FOUNDATION 22

THE REVIEW OF SCIENCE FICTION

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FOUNDATION

22

THE REVIEW OF SCIENCE FICTION

Editor: David Pringle Features Editor: Ian Watson Reviews Editor: John Clute

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Editorial

This issue of Foundation contains two very long feature articles — Roz Kaveney's "Science Fiction in the 1970s" and Brian Stableford's "Man-Made Catastrophes in SF". It is not our normal policy to fill the journal with such large pieces, but we felt in this case that circumstances warranted the publication of both essays as soon as possible. Roz Kaveney's mammoth essay attempts to "review" a decade, and it seemed appropriate to get it into print rapidly, while the decade in question is still fresh in all our memories. Brian Stableford's equally hefty piece, one of the most interesting he has yet written, is due to be published in an American volume, so we print it now in order to give our readers priority of access. We're also delighted to publish in this issue two features articles by contributors

who are new to our pages - Raymond Z. Gallun (with Jeffrey M. Elliot) and Patrick Parrinder.

Because of the extended feature section, our reviews section is briefer than normal. We hope to make up for this in the next issue, when a wide range of books will be reviewed by a larger cast of reviewers. However, we are pleased to welcome to this issue one new reviewer: M. John Harrison, formerly the Literary Editor of *New Worlds*, makes his first appearance in *Foundation* with a review of a recent work by William S. Burroughs.

A note on back-issues: Mrs Joyce Day, our subscriptions secretary, receives many requests for early issues of Foundation. Unfortunately, Nos. 1 to 6 have long been out of print. It may be worth reminding our readers that the invaluable Gregg Press of Boston has published a handsome volume containing full reprints of the first eight issues of the journal. This book, containing over 600 well-filled pages, is available directly from the publishers for \$35. The address to write to is: Gregg Press, 70 Lincoln Street, Boston, Mass. 02111, USA. Please do not attempt to order the book through the SF Foundation – Joyce is overworked as it is! She will be pleased, though, to provide individual back numbers of the journal from issue 7/8 onwards (with the exception of Nos. 9, 10 and 14 which have now sold out completely). These are available for £2 each, postage included. We would like to make a special back-issues offer, however, and it is as follows: until 31st December 1981 we shall sell three back-issues for the price of two. That is to say, any three issues are available to you for £4 — until the year's end. Please hurry if you wish to take advantage of this offer. Our stock of No. 13, for example, is getting low.

Finally (and by way of compensation for the dearth of reviews in this issue of Foundation) I'd like to use this editorial space to recommend three recent non-fiction books which have impressed me. Two of them form a nicely complementary pair. They are: Dreams of Adventure, Deeds of Empire by Martin Green (Routledge and Kegan Paul, 1980, 429pp, £10.50) and The Literature of Terror: A History of Gothic Fictions from 1765 to the Present Day by David Punter (Longman, 1980, 449pp, £5.95 in paperback). They are both admirably weighty studies of aspects of popular fiction. Neither is about science fiction, but both cast a great deal of light on sf. Moreover, they're intelligently written, continuously interesting, and thoroughly enjoyable.

Martin Green's volume is a study of imperial adventure stories, from Defoe's Robinson Crusoe through to Orwell's Burmese Days. Along the way, it deals with Scott, Cooper, Kipling, Rider Haggard and dozens of others, relating all these writers to the thesis that adventure tales formed "the energizing myth of English imperialism. They were, collectively, the story England told itself as it went to sleep at night; and, in the form of its dreams, they charged England's will with the energy to go out into the world and explore, conquer, and rule." Green disapproves of that imperialistic urge, but he believes that the adventure story, "the tale of the brothers", should be taken seriously if we wish to understand the experience of the past 300 years. One question that he leaves in my mind is: to what extent do sf adventures serve the cause of a neo-imperialism?

David Punter's book, as its title suggests, is a study of terror fiction, from the original 18th Century Gothic of Walpole and Radcliffe through to such modern "paranoiac" fantasies as *The Naked Lunch* and *Gravity's Rainbow*. Writers dealt with in some detail include Matthew Lewis and Mary Shelley, Lytton and Reynolds, Le Fanu and Bram Stoker, Lovecraft and Mervyn Peake. Punter makes a strong case for the relevance of the

Gothic, arguing that it is a middle-class form which "defines itself on the borderland of that culture . . . Gothic enacts psychological and social dilemmas: in doing so, it both confronts the bourgeoisie with its limitations and offers it modes of imaginary transcendence . . ." Gothic dares to "speak the socially unspeakable; but the very act of speaking it is an ambiguous gesture." Like Martin Green, Punter demonstrates that study of a relatively despised literary form can teach us much about ourselves.

Lastly, something quite different: Charles Platt's Dream Makers: The Uncommon People Who Write Science Fiction (Berkley Books, 1980, 284pp, \$2.75) is surely the finest volume of interviews with sf writers yet published. Two of the pieces, on Thomas M. Disch and C.M. Kornbluth, originally appeared in this journal, so regular readers will know the flavour. Platt not only records conversations; he gives his own reactions to each writer as a person, providing us with insights into the lives of this strange and wonderful crew which constitutes the majority of important names in contemporary Anglo-American sf. Asimov, Vonnegut, Pohl, Delany, Bester, Farmer, Ellison, Bradbury, Herbert, Moorcock, Ballard, Brunner, Silverberg and Aldiss are all herein, with a dozen others besides, but the gems of the book, for me, are the interviews with Barry Malzberg and Philip K. Dick. Both pieces are exquisitely funny, crazy and touching. Platt has been criticized, quite legitimately, for slighting female authors (Kate Wilhelm is the only woman represented here) but I understand that a second volume is now in preparation and that it will endeavour to make amends. Meanwhile, this isn't quite Vasari's Lives or Johnson's Lives of the Poets, as the blurb would have us believe, but it is one of the best books about the sf scene to have appeared in the past ten years.

I should like to thank our former printers, Russell Press of Nottingham, for the good services which they have rendered us in the past several years. And I should like to welcome our new printers, Allanwood Press Ltd. of Pudsey, near Leeds. I hope that readers approve of the new appearance of the journal.

David Pringle May, 1981

The following heroic piece of work is Roz Kaveney's first feature article for Foundation, though she has contributed many book reviews in the past three years (initially writing as Andrew Kaveney). She has also reviewed fiction for Books and Bookmen, The Sunday Times and elsewhere, and is currently working as a freelance writer, critic and publisher's reader. In this essay Roz tackles virtually the whole of English-language sf during the recent unlamented decade of the 1970s. She has some astringent things to say . . .

Science Fiction in the 1970s: Some Dominant Themes and Personalities

Roz Kaveney

Sf is that which is produced either directly for consumption by the commercial sf market, or in the consciousness — not necessarily the hope or the desire — that that market will form a significant part of its sales. It is that which takes its creative vocabulary and impulse from the past and present matter and narrative modes of the commercial genre as it has formed during the 19th and 20th Centuries. It is that which is sold, discussed and reviewed as sf.

For the purpose of this article I shall occasionally illustrate individual writers and general tendencies by reference to works outside this definition — either from other commercial genres like the tale of terror or the heroic fantasy, or from more respectable literary modes like the fabulation and the phantasmagoria.

What I shall not do is discuss sf outside the English-speaking world. The sf of the Soviet bloc and the major European linguistic cultures has grown up without the taints and the occasional vulgar strengths of the English-language genre; in spite of the growing awareness in England and America of other sfs, the traditions remain largely sealed from each other. Of late, Stanislaw Lem and the Strugatskys have been praised in the West, and even read; but there is little evidence that any of the Anglo-American sf of the 70s would have been any different had they not been. (The influence on other traditions in this period of the mass of translated work from the Anglo-American might serve as topic for a scholarship more patient and nice than mine.) If significant cross-fertilization of these traditions is a factor in future decades, it was in the 70s that the conditions for it came to be. For the most part, Lem and the Russians remained topics of polemical debate; critics pointed to Lem as a way of saying that they order these things better in . . . well, in Poland anyway. (The rudeness displayed to Lem by the Science Fiction Writers of America has, I suspect, less to do with petty details of the organization's rules or with Lem's actual work than with a reaction to "Lem", the stick with which some critics beat them.)

Restricting ourselves then to discussion of the sf tradition in England and America between 1969 and 1980, we find ourselves immediately with the obvious statement that there is no obvious statement to make. Earlier decades can be misrepresented through crude caricature: thus the 20s are an era of leaden Gernsbackian technology-mongering, the 30s of satyriastic planet-smashing octopi, the 40s, in Technicolor with an Erwin Korngold score, the Golden Age of John Wood Campbell, and so on. Such crude pictures are not especially true or helpful, but the fact they can be painted at all points to some sort of unifying feel about the sf of those decades. In the 70s the genre had become too complex for a single helpful lie.

Still, there were undoubtedly themes and obsessions which were shared by many of the writers working in the field, general tendencies which can be pointed to. It is possible to demonstrate the extent to which different works shared a general atmosphere by playing a rather childish game of confusing plot summaries. To demonstrate - a novel of growth to personal maturity, the acceptance of responsibility, and relationships, most of them homosexual, set among the outer planets and their satellites in a time of economic struggle. Triton or Imperial Earth? A lone scientist struggles to an important breakthrough in spite of a political system which stunts his creativity. The Dispossessed or some work of James P. Hogan? A bildungsroman - with touches of the biopic - in which the use of technology to create a new popular art-form, and imagery of flight, are used as symbols of the possibility of personal emotional liberation. The excellent On Wings of Song or the egregious Stardance? The work of all writers in the field was influenced by their reaction to events in the real world of the Western middle class -Vietnam and other wars, the ecology movement, the possibility of economic and political collapse, the revelation of incompetence, conspiracy and crime at the highest levels, the arrogant failure to provide useful answers of the various kinds of alternative politics, the rise of the Women's and Gay movements and the general introvertedness of what cynics called the "Me Decade".

3

Inasmuch as the sf of the 70s had a deliberate and overt contemporary cogency as opposed to the half-realized standard reactions of earlier times, that and a somewhat higher general literary competence were the lasting legacies of what was still in mid-decade being referred to as the "New Wave". This is a slightly ironic result given the extent to which the major part of the New Worlds manifesto was the inadequacy of traditional literary methods to deal effectively with the real contemporary world. In the 60s Michael Moorcock in England, and to a lesser extent various anthologists and editors in the US, became impatient with the complacent, cliched conservatism of the genre, while respecting its stock of vulgar, rich imagery and the occasional gifted writers such as J.G. Ballard who had found a niche within it. More, sf in its commercial flashiness lacked the stodginess of worthy establishment art. Given a magazine and a readership, Moorcock was able to demand literary quality and literary experiment, the use of new modes of narrative and a battery of stylistic gimmickry and elaborations to convey as forcefully as possible a "Happening World" of chance and sudden change. But, as a result of the censorship of the UK monopoly book trade, by 1969 New Worlds' circulation was slipping, and in the 70s it became first a quarterly paperback and then an occasional Festschrift; more importantly, though, the 70s were a decade of despondency in which the climate was not bright for any sort of experimentalism. The legacy of Moorcock's editorship was partly in those works which might never have appeared elsewhere — the fictions of Langdon Jones and the condensed novels of Ballard —, partly in those works which he bullied authors into writing better — in Foundation 15 Moorcock quotes Thomas M. Disch as saying of Camp Concentration that "I wouldn't have made it as good if I hadn't known it was going to appear in New Worlds" —, rarely in any marked decline in the genre or elsewhere in the prevalence of linear narrative. Moorcock's own work in the 70s, though hardly conventional or traditional in expression, was sufficiently so in its overall feel that it could be patted on the head by a literary establishment which a few years earlier might have expected teeth to meet in its wrist.

4

The enduring legacy of the "New Wave" was the increased paranoia and conservatism of the influential sf establishment. The anguished and hostile comments of men like Donald Wollheim - "experimental styles of writing . . . overthrow of all standards and morals" - are worrying and significant if we reflect that Wollheim, rather than Terry Carr, his colleague at Ace Books in the 60s, continued to be a major commissioning editor for novels, and that he edited one of the more popular "Best of the Year" anthologies. While he maintained a high standard of product in both, he demonstrated a bias in favour of the upbeat and the undemanding. Considerably more pernicious was the ubiquity of the conservative Del Reys; he as reviewer in Analog, then editor of the Ballantine Fantasy list; she first at Galaxy, then editor of the Ballantine sf list. Lester del Rey has laid an extreme version of the views of the conservative establishment on the line with unusual forthrightness in comments like: "For serious ideas I still prefer my calculator to any book of fiction", "I'm not interested in self-pitying slobs in any story", and "Experimental style? All those tricks . . . should be called failures now rather then experiments". His wife has given fewer hostages to fortune, but, in spite of a few predictably best-selling exceptions like Pohl's Gateway and Dick's A Scanner Darkly, the list she edited - with its Hogans and Hoskinses and Fosters – seemed to demonstrate the same biases.

The 70s were a time of crisis in the publishing industry — the 80s will be a time of catastrophe — in which all fiction was threatened by crude accounting decisions, and sf proved especially vulnerable to the package and the hype. A nervous industry and conservative editors created the environment for a Gresham's law to operate in sf: lazy potboilers by Larry Niven were considered a safe risk, solid novels like those of Michael Bishop a bad one. The popularity of enjoyably silly space opera at the movies tempted publishers to promote similar fictional works.

Editors are responsible to their employers and their job is to make money and seem to be doing so. They are irresistably drawn to the reliable author who turns out a saleable recognizable series product and keeps to his deadlines — writers like E.C. Tubb make accounting run smoothly. The popularity awards in sf were a temptation as well — the techniques of pushing work forward for a Nebula, or even a Hugo, became so well-known that the hyping was accepted as a normal part of the scene rather than something done to bolster the sales of meretricious work. There is no conclusive evidence that awards sell books, but the effort of getting them, and the fact that something has been won, appease anxious employers irrespective of the actual effect on sales — publishing houses are large

organizations in which even meaningless victories count. If the 80s see a decline in the standards of the field, some of the blame will rest with conservative editors and their reactions to challenging work and the difficulty of promoting it. Because of them, it was easier in the 70s to make a living from mediocre sf and it was easy to be poor by writing it well

If there was a countervailing pressure in the market, it came in the anxious pursuit of excellence by some other editors, and in the generally high standards maintained by the editors of the better original story anthologies — Orbit, Universe, New Dimensions, and some of those produced by Roger Elwood. There are significant writers in the field who might not have sold elsewhere — Gene Wolfe's first short story collection contains hardly a single story from a magazine. There is some evidence that the growing tradition of writers' workshops created peer-group pressure for excellence. The battle for critical standards that went on in the review columns of F & SF and in academic journals like this one had some minor reverberations in the consciousness of the wider of public and thus in sales. (The anathemas pronounced on David Pringle's criticism of Heinlein by Spider Robinson must have at least awakened some of the Analog audience to the fact that it was possible to criticise Heinlein and not get locked up.) One of the oddest aspects of the genre is the sort of village community that exists within it, and there is because of this a certain preparedness to listen to what is being said which gives some hope in the struggle for quality.

5

The mellowing of the modernist movement in sf had something to do with the pressures of economics, but more to do with other pressures of the age. Much of the important work of the late 60s was done in the short story, a form admirably adapted to the investigation of the response of the individual and his senses to immediate and changing reality — less so to studying the interactions of individual and society and the causes and effects of social change. The 70s were "interesting times" in the Chinese sense, and most people were more interested in the question "How can I survive?" than in the question "How do I see the world?". Much of even the short sf of the 70s reflects this and covers issues of social concern rather than that deeper perception of happening reality which the manifestos of the 60s had preferred to examination of the States of the Nations.

The strength of Moorcock's *The Condition of Muzak* lies in an anguished confession of the inadequacy of the flash and filigree of the earlier Cornelius novels to deal with real social collapse — as opposed to gaudy pseudo-apocalypse. Cornelius is gradually stripped of his pretentions and his dreams; no Messiah, no Universal Champion, not even Harlequin for more than moments, the charming but rather pathetic failure is forced to leave even the happiest of this fantasies behind and deal with the death of his mother, a hitherto irrepressible life force who had mocked his own feigned demises. Earlier sections of the novel continue the extravagances of the rest of the series — but in this crucial last Moorcock writes a conventional linear prose. Clearly, there is a level at which this is mocking, a Dickens reading the Death of Little Nell act; below that, what is said is meant and is emotionally true. A last attempt at the old fireworks is aborted brutally:

He turned to call back into the cold dark bedroom. "Don't worry Mum – old Corneliuses never die – they just fade into someone else. There's too bloody many of us, eh?"

He was certain that he had heard her chuckle. He jumped up and went back to look into the bedroom, but she had not moved. She lay dead in her bed.

In spite of their farcical surface, the various "Dancers at the End of Time" novels and stories have serious matter at their heart: Moorcock is effectively rejecting the merry amoralism of earlier work for a chastened moralism. The inhabitants of the End of Time have the capricious powers of the villains of Moorcock's heroic fantasies, but none of the guilt implied in the imagery of decay which surrounds Arioch and Xiombarg and none of the predestination to disaster. They have the indolence and frivolity of the immune: "I suppose it is mortality which makes people rush about so." With impunity, they shift shape, enslave, kill and resurrect. Set against this irresponsibility are various angsts and various ludicrous foes, overcome as soon as they make the effort, but also the outrage and anger of the Victorian Amelia. Their effect on her is to purge her of the class ideology and sexual hypocrisy of her time, but they cannot answer the moral seriousness which is all the more intense for these purifications. The farce, delicious as it is in scenes like Chapter 17 of The Hollow Lands - "A particularly memorable night at the Cafe Royale" -, gives an air of angry contempt to Moorcock's indictment of his own past. At the end of the sequence, a tentative synthesis is reached as Amelia and Jherek set off to the Palaeozoic as in a Victorian novel they might have gone off to New South Wales - armed with "a combination of my sense of duty and your sense of freedom".

This ill-matched pair have been redeemed by a quest for moral knowledge; considering the things Moorcock has done to other protagonists they get off lightly. No such ease in salvation is there for Gloriana and her Prince Arthur in the fantasy which was probably Moorcock's masterpiece and concluded his significant published work of the 70s. They plumb depths of crime and betrayal before, almost by chance, emerging purged. Gloriana is not least interesting because in it, explicitly and adultly, Moorcock's protagonists know that their murderous intrigues are wrong and how easily they could lead back to the worst things in the world. In this world which so parodies our own there is ever at our backs the memory of Gloriana's father King Herne, whose reign, even seen indirectly, is the most horrendous of Moorcock's nightmares of sadistic debauch and the most graphically presented. Gloriana's inability to orgasm, the weakness through which she and her realm become vulnerable and corruptible, results from incestuous rape - the rape has to be echoed in the violence of the attempt by her grandfather Montfalcon at the (apt term) climax of the novel, before she and Arthur can resist evil and violence and become agents of Life. Moorcock weighs the scales, not on behalf of the retributive justice of Montfalcon, but in favour of redemption and survival. In this novel Moorcock gives his increased moral seriousness its social dimension; Gloriana's corruption poisons her realm and her revival will purify it - not perhaps a particularly helpful prescription for the real world, but viable as a myth of reform. Here too, Moorcock explicitly rejects the amorality which earlier he treated with indulgence; Arthur almost destroys a social world by indulging the callous vicious virtuoso arts of power and betrayal. Like certain other serious writers of sf. Moorcock was by the end of the decade writing about where the world, and where his art, were going.

The novels of John Crowley are most notable for their sheer power and grace as writing, but at an important level they function as a comment, partly a moral comment, on stock sf attitudes and what those attitudes embody of the central beliefs of our culture. The unchanging dance of intrigue and slaughter characterizing the feudal society of his *The Deep* comments on their running away from change and progress of most heroic fantasy and on more socially influential pursuits of power fantasy; conspiratorial politics

of all kinds, as opposed to merely the variety that crops up in the Van Vogt tradition, are mocked in the way that the proletarian Just manage to assassinate precisely those of their rulers who might break the cultural stasis, are manipulated by the demiurge into doing so. Crowley attacks through this vast being beneath the scenes not only the power worship of the genre but the whole morality implicit, via the Book of Job, in Judaeo-Christian belief, the belief that vast enough power removes moral accountability. Beasts debunks elegantly, through its mutant lion and fox, servile fantasies about born charismatic leaders and wily cousellors that permeate the whole of our culture, not the sf genre alone. Engine Summer presents a view of the collapse of technological society a deal less complacently than did most of the pastoral eco-fantasies of the decade. There is much that is admirable about the gentle world through which Rush that Speaks moves, but amid the crisp autumnal writing there is the smell of something doomed, and of a limitless nostalgia for what has already been lost:

"We can laugh. We have our systems and our codes. But still only one leg. It doesn't get better, a lost leg, like a cold."

Crowley's excellent work, his disdain for the *career* of science fiction suggest a strategy that may become important to conscientious genre writers in the 80s – to act in everything save actual subject matter as if the field as a whole simply didn't exist.

An elegant and moral fiction was being written throughout the decade by that most gifted and serious, if hardly most influential, of all writers in the field, Thomas M. Disch. Inasmuch as he commented on the possibility of agenthood within modern society, he did so in a tone of deep pessimism which enhanced his other more important themes. 334 and On Wings of Song paint New York and America as environments in which human beings can by luck and hard work survive as moral agents, and perhaps as artists and intellectuals, but in which any more temporal hopes are illusory. Where Larry Niven, as complacent advocate of fatcat values, and Norman Spinrad, as anguished radical critic of class society, presented the pursuit of immortality through freezing as yet another perk for the rich, Disch in "Bodies" is more complex and ironic in his portrayal of it as yet another area in which human exploitation acts as handmaid to blind or capricious fate the rich girl's corpse is shipped to a necrophiliac brothel, the poor girl frozen in her place. There is no hint of social justice here - merely an intimation that, as the crooked hospital attendant says in appropriately cliched terms, "Life goes on". The 70s had more than their fair share of fascist dystopias and fictional worlds strangled by pollution, yet it is the comparatively minor unpleasantness of New York in 334 that is most frequently referred to as a nightmare; perhaps because in its linked tales and portrait of a whole society there is an emphasis on powerlessness. Birdie is too limited in natural gifts and by the appalling education he has been given to solve "the problems of creativity" and goes off as cannonfodder; Mrs Hanson loses her home and has to beg for euthanasia - "The way some people want sex, that's how I want death" -; the talented boy Little Mister Kissy Lips is prevented by the urban uninterest of his intended victim from the murderous acte gratuite with which he intended to make an impact. One of the reasons why people read fiction at all, let alone sf, is to maintain a self-image which includes the possibility of importance, of agenthood; Disch uses all the resources of fiction in general and sf in particular to make clear that these aspirations are unrealistic. Save through art.

