed they were blind. ["Persistence of Vision", p. 19]

The idea that a deaf-blind person would move in the same way that a hearing-sighted person moves seems unlikely to me. Mobility and movement, both in terms of getting up off the floor as a child and out of the house as an adult, pose extreme problems. For many deaf-blind children, vertical orientation is a difficult accomplishment. Those who are musically co-ordinated usually have a unique style of movement—as do many people blind from birth—because they never see what people do with their hands and heads.

Motor development is highly limited in deaf-blind children who do not receive special training. This is important because imitating patterns of motor activity enhances early learning. The environment for a deaf-blind individual is more constant; it lacks the visual and auditory changes that most of us take for granted. Patterns of change, such as light and dark or the movement of people, help the infant begin to separate and order time. The deaf-blind person cannot imitate visible or audible actions. Unless they are taught rhythms combined with patterns of motor activity, deaf-blind children will have severe problems with short-term memory, temporal ordering, and language development. Despite the difficulty in hearing music (or the hearing person’s difficulty with the loud volume required), dancing and music continue to be important to many deaf adults. ["European Programs for Deaf-Blind Children: an Overview", by Jeanne R. Kemore, in State of the Art: Perspectives on Serving Deaf-Blind Children, ed. by Edgar L. Lowell and Carole E. Rouin. Sacramento, Ca: California State Department of Education, 1977. p. 30.]

All children begin learning (usually in infancy) that an object still exists. At some point they realize that a toy behind your back is still a toy and they want it. The lack of this kind of information affects the motivation of many deaf-blind to reach out, make contact and walk through their environment. ["A Parent’s View", ibid.]

The lack of information continues to be a problem in adulthood. Those few deaf-blind who are given an education still have limited access to information and worldly knowledge. They do not know drop. They are not voyeurs. They get only what is specifically aimed at them. The stigma of being perceived as stupid limits what they are told. The attitude that they are permanently dependent further limits the information they are given. (Why teach finance and other independent living skills, or science, or psychology when they aren’t supposed to go anywhere?) Any information that contradicts the status quo is probably considered inappropriate for dissemination to the deaf-blind.

All the graduates of the special schools left knowing how to speak with their hands. Some could talk. A few could write. ["Persistence of Vision", p. 11]

One of the most common communication modes among deaf-blind adults, fingerspelling in each other’s hands, does not necessarily follow English sentence structure. Only a few can write because only a few have had enough exposure to reading to comprehend complex English sentences.

The first order of business was money. None of the students knew much about it from experience, but the library was full of Braille books. They started reading. ["Persistence of Vision", p. 15]

[Janet Reilly] assigned task forces to look into the solutions of each aspect of their project: law, science, social planning, design, buying, logistics, construction. Her Social Task Force read about every variant group that had ever tried to make it on its own anywhere. ["Persistence of Vision", p. 16]

A library full of Braille books does not comprise an enormous amount of information; Braille books are very large and cumbersome. Braille reference books are grossly inadequate and out-of-date. The time required to transcribe into Braille and the space required to store these very large texts means that much information is not in Braille, especially current information. Less than 10% of blind people with hearing read Braille; most rely on "Talking Books for the Blind" and other auditory forms of information dissemination.

The emphasis of Braille transcription is on popular literature and a few college texts. I hope a decade will bring new, more condensed forms of storing and accessing current information for the blind and deaf-blind but this seems unlikely, given the current depressed economy and the 1980’s depression era of Varley’s story.

Deaf-blind people are usually economically dependent on agencies, institutions, and bureaucracies because their medical bills and costs of living are frequently much higher, and the job market is abysmal for the multiply handicapped. The "rubella generation" is tied to a number of bureaucracies, all of which conflict by either providing the same services ten times, or by refusing to provide essential services. I don’t expect that the deaf-blind, after establishing a commune, could live without constant invasion of officials who would interfere to follow up their "most successful cases" and claim the credit for the group’s achievements, or work incessantly to close the place down.