He wrote a number of non-genre short stories in this decade which play with the possibility that it is in art and in seriousness about it that moral agenthood is possible. In

"The Joycelyn Shrager Story" a prestigious critic of experimental film renounces the last vestiges of critical integrity in loony devotion to the monstrously egocentric and untalented eponymous heroine. An elaborate point about artifice as a serious factor in the moral life, rather than a crude point about the links between repression of sexual desire and a certain sort of right-wing views, is made in "Showing the Flag", in which a leather queen (who has taken aversion therapy to save his career) destroys that career — and finds greater than ever sexual satisfaction — by becoming a fascist demagogue; you will be what you are — you will also be what you pretend to be.

These stories and others like them are the prelude to On Wings of Song, Disch's most satisfactory novel so far. Daniel renounces worldly success to pursue the art of "flying" and care for the comatose wife who has left him to "fly"; he becomes kept boy of a castrato singer and comes to pursue a sort of success and a sort of creativity through a singing career and the musical "Honeybunny Time". He loses, or rather comes to accept his loss of the briefly re-awakening Bea and renounces the serious pursuit of "flight". Feigning it as part of his act, he is murdered; on one level of the opera the God Apollo, about whom Disch wrote some elegantly camp vignettes, takes revenge on Daniel for refusal to pursue the true and the beautiful. Writing merry songs of winsome rabbits is to losing yourself in perfect and impassioned song and "flight" what the production of even the most elegant and thoughtful of sf is to what . . . ?

John Clute has criticized for implicit dishonesty the final ambiguity of this admirable novel — just before he is shot by a demented school-teacher "The dials of the apparatus showed that Daniel was in flight". There is at least a possibility then that he was, and the consoling possibility that at the end Daniel did "fly" and is redeemed is meant to influence our response. In the great humanist novel which Disch has praised, Thomas Mann's Doctor Faustus, the optimistic Zeitblom hints at some redemption for the composer Leverkuhn, and the German artistic and intellectual tradition he represents, in the C Major resolution implied beyond the final dissonant chord of the masterpiece Leverkuhn completes as syphilis claims his brain. Disch allows us the possibility while making as clear as does Mann that art and damnation are areas in which one cannot afford optimistic risks. Nonetheless, if there is hope for the genre as a continuing visible entity, a hopeful sign that at some point in the 60s and 70s the taste of the sf audience received some education, it lies in the fact that this bleak and moral, if sprightly and witty work — "Gold Diggers of 1984" forsooth — was a serious contender for the Best of the Year awards.

This gravity about life and art, which is not to be confused with portentous editorializing, is a large part of what was missing from the work of Brian Aldiss during the 70s. Where in *Barefoot in the Head* punning is a useful literary analogue for the psychedelic disorientation of the characters, that in *The Eighty-Minute Hour* is merely an indulgence, having no necessary link to the book's critique of traditional space opera. Space opera was in any case either a dead horse which needed no flogging, a rich and vulgar life which deserved none, or a serious threat to sf as literary form which needed a flogging more effective and cogent than Aldiss seemed to be offering. Much of Aldiss' shorter fiction of the 70s suffers from this pointless and routine frivolity, which is rarely linked to the conceptual wit and fireworks of earlier work. When he was genuinely amusing it was often by retreating to his earliest manner; "Last Orders" – the story not the collection – might have almost been an episode from the bookselling memoirs *The Brightfount*

Diaries in its setting of a standard nightmare of planetary collision against an equally phony but more congenial myth of British pub "Just one more round" good-fellowship. The two hommages to the presiding spirits of modern sf - Frankenstein Unbound and Moreau's Other Island - are in spite of powerful scenes (in particular those in the former with Byron) vitiated by the bland pseudo-American bureaucratic viewpoint of their protagonists. Aldiss is never at his best when portraying, even portraying critically, the powerful and complacent of the world - his sympathy and thus his attention is not with them. It is the absence from it of a real sense of involvement - and of the sense of fun which might have enlivened its muddy landscapes - which gives its peculiar gray carpetlength quality to Enemies of the System: the polemic against communism sets up not so much a straw man as one made out of polystyrene foam. Much of his best work of these years came in vignettes of transient dreams or total stasis such as "Blink of the Moon" and "Appearance of Life" where stillness and a neutral observer give an almost essay-like character to his speculations. The same somnambulant, gently pondering quality pervades his one totally satisfactory novel of the decade The Malacia Tapestry in which a young and unscrupulous adventurer Perian drifts to no great effect through an imaginary Renaissance city where men are descended from dinosaurs and technological change is forbidden. Perian is aimiable enough to involve our sympathies and Aldiss', and the novel is precise and witty in its portrait of his world. Art as medium of social criticism and change is effectively dismissed in the shape of the martyred and absurd Otto Bengtson and Perian's revolutionary friends talk in an apocalyptic jargon which is no more appealing than the repression of the state; here Aldiss shows us concrete embodiments of his political views instead of merely haranguing us with an abstract of them. The book makes a plea for the lazy and sensual man whose agnosticism is convenient but sincere; it does so in an ornate visually precise prose which justifies Perian's lack of moral or political position by showing how clearly he sees the world around him as a result of lacking the prejudices contingent upon greater backbone. Perhaps the prevailing image of the sf of the 70s was the physical fact of the Great City, both as image for the social world of humanity and as the glittering prize which may be won by the daring and the talented. Perian lives in a city which may at any moment freeze into stasis and it is his peculiar fortune to be capable of living from moment to moment unsure of any less immediate goals: in thus involving himself in dialogue with the Zeitgeist of the genre Aldiss achieved a real novelistic complexity and strength that was missing in his other work, including the four non-genre works he wrote during these years.

Cities and Towns are important symbols in the work of J.G. Ballard, however alien his work may be in other respects from that of his old colleagues. Almost alone of those significant writers who can reasonably be associated with sf, Ballard remained true in his work of the 70s — or at least the greater part of it — to the moral and sensual atmosphere of his work of the late 60s. Works like Crash and Concrete Island break so effectively the bounds of genre that it is implausible and probably insulting to refer to them as sf at all — save in terms of a genealogical approach which would link them to the amorality and hightech, high gloss obsessions of the New Worlds school, and of the repertory cast of characters which they share with more obviously genre works of Ballard's like The Drowned World and The Drought. Ballard uses a strategy of extremes to represent possible responses to the complex and threatening environment of our world; this tendency in his work reached a peak of a kind in High Rise which captures in its middle-

class paranoia the feel of Britain in the last days of the Heath government. Like Disch, Ballard is supremely a writer; at times though he is unlike the American in that his artistic control is not equalled by intellectual grasp of his creations. It is perhaps for this reason that his fiction is so haunted by archetypes – particularly by archetypal women.

In the mellow dreamlike period of Ballard's work which inaugurated itself in the late 70s and is clearly embodied in works like "The Ultimate City" and The Unlimited Dream Company, these archetypes become his subject rather than his means. It is relevant to consider these works in conjunction with the somewhat similar surrealism of Angela Carter, certainly more relevant than to relate them directly to any author in the genre out of which Ballard has grown and into the fringes of which Carter has dipped an elegant toe these many years. Both are interested - Carter most explicitly in *The Sadeian Woman* in the extent to which in real life it is possible to make use of the freedom and power given by acting out in one's own personality fantastic and archetypal models of behaviour, in the extent to which in art dream and daydream and specifically sexual reverie can be used as subject matter without spilling over into messy subjectivity and self-indulgence. In both it seems implied that that which is played with is fire, while at the level of praxis these warnings are contradicted by the coherence with which they show people lost in a world of dreams. Hoffman's trespassing on other men's souls destroys what freedom was left in the dull life of Desiderio's city; Blake can only bring liberation to the people of Shepperton by being dead and mad himself. These fictions were so universally admired by the more artistically aware and intellectually alert wings of the sf establishment that they must be taken into account in any discussion of the genre in the 70s; they were only tangential to the genre in themselves and only time will tell if they have much in the way of a productive influence.

The author most immediately and obviously influenced by Ballard and Carter though perhaps also by the Le Guin of The Lathe of Heaven - was Christopher Priest, whose stories and novel of the late 70s shared, amid a staid, neo-Victorian and syntactically overladen prose, much of the same interest in the fate of those who try to have their dreams in, or instead of, the real world. To some extent he evaded the real issue by dealing in "Palely Loitering" and A Dream of Wessex less in threatening and uncontrolled fantasy than in rationally directed daydreams that can - in the former at least be safely indulged without overturning the claims of a demanding and stratified society. When in A Dream of Wessex he shows the shared delusion of the experimenters going sour under pressure of the villainous Mason, it is in terms of the man's rather dull obsession with outward signs of industrial growth rather than of the inner demons which destroy the man offstage. This impinges little on the success of the novel at that level on which it is the moving tale of the human relationship between Julia and David, somewhat more at that level at which it makes statements about Britain, and about sf, and the extent to which both are afflicted with immoral and unrealistic fantasies of power. When his tales of the Dream Archipelago most leave behind reason and spin into nightmare, Priest reveals real imaginative limitations; the effective but hackneyed vagina dentate imagery of "Whores" and the even more cliched devouring insects of "The Cremation" are signally less interesting and deeply felt than humane controlled tales like "The Watched". Still, the directions Priest took placed him clearly as perhaps the most thoughtful and conscientious, if not necessarily the most talented, of the younger writers likely to affect the genre in the 80s; his work implied that it was still possible and useful for writers within it to pay attention to the things that Ballard had to say.

The extent of the retreat from the experimental was manifested clearly in the tone of the accusations levelled at Samuel Delany for Dhalgren and Triton, accusations more angry when they came from those who would have once been counted his allies than from the traditional sf establishment. Triton was actually more acceptable to the Lester Del Reys than it was to the progressives - reactionary critics could assimilate its experimentalist gestures, somewhat leadenly complex perceptions about perception and depressingly anaphrodisiac exuberant sexuality as the expression of a neurotic sensibility, and by association dismiss in doing so all the even vaguely similar work of the previous decade. Delany tried in these two books and in the Marxist, feminist, structuralist anthropological sword-and-slavery epic which followed them, Tales of Neveryon, to move on from the high gloss sensitivity of Nova and the stories in Driftglass to deeper personal expression, a more accurate and intense picture of social interaction and which is perhaps where he came unstuck - greater intellectual depth. If the results were less than satisfactory, at least he made the attempt where other bright stars of the 60s -Zelazny and Anthony - sank into potboiling and in the latter case sheer idiocy. If Delany at moments bored us silly with lectures on structural linguistics and the sociology of philosophy - still, better that than the mess of eugenics, vegetarianism and martial arts which we got from Piers Anthony, and there is much fine material in individual scenes and character portraits in these three novels. If Bron's adventures lack any sort of coherence or direction that is in itself a comment on the world in which he/she survives; and the game of vlet, while inferior to that in Joanna Russ' short story, and the happening laid on for Bron by Spike's troupe are memorable in spite of their turgid wealth of visual detail. Part of the trouble with Delany's work was his fascination with the glamour of urban squalor - calculated to irritate an audience not enjoying the experience of new poverty in the real world - and with a certain kind of chic bohemia; while he was not alone in his interest in the future-equivalents of the sort of people featured in "Andy Warhol's Interview", his work, and that of his disciple Jean Michael Gawron, revealed in their approach to cafe society a naked and tacky elitism and a lamentable lack of any sense of proportion or humour. His pictures of urban life are a necessary part of the gallery of such which the genre accumulated but they seem doomed to dwindle into period pieces even faster than most, lacking as they are in the overall coherence and control that might have maintained their immediacy as literature. In the course of the decade Delany committed much of his effort to a study of the way language works in sf and the occasional excellencies of The Jewel-Hinged Jaw and The American Shore never quite compensate for the suspicion that his critical work took much needed intellectual resources and attention away from his fiction.

6

Sf in the 70s was dominated by Ursula Le Guin whose simultaneously conservative and progressive art and insights created the terms in which all others, including those writers in the genre whose gifts are arguably greater then hers, are likely to be judged. In her 1976 lecture at the ICA "Science Fiction and Mrs Brown" she called for work that would concern itself essentially with people, and during the decade that is to a large extent precisely what she got — even if the means used to portray characters and their aspirations were at times more radical than those she used and advocated, and if the person concretely

portrayed at the heart of some novels was recognizably the author. (It was perhaps with this lecture and its influence in mind that John Crowley in his story "The Reason for the Visit" for Le Guin's *Interfaces* anthology portrays so vividly her idol Viginia Woolf.) In "psychomyths" like "The Ones who Walk away from Omelas" Le Guin uses the freedom of sf and fantasy tropes to dramatize in concrete and apposite ways various problems of morality, particularly of social morality. In The Dispossessed, its pendant "The Day Before the Revolution" and the historical novel about Romanticism set in an imaginary country, Malafrena, she portrays the mutual interaction of individuals and society with a vibrant realism that is only really possible when all the details of the environment have been made up from scratch by the author. There is no need to discuss her work at vast length - Le Guin studies have become something more than a cottage industry. What is important is the extent to which Le Guin has created the terms of critical discussion in her decade. I have suggested that the social and cultural climate caused readers to favour social novels and novels of character above work which examined new ways of feeling or thinking without much emphasis on what that feeling and thinking was actually for: Le Guin acted as a focus within the sf and fantasy genres by being so precisely and so excellently the sort of writer we were all looking for. Even work which has concentrated on expression of the writer's personality, on rhetorical political polemic, on games with literary modes or statements about the career of writing, has tended to do so by means which include at least lip service to the vivid portraiture and sense of deep moral artistic and social responsibility which characterized both the prescription and the practice of Ursula Le Guin.

While specifically rejecting as a useful form of fiction Socialist Realism, she wrote a fiction that was as close as any in the fiction of the period to explicit comment on current affairs, but always with a depth and seriousness that keeps her work fresher than much politically relevant sf is likely to remain. Where Haldeman's Forever War looks increasingly like a glamourized moan about the experience of combat, concentrating as it does on the angst involved in being shot at and the dislocation of coming home to a changed society. Le Guin's The Word for World is Forest looks deeply at some of the real issues involved for a civilized moral humanist in America's involvement in S.E. Asia the undercurrent of racism in Western society, the vindictiveness it awakes in its victims, the impotence of the "good" western "liberal" to control the agression of his fellow citizens and the link via sadistic sexuality between racism and sexism. Davidson's real crime is to make the Athsheans over into his image: for all Selver's pious hopes that once he lays down his mission his people will be able to control their newfound aggression, an innocence has been lost. Davidson, Selver and Lyubov are credible individuals, but stand for something beyond themselves: Le Guin fulfils her own prescription for plausible portraiture, but her characters also act out roles in the social and moral, if not political, debate that gives her fiction its direction and intesity. Odo in "The Day Before the Revolution" is a set of mannerisms and perceptions and memories - we are made to see the world through her failing eyes and are thus forced to believe that she is in there to see it with us - but she also stands for the author's observation of the old, for the hope that one can attain old age retaining integrity and dignity, as a portrait of a generation of noble radicals in our world - rather than in the imaginary capitalism of Urras - and as promulgator of a set of ideas.

By giving that story the title she did, Le Guin cheatingly achieves a sense, a sense no less

real because we have been tricked into it, of Odo's successful and dominant interaction with her world; if a story with that title is concerned so intensely with an individual, we are half-convinced of that individual's agency within society even before Le Guin has begun to demonstrate it. In The Dispossessed she makes use of the knowledge of her fictional universe which many readers already possess to give intensity to our belief that the work Shevek is doing is important and thereby in the importance of free enquiry even when in the short term it clashes with the demands of what approximates to a just society, Le Guin is quite as unscrupulous as Disch or Crowley when it comes to using the standard expectations of fiction in general and sf in particular to manipulate audience sympathy: she has artistic integrity which is by no means the same thing as always playing fair with her audience in the crude sense. She has the freedom of one who has understood the underlying message of modernism and adapted its precepts to her less obviously progressive artistic ends. She is aware that at a crucial level all fiction is a form of rhetoric, a construct rather than a description of objective truth - though it may represent truth that in art if not in life achieved ends justify moderately dishonest rhetorical methods. She works in an art whose nature is deceit - it is when she comes closest to speaking directly about pacifism and the role of women in "The Eye of the Heron", when she is so involved that she forgets to be clever, that she comes closest to the conventional and the dull.

7

Of older authors perhaps the one who responded most notably to Le Guin's challenge was Frederik Pohl, who suddenly transcended the slick formulae on which he had come to rely exclusively to produce novels like Man Plus, Gateway and Jem and a number of effective shorter stories. Suddenly his fiction was dominated by credible characters, or at least by plausible facsimiles thereof. It would be a mistake to claim simplistically that Pohl had suddenly become a realist, or to deny his improvement with charges relating to the continued slick surface of his work: where Pohl's greater artistic success lay was in an enhanced management of the appearance of realism, a smoother sleight of hand in the introduction of "telling" details of the social environment and subconcious motivations of his characters. Like a charismatic but not totally competent conjuror, Pohl keeps things moving speedily along in a way that charms even when we see the wires and the false bottoms. We believe in Rob Broadhead precisely because his aspirations are those of the contemporary middle class rather than those of the future proletariat out of which he rises. Complaints that Jem is flawed by the symmetry of its three power blocs and three alien species are beside the point as, though more apposite, are complaints of its Americocentricity. The book is overtly a mockup in which the boyish delighted side of the American psyche as represented by Danny Dalehouse is perpetually complicit in and compromised by the deadly patriotic virtues of Margie Menninger; what is moving is the way in which this new planet, this fresh green breast of a world commensurate with our capacity to wonder, is sullied by the same old things that are rotting the one we live in. We do not go to Pohl for his deep perception or for the originality of his messages; what is interesting about him is the efficiency with which he manages his strategy of persuasion.

Kate Wilhelm was a particularly important influence on the higher standards of the field yet there was an extent to which she made her influence felt more through her role in writing schools than through her actual writing. Fine novels like *The Clewiston Test* and *Juniper Time* are convincing presentations of the viewpoints of their characters,

particularly though not exclusively those of their female protagonists, but deeply vulnerable to hostile analysis when it comes to the extent to which the plots of both depend on the trashiest of melodramatic cliches. When Wilhelm needs to write out of Juniper Time the wife of Cluny, she has a red mist swim before his eyes and her hit her head on the bathtub. Really!! The device is not only hackneyed but unconvincing. Similarly unnecessary and unconvincing is Anne's betrayal in The Clewiston Test by the repressed lesbian Deena and the confrontations in both books with threatening power figures. In both novels there is a tremendous sense of there being a lot of people bustling about in the vicinity of the protagonists, but rather less of there being a community in which they are involved and for the sake of which they tell the noble lies which lie at the centre of both novels' resolution. Without a real community for them to affect, the moral dilemmas of these protagonists lose some of their tension and their appeal. It is perhaps for this reason that Wilhelm was at her best in shorter tales in which the moral choices dramatized had to do with the inter-action of smaller groups - the telepathic "rapist" of "The Infinity Box" and his victim, or the housewife of "The Hounds" and the husband she hunts through her dreams. It is as if in a shorter form Wilhelm felt less the need for "scenes a faire" which crystallize a plot's dramatic tension at the expense of doing so through crude confrontations. By its episodic nature, Where Late The Sweet Birds Sang avoids the worse mistakes of the other novels: it shows a historical process over a period of time too long for it to be hastened or clarified by melodrama. What the book loses in intensity it gains in a dreamlike quality apt to its portrait of slow decay. It takes cloning, a tedious obsession of 70s sf, and makes of it a convincing myth of mindless conformity for which there is no hope and from which one must escape to survive. How often the better sf novels of this decade seemed to be commenting on the state of the art!

Some of the most effective prescriptive criticism and several of the most cogent moral fictions of the decade came from the major young writer Michael Bishop. Where, say, Crowley works in a style that is so clear that one has to concentrate quite hard on its content to notice it is there, there is in much of Bishop's work a laboured quality which reflects his interest in fine distinctions between moral viewpoints. He has been a major contributor to the debate in these pages about the question of content versus form, but where his friend, ally and collaborator Ian Watson stresses use of sf to examine the implications of new philosophies, Bishop seems to be more interested in what I have described as the standard subjects of the genre in the decade. And Strange at Echatan the Trees shows a society whose moral sense has been skewed by the existence of the superior Parfects and by a division - in the interests of greater emotional control - of the sensual proletarian people Accustomed to the Hand and an austere caste of thinking executives, Those Touched by Fire. Stiff upper lip upper crusts occur frequently in Bishop's work. The self-mutilation implicit in such an approach to life is paralleled in Stolen Faces by the self mutilation of the muphormosers: both groups suffer from self-hatred and a complex slow self-destruction, purged for us by the protagonist's self-blinding and death at the hands of cannibal children, but significantly shown as existing in subtler ways beyond this catharsis. For Bishop, moral choice is a matter of self-improvement and there is little hope of redemption for society. At his most hopeful, in Catacomb Years the domed sky above Atlanta is removed but there is little sense in which the Ortho-Urban theocracy is handing over real power and the religious revelation granted by the alien Cygnostikoi to Julian and Margot is ignored by her and seems likely to remain a matter for his personal

consumption. In *Transfigurations* Chaney, his daughter and their assistant learn truths about the universe through their study of the fellowshipless twin-eating Asadi and their even more alien masters, but the knowledge is of little use as well as being unpalatable; if, as I suggested before, Bishop has here succeeded in *transfiguring* the oldest cliches of sf into art, he is perfectly aware as critic and attentive reader that in other less gifted writers' work the same old cliches are being trotted out straightforwardly and in all seriousness.

Alice Sheldon/James Tiptree used standard genre devices to dramatize current issues in ways that are quite conventional as stories but interestingly complex as arguments. In explicitly feminist stories like "The Screwfly Solution" and "Houston, Houston, Do You Read", it is only as a result of external intervention that men reveal their worst most brutal true selves; this acknowledges the extremity of the narrative means through which she makes a point that she had made more subtly (and as it turned out in propria persona) in "The Women Men Don't See" and expresses a certain moral ambiguity in which she seems to have felt the direction of her thought was trapping her. The narrator of "Houston" accepts the expediency, for the all-woman world in which he finds himself, of his own execution as well as that of his more sexist fellows; by showing this capacity for imaginatively sharing the needs and aspirations of the women, he removes much moral legitimacy from his execution. Indeed, the story is given much of its tension and strength by the extent to which the author seems to know she is playing with a rigged deck and to be worried by the fact. To say, as at times she seemed to be doing, that communication between the sexes was impossible, would be to vitiate the tragic sense attached in much of her earlier work to communication which has been achieved but which breaks down that between the semi-sentient aliens of "Love is the Plan the Plan is Death" or between the lovers in "The Girl Who Was Plugged In". Where communication and fellowship are impossible, there can be no tragedy in their breakdown.

Sheldon/Tiptree attempted optimistic resolution of these issues in an unsatisfactory space opera of ideas, Up the Walls of the World, which, by one of those accidents of history which is in no real sense an accident at all, was a Hugo nominee in the same year as that other mimsy discussion of the possibility of the Good Male, Vonda MacIntyre's Dreamsnake. The saintly unsexist Dr Dann copes by sensitivity rather than by resourcefulness with his various transmogrifications into alien squid and the mindfield of a vast worldwrecker; the alien "female" Tivonel has the same efficiency and moral conscience. We have the complex linguistic joke of the Tyree's sexual biology and Tiptree's acknowledgedly gratuitous choice of pronoun in representing alien sexes in human terms: in case we hadn't got the point we have complexly contentious comments about the Tyree's "feminists" which make clear that Ms Sheldon was not about to be coopted onto anyone's platform. Where the novel is both unsatisfactory, and, to the less rigorous part of its audience at least, unfailingly delightful is in the way in which most of the characters get to have their cake and eat it; Dann, Tivonel and the rest get to tour the universe forever, doing good works and having a good time, in a perpetual shared consciousness in which fellowship is perpetual and sexual politics can be forgotten. Where her most negative visions of sexual politics took the form of overtly angry rhetoric, her positive view offered the easy answers of a fairy tale.

Her very capacity for solid, forgiving portraits, the "negative capability" through which she painted precise vignettes of the sensory apprehensions and revealing memories of even quite minor characters, seemed to be trapping her in an impasse. Communication

and morality were important to her work from the start - Dr Ain fails to deliver his message of eco-doom in an incoherent lecture before desperately spreading it as a plague - and her love for her characters and her need to say something beyond that love began to get in each other's way. Each of her collections contains at least one story in which an act of sex demonstrates frustrated communication. Lust for the alien destroys human culture in "I Awoke and Found Me Here"; genetic sexual programming destroys an alien race's intelligence in "Love is the Plan, the Plan is Death": most apocalyptically, in "A Momentary Taste of Being", the whole of human evolution and endeavour proves to have been prelude to alien contact - after which metaphysical sexual congress we can all wither away. Her last significant work of the decade - "Slow Music" in Le Guin's Interfaces — continues this theme of frustration; a man and a woman who had intended to continue the species are carried accidentally into the same sterile realm as the rest of humanity "a configuration that had been a man striving forever after a loved dark girl who followed a ghostly white milch-deer". This echo of the Celtic twilight points to the melancholy which increasingly characterized Tiptree's thought and work: in the 70s her work was a valuable corrective to a field which needed her sensitivity and stylistic clarity, but somehow she was never quite as good as she seemed always on the brink of being.

8

A tendency grew up in the sf of this period which reflected the specifically confessional prose which had become fashionable in the mainstream somewhat earlier. It is obvious both that sf has great potential usefulness to authors engaged in serious dissection of their own personalities and that that usefulness was likely to have its limits. Where writers like Plath and Sexton had to create personal myths or make over into their own image traditional mythic material, where Berryman created his own formal vehicle in "The Dream Songs", sf writers seemed content for the most part to use the set of myths, the set of formats, already available to them. Perhaps for this reason much of the best work of this kind came from writers who were specifically interested in discussing their relationship to their preferred reading matter and to the act of writing itself. At the same time they were free to work at a pitch other than one of screaming intensity and to make use of emotionally extreme statement where necessary without cracking the fictional mould; but they were always at risk of losing the creative fury which a more totally personalized statement might have maintained.

It was from an author who frequently expressed his loathing for the whole principle of generic division, Harlan Ellison, that some of the most effective work of this kind came; however unfortunate the accident of history which determined the fact, stories like "Croatoan" were marketed as and largely read as sf. "Croatoan" uses effectively a vocabulary of extreme images — sewers, alligators, mutilated tramps, aborted fetuses, stained shoes — because its subject is a set of ideas and emotions which need so — shall we say — intense an embodiment; but it does so somewhat at the expense of the level of polemic which, we are assured in Ellison's own introduction to the story, lies behind, and forms the impulse for, the story. A confession is being made all right, but it is not clear what the crime was. Ellison's best story of the decade was perhaps the gentle exercise in populist nostalgia "Jeffty is Five", a dramatization of themes from Ellison's excellently perceptive and very personal TV criticism, but even there frequent false notes are struck from moment to moment and a true comment is embodied in fake emotion. "Deathbird" achieves its highest point in the description of the death of a much loved dog rather than in

the apocalyptic phantasmagoria of Stack, Snake and their defeat of the god who kills dogs and worlds. Yet when Ellison strayed completely off his turf in "All the Lies That are My Life" he lost much of the intensity of his portrayal of emotion, and the fascination inspired in his audience by his violent and demonic use of genre imagery, replacing them with a crudely boastful imagery of the trappings of success, an incongrous late Henry James plot about artistic impulse and a style best adapted to the Saturday Evening Post. There seemed some hint that his work like that of several colleagues was reaching an impasse for which the limitation imposed by genre were only part of the explanation.

Philip K. Dick shared Ellison's brutal imagery and increasingly made explicit in his fiction the extent to which that imagery embodied his personal concerns with the havoc wreaked on minds by drugs and the need of humanity for some kind of transcendent insight. We must wait a few months yet for his definitive statement on the latter; the definitive statement on the former A Scanner Darkly was at once his most moving work and one of his least artistically satisfying. Dick feels the need to impart seriousness to his visions of the horror of lovelessness and the removal through psychopathy or drugs of that sanity without which love is impossible by dramatizing that horror in concrete terms. In A Scanner Darkly drugs reduce the hero to a humiliating idiocy which is portrayed realistically enough to be moving and upsetting, but also to remove the character's effectiveness as any kind of normative viewpoint. Dick is never at his best when at his most pessimistic - his style needs to be kept on the rails of control by the effort of looking at both sides of things. Hence his most satisfactory work of the decade was not Scanner or the farcical Galactic Pothealer or the nightmarish A Maze of Death but the dark comedy of fame and aspiration Flow My tears The Policeman Said in which art is seen as offering a focus for saving virtues from the title through to the final vision:

The blue vase made by Mary Anne Douglas and purchased by Jason Taverner as a gift for Heather Hart wound up in a private collection of modern pottery. It remains there to this day, and is much treasured. And, in fact, by a number of people who know ceramics, openly and genuinely cherished. And loved.

Lower pitched, and more interesting because more provisional, were the confessional aspects which, in very different ways, gave strength to the works of Joanna Russ and Fritz Leiber. Leiber came increasingly to use genre material as a central myth around which he could weave gentle meditations on old age and its losses, or on the intimidations of order and chaos proffered by art and the universe. Read as a serious tale of alternate universes "Catch That Zeppelin" would be a slim anecdote padded with lectures - it is vastly more effective as a disquisition on Leiber's love for his son, his feelings about his German-American roots, the advantages of social order and of not examining truth too closely. As memoir of the friend who may be mutant or time-traveller "Death of Princes" is to say the least inconclusive — but it is brilliantly moving and poetic as a meditation on the sense of the other that is part of friendship, and on lost or unfulfilled promise. Perhaps the most moving of Leiber's "confessional" works lie outside the theoretical scope of this article - he has himself pointed to the relationship between the death of his wife and the heroic fantasy "Ill Met in Lankhmar", and the resemblance between Leiber himself and the Franz Weston of Our Lady of Darkness is overt. What is perhaps a useful addition to such personality-mongering is the extent to which intensely controlled structure underlies all this work and Our Lady of Darkness in particular. Leiber's structures are dramatic and organic but all the same very real - every entrance is prepared and every storm is followed by a calm. In Our Lady of Darkness the terrible night of the brown thing's visitation contains as prelude and denouement the heroine's performance of classical and austere music and her exorcism in reason's name of "all inharmonious and disorderly shapes"; the balancing night of goodness and order frames in chess and good company its story of the demon nurse who haunted a ward with a parody of peace in the shape of death. Leiber's self-revelation is magnificent because it is sane and controlled; the demands of genre and its vocabulary helped him embody private emotions in a mellow balanced public form.

A similar control lies behind, and gives muscular strength to, the effective feminist anger of Joanna Russ' three novels. The Female Man achieves much of its artistic depth as a feminist text in a way which transcends the genre with which it starts her fierce dialogue; it is because of the fury which informs it one of the most effectively unconventional narratives of the decade. It is I think justified to refer to it as possessing a confessional aspect; part of its strategy, part of its indictment, lies in the fact that male oppression have made this angry an author this controlled and this intelligent. Like Leiber, Russ proves that there is no neccessary link between the intensely personal and the hysterical; her private and public anger are effectively combined; there is in the bleakly magnificent role which she played in the decade as a prophet of political regeneration and artistic renewal something of Pope's

Yes I am proud. I must be proud to see Men not afraid of God afraid of me.

Feminism is an important subtext to that reviled, underrated and admittedly somewhat overlong novel We Who Are About To but it deals with a much more general belief in individual autonomy as well as with the author's complexly angered response to stock attitudes of the genre to which she still finds herself drawn. The heroine opposes in the name of human dignity standard Campbellian assumptions and refuses to go through the indignity of sex with unattractive men to produce children who would probably be doomed, insisting on death as a civilized human being. The fury which greeted the book was prompted by the complexity of Russ's response to traditional values — her heroine is as prepared as any Heinlein hero to kill in defence of freedom of choice and there is nothing passive about her choice of suicide. Most negative criticism has distorted the lengths to which Russ pushes the argument — in the event her heroine kills in self-defence. Though Russ has mocked the self-indulgence of the use of the paradoxical nature of fiction to comment on fiction itself, it is interesting that the novel is represented as being a taped memoir; if what it says is "true" there is no one there to transcribe it.

The Two of Them takes a space opera background — overtly borrowed from Suzette Haden Elgin's At the Seventh Level — and discuss thereby the limitations of the preparedness of men to accept the autonomy of women as individuals and the fruitful friendship of women. It is intensely and inconclusively concerned with and disgusted by the ideologies of sf and the forms and fictional devices which are inextricably intertwined with and contaminated by those ideologies. Russ uses sf as an adjunct to her criticism of it as well as a means of making manifest her views about human dignity and sexual politics: as yet, it is only in the work in which she dealt primarily with the latter that she achieved a fully successful novel. Shorter fiction from early in the decade — like "The Second Inquisition" — revealed the stylistic and moral integrity she will eventually bring to a novel which covers the full range of her interests, while the reaction to fantasies of freedom and joy associated with recent short fiction such as "My Ship" and "The Extraordinary Voyages of Amelie Bertrand" indicate that such a novel may be sunnier in its

attitude to wishfulfilment than her austere criticism might imply.

While it is clear from various interviews and fragments of autobiography that melancholy works like Dying Inside relate to the more stressful passages of Silverberg's own life, and while he has both written productively and movingly about his personal relationship with sf in stories like "The Science Fiction Hall of Fame" and made largely successful attempts to embody awful old sf plots in real novels (e.g. the complex relationship of Genghis Mao in Shadrach in the Furnace to a traditional villain like Ming the Merciless and the links between the novel as a whole and VanVogt stories like "The Great Judge" and The Mind Cage), perhaps most interesting is that aspect of his work in which he uses the standard matter of the genre as mythic material whereby he can write about the act of writing. The novels and novelettes of the "new Silverberg" achieve much of their intensity and appeal though this perception of the hero as artist and the artist as hero. According to such a reading then Valentine becomes the artist in midcareer conscious of his power over his audience and his art of mastery and grace, throwing for their entertainment "on the steps of the throne"; The Second Trip a study of the necessity of finding some kind of balance between the demonic and the socially conformist in one's art; Lew Nichols one who abandons the mechanical craft of stochastics to float free on the inevitable tide of Art. Silverberg finds in the amorality traditionally allowed in sf to the hero with a wild talent to develop or a rebellion to foment an apt metaphor for the freedom of the Artist. It is this slightly ponderous seriousness that renders Silverberg's obsession with jet set success (most gratingly embodied in the short story "Capricorn Games") less offensive than the same obsession in Delany or occasionally Ellison and for the sake of which we forgive the occasional signs that on an offday Silverberg the stylist has a tin ear. The effective horror of The Book of Skulls lies in the accuracy of the portrait of the abandonment by the two survivors from its four sympathetic protagonists of all human decency in their quest for immortality and in the way we continue to identify as they do it; Silverberg maintains our sympathy for them just because he is aware that in writing effectively about the dirty little secrets which rule life he is abandoning a certain kind of decency himself. For all his occasional vulgarities, Silverberg was capable of being effectively present in effective work because, of writers in the field, he was one of the few clearly conscious of what he was doing at all times.

The artist as hero appears, rather less personally, in two crucial works of Algis Budrys – "The Silent Eyes of Time" and *Michaelmas* – in both of which we see a controlling figure deal expeditiously with attempts at the usurpation of his control. *Michaelmas*, the more complex and satisfying piece, has its hero realistically control the world not through strange powers but through dexterity and understanding of communication. The classical geniality of the tone in which Budrys presents Laurent Michaelmas keeps him sympathetic (where the cynical flipness of a Bester forfeits all the sympathy that might have gone out to his Guig in *Extro*) and embodies plausibly in him one of the standard human daydreams. Because Michaelmas is isolated and condemned to whimper in his sleep, the audience is content that he remain separate from us and the book's vague elitism is less grating than it would be in say Silverberg. Michaelmas confronts an alternative author, who desires to revise the world that Michaelmas has with effort constructed and replace him with a more amenable version. When Michaelmas punishes a murderous reporter, part of his computertransmitted curse is a distortion of the man's transmitted image. What can happen to an artist who does lose control to a more powerful creativity is expressed

movingly if at times hermetically in "The Nuptial Flight of Warbirds". It is in his artistic control and his interest in problems of self-definition and self-image that Budrys can usefully be linked with writers of a more confessional tendency.

9

Though there were pressures for mediocrity on all writers in the field — the need of publishers for a product with a short or at least easily predictable lead time, the rewards in money and adulation consequent to success among the lazier part of the public, the survival among Campbell's heirs of an ideology of aggressively unpretentious craftsmanship — the existence of the writers and work I have mentioned up to this point was bound to inspire other more commercial writers to a measure of self-improvement.

I have devoted much space in these pages to commentary on the deficiencies of some of Anderson's most carefully willed and deeply meant fiction of these years — it is worth recording also those moments when his generally undistinguished work is transfigured and a genuine melancholy breaks through the clumsy and elaborate artifice of his styles. The final confrontation of the alien leaders in *Fire Time*, the destruction of Byzantium the archetypal city in *There Will Be Time*, and in spite of its embarassing cultural trimmings "Goat Song" communicates loss and dark joy — these indicate the better writer that Anderson was perpetually trying and failing to become.

His friend and colleague, the less talented Gordon Dickson produced one work at least which came closer to achievement that anything of Anderson's: *Time Storm* is a daft and pompous enough piece of tosh with its incomprehensible metaphysical rationale and copybook misogyny — but its very pomposity gives a certain grandeur to the dream landscapes that usurp contemporary America. Almost by accident Dickson's laboured prose gives a real sense of communication achieved with difficulty to the scenes in which Despard deals with the ape-like Old One. Most importantly, the surprisingly three-dimensional portrait of Despard has a certain honesty in showing just how alienated and emotionally sterile one must be to function as the strong silent hero of commercial space opera.

Sterling Lanier wrote, in *Hiero's Journey*, perhaps the least irritating of ecologically-orientated after-the-bomb stories; Lanier's mutant animals have a certain loony charm and we already know from the Brigadier ffellowes stories that Lanier has a nifty touch with devouring lumps of slime. The late Richard Meredith produced in his alternate worlds trilogy one of the decade's most effective pieces of paranoid plotting — he keeps his revelations of what is *really* going on coming thick and fast and the heroine only spoils escapes by falling over once or twice. Sf is, among all the other things that it is, a commercial genre whose readership is going to demand some of the time fast paced action thrillers to rest their strained brains; it is when work of this kind gets above itself, either in its professions about itself or in its promotion by publishers, that trouble starts.

10

Of the two politically and artistically reactionary tendencies which as a result of publisher's promotion and audience's lazy-minded conservatism became an important factor in the field in the 70s, the more significantly pernicious was the one characterized by militarism, crude technophilia and a fascination with images of sexual and quasi-sexual humiliation (rarely it must be admitted with all three at once). The work of

Pournelle, Busby, Chalker and so on can be distinguished both from that of American conservatives like Heinlein and Anderson and English neo-conservatives (who might prefer to be called neoliberals) like Aldiss and Keith Roberts. Heinlein, Anderson and Herbert stood pretty much where they had always stood - any appearance to the contrary was largely a matter of their audience's greater sophistication in literary and political taste; it must be admitted though that the climax of Children of Dune where the uppity woman Alia becomes possessed by her sadistic pederast grandfather is an image of straight male paranoia as loathsome as any in the field. Aldiss and especially Roberts portrayed in an evocative artistically aware prose emotional situations deriving from extrapolations of current "trends"; the silliness of Roberts' views is surpassed by the power and beauty of his writing. By contrast, the work of Pournelle and the others is characterized by commercial crudity and by the simplistic portrayal of wish-fulfilment revenges for the misfortunes, defeats and exposure to scandal of the American imperium and the American middle class, for the increased stroppiness of minorities and other groups of the oppressed and for the admittedly worrying retreat from reason and - not the same thing - technophilia. Prompted by critics like del Rey, this group tended to see as adversaries better writers who were moved to delight by some or all of these things.

Half-remembered Campbell editorials supply much of the thought and all of the non-existent polemical manners of these writers, but the influence which unites them is Heinlein: not the adult Heinlein of heterodoxy and occasional doubt — but the solid foursquare Heinlein of the juveniles on which many of this school and most of their audience are of an age to have cut their teeth. In Heinlein's juveniles we find themes which recur endlessly in work of this kind — the importance of strong central leadership (Tunnel in the Sky), the struggle of the gifted against a conservative bureaucracy (Starman Jones), the right of the powerful to make the weak show cause why they should not be obliterated (The Star Beast). Heinlein was writing for the young and his use of stock plots can be justified in a way that cannot excuse the tendency of these writers, in what can hardly be called a retreat to innocence, to do the same. In Pournelle in particular, the Little Tailor is rarely all that little and the Man who Learned Better has rarely all that much to learn.

John Clute has drawn attention to the theme of metamorphosis which characterizes the work of Chalker and its specifically sexual component and much the same is true of other writers - though not, because life is not that simple, Dr Jerry Pournelle. The substantive parts of F.M. Busby's "Demu" trilogy - Cage a Man and The Proud Enemy - deal with the hero's stuggle against the Demu, a xenophobic race of vast power, whose sole aim in life is to transform surgically, without anaesthetic, all intelligent lifeforms into replicas of themselves, that is to say reasonable facsimiles of the Phantom of the Opera. Busby might be seen as saying something worthy about cultural imperialism both internal and external, but his chosen strategies indicate less salubrious aspirations. Why the emphasis on sheer pain and humiliation if not partly because of a calculation that given his limited gift for evoking moral outrage, Mr Busby is best advised to try and awake in us a prurient sadism? Why the endless brooding on the sexual mutilation of the heroine and the indulgence shown to Barton for his inability to hide his repulsion? Busby might claim to be commenting adversely on the deformation of women in sexist society — he seems hip enough for something like that - but the horrors his heroine has suffered are gone over too repetitiously to be merely a political statement or an emotional intensifier. One is drawn to the conclusion that at least some of the time Busby is conciously writing for people who like to read books in which women get their breasts and lips cut off. While sexual mutilations are inflicted on male characters, Busby does not go on and on about castration — and is careful to ensure that the characters to whom it is done forfeit through quislingism our sympathy and attention.

The plotting of the trilogy shows a few typical strengths and many typical weaknesses as far as sheer mechanics go. In the early segments Barton has the crude vigour of a Clint Eastwood protagonist in a Don Siegel film, but as the series grinds on, the mechanics he overcomes become progressively paper thin. Confronted by his fleet the Demu more or less dry up and blow away, unconvincing more powerful aliens decide to leave Barton well alone and a brutal and neurotic admiral is merely risible. The early sections acquire their strength and power from Barton's refusal to capitulate under pressure; as the pressure becomes progressively more token, his strength has nothing to demonstrate itself against. I would not object to this group's indecent obsessions so much of there was a decent dramatic tension to their work; at least in Roberts' work the antagonist gets some sort of day in court.

Busby's other works Rissa Kerguelen and Zelda M'Tana are largely rewrites of a specific Heinlein juvenile, Citizen of the Galaxy, only with female leads, in the latter case a black bisexual female lead. Superficially praiseworthy noises are made about sexual and racial equality — but in his ideal worlds this seems to be a matter of the equal right to inherit vast wealth and participate in lovingly described bouts of bareknuckle and savate. The decadent shareholders overthrown by our virtuous rebels have taken up body sculpture as a hobby — dissidents and the unwary are variously mutilated in their experiments. Exploitation is Busby's subject; the word also describes his works.