People who were born deaf and blind face the limiting environment of residential schools or the rotten conditions in custodial institutions, compounded by mobility impairment, in-
formation deprivation, communication difficulties, and the stigma of dependency that society places on them. In addition, many were born with other disabilities, or added new disabilities onto existing ones through self-injurious behaviors such as tearing the skin, gouging out eyes, biting off fingers, and head-beating. To overcome the psychological and economic effects of institutionalization, of deaf-blindness and other disabilities, and of growing up isolated from, but vulnerable to, society requires a lot of courage, determination—and usually support from both disabled and able-bodied persons.

The struggle of the mobility-impaired, hearing impaired, and visually-impaired groups has been to get more access to the society in which they live by changing the architecture, services, and attitudes of this society. To reject a society which refuses to adopt radical changes and to build an alternative community is a strong, positive idea. But people usually want to get it first, and then decide to accept or reject whatever "it" is. The deaf-blind as a community may want to get into society first, before dropping out. Radical changes are needed to dissolve the many barriers that keep deaf-blind people (and those who in any other way deviate from the rigid standard of normalcy) from full access to society, so they can have the option to reject it.

On the other hand, I wonder if our society—which assumes "normal" means sighted, hearing, and able-bodied—will be able to change in ways that will allow deaf-blind-mobility-impaired persons to enjoy associating in it widely. Varley's vision of how the deaf-blind could live without handicaps may be the ultimately preferred lifestyle for the deaf-blind, because they are considered incomplete, inhuman, and untouchable in this society. It is ironic that the deaf-blind rely on and enjoy touch so much, yet are so isolated from it because rigid defenses against touch are so strong in this culture.

Varley's story is a good look at the very real problem of society's inability to cope with differences in people. It also expresses a radical solution to this problem by showing how conditions that are handicaps in this culture can be enviable traits in another. This story is a fine example of science fiction's fantastic potential to discuss, on a personal level, present social issues in terms of future radical solutions. It can be a springboard for readers and writers to challenge more assumptions and to analyze more problems which affect hearing-sighted, deaf, blind, and deaf-blind persons.

The story leaves me with several questions. Would activities be ordered by day and night in a community set up by deaf-blind people? What kind of music would develop when perceivable vibrations are more important than melodic notes? Can a group of adults develop radically different values and morals from those they learned as children? I hope the answers to these questions will be found by persisting radical changes.

"The Persistence of Vision"

Cy Chauvin

Can We Gain New Awareness By Denying Our Senses?

There will be a civilization based on the mystery of touch, and all that that means; a field of consciousness which hasn't yet opened into existence. We're too much afraid of it—oh, stiff as wood, with fear! We paw things—but probably we've never truly touched anybody in all our lives, nor any living thing. Oh, there'll be a democracy—the democracy of touch. For the few who survive the fear of it. (John Thomas and Lady Jane, by D. H. Lawrence, p. 58.)

In the title story of John Varley's recent collection The Persistence of Vision, he puts forth an unusual approach to the problem of language and communication: his theory in this novella is that by destroying some of our senses we will intensify the power of those remaining, resulting in an emotional and psychological breakthrough.

The story is centered on a society of the

Since the dolphins and toothed whales are both highly intelligent and communicate about the world in the same mode as they perceive it, sound, this may be one of the reasons why investigators like John Lilly have had such difficulty in proving that these creatures have a genuine language. —"Towards an Alien Linguistics" by Ian Watson
blind and deaf, a commune called Keller, which has evolved into a seemingly more human and caring society than the larger world around it. The inhabitants communicate by touching, and sex becomes just another means of communication. Oddly enough, in my opinion, this seemingly superior society has no native forms of art, no sensuous sculptures or novels told by hand. Perhaps they are so involved in themselves that they have no time for art; or perhaps it’s an inadvertent omission by Varley. Still, the protagonist is a struggling writer. Presumably he would be likely to notice and remark on other artforms. The group does have a mystical, communion-like gathering in which they form a circle and encounter the transcendent in a way that is not explained, except that no one with sight or hearing—not even the perfectly normal children of these people—can experience it or understand it.