It was almost necessary to invent this group in order to show how Larry Niven has declined into membership of it, a decline aptly symbolised of the transmogrification between Ringworld and Ringworld Engineers of the beautiful genetically lucky and inadvertently graceful Teela Brown into a knobbly, self-doomed, sexless monster. Niven has ceased to be the acceptable face of technophilia and come to resemble not just his collaborator Pournelle but the Chalkers and the Busbys. Early in his career he brought back into fashion - naively but effectively - the resonances and charms of Big Dumb Objects like the Ringworld: as painted stages go, his Meccano universe was sort of loveable. In stories like "Inconstant Moon" he gave us protagonists whose cognitive resourcefulness rather than muscle got them out of the traps they had been placed in by stellar mechanics and the author; one was worryingly aware, though, that in one's unsophisticated response of "Gosh, wasn't he clever" there was some confusion as to whether it was character or author one was meant to congratulate. The times diminished Niven's easy confidence and as early as "The Fourth Profession" we find him distorting a pleasant little tale of a barman tipped over-generously by an alien into an Awful Warning of the results of not getting into space. From here on, Niven like his hero, "was going to have to keep a tight rein on my tendency to preach". He might have chosen this moment to grow up, develop his style and write, say, moving elegies for the high-tech world that might have been, but under Dr. Pournelle's Mephistophelean influence, he became less interested in the possibility of defeat.

Warning shots in their campaign against radical chic were fired in the anti-ecology movement sections of *Inferno* – it has been said that they learned little from their great

original but this is not true; they learned how effective a condemnation of opponents it is to cover them in shit. It is in *Lucifer's Hammer* that dream revenge against the enemies of progress is put into real effect, overseen, by a strange coincidence, by a rich amateur astronomer and a tough-minded scientific popularizer. Early Niven got excited about his Big Dumb Objects and communicated his glee in a stream of enthusiastic gush; the lack of excitement we feel about the denouement of *Lucifer's Hammer* — a decision to fight to save an atomic power plant — has partly to do with our knowledge, from the thinness of the remaining pages, that the actual battle will be offstage, more with the fact that the salesmen's pitch is too hectoring, too crude and too little evocative. Early in the book one of the viewpoint characters ponders:

Why couldn't people understand? Why couldn't everyone appreciate the beauty of fine machinery, the *magnificence*?

Simply, I would maintain because those interested in, and capable of, persuading us of the joys of technophilia use such thoroughly shoddy and unconvincing methods. In Lucifer's Hammer they call for a more sophisticated response than that sheer delight which we feel over Niven's clockwork worlds; at the sophisticated level at which the book's ambitions and pretensions make us respond, we know that to represent the debate over the social responsibility of technology in terms of a post-holocaust struggle between tough noble farmers and mad religious cannibal terrorists is both to play with a blatantly rigged deck and to do so clumsily. There are moments where the cannibalism is used for more than shock value, where its extreme emotional resonances are examined rather than merely used for polemic — notably in an underplayed scene in which the black ex-street criminal Sergeant Hooker discusses with his tame medic the diseases his men have caught from their dinners; scientific knowledge is used to give weight and an objective correlative to what might other be an uncontrollably distasteful emotional image.

More usually, the book attacks its targets by assertion alone — among them uppity women. Before the cometary collision we see a typical California socialite: "Annabelle Cole was liberated... In six months it might be the decline of artistic tradition among Australian blackfellas. At the moment there was nothing for it but to blame men for everything bad that had ever happened."

Once the comet strikes everything changes — we have the insight from a reasonably sympathetically viewed character whose worldly and Machiavellian views are taken as normative that:

"The only good thing about Hammerfall, women's lib was dead milliseconds after Hammerstrike". We also have plot strands concerning the post-disaster quest of one woman for the best possible provider, of another for the most politically viable consort to wield the power she carries as her dowry. Orwell says somewhere that we have a right to expect common decency from authors; were the crudity of expression of the doctrines of these authors forgiveable, we would still have to find outrageous the presentation of locker room platitudes as an adult response to the problem of sexual equality. In Busby's preparedness to admit to macho culture those women who can compete on its own brutal terms, in Niven and Pournelle's resurrection of the anti-suffragist doctrine of separate realms, we have a misogyny more pernicious because more controlled and 'reasonable' than that which causes one of Jack Chalker's heroines to spend several hundred pages as a hopelessly incontinent donkey or that embodied in the overtly male supremacist bondage fantasies of John Norman. (What price Wollheim's "moral standards" in respect of

Norman? About \$2.50 at current rates.)

In spite of his disclaimers:

"If there's a message in there - and of course I think I have something to say - I don't put big hands pointing to it".

the work of Pournelle is heavily polemical and discussion must deal at least in part with its doctrines and the effectiveness with which he expounds them. There are scenes in his work, and scenes probably attributable to him in the collaborations with Niven, where he restricts himself to eloquent portrayal of the positive values implicit in his system. The military code helps the cadets in *The Mote in God's Eye* face inevitable death with dignity: in Lucifer's Hammer the mailman Newcombe picks himself out of the mud into which the catastrophe knocks him and continues his rounds, conscious of his duty to get the mail through and the living that he can make from doing so without the government as middleman. In this latter we have an elegant formulation of "libertarian" thought embodied in the hero's solution of an economic and socio-moral problem. More usually in work of this kind, doctrinal problems are solved by confrontation with an antagonist. Whether because Pournelle is too convinced that his doctrines alone can save mankind to be capable of imaginative sympathy with heretics, or because of a cruder calculation that his audience aren't really interested in liberal bullshit about fairness, he attaches to antagonists no glamour to countervail that of the hero and their confrontations are thus emotionally null. At best drama results from the sight of the hero's muscles - mental, physical and moral - straining against the largely inanimate thing his enemies become; it is because of this problem that we enjoy most of those Niven stories in which the antagonist is an object rather than an individual.

Pournelle - and I take him as paradigm of this tendency largely because he is the most articulate and thoughtful - neglects the emotional feel of the situations he describes. He has criticised *The Dispossessed* for the alleged implausibility of its anarchist society, failing to take into account the extent to which Le Guin renders Anarres convincing as a fiction as well as a doctrine by her careful selection of symbolism, typical characters and typical events. Pournelle's fiction is diminished as exposition of his views by his assumption that simple uncluttered narrative is at all times best suited to his purpose. One section of The Mercenary ends with Falkenberg's massacre of a horde of political troublemakers (heroes of this kind stand to best advantage in an empty landscape and if it is not empty when they start they tend to make it so). Were there some whiff of grapeshot on the page, some evocation, however gloating, of the actual smell of an arena full of machinegunned corpses, the work might be reprehensible but it would be art, however offensive to my liberal susceptibilities. This group are too often slack in their duty not only to their art but to the doctrines to which they sacrifice it; this irresponsibility manifests partly in idiot solutions to human prolems, partly in a prose which is, under its sensational subject matter, bland.

There was after all work in the 70s which shared similar viewpoints but had a naive decency and doggy seriousness, approaching art by sheer innocent sincerity. Most of Bova's own work is as undistinguished as that which he published in *Analog*, but *Millennium* is somewhat better. His hero is a standard hectoring know-it-all – but is motivated in his political efforts by guilt and shame as well as hopes for Man's Future. In work of this kind Soap Opera can redeem Space Opera. Bova martyrs his hero – not an especially subtle polemical strategy, but at least an attempt to persuade us at an emotional level

rather than by mere assertion. Some of the other work published by Ballantine/del Rey mingled its technophilia with some sense of real interest in science; Tony Rothman's *The World is Round* deals in part with the struggle of primitive astronomers to achieve the eponymous insight on a very large (thus not visibly curved) planet and communicates the author's intellectual excitement in spite of a leaden style.

Right at the end of the decade, Gregory Benford proved in Timescape that technophilia could be the subject of a real novel - as opposed to an aimiable treatise one could patronise for its good intentions. Benford - when his work is not in its less effective mystical mode - shares at least some of the prejudices of Pournelle. Women in his work tend to be either submissive or part of some alien Other - a resurrected vehicle for alien machine intelligence in "A Snark in the Night", the gentile, surfing trendy Goldwaterite of Timescape — and he is suspicious of career politicians; but there is a real commitment in his work to *creating* as artist that which he cannot understand, a commitment which in Timescape reaps very real dividends. Like so many others before them, Benford's heroes save the world, but - particularly in Timescape - his fiction is so constructed that they do it more by luck than by judgement. What for brief moments redeems Rothman and early Niven is the childlike unselfconsciousness of their communications; Benford, a serious artist, has a humility which means he has to descend to persuade us of the possible validity of his views and prejudices, of the reality of his characters, of the emotional truth of his fantasies of success. Benford is an assured and contemporary artist whose fictions are morally complex; he is free of the arrogant assumption that assertion equals persuasion, that significance can be equated with sales figures, that the simple certainties which served for teenage readers in the 50s are good enough to be reheated and served up in the 70s.

11

Also worrying were the implications for the future of the genre of the volume, and the low quality, of that body of work which can be called Science Fantasy. In a decade of uncertainty and strain, an audience loath to relax strenuously with imaginary worlds different from the real world but equally complex, equally compromised, found appealing books which presented worlds at once grander and more simple. There was a rash of books depicting caste-oriented worlds in which the less well-off are also the less gifted, in which their superiors respond to forelock touching with gracious gestures of noblesse oblige. Such books have an obsession with aristocracies of blood (often rationalized in terms of genetically transmitted mutant powers), with feudal or guild models of society and that variant of the "Little Tailor" story which can handily be called the "Ugly Duckling". These books offered the gratification of adolescent escape — static societies are restful: if honest leaders are born or emerge through aristocratic codes, you don't have to worry about voting for them; there is an opiate to stifled ambition in the knowledge that in such just worlds disregarded merit will be revealed in the end, as if by magic. Or rather, by telepathy, "laran power" or a capacity for talking to dragons.

The most popular, and perhaps least readable, of such books was *The White Dragon* by Anne MacCaffrey, a bestseller in hardback and a serious contender for awards. (MacCaffrey started the series of which it is part in the 60s – but it is in the 70s that her work has seriously deteriorated and become more influential.) Its plot concerns not one but two Ugly Ducklings, the politically impotent noble Jaxom and the little white dragon

Ruth, who elevate themselves from objects of contempt to serious actors on the Pernese scene by discovering hidden talents. The pair have the romantic appeal of the downtrodden – the thrust of the story also demands that we admire an aristocratic caste which can admit that it was wrong. Our sympathies are manipulated – not especially competently – in two directions at once; it is only by more or less deliberate collusion with the author that the audience can yield to her effects. In her better work – the far from wholly contemptible "Killshandra" series in Elwood's Continuum anthologies – MacCaffrey writes a clearly visualised objective prose; in The White Dragon evocation of place is blandly minimal:

"Jaxom could see dense forest extending unbroken toward the low range of foothills that culminated in that magnificent mountain. Just beyond this cove, on both flanks, were other little bays."

This is less a matter of conveying information in a neutral tone than of avoiding any statement sufficiently emphatic to wake the reader from somnolent reverie, than of sketching in the lightest of details to focus our daydreams. We are told in many scenes of the passion that is going on before us, but rarely is it shown us. Lessa is an important personage, powerful, irresponsible and hot-tempered. Descriptions of her rages are in terms of perfunctory cliche — her face becomes livid, her "slender frame" taut, she spits words, contradicted her jaw drops with amazement. MacCaffrey is no more to be blamed for these cliches than are publishers and audiences prepared to put up with them.

Marion Zimmer Bradley is a more interesting case, whose work is surrounded by equal levels of cultishness but has some minor merits. In the Darkover books of the late 60s, she created artlessly a gutsy daft society that mingled barbarism and technology, magic and passion, in ways calculated to thrill her audience. Because she made up this culture as she went along, the series could and did come to serve in the early 70s as a vehicle for a serious and complex response to matters of sexual and personal politics. Briefly, her determination to become morally earnest and ideologically pretentious caused Ms Bradley to take greater pains; in a few novels she kept the vigour and high colour which had won her an audience while actually saying something in a serious and occasionally an adult way. In the woolly liberal feminism of the Darkover books we see the tendency of the science fantasy school to want to have their cake and eat it too. On Darkover as presented women have three choices - they can be sexually fulfilled chattels, tough Amazons or chaste dedicated sorceresses; as the series filled out into a serious discussion we saw from Ms Bradley less a deep evocation of the meaning of these roles, or a sensitive examination of how playing them actually feels, than a series of demonstrations of how a talented and superior heroine can bend the rules for herself to suit herself. Worse still, Bradley is somewhat heavyhanded at the portrayal of personal emotion and tends to embody it in melodramas which ruin those novels like The Forbidden Tower which deals essentially with the private life.

Bradley comes closest to artistic success in a novel where a young man has to combine private aspiration with public duty; in *The Heritage of Hastur* we see the recurring character Regis learning to use power with restraint, to reconcile his homosexuality with his capacity for disinterested friendship and his duty to provide his caste with an heir and to accept that he must stay and mind the store while others have adventures. The tale is hardly profound, but as a mythic examination of the compromises which in the real world usually replace real solutions, it has a dignified and adult emotional realism.

Its dignity comes partly from the many scenes in which its code-bound males swear oaths, issue challenges and confront accusers, hamming busily away like refugees from *Il Trovatore*. Bradley is not seriously suggesting such methods of settling our affairs; she has realised that use of the conventions surrounding honour make her characters less wooden and more hieratic. The scene where Regis and his heterosexual beloved swear master-andman fealty is more moving than one in which they explore non-sexual love via telepathy; "chivalric" literary conventions impose decorum on the first where the second becomes mawkish.

(One of Bradley's better disciples, C.J. Cherryh, has built a thriving career round the cult of honour, thus cannily covering her literary deficiencies. Her third novel *Hunter of Worlds* is structured round a conflict between the different conceptions of honour possessed by four species; whole pages are couched in alien jargon relevant to the attempt to reconcile these four codes.)

At its best Bradley's work covertly acknowledges that we live in a world in which there is no honour to guide us, that she is using deliberately an archaic convention to cover weaknesses in her writing; her standard audience cares, though, not a jot for her effective solution to stylistic problems, and little for her serious matter. What they want is glamour – and, as she tended increasingly to concentrate on earlier more barbarous epochs of Darkovan history, that is what, instead of marginally adult entertainment, they got.

This audience is unusually aggressive in its demands for the undemanding - undertow from it pulled down the once promising career of Roger Zelazny. Once Zelazny was a bright new hope, acceptable to "New Wave" and old guard alike, revivifying cliches with erudition and wit - "But now how fall'n, how chang'd . . ." Much of his efforts of the 70s went into the Amber series which had started as an entertaining exercise on themes from P.J. Farmer, but became afflicted with cultish and commercial success and artistic disaster. The struggle of a royal family for power over the ultimate reality might have served as scenario for a preposterous and powerful novel like Gloriana - but Zelazny went for the easy popularity of a fast-moving gaudy comic book. The first book has some entertainingly operatic scenes and the shifts between intermediate realities continue to be evocatively managed. The surprise endings of the middle volumes give a pleasing tingle on first reading, in spite of their improvised air: but as the series progresses there grows up an increasing sense that the momentary spills and thrills are all there is, that one is reading 765 pages of shaggy dog story. All Zelazny's fiction is strongly centred on a protagonist increasingly other characters came to exist as if figments of the protagonist's imagination. The rot - I use the term advisedly - sets in for good in a scene when Corum descends to the dungeons of Amber castle and chats merrily with a spear-carrying guard/poet who is obviously Zelazny himself. This contempt for the audience to which he had whored his style is what unites Zelazny with the Niven who once said "my ideal reader is a lot like me except he needs things explained to him".

It is possible to write for this audience and not sell yourself; if Vance shows an aimiable contempt for his standard audience and for himself it is but part of the general misanthropy in which his stylistically bizarre and heterodox work is soaked. Jack Vance tells tall tales of rogues and of idealists who mature into cynics for the sake of turning a penny while at the same time constructing if not an elegant object a pleasingly fantastical one. His basic unseriousness makes palatable his special pleading for Afrikaanerdom in *The Gray Prince*, his denunciation of British trade unionism and the welfare state in

Wyst:Alastor and his vituperative portrait in *The Face* of Arabs as sadistic paederasts with ugly wives and awful taste in food. His affectations, his neologisms and archaicisms are part of the joke. Vance has his own integrity though — and left the 'Demon Princes' series alone for a decade for all the pleas of his audience until he actually wanted to write the fourth and fifth.

In Lord Valentine's Castle Robert Silverberg commits a book which guarantees itself the MacCaffrey audience and manipulates in all readers that part of themselves which is drawn in the same directions. Here too we have a caste-ridden world with quasi-divine rulers and a hero cast down from the heights to earn his living as a juggler, a trade for which he finds he has unusual aptitude. Where other writers take monarchy and aristocracy as givens, Silverberg treats us as adults while playing the game of accepting the monarchic convention. He tricks us into sharing this acceptance by gradually transforming juggling from a mere device of the plot to a mystical experience and a demonstration, in its keen eye, firm hand and inner peace of Valentine's predestined and inborn fitness to be absolute ruler of billions. Where the world of Darkover, the multiverse of Amber seem at most to be the size of the Home Counties, Silverberg imparts scale and seriousness by the sheer length of Valentine's travelogue journey, by endless catalogues of wonders passed in transit, a technique which he may have learned from Vance, on whose standard themes and form Lord Valentine's Castle is essentially a variation. If there is a trace of contempt in the curlecues with which Silverberg embellishes his exercises, it is the honest contempt of the virtuoso for those who have only one tune to play.

12

With a neatness that might almost make one believe in some kind of dialectic of history, there emerged at the end of the decade a group of young writers who shared some of the less unpleasant interests and much of the popularity of these two groups, but influenced by the richness of Silverberg, the moral and artistic complexity of Le Guin. Writers like George R.R. Martin, Joan Vinge and John Varley are fascinated by the past of sf, but have paid attention to the critique of that past made in different radical ways by Russ and Le Guin; if there are elements of pastiche in their work it is a chastened pastiche and one not characterised by mindless enthusiasm. They take the post-Niven space opera, the post-Bradley science fantasy, and make of it something which lumbers in the direction of being art. The Big Dumb Object becomes for them a peopled and moralised landscape. Worlorn in Martin's Dying of the Light is an artificially habitable rogue planet which spins into the light of a star, enjoys its brief heyday as a festival world and then spins on to darkness and death: it is an apt symbol for the artificially revived and inevitably doomed hopes of its lovelorn hero, just as its variety of moodridden empty cities stand at various points in the novel for the emotional content of scenes which occur in them. Except in the pastoral of "The Persistence of Vision", Varley's future history is one in which the whole of the Solar System is effectively a conurbation. More importantly, Gaea in Titan and more notably in Wizard is a place which first awakes all the delight in the freedom of irresponsible power that the Ringworld was then becomes a symbol for the mature rejection of such immature and amoral joy. Carbuncle in Vinge's The Snow Queen (the working draft of the tale was called after the city rather than the shared aspect of the protagonists) is both jewel and disease, a city much like Dickens's London or Hugo's Paris, a backdrop of a society so vast that we cannot know the results of our moral and immoral deeds; in the book there is a fascinating tension between the glamour of the great world and that unknowable aspect of it which hinders mature and moral choice.

Varley, in *Wizard* slaps effectively the face of that audience which liked *Titan* uncritically; the other two have similarly won vast popularity by making clear their reservations about their audience, what they as writers of moral fictions are about and up with what in the way of readings of their work they are not prepared to put. "Eyes of Amber" is far from being Vinge's most significant story, but it is strange that an audience devoted to MacCaffrey and Niven should have voted it a Hugo since a large part of its subject is the inappropriateness of primitive butchery viewed without moral comment as the entertainment of civilized beings. In various of Martin's stories — one of which, "Sandkings", also won a Hugo — bored urbanites who take pleasure in watching animals tear each other to bits come to appropriately sticky ends.

For all their limitations, moral commitment is so important to these three that they never fail to manage their sermons effectively and entertainingly. *Dying of the Light* is a somewhat confused blend of *Rob Roy* and *Women in Love* but Martin conveys through its operatic confrontation scenes and evocative landscapes its central message:

"It is a world without a code . . . so each of us must cling tightly to whatever codes we bring with us."

Varley's feminist commitment can at times irritate through its sheer doggedness and through the seeming incongruity of its combination with the narrative strategies of early Heinlein, but it renders plausible and responsible the crude heroics of his protagonists as symbols for the greater level of free agenthood which, in the real world beyond the book, sexual equality will bring. As yet, the most effective work to come out of this group is Joan Vinge's The Snow Queen, a bizarre, uneasy but effective blend of Leigh Brackett and Margaret Drabble. Standard 70s space opera notions - clones, duels, black holes, immortality drugs, cultural imperialism - and a complex dialogue with the Hans Christian Anderson märchen are gone through as vehicle for presenting novelistically a large cast of characters confronted with moral choice. For all her obvious enjoyment of it, Vinge's frivolous surface is the sugaring on a pill of serious doctrine. She is distinguishable from the writers I have stigmatized as hacks less by her not especially distinguished style, or by her plotting, which relies to a point past that justified by symbolism on happenstance and coincidence, or by her political rejection of the ruthless easy answers of the charismatic Arienrhod for the subtler gradualism of her clone Moon and her foe Jerusha – but rather by her sheer seriousness, her explicit statement at the heart of the work that 'things matter', that the issues which dominated the genre in the 70s were too important to our social health, the myths of trifled with too important to our cultural sanity, to be no more than the topics of heartless games played for a fast buck, for the audience's beer money. It is clear that the most we can expect from this trio is solid competent work, but a market in which they are important factors will be one which has not lost all touch with the basic seriousness and literary values of the best and most significant sf of the 70s.

13

In one of the standard cliches of the animated film, a dog or a coyote or a duck runs off the edge of a cliff or a building and continues to run quite happily until such time as he looks down and realizes that he is without means of support. In the 1970s a number of the popular arts lost, and failed to regain, their innocence under the double threats of a corrupting commercialism and an inhibiting sophistication; in this respect at least sf was somewhat luckier than the movies, somewhat less lucky than rock music. It is possible for anyone to pick up a guitar; the same is not true for a printing press and even less true for a camera.

It was important to the genre that the sort of juvenile innocence which had characterized writers and readers alike for decades could increasingly not be maintained. Too many critics had spent the late 60s and early 70s pointing out how immature were the fantasies which much of the genre was devoted to gratifying; the only real debate seemed to be between those who considered that the genre was dominated by the powerfantasies and technological wetdreams of emotionally retarded pseudo-adult males and those who like Thomas M. Disch and M. John Harrison suspected that the real age of the sf audience was vastly younger. Remarks of the kind which were commonplace get through even the thickest of skins in the end.

And once it had been accepted by most of the people working in the genre that there was a case to be answered that sf was a branch of children's literature, what then? Well, unfortunately, as I have devoted a large part of this article to demonstrating or asserting, a number of popular writers seemed to decide on, for answer, the projection of the tongue and "No it isn't childish, yah boo sucks so there!" Instead of writing for innocent retarded adolescents they started writing for adolescents with very nasty minds indeed. The cannibalism in *Lucifer's Hammer*, the obligatory mutilation scenes in Busby, the scenes of ritual torture in which Philip José Farmer became so, shall we say, interested — all these prompt the conclusion that it is possible to be at the same time infantile and corrupt.

All too many publishers either shared these tastes or regarded them as likely sources of financial profit. Figures respected and loved as good ol' boys in the social hierarchy of the field functioned happily and almost simultaneously as book reviewers and magazine editors; they helped corrupt public taste and then proceeded to self-congratulation for the acumen with which they had succeeded in gratifying it. Sf publishing added vices all of its own to the catalogue of sins which characterize the industry as a whole; when one contemplates even the respectable sf paperback lists one is forced to conclude that for all the professed love these editors have for the genre they are just like other editors in regarding books as a product to be packaged with any handy brand name. Various critics, for various reasons, have suggested that Heinlein's *The Number of the Beast* is one of the crucial books of the decade; if I agree it is only because it is only in such a decade of greed that a book would have been published which exhibits so nakedly how a major talent has decaved.

The real sadness of the fact that so many publishers devoted so much energy to promoting juvenilities and senilities lies in the fact that there was so much good work in the genre to which more or less the same public could have been exposed with equal financial profit. The most important thing I can say about sf in the 70s is that a reasonable number of fine novels were produced more or less under the auspices of the genre. Some authors accepted at least some of the rhetorical accusation of childishness and acknowledged consciously that what they had been doing for years was quarry the rich vulgar vein of material which sf possesses for a vocabulary of imagery through which they could explore topics of more interest and importance than mere talespinning. The real

failure of the authors who tried to persist in the old ways lies in the fact that even at the level of pure storytelling, which say Pournelle claimed as his forte their work was inferior to that of the writers who considered it a subsidiary part of their task.

The better sf of the 70s was serious-minded about the art of writing. The technical fireworks of the late 60s had expanded writers' vocabularies and now they got round to using that vocabulary actually to say something. Many of the decade's major works treat as subject the act of writing, using to reinvigorate the audience's interest in the matter generic conventions of slow preparation an' sudden accomplishment. Writers toyed delicately with, or made virtuoso displays of, material of which earlier writers had made heavier weather — but the play of a John Crowley is more serious than the plodding of a Van Vogt. Writers refused increasingly to be dominated by the demands of their traditional markets for standard lengths and uncomplicated material; as a result the better work of the decade is among the most formally perfect and satisfying the genre has produced.

The better sf of the 70s was serious too about life and ethics and ideas. I have suggested that even those writers who would characterize themselves as interested primarily in technical accomplishment produced fiction with a strong moral content; the presence in the field of a writer like Le Guin with her major talent and ethical preoccupations could only enhance this tendency. Most of the political currents of the 70s found reflection in sf of ideas; my objection to the Pournelle school is not its politics, repellent as I find them, but the artistic inadequacy of their embodiment in fiction. Some of the best of the large quantity of feminist utopian literature produced in the decade came from writers involved with commercial sf simply because it was possible for those affected by genre traditions to play with ideas for their own sweet sakes as opposed to purely polemically; Suzy McKee Charnas' Motherlines is admirable for many reasons — its management of a sense of the passage of time for example — but perhaps most for the objectivity with which it does not ask of us total commitment to the way of life portrayed.

This seriousness about life was reflected too in the extent to which sf lost its pastoral tinge and became more preoccupied with urban life. The image of the just or unjust city and the backdrop of mean streets and cloudcapped palaces are crucial to much of the best work of the decade. To multiply examples even further – though Gardner Dozois' Strangers deals primarily with the failure of communication between Earthman and Alien, between man and woman, it is the looming strange solidity of the Cian city which gives the novella its gravity, just as the doom and gloom of Dozois' short ecofictions are enhanced by the metaphorical stench of decaying concrete; Terry Carr's Cirque takes urban life as a paradigm of aware existence – characters are judged by the degree to which they are strenuously involved with their environment. The reader of sf is traditionally a citydweller; the genre in the 70s became aware of its readers' actual daily lives and transmogrified them into reading matter.

I have pointed critically to the extent to which packaging of authors' names and the conditioning of the audience to expect a particular product from a particular auctorial brandname became an increasingly pernicious feature of the decade; it should also be mentioned that, more than ever before, authors in the field made a point of causing their personalities, or something which feigned to be those personalities, to impinge on their work. Sometimes this occurred in ways which can be linked to the confessional tendencies of contemporary literature; sometimes it was a humble admission of personal involve-

ment in the ethical questions under discussion; sometimes it was merely a self-indulgence.

And what next? My own suspicion is that we'll see a lot more of the same. When I read in the course of the decade the professions of various admirable writers that they were about to cut forever adrift from sf I was reminded by the failure in most cases of this departure actually to happen of Lytton Strachey's comments on High Anglicanism:

"They followed Newman up to the very point beyond which his conclusions were logical, and, while they intoned, confessed, swung incense and burned candles with the exhilaration of converts, they yet managed to do so with a subtle nuance which showed that they had nothing to do with Rome."

Clearly, a genre which could produce some of the unwholesome pulp I have described — not to mention the blandness of Roger Elwood's Laser series — is one before associating with which a serious writer might well have qualms; but it is not necessarily the case that it would be possible in the real world of publishing for more than a handful of writers to draw material from the topoi of commercial sf without having to be published within it. There is a clear dilemma here and one to which there seems to be no solution while crisis persists. The failure of the Laser series indicated that Roger Elwood was a few years ahead of his time; so too were those who predicted at the end of the 60s the end of the sf genre. For the moment at least, "the tightrope has its dancers still".

It is a delightful surprise when a "Profession of Science Fiction" piece arrives unsolicited; and the delight is all the greater when it tells the story of a veteran writer in the field, one moreover who has not told his story till now — and a fascinating and engaging one it is, of considerable historic value. Sf pioneer Raymond Gallun is currently being rediscovered by a new generation of enthusiasts, while at the same time he has recently completed several new sf works. The following is as told, in Mr Gallun's own words, to Dr Jeffrey M. Elliot, Senior Curriculum Specialist of the Education Development Center in Newton, Massachusetts. We thank Dr Elliot sincerely for directing it to our pages.

The Profession of Science Fiction, 24: The Making of a Pulp Writer

Raymond Z. Gallun (with Jeffrey M. Elliot)

I am now close to three-score-and-ten. Back as far as my memory can go, there are a few trace-impressions, printed deep by emotional impact.

For instance, there was a bright, crisp afternoon one late September — "Fairtime", folks said, because the Dodge County Fair was in progress in Beaver Dam, Wisconsin. But I wasn't at the fairgrounds. Instead, I was beside a big old house that I didn't know very well. My elder sister plopped me down on a pile of sand intended for some constructional purpose, and told me to play in the stuff. Then she deserted me for a more important matter. Inside the house, my father's mother was dying. I hadn't much of an idea of what dying was, except that it was awfully lonesome, and for keeps. Not that I particularly liked my grandma, except for the big, soft, sugar cookies she baked. Otherwise, with her gruff voice — when it went gentle, I trusted it even less! — and her insistence on *Ordnung*, for me she was close to being a distaff ogre. Not that I knew the word "ogre" itself, but I felt its meaning.

I guess I poked at the inscrutable sand a few times. Having no idea at all about how I was supposed to play in it (the insophistications of a little guy not yet turned two can be enormous), I was overwhelmed by a sense of being, worse than ever, a dummy and a failure, while some incomprehensible enormity was taking place. Worst of all was my total, abrupt lonesomeness, when most of my existence had been sheltered and mellow. My whole universe was suddenly coming all apart. I began to bawl, and then to scream in sheer terror. Had I been marooned all alone on the far side of the moon, I couldn't have felt worse. It seemed ages before somebody — I suppose my ma — came to pick me up, first to scold, and then to hug.

Such are the trials and tribulations of very small fry, when harsh, outer events jolt them from their comfortable, egocentric position. Some psychologists consider such incidents cause for dangerous trauma. But if one comes through okay, as most of us do, these small, horrifying happenings can be important lessons in coping with the real world, and in separating imaginary hazards from real ones.

We Galluns lived in an odd sort of habitation on the northern outskirts of Beaver Dam. I say "odd" because the house and barn were connected by a passage — a feature that was little-known in Wisconsin, though fairly common in the state of Maine. It was here, I believe, that the builder — an eccentric science teacher and inventer — orginated. My mother very much disliked the small rooms and curiously-arranged interior features of our dwelling. These seem to me now to have been attempts towards advanced design, not bad in idea, and with later-day convenience in mind, but poor in practical effect. In short, here was a prototype arrangement, still full of uncorrected defects.

Further, the builder, who had ended up a suicide, had left a lot of science books and other rather esoteric volumes in the attic. Later on, when I was in my teens, I came to the conclusion that the man who had built the house, though dead before my time, was really my environmental godfather, because of influences that came to me from him.

But I get ahead of things somewhat. Our dwelling was set on a five-acre lot, too small to be considered a regular farm, though it was originally intended for raising chickens. Actually, my dad worked mostly in town — store clerk, salesman, foundry moulder. Often, we were pretty broke.

Dad's mother came from Holstein, in Germany; his father from Osterwieck, also in Germany, but close to the Dutch border. Since the name Gallun (pronounced Galloon, though I readily accept Gallon) isn't German, it is fairly obvious that, at some earlier time, there was a family migration from Holland. Grandpa Gallun, the second of grandma's four husbands, was a tanner by trade, but he died at thirty-two. Thereupon, grandma

became a reasonably successful saloon keeper.

My mother's parents were from near Stettin, then in Germany, now in Poland. Grandpa Zinke – the name is my middle name – had served in the Franco-Prussian war, and partly in rebellion against militarism, he came with his wife and first child to the States. He had been a tailor, but he turned railroad man.

I had numerous aunts and uncles from both sides of the family. A great influence on me was Anna Dorothea Louisa Zinke - Annie. Since my mother was sick after my birth, the story is that my first semi-instinctive spoken word was corrupted from Ma-ma to An-na. Annie was hardly of the current maiden-aunt stereotype. For a joke, my ma often told me that Grandpa Zinke had found Annie as a tiny papoose, along the railroad tracks, after a band of Indians had passed through. She could do housework sketchily, but hated it; she'd much rather pitch hay or plow. She spit out of the hayloft one time, and what landed on my head was a cud of tobacco. One innocent young farmer, reasonably supposing that Annie would be an excellent helpmate on his acres, got a black eye in return for his marriage proposal. In wintertime, Annie, wearing a long sheep-lined coat, a red stocking-cap, and flat-soled galoshes with heavy socks inside, would be out in the marshes along the frozen lake, with a · 22 rifle and a gunnysack of traps over her shoulder, catching muskrats for their pelts. Or else she'd be spearing fish through a hole in the ice. In milder seasons, she gardened and did papering and painting for hire. She was also the town gadabout and carrier of private news. Now and then she got riproaring drunk. She had tried her hand at hoboing, once out to Montana. She loved guns and fighting-cocks. She wanted to be a cow-girl. She told fortunes by cards and palms. And most of the money she could scratch together, apart from buying oranges and such for my sister and me, went into dubious goldmine stock. She was that kind of dream-haunted romantic. She sang lusty Irish songs which she had learned from the trainmen. By association and osmosis, she was more Irish than German. Annie is long gone now. But - dammit! - I think she was my most kindred and loved relative.

Another member of my mother's family who impressed me much was Julius Zinke (Junior). He was a Navy pharmacist who had gone around the world with Dewey, after the Spanish-American war. I never saw him very often, but on his infrequent furlough visits, there was always a furor of excitement in our household. His more significant effect on me was in a trunk full of oddments and endments he'd left with us: photographs, Navy pennants, old uniforms and buttons, snakeskins, strange shells and carvings, and other souvenirs from afar. Since, as a small child, I couldn't say Uncle Julius properly, he became Uncle Doodie to me, and the name stuck. Ma's claim that Unca Doodie had been everywhere got mixed up with her answer to me about what all the stars at night were. She told me they were places where people lived. So — my ideas of geography and cosmology being very vague then — I naturally assumed that he'd been to the stars with the Navy, too.

I remember the first airplane I ever saw, a box biplane, way up over the town. It was so far off and tiny that I couldn't tell just how it was moving along — I though parallel to the span of its wings, instead of at right angles to them. I hadn't the faintest notion of aerodynamic principles, then. This plane was a new county-fair attraction, supplementing the daily, hot-air balloon ascension.

Several times I had watched such balloons being inflated over a furnace consisting of a large, ceramic sewer-pipe section, set vertically in the ground, with a fire pit underneath.

The pipe was stuffed with kindling wood, liberally doused — so it was said — with a mixture of gasoline and kerosene, which was then ignited. It took quite a while for the big, canvas pear to swell and fill with hot, black smoke, and, through the fabric, you could see the flames leaping up inside. Presently, though, the guy-ropes would be released, and the balloonist would ascend, usually upside down, his booted toes hooked inside a large ring attached to the shrouds of a parachute, which wasn't bundled, but dangled, full-length, down from the balloon. On his way aloft, the aeronaut did fearsome acrobatic tricks on the ring. From maybe two thousand feet altitude, he would parachute to the ground. After a while, the balloon, left behind up there, would tip over, spilling its black smoke into the sky from its open bottom. Then it would crumble and fall.

I never heard who any of the balloonists were. But the pilot of that first plane was named Jimmy Ward. He did stunts – loops, wing-overs, tail-spins, and more. Pretty soon we had a pet chicken named Jimmy Ward.

While I was little, due to a clumsy and absent-minded way of rushing at anything that drew my attention, I often got into trouble. At a time beyond the reach of my memory, I fell, face first, into a barrel of ground feed, intended to be mixed into the slop for the hogs. I darn near smothered from the powdery stuff that got into my throat. My mother used to put me on a clothesline tether, to keep me from rambling off into the nearby woods. One time she had found me in the back pasture, hugging the rear leg of our old sorrel horse, Tony, who had the good sense to stand stock still. I guess I liked Tony, and the only parts of him that I was big enough to reach, for affection, were his legs.

And there were incidents of another sort. One involved chewing grass and spitting the green juice on another woman's clean bed-sheets, flapping on a line. Ma really gave me a licking for that!

My mother, having certain ideas about her simultaneously precocious and retarded youngest (besides my sister, I had had an elder brother who died at eighteen months), managed to get me into kindergarten at age four, and first grade at five. I was a pretty good-sized kid. Maybe, in part, she just needed to be rid of me for a few hours a day.

I got along reasonably well during those first two years in school. But when I was in second grade – the U.S. had entered World War I by then – my mother spent a month in the hospital. Dad and Annie were both working in the foundry, Annie as a core-maker. After her day in high school, sis usually stopped by at the hospital, to see how ma was doing. Arrangements about me were sketchy. So usually I came trotting the mile-and-a-half home, only to find that I wasn't strong enough to turn the key – traditionally kept hidden under the stoop – in the cold-stiffened lock. It was late fall. So I went into the warmer henhouse, and talked to the chickens. I guess by modern standards I would have been considered a neglected kid, not getting very well fed, and not being very particular about putting on warm clothes. Further, as an oddball, I got beat up by other kids. Besides that, I fell out of a tree and hurt my back. Further still, I skinned my knee in a flop while running in loose gravel. Through misplaced prudence, I failed to report my injuries, particularly the last, which festered badly.

So, by the time ma got out of hospital, I had chills, and was feeling sick and feverish. This condition worsened for a couple of weeks. By then, my lower left belly was bulging pretty bad, and it ached. Our doctor, who came out a second time in one day, told my mother: "If Rayme has got what it must be, we don't have much time. The walls of the thing could be thin, and if they stretch further and break, that means peritonitis. Not

good . . ."

I wasn't supposed to understand any of this, but I was smart enough by then to get the general idea.

So, the next morning, Doc came with his Model-T coupe, and took me to the big refitted house in Beaver Dam, that served as a hospital. The surgeon came from Fond-dulac. That same afternoon they opened me up, front and back, and drained two quarts of pus out of me, from a large perinephral abscess. Not long after I woke up, thirsty as hell from the ether anesthetic, bells began to ring and whistles to blow — it was New Year's, January 1, 1918.

It occurs to me now that, of all the people who had been in that operating room just before I "went under the ether" – three doctors, a couple of nurses, my parents, and several uncles and aunts – I am the only person still around today, though my chances weren't much just then. Of course, I was much the youngest of the crowd.

Fairly soon I was on the mend, thanks to the rather primitive medical procedures that had been applied, what with no x-ray equipment available, and wonder-drugs decades from being recognized. But there was considerable individual and collective devotion. I began to realize some of this, and how lucky I was! Maybe the biggest — if somewhat sublimal — lesson of my formative years was that I was living on borrowed time, and had better appreciate the gift of continued existence.

I didn't come out of my illness much the worse for wear. Time went on. Both by environment, living practically out of town, and, I suppose by how some odd genes had bent me, I was often not quite in with other kids. Around our place, the work ethic was emphasized. I pulled weeds, smashed potato bugs, hoed, tended pigs and chickens, and picked berries. My overworked mother was still a sucker for any itinerant book salesman; she saved our strawberry and raspberry money, particularly to buy educational books for the young. So, in addition to heavier science literature already around, there was plenty of simpler, better illustrated means to look up answers to natural mysteries. Besides, by then, I guess I was already hearing my own particular drummer.

I remember some incidents. Near our place, there was a field that always became a fair-sized lake, when the accumulated winter snows were furiously melting in March. Once, there was a sudden, gurgling rustle in the night. In the morning, that lake was completely gone. "The sink-hole must have opened up," my dad said. Fascinated, I went to see the hole. It wan't much. A couple of big rocks with an irregular gap between, in a two-foot deep pit, washed out in the center of the plowed field. The water had swirled down there, like in a bathtub drain. Where to? And I fantasized: into some underground stream? A system of caves which nobody had ever seen? Romantically, I wished I could dig into, and explore, such strangeness. It would be like reaching another world — different from, but as thrilling as, John Carter's Mars. Yes, I was beginning to be acquainted with Edgar Rice Burroughs' yarns. And, as far as I now know, whatever lightless region lay beneath that sink-hole remains unviolated by human intrusion, even after all these years, and the uncounted ages before them. What's down there? Stalactites? Paleolithic paintings? Dinosaur bones?

Before I was ten, I was actively imagining in many directions – paleontological, historical, interplanetary, interstellar, futurian... So the base of an extensive fantasy life was being laid. Everybody has a fantasy life. You can cook such a thing up all by yourself. Or borrow its seeds from books, story or informational. If entirely from the latter

sources, the dream-life is prepackaged and guided. But you still have to fill in many details with your own fancy. After a while, you may find yourself dissatisfied with what you read, and you may begin to construct visions which seem better to you. By then, you've come a good ways. Lately, when anybody asks me that stock question about where I get my story ideas, I tell him to develop a rich fantasy life, that the ideas will come, and if they're good enough . . .

I did have one particular, make-believe, childhood companion, whom I somehow named Mister Weefles. He took lots of forms: a large bird. A mouse carrying a tiny rifle as a defense against cats. A weird, shaggy monster. In Paris, years after he had first emerged from the mists in my head, I remembered him, revived him as the last Lunarian, and put him in a short story which was published as "The Stepson of Space".

I made out sufficiently okay in the external world, until the chemistry of adolescence turned me sensitive, as it has a way of doing. My peculiarities began to show agonizingly to my own view. My mother had always been touchy about our being an odd sort of family, living in an odd, run-down sort of house. Poor, conscientious woman, she so wanted to be like other folks. But circumstances and her own deep-down shyness and rather poetic outlook had trapped and frustrated her. She was part of the oddity, yet she couldn't quite accept the value of her own differentness.

No doubt the genetic traits I inherited from her were accented by her out-spoken comments. "I'm ashamed of this crazy place!" she would say. "Not town, not farm! Who'd ever buy it? But here we sit, because we don't have to pay rent! Ray — you're a boy — you should plan to go far away — amount to something — a good trade."

Yes, I too hated where I lived, and what I had become. I saw myself as not fitting in with any group of peers. I had little aptitude for sports, and not much interest. I had plenty of exercise, but it was all work. I didn't know how to play, and had lost any capacity to be sociable. I was more and more an introverted loner. At school I couldn't talk or make sense, except in science or Latin classes. I was a shabby, pedantic grind. And a screwball! In shame, I kept many of my activities hidden.

For instance, what was a sensible and regular person supposed to feel about a kook of fifteen who crouched for hours watching the activities of a large nest of big red ants, instead of playing baseball, except that he was lingering over-long in infancy? What were well-adjusted folks supposed to think about a nut who toiled over E.A. Wallace Budge's grammar of ancient Egyptian hieroglyphics, instead of learning to dance? I despised what I did, yet I loved it all, too, and was rather bitterly pleased with myself. So, a conflict.

Nor did I like what I saw of myself in mirrors: awkward-looking, peasant-like and "Dutchy" – so disgustingly blond that I seemed faded and washed out – cherubic and innocent, and cussedly, damnably young!

I cussed a lot in compensation, often under my breath. I once overheard a high school teacher of mine remark that she thought I was going schizophrenic, and I was scared she was right.