The protagonist leaves after several months because he feels he cannot fit in this commune. He does find the material for his own art from this experience, and finally becomes a successful novelist. After several years, he decides that what he has is not happiness, and so returns to the commune—only to find that all the original members have left in some mysterious way. Only their children remain—and they have voluntarily chosen to be blind and deaf: the implication being that this is the only way to achieve the transcendent state that their parents have gained.

The implications of this story seem contradictory. Language and communication are not expanded by closing off the very avenues of that communication, by restricting our senses rather than expanding them. In the past, science fiction has tried to show how we might expand our senses: through telepathy, radio telecommunication with our planets, encounters with aliens; or through the use of new drugs. The new perceptions might be baffling—indeed, often times we cannot understand them at all—but they are gateways to new knowledge. Varley describes his commune in utopian terms, but all his premises are false except one: that touch might bring human beings closer together. The fact that Varley describes Keller (the commune) as a utopia also tends to rob the story of any value it might have in other ways, such as a story of personal crisis. But Varley’s unnamed protagonist is only a mouthpiece and camera through which he can describe the commune; sometimes we can sympathize with his views, but we are not led to care for him the way we do for most characters in fiction.

"The Persistence of Vision" is not at all what it seems. Most disappointing is that it fooled so many voters of the Nebula and Hugo awards. Do most of these writers and readers really think that by restricting our senses we can achieve a breakthrough in human understanding, or was Varley’s story appealing as a sort of "free-sex" fantasy, a wish-dream?

I have one final complaint. The phrase "The Persistence of Vision" is normally used to describe a phenomenon associated with movies. We don’t actually see a "moving picture". Instead, we see a series of rapidly-projected still pictures which our eyes and mind blend together into a "moving" picture. This phenomenon has nothing to do with Varley’s story; it could easily have been called "The Persistence of Hearing". I presume that it is meant to be poetic (with which I am entirely in sympathy), since it makes no literal sense. But the title does not fit the story.

"What do I do instead of pursuing sex or fame?" writes Colin Wilson. "I attempt to widen my perceptions until I contemplate the whole world." (Poetry and Mysticism, p. 22). The Children of Keller would not agree; they "blindly" pursue a philosophical contradiction in—

Selected Works of Suzette Haden Elgin

Diane Martin
Jeanne Gomoll

Suzette Haden Elgin is a linguist who along with publishing extensively in her field, also writes science fiction. Her SF writing career began in 1969, with the publication of a novella, "For the Sake of Grace". This was later expanded into a novel, At the Seventh Level (1972). This novel and two others, The Communitoffs (1970), and Furtherest (1971) were recently re-issued in one volume as Communitoffs Worlds. A fourth novel, Star-Anchored, Star Angered was published in 1980.

These four novels are all based on a single history in which human civilization has spread throughout three galaxies, and unified under a not-too-abrasively authoritarian government called the Tri-Galactic Federation. The Federation's main duty is supervising the testing of all new-born human infants to see if their blood contains something called "Factor Q". Children found to possess this characteristic also have superior telepathic abilities—superior, that is, to the average Federation citizen. Children who possess both Factor Q and telepathic abilities are taken from their families and trained from birth to become "communitoffs"—people who link the three galaxies and their worlds telepathically, this instantaneous communication being the only way the Federation can remain a viable governing force, because of the vast distances involved.