But I couldn't yet break the pattern of what I was, though I had plans. Summers I worked in the local cannery, with frequent Saturday shipping-work there during the school year, plus some evenings at the battery factory. After graduating high school, I became a cutter in a shoe factory for a year.

So, pushed in part by maternal pressure, I did get to the University of Wisconsin for the 1929-30 term. Much more than for learning in the classroom, it was a minor busting out of what I'd been, and into a little needed outer living — like other people! I didn't shine much as a student. But I even had a girl. Though we hadn't known each other before, we had been born just twelve miles apart, in not too dissimilar rural backgrounds. We were both would-be romantic vagabonds, wanting to journey far and wide to exotic places. The trouble was, we were both poor. I was too full of other dreams and wantings to think seriously of marriage. I was convinced, with Kipling, that "they travel the faster who travel alone." The end of that May, we parted, and neither of us returned to the university.

For me, the university was somewhat of a disappointment. Remembering that I owed my continued living to physicians, I had thought of becoming one myself. But, as matters were, such an objective wasn't quite Ray Gallun. Physicist or astronomer seemed closer, but aside from their being less practical, I wasn't all that apt at maths.

Besides, two short stories of mine, "The Crystal Ray," written for Junior English Composition in high school, and "The Space Dwellers," written for Senior Composition, had both been published the preceding November, respectively in Gernsback's Air Wonder Stories and Science Wonder Stories. I'd gotten checks of twenty-five and thirty dollars for them. Sure, a pittance now, of course, but to put the purchasing power of the dollar back then into perspective with that of the present, remember that we have to multiply the former by a factor of more than five, and probably closer to ten. I had gotten a foot into the writing door — a condition which I was already slow to take advantage of. Besides, in 1928, I'd had a poem published in Magazine World, a periodical put out for high school students by the Atlantic Monthly Company. And the year before that, I'd won a medal for some verses in an anthology of poems by Wisconsin kids that was presented to the then-First Lady, Mrs. Calvin Coolidge.

Half of me itched to ramble off toward far horizons, but my other half itched as much to sink back into my Beaver Dam seclusion, and to give substance to the wild scenes and adventures swirling in my head. I elected to do the latter. I figured that the other importances could wait a couple of years more, for better, more secure fulfillment, when, hopefully, I had established myself in a story-writing job that I could take with me wherever I went.

So, for the present, I returned to working at the shoe factory, and scribbled in the evenings. I wrote several novelettes for Gernsback — Revolt of the Starmen, Wave of Compulsion, Moon Mistress, Menace from Mercury, etc. The trouble was that Gernsback — with the excuse of the Depression — had now become very tardy with payments. Finally, with the aid of one Ione Weber, an attorney originating in Wisconsin, but operating in New York, I got him to pay off the 300 or so bucks at the rate of fifteen dollars a week, an arrangement he more or less adhered to.

Having lost my shoe factory job in the deepened Depression, I got into the local hemp mill in January, 1932, along with a bunch of much older men, my pa among them. Our seventeen-and-a-half cents an hour gave us about two bucks apiece for a ten-hour day, with time-and-a-half for overtime. It was a hot-cold job in a corrugated iron structure enveloped by a Wisconsin winter. I trotted back and forth, like a mechanized zombie, from the hot dry-kiln conveyor, feeding fistfuls of hemp stalks, brought in bundles from the stacks outside, between spinning steel rollers at the cold end of the building. The murk of black dust from the mashed-up hemp stalks was tremendous. Everybody was coughing and spitting. But we were all lucky to have work in those bad times. I had lost my over-

serious, shabby-genteel mother to tuberculosis the preceding September.

In my zombie-like trotting, I escaped into dreamland. Perhaps there was even an incidental aid to this! The large variety of hemp, raised for its fibre, was a very close relative to marijuana. And the waste hemp straw was used to fuel the engine and dry-kiln boiler. So there was a pervasive pungence, like that of burning pot, issuing from the smokestack. See what I mean?

If I was mildly schizoid already, maybe the hemp added a special touch. I fantasized as I toiled. Reality blended into visions and wishes, till at moments it was almost hard to tell which was which... The sense of effort and need... Mars, the red star I'd found in the sky long ago... The grimed snow in my flashlight beam, as I made my way, to and from work, across the dark, plowed fields... Suggesting the ice-caps of Mars?... I wanted a special friend... I didn't even know anybody, besides myself, who really loved science fiction... Why not a non-humanoid, Martian companion, drawn by a romantic yearning to penetrate the mysteries of Earth, as I yearned to probe those of Mars?...

At home evenings, by kerosene lamplight, I wrote "Old Faithful," which has become my best-remembered story. No, it didn't find its way easily into print. Although Amazing Stories had published a couple of my yarns, T. O'Conor Sloane, then the editor, kept the script for over a year, and then sent it back. I don't remember any comment from him, but I have the impression that "Old Faithful" was too out-of-formula — not the sort of thing he was used to. In science fiction, which, almost by definition, should be a forward-looking, innovative type of literature, this seems a strange reaction, a paradoxical contradiction of terms! Yet I suspect that, these several decades later, this same backwardness, and tendency to repeat moods, themes, and settings that have made money before, again afflicts science fiction. Is this truly what the readers want?

I had already sold several short yarns to Astounding Stories, revived from the Clayton collapse by Street and Smith, before I reread "Old Faithful," and then thinking "what the hell," sent it to F. Orlin Tremaine, the new editor. When, in a previous letter, I had mentioned the word "formula," he had come back at me sharply that the new "Thought-Variant" intent of the magazine included getting away from formulas.

My contact with Tremaine, 1934-37, was an interlude in which matters improved much for me. I still took jobs when available, but writing plumped by earnings. Also, I was getting along better with myself and the world. I was obviously an intrinsic non-conformist, not being able to do much to change this. So why shouldn't I be what I was? Flaunt it a little, even? I bought myself a mail-order beret. To the present, I still wear berets, which can be stuffed conveniently into a pocket when you don't need them. But in those remote days, that first beret got plenty of startled stares and disapproving remarks in that small, midwestern city. In the current era of collective non-conformism — or perhaps it is just another face of the same old collective conformity, in which everybody dresses just as he feels like doing? — who bothers to be aware of a mere beret? Yet things were much different back then.

As winter came, I thought of replacing my shabby old overcoat with a new one. But a romantic's alternative occurred to me. Instead of spending the seventeen dollars on a coat, why not buy a Greyhound bus ticket down to New Orleans for the cold months, coming back in April?

That's what I did for a couple of winters.

In May, 1935, when I had finished writing Davy Jones' Ambassador, I journeyed

down to Mexico for the summer - my first enchanted intrusion into a foreign scene!

I finally left Beaver Dam, pretty much for good, just after Christmas, 1937. New Orleans again. Then by freighter to London. I had intended to spend considerable time in Britain, but a girl passenger helped change this. So I wound up in Paris, which became my base for the next year-and-a-half.

By then, Tremaine was no longer actively editing Astounding. He was an editor whom I had appreciated very much, though I had not met him personally. His letters were brief and to the point. He never said that a story was better than good. If he wanted a revision in a script, his terse suggestions left room for one's own judgement. We had a good, dependable working arrangement.

John W. Campbell was of a different sort, effective in another, more precise, specific, and perhaps conscientious — though somehow elusive? — way. No doubt many writers found his extended, constructive criticisms very helpful. But he and I both were personalities with definite ideas; also, we were of approximately equivalent experience in science fiction. I remember that he bought a story of mine for three weeks in succession. Then it seemed to me that he turned picky, and a bit capricious. We didn't quite hitch. A fair amount of the incompatibility was, no doubt, from my side. He had every right to shape his magazine according to his own lights. I was into a new way of life in a foreign country; besides, I wasn't altogether a paragon of patience. There were other magazines to work for. Also, with the world — from my closer-up viewpoint — more palpably preparing for a major and agonizing upheaval, the writing of stories of any kind seemed of secondary importance.

Refugees from Nazi Germany were coming into Paris. The first residence I got into there — Le Foyer des Jeunes, 151 Avenue Ledru Rollin, was a pension which should be immortalized as a gathering place for just about every economy-minded young chap from the States, Britain, and Canada, who ever hit that fabulous old city. I joined up with a group of such fellows who not only needed to make some sort of living, but idealistically wanted to help the scared and troubled rejects from Hitler's Third Reich. For once I had companions with whom I could closely identify.

We met trains and we helped find contacts, and some sort of lodgings, for the refugees. Since most of them hoped to migrate to the States, Britain, or Canada, we gave them individual lessons in spoken English — the going rate for those who could pay was ten francs an hour, with a dollar buying thirty-seven francs. Quite a few managed, in various ways, to have more than the miserable nine marks that was all they were legally able to take out of Germany. We got by. We also got lessons of our own in the contrasting complexities of the human psyche, when faced by hard facts.

Incidental to journeying around Europe and North Africa, I also made several excursions into Hitler's domain. I had been informally commissioned to check up on relatives and friends of people I had already met. Besides, I wanted to observe the Nature of the Beast from close quarters. With a rucksack on my shoulders, and wearing lederhosen, it was amazing how readily and cordially even huge, military Wehrmacht trucks picked up hitchhikers — anyhow, those who looked like me. Of course, it was National Socialist policy toward their own — and foreign — wanderbirds. I was visibly one of "Our Americans." That my paternal grandfather seems to have been an apostate Jew didn't show. I got along very nicely at the Jugendherbergen — youth hostels — and elsewhere. Fellows took me under their protection as if they were my more-experienced

brothers. If I was somewhat of a hypocrite and a spy, so be it; that was my own secret. I knew a lot of old German songs. I got into street marches with my brawny, and often quite bright, comrades. And, believe me, there can be an emotional treachery! All those long, red banners, with black-on-white swastikas! And the jingly, elfin, yet booming, martial music. While locked arm in arm, you sing, "Die fahne hoch! Die reihen fest geschlossen! . . "With your heavy soles slamming down in unison on the cobblestones. Ah, yes, a sense of tremendous power, and of unified and friendly belonging, can try to sneak into your guts. Exhilarated feeling attempts to overwhelm reason.

Unless you're made of such stuff. Then, from deep down, your emotional gorge begins to rise. Nuts, pals — not my bag at all, and you're not going to absorb me. Whenever it can be done without surprise. I'll slip away, to attend to my own affairs . . .

I was much too used to being my own man. Extreme collectivism, right or left wing, isn't for me. Besides, I'd seen too many scared faces. Yet I wonder today how many of those rather nice — though darkly inspired — kids whom I marched and sang with, made it all the way through the second world war and are still alive.

Germany of then was a peculiar country, acting out its fairy tales in anger, it seems to me — the Pied Piper of Hamlin leading the rats to drowning with his music, the siren songs of the Lorelei, the wicked witch of Hansel and Gretel baked to gingerbread in an oven. Ironically, the ovens of Auschwitz were made by a manufacturer of baking equipment.

During the 1938 crisis, which ended with Hitler grabbing Czechoslovakia's Sudetenland, all the streetlights of Paris turned dimly, eerily blue in semi-blackout. It was a creepy time! Nobody had much of an idea of what a massive air raid on a large city might be like. That was a still-untried thing, but there were rumours that there would be half a million casualties. But the scary emergency ended in a further step toward capitulation. Mr. Chamberlain, the British Prime Minister, visited Hitler, and brought back what he called "Safety," though the agreement soon sacrificed all of Czechoslovakia.

1939 was kind of hectic for me, but quite agreeable. I was down in Italy, after just about deciding that, if I was going to have another winter in Europe, it would be at Cap d'Antibes, in Southern France. We were vagabonding up the west coast by "auto-stop," or hitchhiking, in late August, when the final international warm-up came. I was in St. Avertin, near Tours, when France announced its general mobilization order. Wide requisitioning of vehicles, even bicycles, was expected, but I managed to get back to Paris without much trouble. By then, for quite a while, I'd had a little studio on the top floor of Number 2, Rue des Grands Degrés, a couple of stone throws from Notre Dame Cathedral. With everything uncertain, I was just following my nose, in a spooky nevernever land, dim blue at night. The announcement of the invasion of Poland – War – came with a minor flutter, almost a tense quietness. Again I helped Freddie Suter, the Swiss concierge of the building, arrange sandbags on the roof. I went around to exchange views with fellow Americans. Funny how scared people lean on each other! The general urge was to get out. I packed up my minor treasures.

Then came that night when the first two German photo-planes appeared – little sparks high up that the search beams sometimes caught. They dropped a few flares. Defense – flak and planes – made a lot of noise. "I-dare-you" stuff, as usual, put quite a few characters, including me and some companions, on rooftops and other points of vantage, instead of down in the *abris* (shelters). It got to be a heady sort of lark.

Getting out of Paris by train, with so many people trying to do just that, proved a bit difficult. But, in a couple of days I got a ticket, and in a matter of about thirty hours, stopping and starting for the passage of war material trains, I got to Bordeaux.

I was there and in the vicinity well into the Autumn. The lark mood recovered. I helped other strandees find lodgings in private homes when all hotels were full. I rode the trolley twenty kilometres out of town to Caillou, and worked with a grape farmer doing the vintage. Finally, I got a job on the St. John, a ship rented by the U.S. Lines, and sent over to collect American refugees. During the long wait, a lot of fresh fruit and vegetables were going bad. So, I was sorting. Nights, I was out on the town. The camaraderie among us late departees was enormous. Brought along from Paris was even Cloë, the mascot cat from the American Students and Artists Center.

I got to New York - my first time there - by the end of November. Because of workaway passage, I still had four hundred dollars in traveller's cheques.

I met other science fiction people for the first time. Mort Weisinger, Horace Gold, Julius Schwartz, Malcolm Jameson, Hank Kuttner, Otto Binder, Manly Wade Wellman, F. Orlin Tremaine... It was a big thrill, topping a long awareness from a distance, and they were very good to me. Visiting Campbell – just once – was also entirely agreeable.

I wrote again, but after a while I slipped into a phase where story ideas didn't come very often without glitches. So, in September, 1940, feeling more attuned to a foreign scene, I went to Mexico City, which became like a second home to me. I wintered in Acapulco, then still little more than a dusty, charming fishing town, where you could live for about five bucks a week.

I finally left Mexico City for New York in the spring of 1942. Along with four other guys, I had tried to join the Navy back in 1931. For a variety of reasons, they had rejected the lot of us, then. But now, in wartime, I thought I had a chance. Not so. They still didn't like my nearsighted eyes, or the deep scar on my back. So I was told that I still might qualify as a civilian employee. They fiddled with my application for months. Tired of my pestering, one of their people finally told me that I might make it quicker at a neighbouring office hiring for the Corps of Engineers. I applied on Tuesday, and was shipped out on Friday of the same week. Ironically, I had to turn back the Navy travel vouchers, which came through in the meantime.

Very soon I was helping to dig Army storage tunnels deep into the mountains of Oahu, and then "setting up" - preparing - drill-steels in the blacksmith shop. After completing the contract, I at last made it to Pearl Harbour as a marine blacksmith. I've always kind of liked physical toil. Close to war's end, I got back to New York.

I wrote science fiction sporadically, and took some pot shots at "slick" magazines. In 1946, Collier's published two mainstream short stories of mine; then I had another short in Family Circle, plus a couple of others in newspapers. But I couldn't make my effort toward the big magazines really stick.

F. Orlin Tremaine, then with MacFadden, gave me names and addresses which got me into technical writing, which turned out to be my mainstay of employment. If I wanted to be a constant wanderer, the old, automatic process of sinking roots got partly in the way.

Along the line, I got attached to Frieda Talmey. We were very different people, complementing each other. As a teacher, she had long summer vacations for journeys to far places, and I could usually bust away. Our strengths and weaknesses were in offset

positions, so, where one was in doubt, the other was sure. Our cultural backgrounds were vastly apart, but we both liked natural things, and were both rather religious agnostics. Her knowledge of languages was extensive and precise; mine was largely picked up from the immediate environment.

Perhaps I should interject a kind of footnote here, of possible interest to science fiction readers. Frieda's father was Dr. Max Talmey, who, as an impecunious medical student in nineteenth-century Germany, was frequently invited in by an Einstein family to have a good meal. Incident to this custom, young Max presented much younger Albert Einstein, then about eight years old, with his first advanced mathematics book. Their friendship continued.

In addition to being a fine eye surgeon, Max Talmey was a linguist, with special interest in auxiliary languages. Being dissatisfied with Esperanto, he devised his own - "Arulo". He believed that a universal language, understood everywhere, would be a great force for world peace.

The Talmey apartment was at 101st Street and West End Avenue, Manhattan. The kitchen window fronted on a light shaft from which one could see down to the rear windows of the adjacent Jewish synagogue. During one of his visits to the Talmeys, Albert Einstein looked out of the window, and heard the cantor singing. Einstein grinned in his puckish way, and remarked: "So sieht der lieber Gott von hinten aus! Ich habe mich immer darüber gewundert!"

Or, in equivalent American English: "So that's what God looks like from the backside! I've always wondered about that!"

Summers, Frieda and I rambled around in lots of places. Being at the time more intrigued by Latin America, we didn't get back to Europe till 1952. Paris felt to me rather like burying the dead. Spain and Portugal had a livelier appeal. In 1958, while visiting Walter Ernsting (Clark Darlton of the *Perry Rhodan* books), whom I'd met in 1955, I began what turned out to be my last science fiction story till 1974. Frieda was just then away in Berlin with a group of teachers on a Fulbright grant, studying German methods of teaching. In September, I went down to Ibiza in the Mediterranean, and brought the completed novel, *The Planet Strappers*, back to New York just before Christmas. Pyramid Books published it in 1961.

But I was a bit weary of science fiction. A thousand dollars advance — the usual amount in those days — looked like rather slim pickings for so much work, even with the couple of hundred bucks extra. I had an easier, more lucrative way of making a living. So I thought of whom — Rupert Brooke?: "Tenderly, day that is dead..." A phase ended. Great fun while it lasted. Now settle down to being a good nine-to-five type, except for the summers. And a husband with a fine wife.

No, I never actually quit spare-time literary scribbling; I just relaxed in it, and began doing what I had wanted to do — write an intimate novel, centred around the house in which I had grown up, and its effect, and that of its creator, on a person rather like myself. Though I went through the script four times, I kept on having lots of fun doing it, in spite of the fact that it turned out to be 1,450 pages long. Several years ago, I showed it around to quite a few publishers. I got some nice comments: "It certainly has pace and color . . . Interesting and convincing characters and incidents . . ." But the overall impression about Ormund House boiled down to one statement about it: "Far too long to be commercially viable."

That was a while ago, before there were many massive paperbacks. Maybe I should start sending *Ormund House* – no, not science fiction, but a real story behind a lot of science fiction – to publishers again.

In the spring of 1968, Frieda and I were setting up another summer jaunt into the distance. Africa again. We'd been pretty well all up and down its eastern side, but we'd missed Ethiopia. Her sore right-knee joint was expected to improve quickly. No big-deal. The doctors checked with more X-rays. So Frieda went to the hospital. An Elliot-bar – an L-shaped piece of stainless steel, with eight screws through the femur bone – was inserted into that knee joint. Besides the biopsy, a lot of tests were made. The diagnosis was: "Undifferentiated, metastatic carcinoma, primary site unknown."

A very remarkable gallant woman – this opinion is much more than just my own – passed on in May, 1974. The interim six years were by no means spent in constant emergency. We even took less strenuous jaunts – Germany, the Canary Islands, and Western Mexico.

During much of 1973, I had to stay at home with Frieda. That was how I got started writing science fiction again — The Eden Cycle, which Ballantine published in 1974. To me, this novel is my best science fiction story. It stays human throughout, though its Ultimate Solution goes as far into reasonable possibility as my imagination can reach. Its end is not negative, though the human characters may thanklessly seem to think so. When what better Great Purpose can be found for Life than to live it? I suppose the story behind the story peaks through a bit — when you know. My opinion, of course, but I believe that Eden Cycle merits more attention than a hasty skim-through.

Under potent chemotherapy, Frieda seemed to be bouncing back out of hazard again. It was a Sunday afternoon. She was talking around the hospital, seeing visitors to the elevator. She told a joke and laughed a little. The jolt of that laugh was just enough to rupture cancer-chewed blood vessels in the center of her chest. She was gone in fifteen minutes. Perhaps so best.

I've been retired from formal employment for a while now. I'm refreshed for science fiction writing. I've written three new novels, and two novelettes have been published in *Analog*, this after at least twenty years of trying nothing at all for any magazine. My long absence from science fiction is explained by the twelve years I spent writing *Ormund House*.

These recent years have been rather eventful. In South America in 1977, those two star-struck kids from back at the University of Wisconsin re-met. We'd been totally out of touch for four decades. Early in 1978 we got married. Bert (Bertha) is another remarkable woman — and from close to my own roots. And while living fully and ruggedly otherwise, she remained true to her young dream of distant places. We're of the same romantic inclination. She's a travel consultant. At the risk of being called a habitual name-dropper, I remark that her brother, recently deceased, was Dr. Milton Erickson, noted psychiatrist and hypnotherapist. Not bad for a boy off a small Wisconsin farm, though of strong pioneer parentage.

Bert and I honeymooned around the world, with a month's pause in Kashmir on a houseboat. Since then we've been through Mainland China. Then to the Balkans. Next year, if our strength hold out, we'll probably take another look at Australia.

About my science fiction, I understand that *People Minus X*, originally Simon and Schuster, 1957, and Ace as a paperback, 1958, will be republished before long. Tower

Books has taken one of my new novels, Skyclimber. At this writing, the other new novels, The Magnificent Mutation and Gemi the Finder, are out looking for slots.

Gemi, particularly, is something I've long wanted to write. How about a guy, gifted with a strong scientific mind, but born circa 1900 B.C., when science was barely at its beginnings? That's Gemi, ancient Egyptian adventurer, intriguer, geographer, and wise man. Egyptology has fascinated me since I was a kid. If a kind of medieval atmosphere can pervade many science fiction and fantasy books, why not that of old Egypt? For a change?

You see, a science fiction scribe drop-out is trying to get back in. Old-timers remember me; the younger set still not so much. Mostly my own fault - I just vanished for a long time.