Having set up a universe where telepathic communication is the accepted norm, the dominant theme of Elgin's books is the problem that the existence of telepathy brings to human culture. In At the Seventh Level a murder is almost accomplished by a group of telepaths pooling their powers. In Furtherest a genetic mutation and the planet Furtherest's extreme isolation from the rest of civilization protect that world's telepaths from being discovered. And in Star-Anchored, Star Angered, laws which prevent religious persecution protect a cult who has discovered methods of increasing their telepathic powers.
The world in which her stories take place are generally ones on the periphery of the Federation's boundaries. Even though classism has supposedly been overcome long ago and everyone calls one another "citizen," and sexual, racial, and religious prejudice are unknown, these advances have not penetrated to all the worlds of the Federations. The planet of Furthest is dominated by Victorian prudery, the planet in At the Seventh Level can best be compared to Century Turkish-Arabian cultures, and Star-Anchored, Star Angered is set on a planet dominated by powerful and autocratic religious hierarchies. Even Coyote Jones, the main character of all these novels is both anachronistic, and a deviate from the Federation norm: Coyote an agent for the Tri-Galactic Intelligence agency, has a unique telepathic ability: he is a mass projector. Others consider him "handicapped" since he is deaf to in-coming telepathic messages. His investigations give impetus to the various plots of Elgin's novels. His cover is usually that of a sort of wandering minstrel, whose hobby/profession is singing ancient folk songs. In a time when most folks are speaking something called Fanglish, he uses archaic terms like "shit" or "corny," and considered very eccentric by his contemporaries. These novels are well-written, but basically ordinary adventure SF. What makes them stand out is the background Elgin has created. Drawing on her experiences as an educator in the field of linguistics, she makes some tantalizing extrapolations of what education/communication, and linguistics will be like in the future. The communipath system is described only sketchily—but just imagine the implications of a communication system that spans three galaxies, where the "operators" are people completely isolated from the very civilization they are compelled by the government to serve. Then there's the asteroid Harvard, the setting for the beginning of Star-Anchored, Star Angered. Harvard is the university world for the Federation, at which 1000 students (and only 1000 students at a time) are allowed to learn one-on-one with a live teacher. And the rest of the population is educated by more conventional methods, like microfilms. In At the Seventh Level, citizens must take the equivalent of state board exams, only on a planet-wide scale, for any profession. The highest profession is that of poet. Oral exams to determine the entrance level (if the applicant passes are administered by computer. (The highest level is seven.) Linguistically, these books are very subtle. They are all, for example so clearly written that you almost don't notice. And Elgin has the reader totally believing in telepathy by about the second page. In a clever bit in Furthest, the author has a Further decide that the best way to describe the organization of Furthest society to an off-worlder is to show him a soap-opera. Elgin makes little attempt to illustrate the evolution of language by invented slang or unusual grammar. But the wide-spread telepathic abilities of all members of this civilization, and the fact that it covers three galaxies, suggest that sweeping changes in communication have taken place. When we said, a while back, that Elgin's SF was basically ordinary adventure SF, there's one amendment that ought to be made to that statement: It's basically ordinary non-exist SF. Perhaps that's a contradiction in terms. From a feminist perspective, At the Seventh Level is the ultimate (or at least penultimate) token woman story. One wonders what real-life academic horror stories prompted Elgin to write it. And Star Anchored, Star Angered deals with speculations on the essential differences between men and women, particularly in their respective abilities to tap energy on the psychic plane. Coyote Jones' mission is to prove that a religion is fake and that its proselitizer is a fake goddess. Being telepathically deaf, he'd be immune to whatever psychic trickery she was using. The only problem is that there turns out not to be any trickery involved... For a more direct exposure to Elgin's views on linguistics and communication, we recommend her non-fiction. Pouring Down Words (Prentice-Hall, 1975) is a very readable textbook which looks at some of the different ways language is used, in prose, poetry, politics, religion, folklore, and the media. The Gentle Art of Verbal Self-Defense (Prentice-Hall, 1980) is not only captivating reading, it's useful. You can learn how to cut through the bullshit and find out what people are really saying. And you can learn how to win those impossible no-win arguments. Fact or fiction, Elgin's writing is both entertaining and thought provoking.

A Selected Elgin Bibliography


Twelve Fair Kingdoms, Book 1 of the Ozark Fantasy Trilogy, Doubleday, 1981.

Language is like beating out rhythms on a cracked pot for bears to dance to, when one is trying to wring tears from the stars.
Gustave Flaubert
FUTURE INSULATION

by CTEIN

Once, there was a TV show called Star Trek. It set standards for TV SF that have rarely been exceeded. It created millions of new SF lovers, thousands of new fans and changed SF writing and art in substantial ways. It even changed many of us who, like me, first became involved with the SF community via Star Trek.

Later, there was a cartoon show and recently, Star Trek The Motion Picture. STTMP proved that you can't go home again, although it can be fun to try. It also shook up the movie and SF industry for years, while fueling rumours of a revived TV show. Said rumours were only outnumbered by the (now sadly impossible) rumours of an imminent reunion of the Beatles.

Slipping through all this sound and fury has been a development which I believe is a far more potent social force than anything SF or George Lucas has released. At least, I fear it is so.

Star Trek: The Video Game!

Do I hear laughter? Bear with me—this column is about future shock.

***

Here's the first piece of the puzzle:

Some years back, one of the World Fairs had a movie exhibit which included audience participation. At critical moments in the plot, the film would be stopped and the audience would vote on the course of action to be taken by the actor(s). Then the movie would begin again, the actor(s) would make the voted-in decision and the plot would continue to the next critical point.

This was a primitive set of "parallel universes" on film. A script had been written with branch points at the critical moments. If the decision was "yes", one plot line was followed, if "no" another. Scenes were filmed to match the various plot lines and the appropriate reels of film run according to the audience's wishes.

The audience influence was an illusion, of course. They had no real control over the course of the plot—they could only select from alternatives (and their consequences) provided by the authors. In fact, the decisions could all lead to the same conclusion, although the audience didn't necessarily know that. Their freedom of choice was a cleverly induced delusion, although the participation was real.

Piece two: On-the-job training can be difficult if the job involves expensive and/or hazardous situations. If you want to learn to control a reactor, or fly a plane, or pilot a ship, or plan a battle, learning-by-doing can be exceedingly dangerous.

Simulations are a useful answer. The idea of a simulation is to create a realistic environment for the trainee, which will respond to her actions like the real world would, but does not involve the expense or risks of the real world.

Simulation can be done with real objects—military exercises are a good example, or with synthetic ones, such as the projected view into the "cockpit" of an aircraft simulator, complete with phony but realistic instrument readings. More and more of these simulations are being created by cleverly programmed computers. There is even an aircraft pilot trainer for the Apple II home computer. Which leads me to...

Piece three: The experts used to predict that computers would enter our everyday life as household managers, home library terminals, electronic newspapers, and department stores. Even ten years ago I don't know of any predictions that said computers would come into our lives primarily as amusement devices.

For all the talk about their practical uses, most home computers have been bought as toys. Video games are big sellers.

I suppose a "video" game is any game using a TV. That could include card or board games which simply use a TV instead of physical tokens and boards. The biggest and most exciting category (for users and sellers both) are the games which involve animation and TV's moving image. Most of these are very crude, involving nothing better than line or block pictures, with a modest array of colors.

That is an economic, not technical problem. If you want "real-time" (which means you don't wait for the computer to catch up with you) you have about 0.1 second to create a TV image, at most. The better the picture quality, the more information your computer has to be able to handle in that tenth-second.

Today, full-TV-quality is available, but it costs about $100,000, in round numbers. Your $500 home computer can only deal with a small fraction of that amount of information, perhaps 1/100 the amount of information in a real TV picture. In less than 10 years, though, a $500 computer will be able to handle full-quality video. It will be as realistic as anything CBS broadcasts today, so long as someone programs it that way.

It's programming that makes a computer more than a paperweight. Writing high quality
graphics programs (as opposed to stick figure pictures) is a great deal of work. Writing realistic TV picture creators will be a horrendous job. But the rewards are huge for the programmer who can do it.