My present view of the worlds problems? I'm pro-technology and — yes — pro-nuke. No-nuke attitudes seem so one-sidedly propagandized, and so burdened with nervous, unreasonable dread of the unknown, that they might be called a reversion to primitive demonology and superstition. Not only is this causing costly obstructionism; it is downright dangerous. I can't go deep into the nuclear topic here, but the way out of misinspired emotions — except for such persons who take "No Nukes!" as a closed-minded cult principle, perhaps linked with almost religious fanaticism — is to get better informed of the facts. There are good books around that look carefully and calmly at both sides. One available in paperback, and I have no reason, other than the quality of the work, to favour either the author or the publisher, is *The Health Hazards of NOT Going Nuclear*, by Dr. Petr Beckmann.

Another matter which I favor even more emphatically: Let's get seriously back into space exploration! Surely it is time for us to start fledging a little faster from the nest of Earth. To me, reading and writing science fiction has always been largely an interim substitute for Realities which haven't yet come about. But the Reality is preferable, and usually more exciting than any mere imagining. The moon and the asteroids are out there, waiting. And Mars. It is almost irrelevant whether there is, or has ever been, life on Mars. There it is — a world with a day so like in length to our own that, without a clock, we would be hard put to tell the difference! And there seems to be plenty of water in the form of ice and permafrost. Mars is a harsh place, but it has a strange soil chemistry. I think Mars may yet hand us some fascinating surprises. And how about those pairs of huge, symmetrical, three-sided pyramids in Trivium Charontis? Not to mention other, huge, regularly formed objects and markings.

So how about the moons of Jupiter – volcanic Io? Europa, Ganymede, Callisto? How about the great Jupiter itself?

Our guts and minds need a new frontier. Let's get an enlivened space program into action.

In our last issue we were pleased to publish Naomi Mitchison's personal testament to sf, "Wonderful Deathless Ditties". Now Patrick Parrinder has kindly supplied us with something which has been long overdue in the field of sf criticism — a study of the sf of Naomi Mitchison and her late brother, J.B.S. Haldane. Dr Parrinder is a lecturer in English at the University of Reading, and author of H.G. Wells (1970), Authors and Authority (1977) and editor of Science Fiction: A Critical Guide (1979). He has lectured on sf in the UK, and at universities in the United States, Canada and West Germany.

Siblings in Space: The Science Fiction of J.B.S. Haldane and Naomi Mitchison

Patrick Parrinder

In thinking of Naomi Mitchison's life and achievements, whether we look at her production of seventy-odd books or of three sons each of whom became a professor of science, it is difficult to avoid Noel Annan's phrase "the intellectual aristocracy". Like her brother, J.B.S. Haldane, and like her Oxford contemporary Aldous Huxley, Naomi Mitchison belongs to one of those extended families or clans which have left an indelible imprint on British cultural life in the last 150 years. Her father was John Scott Haldane, the Oxford physiologist; her uncle, Lord Haldane, was a Hegelian philosopher who served as a minister in both Liberal and Labour cabinets. She and her brother share a rebellious streak, a simplifying and contrary urge, that is not, perhaps, much in evidence in their illustrious forebears. They are scientific fantasists, scholarly popularizers, and patrician socialists and communists. "J.B.S." was one of the great debunkers of his age, while Naomi Mitchison's sceptical "love-hate relation" with science seems to have begun when, as a girl, her brother persuaded her to carry out genetic experiments on her pet guinea-pigs. Yet both have been among the most loyal exponents of 20th-century scientific optimism.

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J.B.S. Haldane's greatest contribution to science fiction may have been an indirect one, of the kind that is acknowledged in Arthur C. Clarke's essay "Haldane and Space", but his direct contribution, in such writings as "The Last Judgement" and *The Man with Two Memories*, is by no means negligible. Together with J.D. Bernal, he was the leader of that remarkable group of British ideologists of science whom Gary Werskey has recently

studied in his book *The Visible College* (1978). Like Bernal, Joseph Needham and Hiram Levy, Haldane became a Marxist and was for many years closely associated with the Communist Party, writing, among other things, a regular scientific column in the *Daily Worker*. His life, culminating in a decision to emigrate to India in public protest against Britain's invasion of Suez, bears impressive testimony to the depth of his political and social convictions. His ultimate loyalties were to the advancement of science, however, rather than to the classless society – making him a Wellsian prophetic rationalist rather than a militant socialist.

Daedalus: or Science and the Future (1923), the brief pamphlet which launched the "Today and Tomorrow" series conceived by C.K. Ogden, and which began Haldane's own career as a popular writer, is a wonderfully provocative statement of his scientific creed. Freeman Dyson in Disturbing the Universe (1979) has called it "in many ways the best book ever written about the human consequences of progress in biology". Daedalus is at once a meditation on the place of biological invention in history and a work of futurist speculation, involving for part of its length a characteristic fictional device: an essay on the development of 20th-century biology to be read by a "rather stupid" Cambridge undergraduate to his supervisor 150 years hence. The principal innovation that he reports is the near-universal adoption of ectogenetic (or artificial) motherhood, leading to the separation of reproduction from sexual love — a prospect that is reproduced, although in different forms, in the clone-based societies of Huxley's Brave New World and of Naomi Mitchison's Solution Three (1975).

Daedalus is notable for its idiosyncratic Haldane blend of patrician classicism (he was an Old Etonian) and scientific romanticism. It portrays the biologist as "the most romantic figure on earth at the present day". Haldane's title invokes the legendary pioneer of aviation (Bertrand Russell's celebrated rejoinder to it bore the rather predictable title of *Icarus*). Nevertheless, it is Daedalus the biological engineer whom Haldane chooses as his hero. When Queen Pasiphaë became infatuated with a white bull, it was he who constructed the cunning wooden apparatus which enabled her to consummate her passion. The offspring of this prototype of all genetic experiments was the Minotaur, and, as Haldane drily remarks, "Had the housing and feeding of the Minotaur been less expensive it is probable that Daedalus would have anticipated Mendel". The "fabulous artificer's" research grant ran out — an annual contribution of fifty Athenian youths and fifty virgins proving ultimately unacceptable to his sponsors.

The moral that Haldane draws from the Daedalian experiment is that all biological progress involves an initial affront to our sensibilities. "If every physical and chemical invention is a blasphemy, every biological invention is a perversion", he writes. Later generations are able to take the invention in their stride. (In 1981 a total of 200 artificial inseminators, armed with apparatus not totally unlike that devised by Daedalus, were employed in British cattle-breeding centres.) But the biologist, an *enfant terrible* like Haldane himself, must always remain shockingly in advance of popular opinion. "The scientific worker of the future will more and more resemble the lonely figure of Daedalus as he becomes conscious of his ghastly mission, and proud of it".

Few scientists have written as boldly about science and its relations with popular feeling and cultural tradition as Haldane did. Admittedly, some of his most outspoken sallies first appeared in the *Rationalist Annual*, where a certain amount of fly-swatting would have been expected. "Like bedbugs in the cracks of walls and furniture, miracles

lurk in the lacunae of science", he concludes a brief "parallel world" sketch reprinted in Fact and Faith (1934). "The scientist plasters up these cracks in our knowledge; the more militant Rationalist swats the bugs in the open". In Daedalus his 21st-century undergraduate writes airily of events in 1942, when a new strain of fertiliser supposedly escaped from the laboratory and caused the surface of the Atlantic to set to a jelly. That was the sort of unintended "possible world" about which a more orthodox propagandist for scientific progress might have been expected to keep silent. Haldane's insouciance about the social consequences of science (he also wrote Callinicus, a defence of chemical welfare) is as unsettling today as it was sixty years ago.

It is not surprising that someone as far-sighted, as iconoclastic and as creativelyinclined as Haldane should have turned to science fiction. Possible Worlds (1927) is a remarkable source-book of sf ideas, containing his famous essay in scientific apocalypticism, "The Last Judgement". I have written of this elsewhere, and will confine myself to the title-essay of his 1927 collection here. "Possible Worlds" sets out to expose the anthropomorphic limitations of the physical, biological, and metaphysical concepts by which we live, by imagining the world of nature as it might appear to a dog, a bee, and a barnacle, as well as to one or two more hypothetical animals. The result is a series of science-fictional premises for the construction of "other worlds" in which the familiar human sensory apparatus has been replaced by something different. We are, in effect, looking at existence "from the point of view of non-human minds". Haldane concludes this thought-experiment with an expression of fundamental epistemological scepticism of the kind we nowadays associate with the novels of Stanislaw Lem: "my own suspicion is that the universe is not only queerer than we suppose, but queerer than we can suppose". This statement has achieved semi-canonical status, since Arthur C. Clarke referred to it as "Haldane's law".4

Science fiction is engaged in a constant struggle to disprove "Haldane's law". This is as true of Lem's novels as of anyone else's. One cannot present "unknowable" alien intelligence in a novel without in the process conveying some knowledge about it. It is highly significant, therefore, that "Haldane's law" is a whimsical afterthought which goes against the grain of the essay in which it is put forward. Both its author and Naomi Mitchison have written fiction which seems intended to controvert it, as we shall see below.

The Man with Two Memories, Haldane's single, unfinished sf novel, was published posthumously in 1976. Though introduced by one James Robert Murchison, FRS, Professor of the History of Science at Leicester University – a very J.B.S.-like figure – this is in effect the autobiography of Ngok Thleg, an alien born many thousand million years ago on the planet Ulro. Ulro, with its capital of Golgonooza, made an earlier appearance in Earth literature in the prophetic books of William Blake. Just as Blake must have relied on a celestial visitor for his information, so Ngok Thleg's memory has become fused with that of Murchison. Ulro was the home of a thriving industrial civilization incorporating genetic engineering and behavioural conditioning on the Brave New World pattern. Space exploration, using nuclear-powered ships, was under way, and the Golgonoozans were in radio contact with other star systems. They had located several thousand planets containing intelligent life in the galaxy, and, using the universal language of mathematics, were able to exchange messages with 358 of these.

Haldane provides a long, quirky, and exceptionally detailed account of his

protagonist's upbringing. Ngok Thleg is a misfit on Ulro, an "archaic" who finds himself excluded from many of its cultural activities. People like him are subjected to psychological conditioning, brain surgery, or worse. Initially, however, he is allowed to train as a historian. Because the novel is unfinished, the mystery of his subsequent transmigration to Earth is not formally explained, although it is clear that his soul has been projected forward after death (there is an execution scene which recurs in Murchison's nightmares) in an attempt to influence the development of terrestrial civilization. Memory fusion, as perfected by the Golgonoozans, depends upon a substantial genetic similarity between "donor" and "recipient". Believing that the universe may be improved as time goes on — so long as each new intelligent species can rely on some advice from the past — they have sent Ngok Thleg as an unwilling messenger to the culturally rather more backward Earth.

Haldane seems to have written the tale of Ngok Thleg shortly after his move to India in the late 1950s. It has a relaxed, capacious narrative which never hesitates to pick up unconsidered trifles by the wayside. Details of life on Ulro range from their achievements in linguistics and number theory to the biochemical process employed to produce sweetsmelling excreta. The author moves straight from suggesting possible amendments to the marriage service of the Society of Friends to some remarks on canine behaviour in Homer. (One wonders if he lacked journalistic and conversational opportunities immediately after settling in India.) Be that as it may, *The Man with Two Memories* does surely reflect the sense of cultural schizophrenia induced by emigration to a Third World country where he hoped to further scientific development, and which was, in the words of one of Ngok Thleg's teachers, "a little behind our own". His deep concern for Indian culture and love for its classical texts is also in evidence. *Volj*, the all-important Ulroan ritual from which Ngok Thleg is debarred, involves the pursuit of heightened awareness such as that sought through yoga. The premise of memory-fusion on which the story is based has affinities with reincarnation.

Haldane's literary gifts were considerable, and could take surprising forms; his poem "Cancer is a funny thing", for instance, is one of the few examples of really popular verse in the last twenty years. Though his novel is no more than a curiosity, his speculative essays are too little read and have not yet had the recognition they deserve. "J.B.S."s varied achievements speak for themselves (his biographer, Ronald Clark, lists more than 300 scientific papers alone), and it would be pointless to regret that he only occasionally turned to science fiction. All the more so as his flair for the romantic applications of speculative biology has been carried on by his sister, whose first sf novel Memoirs of a Spacewoman was, one would guess, written within a year or two of The Man with Two Memories.

2

Naomi Mitchison has been familiar with science all her life, and with science fiction for most of it. Her three sons have pursued successful scientific careers, and she has known many of the century's leading scientists. Solution Three, her second sf novel, is dedicated to James D. Watson, and there is a lively description of a visit to Carradale, the Mitchison's capacious house on the Kintyre peninsula, in Watson's best-selling account of the discovery of DNA, The Double Helix. (There is also, I suspect, a disguised and subtly altered portrait of the Mitchison clan with its intellectual and political ramifica-

tions in Doris Lessing's *The Four-Gated City*.) Lady Mitchison is the author of mainstream novels, historical fiction, children's books, political pamphlets, and a great deal of journalism; and among her more unlikely distinctions is that of being chosen as Mother to the Bakgatla tribe in Botswana. As with her brother, her profound experience of cultural and racial contrasts would seem to be one of the sources of her science fiction.

I shall dicuss Solution Three before coming on to Memoirs of a Spacewoman (1962), which was appropriately included in 1976 in the New English Library's SF Master Series. Solution Three offers a variation on the biologically-engineered societies foretold in Daedalus and in Brave New World. Its mental atmosphere is that of the patrician utopias of Huxley and H.G. Wells, in which a council of scientific bureaucrats rules the world and politics has been superseded by administration. (The common ancestor is Plato, whom she recalls reading in her girlhood at the same time as she discovered Kipling, Wells, Poe, and Stevenson.⁵.) In Solution Three the Council has come to power on Earth after an unspecified, presumably nuclear global catastrophe. The New World has its problems, but Mitchison's view of her society is a benign one, leading up to the suggestion that, if one solution doesn't work, you can always try another.

Solution Three is the latest of a series of world population policies imposed by the Council. The annual birthrate is steadily falling. Public feeling has been aroused against heterosexual relationships, which are now viewed with disgust although still grudgingly permitted to the Professorials, an anomalous group of misfits who happen to be indispensable since it is they who control the supply of new technology. Biological progress (going right back to the work of the pioneers "Watson and Mitchison") has ensured that the great majority of new births are brought about by cloning. Male children (reputedly with the genes of Lenin or Mao) and females (with the still more mythical genes of the Virgin Mary or the Buddhist deity Kwan Yin) are incubated by specially selected mothers. At a certain stage of infancy they are taken away for a gruesome process known as "strengthening", which they later look back upon with stoical aplomb (perhaps this is the utopian equivalent of the traditional English boarding school?)

The novel portrays a curiously enervated society — not a police state but a Welfare State of "watchers and carers". The cool, civilized, vegetarian Councillors give the impression of floating along on a cloud of cannabis, the "aggression dispeller" used to damp down possible outbursts of anger or conflict at their meetings. Generous amounts of Lesbian copulation in public do little to raise the emotional temperature. The resumption of space travel, along with most of their other hopes, has been laid at the door of the next generation, that of the clones, to whom leadership will eventually pass. But suddenly it appears that things are going wrong. The first clones, now in their early twenties, show unexpected signs of individuality and even a hankering after the insanitary family life of the Profesorials; meanwhile, a mysterious blight attacks the wheat crop world-wide. The remedy (Solution Four) is obvious; a society of uniform look-alikes cannot survive. This has been known to geneticists since Mendel, and was stated rather picturesquely in *Prometheus*, a companion volume to *Daedalus*, by the zoologist H.S. Jennings as long ago as 1925:

so long as biparental inheritance is kept up, the variety, the surprises, the perplexities, the melodrama, that now present themselves among the fruits of the human vine will continue. Capitalists will continue to produce artists, poets, socialists, and labourers; labouring men will give birth to capitalists, to philosophers, to men of science; fools will produce wise men and wise men will produce fools; and all the kinds of problems presented to society by the

turns of the invisible wheel will remain.

The genetic diversity inseparable from meiosis, or biparental heredity, cannot be dispensed with; this is as true of cereal crops as it is of human beings. Solution Three is, then, a propaganda novel on a strictly contemporary theme, that of the relentless destruction of diversity in species and our urgent need to preserve an adequate gene pool if both we and the environment that sustains us are to survive. We leave this neo-Platonic world with the Council on the verge of publishing a new edict, which may be roughly translated as: let heterosexuality thrive.

Memoirs of a Spacewoman is quite unlike Solution Three. It is not a particularly didactic book, and its heroine encounters a radical otherness of being and experience which is quite foreign to the genre of the Platonic neo-utopia. Mary is an interplanetary "communications expert" whose adventures in learning to understand other races seem intended to defy the pessimism inherent in "Haldane's law" and echoed, more recently, in Stanislaw Lem's galactic voyages. One might draw a parallel between Naomi Mitchison's dissent from her brother's views on this point, and the arguments that Gregory Benford is currently advancing against Lem. Benford reminds us that intellectual cognition is not the only kind of knowledge, a theme which he illustrates by means of an entertaining account of the process of chicken-sexing, which he learned as a boy in Alabama. His serious point is that there can be a coherent "intuitionist" alternative to the narrowly rationalistic epistemology on which Lem bases his idea of the "unknowability" of non-human minds. If this is so, Mary in Memoirs of a Spacewoman must be the classic embodiment of intuitionism. She succeeds in making contact with various grotesquely alien life-forms, and she does so, at times, by using her body – that is, by offering it for fertilisation – as only a female spaceperson can.

This is an imaginative and witty novel, and most certainly a feminist one. The narrative is episodic: an unsystematic memoir in which Mary recalls her attempts to make contact with a series of alien races, and the moral dilemmas that ensued. Not all of these contacts are sexual. Yet the double meaning of "intercourse" appears early on in the story, as Mary and her research assistant observe their Martian opposite numbers:

The Martians, of course, took off their protective coverings in order to communicate. This was always a tiny bit disconcerting, since in some ways they were so like ourselves, but their uncovered areas were slightly different. I remember Olga blushing a bright northern pink the first time she saw two Martians in full communication. "But," she said, "what are they doing?"

"Communicating – talking," I said, "yes, certainly, with their sexual organs. And remember they are all two-sexed; they only take on mono-sexual characteristics at certain specific times, and very seriously, Olga, my girl."

The Martians, needless to say, found humanity "terribly shocking at first... the way we covered up what should be uncovered... They thought we must have some kind of horrible taboo against communication". Mary, indeed, has no taboo of the sort. On two occasions she takes part in a grafting experiment, involving organisms from another planet with "a tissue so alien that it is not recognized even as an enemy so that no antibody is produced". As the graft grows, she finds her personality changing uncontrollably, until she is, from a scientific point of view, "delinquent". The graft's nature, it turns out, leads it to try and fertilise whatever host organism it is attached to.

Recovering from a dangerous accident on one of her expeditions, Mary finds herself taking part in yet another genetic experiment. The circumstances permit her Martian colleague, Vly, to overcome for once his natural revulsion towards a Terran female. Vly is

a civilized Martian, who deliberately make opportunities to visit Terra and see his baby from time to time as she grows up - though his distaste for the whole affair is quite palpable. Mary's too, perhaps. Nevertheless, as she pluckily observes, "There is something about it all that makes me sure it is a plus fact in the great moral equation".

The "great moral equation" is what, in this novel, provides the intellectual fodder that the Great Epistemological Dilemma supplies in the novels of Lem. For, however monstrous and bug-like the life-forms may by, *Memoirs* radiates with the confidence that the problem of communicating with the alien can be solved. All that is needed is patience, resourcefulness, and expertise. The resulting contact takes its toll, however, in the emotional and intellectual pressures brought to bear on the researcher: pressures to relinquish her own identity and values, and pressures, conversely, to "interfere" with the Other. Interference is an offence against the galactic code, so that those found guilty of it are prohibited from taking part in further expeditions. The temptation is strongest when the explorers come upon alien cultures in which large-scale killing is a matter of course, and in which parents attack their own offspring and allow them to die. It is like revisiting those ages in the past when humanitarian concerns were of little account and large numbers of people were sacrificed in the name of religion or national identity. (The dilemma of interference or non-interference here is comparable to that in the Strugatskys' *Hard To Be a God.*)

Given the power to intervene in other societies whose practices are abhorrent to us, we have rarely hesitated to use it. Yet, even under a regime in which any form of gross interference is punishable by the galactic code, it remains true that no landing on, or observation of, other planets is entirely without consequences for their inhabitants. Mary is bound, therefore, to envisage the possibility that in future space travel will no longer appear to be morally acceptable. Nevertheless, she is optimistic that this will not happen ("Could we perhaps become totally imperceptible?" she asks herself). Not philosophy but cheerfulness — a pragmatic determination to break down every human predicament into "problems", each one capable of its "solution" — is the perhaps unfashionable basis of Mitchison's sf. It marks her modest, humorous, and wholly distinctive contribution to what she calls the "serious sf of the prophets and movers". For her, as for her brother, for Wells, and for Edgar Allan Poe, science fiction is all a bit of a lark — and none the worse for that:

The more we explore, the more problems meet us. Yet would we have it otherwise? I think not. Humans were beginning to run out of serious moral problems about the time that space exploration really got going. The mid-twentieth century had been full of them, but when most of them had proved to be quite easily soluble — given, of course, that solution really was desired — there was quite a danger of moral boredom. Well, we can't say that now!

Mary speaks with her author's voice here, and its jauntiness cannot be separated from the peculiar good fortune and security of Britain in the earlier 20th century, and of the British intellectual aristocracy into which Naomi Mitchison was born. It is, we may say, congenital. It is also highly infectious. The universe of *Memoirs* is a chaotic but nevertheless benign one, full of curious and interesting people and things; a universe which, as she says of one of her characters, "one may explore . . . endlessly, always learning something new". Much the same universe is invoked by Haldane in "Possible Worlds", despite its pessimistic conclusion. Haldane and Mitchison (if we may be permitted to merge their identities somewhat) are by no means the only British writers of their generation to have begun as *enfants terribles* and to heve ended, more or less, as a national

institution. There are, for example, Rebecca West, William Empson, and Evelyn Waugh. What is peculiar to our chosen pair is the exhilarating confidence with which they have proclaimed that — as C.P. Snow said of scientists in general — "they have the future in their bones".