I bet the first game to get TV-quality will be Star Trek. It is the most popular of all computer games—you can't find a computer that can't play Star Trek. Basically, the game is a cross between the pencil-and-paper game of Battleship and a shooting gallery. You control the Enterprise. You can fire weapons, move through space, refuel, put up shields, etc. etc. Your enemies are computer-controlled ships (usually Klingons, of course) who can do some or all of the above things. Many, many variations exist upon the game.

Put the pieces together now. Suppose you were to write a real-TV Star Trek game with "realistic" responses and a set of program branches to accommodate your decisions. That is, make it a simulation game.

There you are, looking at a TV picture which shows the view from the Captain's chair, looking at the forward view screen. Crew members flunk the screen; others move in view and talk to you (computer speech is already common) as necessary, providing you with information you have asked for (you can, today, buy a $900 box for the Apple that understands 6800 spoken words), relating interesting comments, gossip, battle intelligence, or whatever, "spontaneously". The effect is like watching an old Star Trek episode.

Depending on the decisions you make and the commands you give, different displays appear on the view screen, different characters come and talk to you, different plot lines are followed. The game becomes a story that gives you a very realistic illusion of participation and control, like any good simulation should.

None of this is as tough as it sounds. It is tedious working out the long decision-trees needed to make the plot really flexible, but it isn't difficult, once the basic graphics and player-response routines are written.

What really bothers me about this is that illusion is masking reality. The framework of the game is entertainment. Entertainment is rarely realistic.

Most dramas are simple, even simplistic, with isolated, readily understandable problems. Solutions are intelligible and available; motivations are understandable if not rational. The world is a relatively orderly place in entertainment, with very rare exceptions.

These limitations are, in part, in the nature of good storytelling and entertainment (see Algy's Buys's columns on writing in Locus, for a far more extensive and erudite discussion of these points). And I think these characteristics are in conflict with those of a good simulation.

A good simulation is, above all, realistic. In the real world that means complex, usually. Problems interact, side effects predominate, solutions involve trading off conflicting and ever-changing demands.

Good simulations reflect those subtleties. In fact, if it weren't for the sub-
tleties, most simulations wouldn't be needed. Be that as it may, simulations are an excellent teaching tool. One virtue of their quick, consistent responses and the implied rewards and punishments they deal out to the trainee.

Is this compatible with good entertainment and drama? Do we want the lessons of the simulators to be that we should think like Kirk, or Mannix, or even Hawkeye Pierce? It doesn't matter that the video game is not intended to be a teaching tool. When it becomes responsive to the player, and sufficiently verisimilar, it becomes a simulation and an effective teaching tool.

The universe it teaches about is the one made up by the author/programmer. Unfortunately, I don't see that this makes the video game any less effective a teaching device. Even if it teaches reflexes and thinking patterns more appropriate to prime time TV.

Don't misunderstand me. I am not suggesting we'll have a million people running around thinking they are Quincy. But we may have a million people running around who tend to think like Quincy.

Also, don't confuse this problem with the question of TV's influence on video today. There is a huge difference between a passive entertainment medium and an active, interactive one. The latter can become a simulation, and that is an entirely different criterion.

Still not worried? Here's an unpleasantly probable example.

The game is STuD. You (meaning the game player) star in a porn fantasy of your own creation. All women are beautiful, oversized, and have excellent taste (they find you irresistible). You can seduce them with ease, or with a chase as you please. In the end, you'll always capture them, because deep down, they really want, even if they won't admit it, to get laid. Nothing you suggest is too outrageous; anything you do pleases them. Even if they say they don't want you, secretly they do, and they prove it. Anything goes.

Even rape—afterwards, they'll love you because of your incredible sexual prowess. There may even be a few masochists if that is your taste. Mutilation? Snuff? Why not—they're all willing and they'll love it. Anything you want, any woman you want, doing anything that can be done on a screen, talking to you, looking at you, in living realistic color.

And maybe, just maybe, the women in the real world are a bit like the ones you conjured up? You can always hope and give it a try; what's the harm in that...

If you don't think that is likely (it is certainly possible), you don't know the history of new art forms. One of the first "unofficial" applications has traditionally been pornography (as distinct from erotica). Some of the early Disney studio stuff would not play in Peoria. And there is no way to stop it either legally or illegally.

That is why video games make me very uncomfortable. They will create something we've never had—the entertainment simulation. We've never (individually or collectively) had to deal with that much blurring of the line between fantasy and reality. I have no idea how we'll handle it.
Have you ever told a joke that fell flat because you had to stop to define or explain, since it turned out that your audience was not acquainted with the crucial element of the joke? Or, have you found yourself involved in one of those frustrating conversations that stretched on and on because so many digressions had to be made to identify the people you were mentioning? By the time you finish a story like that, you wonder why you started in the first place, right?

It could be worse. Think about what it would be like talking to an alien who will not only miss all your jokes and fail to be up on the current fashions in your circle of friends, but for whom the word, "Hi," will have to be defined...

Professor MacGregor offers a short exercise as an illustration of the alien communication dilemma. Think of it as a take-home exam.

Pleasant Mundane Story
LOREN MACGREGOR

On Monday the current failed. It wasn't off for long, but even five minutes was enough to bother Harry's methodical soul. He spent the morning setting his collection of clocks, matching each one to the old Swiss upright his grandfather had bought in Germany after the Great War.

That clock was a beauty. In 20 years, it hadn't lost more than 10 minutes, and not one of the electric clocks he owned could match that. He smiled, remembering how Gran had objected when Granther brought it home. She'd complained about the size, she'd complained about the noise, and—a true Scot to the last—she'd complained bitterly about the cost. But Granther kept it anyway, and it had been in the family ever since.

---

1Monday: The traditional Western High German name for the second day of the week; a product of Western civilization based on the Gregorian calendar and the solar year.
2Current: From an Old French word meaning to flow, in this sense used to denote electrical energy.
3Minutes: Also derived from the French, the calendar, and the year, not necessarily in that order. See also Tempus edax rerum, or "time re-eats the run".
4Explain methodology. In what ways does it apply to Harry?
5. Explain the concept of soul. How does it relate to the Western Christian mythology? To the NAACP?

6. Morning - How could the concept change in a binary system? See also 1 and 3 above, 5 below.

7. Collection - The dictionary offers as one definition, "standard pose of a well-handled saddle horse." This might be confusing to an alien reader.

8. Clocks - Western civilization has an obsession with time. Clocks and chronometers are ways of convincing an observer that time actually passes in an orderly fashion.

9. Matching - Perhaps Harry is setting fire to his clocks?

10. Old Swiss Upright - We now have our resident alien in total confusion and must explain, in order, Switzerland (and the concept of nationalism and national boundaries), watchmaking, clockmaking, and the Swiss reputation for both.

11. Grandfather - Explain familial relationships; explain why it is "his" grandfather and the concepts of ownership involved. (See also Delany's comments on the Master-Slave relationship.) What would Phil Klass's seven-sexed Venusians make of the concept?


13. Germany - Briefly describe the socio-political and economic forces which brought about the current Germanic state. Reaffirm your description of nationalism (10 above) and defend it in view of the several German nationalistic movements.

14. Define beauty on a non-cultural, absolute level.

15. Years - The year is based upon the time it takes the Earth to traverse the sun; or, in pre-Copernican times, the time it took for the sun to circle the earth. Either may be correct. See also 1, 3, and 6.

16. Not one of the electric clocks... - Give a brief dissertation on the difference between pendulum and electric clocks, with notes on electricity, the Swiss watch movement, and the ordering of time in Western civilization. See also 1, 2, 3, 6, 8, 10, and 15.

17. Watch - Give examples of the different meanings of this word.

18. a and b - Discourse on the varieties of American slang.


20. Noise - Clocks tick, cluck, cuckoo, and chime—even the digital ones. Explain this to an alien visitor. For extra credit, explain why digital cash registers make noise.


22. Family - Amplify your answer to No. 11. Explain, in light of this, how a clock can be "in the family"
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