Notes

- 1 Naomi Mitchison, All Change Here: Girlhood and Marriage, London (The Bodley Head) 1975, p. 61.
- 2 Reprinted in Report on Planet Three and Other Speculations (1972).
- 3 See my Science Fiction: Its Criticism and Teaching, London and New York (Methuen) 1980, pp. 98-9.
- 4 Clarke, Report on Planet Three, London (Corgi) 1973, p. 120.
- 5 "I picked up and began to read *The Republic* and was much taken with the idea of being a Guardian". *All Change Here*, p. 40.
- 6 Gregory Benford, "Aliens and Knowability: A Scientist's Perspective", in *Bridges to Science Fiction*, ed. George E. Slusser, George R. Guffey, and Mark Rose, Carbondale and Edwardsville (Southern Illinois University Press) 1980, pp. 53-63.

Brian Stableford's most recent novel is Optiman (DAW, 1980), to be published in Britain by Pan Books under its original title, War Games. In this long essay Dr Stableford takes a penetrating look at the age-old theme of fictional catastrophe – particularly those imagined disasters brought about by human agency. This piece will appear in a volume entitled The End of the World, edited by Eric Rabkin, to be published by Southern Illinois University Press.

Man-Made Catastrophes in SF

Brian Stableford

All human life, everywhere, is haunted by the possibility of catastrophe. The degree of anxiety manifest in any society or felt by a particular individual may vary greatly, but there is no human situation which is free of it. A great deal of literary and dramatic art has, throughout history, been preoccupied with the possibilities of general or personal disaster. No culture lacks illustrations of disaster or prescriptions of the appropriate attitudes and responses to disaster. Much imaginative endeavour has also gone into the attempt to provide reassurance that it is, after all, possible to avoid or survive catastrophe, if only we behave in an appropriate manner.

That this should be so is by no means surprising. Human existence depends on the ability to reason, and the ability to foresee the possible outcomes of the situations which confront us. If we could not anticipate disasters we could not avoid them, and it makes perfect pragmatic sense to be perpetually on the lookout for the possibility of disaster. When disaster threatens from without, we must be prepared to ward it off, or take evasive action — and we must, of course, be doubly cautious that our own actions do not precipitate disaster.

There is, however, no culture which is really objective in its attitudes to misfortune. All societies – and perhaps all individuals – sanction the belief that some people deserve to suffer, and that when catastrophe strikes the guilty the moral order of the universe is being conserved. Here, of course, human ideas about what ought to be the case frequently come into conflict with observations of what actually is the case, for (as St. Matthew and everyone else has observed) Heaven "sendeth rain on the just and on the unjust". The sense of satisfaction which we feel when the wicked are punished is bought at the price of the sense of confusion which we feel when the innocent also suffer. We tend, in such cases, to seek special explanations - both history and cultural anthropology bear eloquent witness to the ingenuity which goes into the search. The scientific world-view which some members of modern Western culture have adopted is virtually unique in holding all such special explanations to be invalid, and holding fast to the logic of chance, which presumes that where natural catastrophes are concerned there is no earthly reason why the just should have any particular advantage over the unjust. Only where catastrophes are man-made does the scientific world-view leave room for a moral order. For this reason the characteristic attitudes displayed in science fiction stories about manmade catastrophes are markedly different from those displayed in stories of natural disaster.

Ours is perhaps the only culture where it is possible (because of the sacredness of the scientific world-view) for individuals and groups to suffer catastrophes without seeking to debit the moral responsibility for the misfortune from themselves or from others. It is possible - but it is not easy. The most-asked unanswerable question is still: "Why did it have to happen to me?"

The tribal societies which we are pleased to call "primitive" are never at a loss when called upon to preserve faith in the moral order of the universe in the face of disaster. For such societies, all catastrophes are man-made. If I fall ill, it is because the ancestral spirits have been angered by some failure of duty, or because I have broken a taboo. If I really am completely innocent of any such transgression, then witches are at work. Some tribesmen are more given to guilt than others — many societies allow witchcraft only as a rare and exceptional explanation, while others use it habitually. The beliefs of the Azande, who find witchcraft everywhere, have been extracted from their context as an exemplary illustration of how unreasonable savages can be. We know that when a man sickens and dies he has been carried off by cancer or trypanosomes, and we know that the fact this man and no other was crossing the bridge when it collapsed is a coincidence of no significance.

What we often fail to realize, though, is that we have paid a price for our entitlement to this intellectual snobbery. The pseudotheory of witchcraft functions in Azande society not so much as an explanation of the way the world works, but as an imaginative instrument which allows people confronted with misfortune to do something about it. It

enables the tribesman to respond to catastrophe in a *meaningful* way, so that even in the absence of medical knowledge he can pit himself against the ravages of sickness and need not feel helpless or that the universe has suffered a fall of moral parity. It is an awkward question for modern Western man to face when he asks himself *who* is better equipped – in purely pragmatic terms – to deal with the experience of grief and the horror of helplessness: the tribesman who hunts witches; the religious man who prays to God; or the rationalist who understands the workings of chance.

In the context of these observations we may, perhaps, be able to see one of the reasons why contemporary sf writers are so fascinated by disasters which come about not through the workings of blind cosmic chance but as a result of our own actions. There is a certain irony in the fact that science, which destroyed the moral order implicit in our traditional frames of reference, should also have given us the power to bring destruction upon ourselves on such a vast scale. The mythology of man-made catastrophe which we are in the process of building is replacing the taboos whose violation would once have angered our ancestors with a new set, whose violation will overpopulate and spoil the earth. The witches whose innate evil threatened the security of traditional communities are being replaced by different kinds of evil men, who threaten us no less. The analysis of stories of man-made catastrophes will reveal them to be propaganda for new codes of social behaviour, embodying new concepts of sin — or perhaps refurbishing old ones.

At first glance, in fact, it appears that modern catastrophist fiction relies heavily for moral inspiration on traditional catastrophist fantasy. There are few modern stories of flood or plague which do not refer back explicitly and metaphorically to the incidents in *Genesis* and *Exodus* when God instigated reprisals against human wickedness and Pharaonic intransigence. Closer inspection, however, will reveal that where we are dealing with writers whose allegiance is to the world-view of modern science rather than the presuppositions of religious doctrine the parallels are drawn specifically to be broken. Even in the works of 20th century writers whose commitment to Christianity is wholehearted we very often find an attitude to catastrophe which does not at all reflect the story of Noah. (An excellent example is provided by Alfred Noyes, author of the atomic holocaust story *The Last Man* and the holocaust-threat story *The Devil Takes a Holiday*. The latter story, in trying to come to terms with modern man's apparent predilection for self-destruction, breaks new theological ground in redefining the role of the devil.)

It is not too difficult to find stories which provide crucial turning points in the imaginative attribution of significance to catastrophe. In John Beresford's "A Negligible Experiment" the impending doom of the Earth is taken (by a scientist) to imply not that God has tired of human wickedness for once and for all but that God has grown tired of trivial experiment and is moving on to new fields. In such a scheme there is no room for Noah and the Ark. The personal catastrophe which strikes down the hero of H.G. Wells' The Undying Fire becomes an exemplary visitation developed in parallel with the story of Job. The moral of the tale is similar: what is called for is a massive reinforcement of faith; but it is also crucially different in the important matter of what the new Job is required to believe in. Later in his career, Wells was also to recast the story of Noah to hold a related moral. The hero of All Aboard for Ararat accepts his commission only on condition that God steps down from his exalted position to let man and science adopt the crucial role of moral guide and guardian.

The tendency for modern practitioners of exemplary catastrophism to borrow meta-

phors from older traditions has been greatly encouraged by the fact that our cultural heritage is particularly rich in imaginative strategies for dealing with the question of moral responsibility for misfortune. The scapegoat strategy of the Azande is amply represented in the history of Medieval Christendom by the slaughter of the Jews in the wake of the Black Death and by the witch-craze which attended the decay of the Roman Catholic Empire of Faith, and has also been echoed in more recent times. The notion of divine retribution occasioned by the breaking of taboos is amply represented by that fraction of our religious imagination which derives from the Old Testament. In addition to these strategies we also have (again courtesy of the Old Testament) the story of Job, which cunningly suggests that the misfortunes of the innocent might be a test of their faith. This notion is particularly ingenious in that it removes altogether the notion of guilt, and it may perhaps be something of a tragedy that the Christian world much preferred its own imaginative tour de force, the concept of original sin, which abolished instead the notion of innocence. This unusual versatility of the Western religious imagination permits catastrophists to draw morals from their stories in several different ways, and not all of them are out of keeping with a rationalistic world-view. The Darwinian theory of natural selection has (for social Darwinists, at least) put a new gloss on the notion of the catastrophe-as-test; while the science of genetics, especially when its implications are misconstrued, has injected new meaning into the notion of original sin.

Another thing to remember when we find modern tales of disaster drawing metaphors from the literature of the ancient world is that ours is not the first Western culture to have coped with the rise of rationalism. The Greeks invented science, and *their* exemplary literature quite frequently shows genuine parallels with our own style of thought, with the one important difference that we have taken rationalism and science somewhat further than they. We live in a post-Promethean age.

The scientific imagination, in providing a new mythology of catastrophe, has to overturn the old mythologies provided by the religious imagination. It has no option but to reflect them even as it transfigures them. In so doing, however, it is subject to a curious restraint, in that much of the vocabulary we have built up in order to talk about possible catastrophes is derived directly from particular religious myths. The words, in consequence, cannot help but carry implications which are antipathetic to the new meanings which the scientific imagination wishes to impose upon them. The words which we use to talk about the possibility of impending doom bear echoes of religion, and none more so than the word apocalypse, which carries with it a host of associations. From the same source, of course, we acquire Armageddon and the Millennium. The very use of the words confers ambiguity upon modern fantasies in which they feature strongly, and they recall metaphors whose mesmeric power is obvious even when they are used ironically (as, for instance, in Norman Spinrad's story "The Big Flash"). The main consequence of this fact is that we can see in 20th century catastrophist fiction a curious kind of ideative resonance, by which the apparatus of the religious imagination echoes in the literature of the scientific imagination as a series of apparitions. Look, if you will, at the illustrations in the pulp magazine Famous Fantastic Mysteries, which was for a long time filled with stories of the end of the world, and see how frequently religious symbolism is used to catch the mood of such stories.

In the discussion of literary works which follows, I shall make abundant use of such loaded words as "apocalypse" and "Armageddon". I shall also refer back frequently to

ancient myths whose function was to allocate moral responsibility and to define different kinds of misconduct. This should not distract attention from the fact that what is really under scrutiny is the construction of a *new* mythology of moral responsibility, and we are concerned not with the reaffirmation but with the metamorphosis of our concepts of sin.

The Advent of the Age of Anxiety

It might be argued that what it has become fashionable to call "the Age of Anxiety" began when people realized that they were not, in fact, responsible for catastrophes, and that an entirely arbitrary disaster (a plague or a cometary collision) might wipe out mankind at any time. The rationalists of the Enlightenment could stop worrying that God might send another deluge to punish their apostasy, but they also had to stop believing in a divine protective power that would make sure nothing happened to the chosen people. The Age of Anxiety is therefore linked to a developing awareness of man's vulnerability to natural catastrophe.

If we follow this line of argument, however, we must point out that there arose in the wake of this apprehension a different sense of threat which redoubled our existential insecurity, for the rediscovery of the possibility of man-made catastrophe created a feeling rather different from the one men had when all misfortunes were punishments or sorceries. The new mythology of man-made catastrophe — the essentially sciencefictional mythology — stressed that the mundane activities of ordinary human beings might set in train sequences of cause-and-effect which could destroy civilization. This was a new idea. It surfaced less than a hundred years ago, and perhaps correlates better with the application of the label "Age of Anxiety". Being at the mercy of Nature caused us only mild concern; being at one another's mercy was quite another matter.

There are very few 19th century stories which invite description as tales of man-made catastrophe, though there is a certain touch of foreboding in many stories of personal tragedy. It is not too difficult today to read Mary Shelley's Frankenstein (1818) as a parable in which the unlucky scientist represents modern man threatened with destruction by the monsters of his own creation. This interpretation certainly helped Brian Aldiss to find in Frankenstein not only the first but also the archetypal of novel, but its force would not have been appreciated by Mary Shelley. The same is true of some other mid-century parables, including Herman Melville's Renaissance fantasy "The Bell-Tower", which has been annexed by some recent science-fiction historians. This theme does appear once in 19th century imaginative fiction, in the section of Samuel Butler's Erewhon (1872) which is entitled "The Book of the Machines", but there it is only the ghost of an idea. Butler refrains from lending wholehearted endorsement to the Erewhonian's reasons for abandoning machinery. Butler had first put forward the idea that man might be overtaken and enslaved by his machines in the article "Darwin among the Machines" (1863) which he signed "Cellarius", but he replied to his own article with an opposing argument in 1865, his tone throughout being ironic. "The Book of the Machines" anticipates an important 20th century argument, but the anticipation does not really testify to considerable foresight on Butler's part. A much more realistic - and certainly sincere fear of the effect machines might have on human life was that expressed in Wiliam Morris's News from Nowhere (1891), which is by no means a Catastrophist work.

In fact, 19th century attitudes to technology were overwhelmingly optimistic. The fruits of the steam engine were welcomed far and wide; it represented in the eyes of most

visionaries a way to free men from drudgery and to increase the productive capacity of society so much that every man might become wealthy. There were plenty of people who observed the unpleasant consequences of industrialization, who abhorred the growth of filthy cities and the creation of the new urban poor, but they were far more ready to blame poor social institutions for this kind of misery than the machines themselves. We find in 19th century English literature many eloquent pleas for political reform but hardly any sympathy for the Luddites. The one striking exception is Richard Jefferies' After London (1885), which looks forward to the day when the ruins of the great cities are no more than poisonous sores in a rural landscape. Though the reversion to barbarism of England's populace is described in the first part of the novel the nature of the catastrophe is deliberately unspecified, and is perhaps to be regarded as the working of an ironic Fate rather than either a natural or man-made disaster.

Most 19th century writers concerned with future technological developments regarded the industrial revolution as a prelude to Utopia. The archetypal expression of this view was Edward Bellamy's best-selling Looking Backward (1888). There were plenty of objectors to Bellamy's view of the socialist Utopia, including William Morris, but most of the replies to his novel are alternative Utopias few of which dispute the necessity or desirability of mechanization. The one major catastrophist reply – Ignatius Donnelly's Caesar's Column – objects only to Bellamy's premise regarding the direction of socioeconomic "evolution". Technology provides Donnelly's world-destroyers with the means, but the cause of the holocaust is the nature of the Capitalist system.

In Caesar's Column the catastrophe is twice man-made: it is revolution led by the "Brotherhood of Destruction", but made necessary by the greed of the capitalists who control the world's wealth and keep the working class in conditions of grinding poverty. Donnelly's assumptions differ very little from those of Marx, but what sets him apart from most quasi-Marxist socialists is precisely his catastrophism: most Marxists looked forward to the revolution as a means of liberation. Marx did, of course, anticipate that the revolution might be bloody, but he did not consider that this blood was on anyone's hands – according to his economic thesis the revolution was inevitable, and the role of the Marxists was to lessen the birth-pangs of the new world by acting as "midwives". In the view of orthodox Marxists, the catastrophic aspects of the revolution were to be classed as a natural disaster – only its positive aspects were to be regarded as man-made. Donnelly dissented from this, believing that the revolution could and should be avoided if only men would commit themselves to Christian values in their economic transactions.

Not everyone saw revolution in the same way. For Marx, it was both inevitable and desirable, so that it was neither man-made nor a catastrophe. For Donnelly, it was clearly undesirable, but was only inevitable if men declined to act. For others — especially those who felt threatened by the possibility of a rebellion of the lower classes — there was no doubt at all that revolution constituted a man-made catastrophe, and it is in connection with such political anxieties that we can identify 19th century fictions which most nearly approach the subject of this essay. The exploits of the Revolutionary Tribunal in Paris in 1793 created anxiety in Britain, and the history of the ill-fated Paris Commune of 1871 seemed to provide a further moral lesson. Accounts of such imaginary uprisings were, however, limited by the presumption that no really effective destructive power would be available to the revolutionaries. Anarchists armed with airships did not appear until 1893, when E. Douglas Fawcett produced *Hartmann the Anarchist: or the Doom of the Great*

City. The scale of violence in that book is not quite parochial, but it is hardly apocalyptic. Destruction on a far vaster scale was featured in another novel of Terrorist uprising published the same year — George Griffith's The Angel of the Revolution — but here the Terrorists are the heroes and the world is being liberated rather than raped.

The prospect of a socialist revolution, however, was not the most important cause for political concern in late 19th century Britain. Much more attention was paid to the possibility of international war, and it was this prospect which exercised the most powerful influence over futuristic fiction. From 1871, when Chesney published his imaginary account of "The Battle of Dorking" as a piece of propaganda for rearmament, until 1914, when the Great War at last broke out, war-anticipation stories were the most prolific species of futuristic fiction in Europe.

It would be a mistake to consider all the future war stories of this period as catastrophist fictions. The prospect of *losing* a war was, of course, a prospect which no one could tolerate, but the prospect of a successful war was something else. To many of the writers who participated in the debate aroused by Chesney's fictional essay, war was still a great adventure, not to be commenced for the sheer fun of it but by no means to be shirked. There are many British stories of possible invasion which recognize the truly disastrous nature of that prospect, but the authors almost invariably relished the opportunity for tales of heroism and glorious derring-do. There were very few writers who display the least trace of the attitude which became commonplace in future war stories written *after* the Great War: the view that involvement in war is a catastrophe for *everyone*, winners and losers alike.

Before 1914, war could still be regarded as a game, especially by those whose attitudes had been fixed by a knowledge of history. The horrors of war had been made known to the British by reportage from the Crimea in 1854-56, but this was a war fought on foreign soil, in which only soldiers were involved (on the British side, at least). The weapons used there were extremely limited in their destructive capabilities. It was this kind of contest which was imaginatively associated with the notion of a future war by the majority of 19th century writers. Only a very small number of men realized the extent to which technology could and must remake war. Some of these were among the European observers in the American civil war, who had seen glimpses of the future in the use of breech-loading rifled guns, machine-guns, ironclad ships, observation balloons, flame-throwers, poison gas and submarines. Few of these things had made any significant impact on the actual fighting, but their existence was sufficient to create an awareness of threat in those with sufficient imagination. This awareness grew steadily through the half century which separated the end of the Civil War from the beginning of the Great War, but before 1900 there were really only three writers of futuristic romance who foresaw the possible nature of a new war. These three were George Griffith, author of *The Angel of the Revolution*; M.P. Shiel, author of The Yellow Danger (1898); and H.G. Wells, author of When the Sleeper Wakes (1899). None of these novels, however, can be regarded as Catastrophist fantasies. When the Sleeper Wakes is, like The Angel of the Revolution, a story of a liberating revolution made inevitable by socioeconomic factors. The Yellow Danger, which involves the annihilation of the entire populations of Asia and the European mainland by means of bacterial warfare, justifies its excesses by the logic of social Darwinism. Of the three, only Wells went on to cultivate an attitude to war which was much more in keeping with the wholehearted catastrophist view that became commonplace in the 1920s.

One striking aspect of the war-anticipation stories of the 19th century, including those cited above, is the dominance of the notion of a "war to end war". Those writers who did foresee death and destruction on a vast scale believed that such horrors could be justified as the necessary prelude to a new way of life. The greater the wars envisaged by these stories, the stronger was the commitment to the notion that they would represent a final settlement of all accounts. This combination of ideas helps to explain the essential moral ambiguity of the attitude to war manifest in these stories. No one before 1900 used speculative fiction in order to stigmatize the impulse to make war as a species of original sin.

The notion of using new and extremely powerful weapons to put an end to war forever was one which cropped up regularly in 19th century imaginative fiction, when the logic of ulitmate deterrents seems to have been very widely accepted. Examples include *The Vril Staff* (1891) by "X.Y.Z." and *His Wisdom the Defender* (1900) by Simon Newcomb, where single individuals put crucial inventions into the hands of a benevolent few. Many future war novels gave a decisive role to inventions made by lone scientific geniuses. There was, however, an unpleasant corollary to this line of thought. If lone inventors could discover weapons so dreadful that they might terrify the world into peace, what of such inventions in the wrong hands? It is in connection with this notion that we discover the few wholeheartedly catastrophist stories of the 19th century which focus directly on *manmade* catastrophes. They are fantasies of evil scientists — frequently mad scientists — who threaten the world with destruction. An early example is *The Crack of Doom* (1895) by Robert Cromie. In virtually all stories of this type, the would-be world-wreckers are thwarted, but the plot nevertheless shows a developing awareness of the *vulnerability* of society to the destructive power of new inventions.

The principal limitation placed on both the future war story and the mad scientist story was, of course, the kind of weapons which the contending forces could be imagined to possess. The main reason why stories produced in the last years of the 19th century differ so markedly from those produced even in the early years of the 20th century is that in the space of a few years, from 1895 to 1898, a great deal of new imaginative fuel was added to speculation about future weaponry by certain unexpected discoveries in science. Before 1895 it was easy enough to imagine battles fought by airships and submarines but these machines changed the way that battles might be fought rather than adding to the destructive power of the opposing armies. That submarines might make sea travel extremely dangerous, and that the aeroplane would make the bombing of cities possible, were realized by some writers — notably Griffith — but even these possibilities seemed inadequate as a recipe for Armageddon.

In 1895, though, Röntgen discovered X-rays and Becquerel described the property of "radioactivity" in uranium. Both discoveries were widely publicized, and the following year saw publication by Marconi of his work on wireless telegraphy. So dawned, in the popular imagination, the age of miraculous rays and no-longer-unsplittable atoms. These discoveries provided an imaginative carte blanche for technological fantasies of all kinds, including stories involving weapons of miraculous potency. It was the notion of deathrays and disintegrator-rays which fed the new apocalyptic imagination, together with the less popular but more prophetic notion of atomic bombs. By 1900 it was a great deal easier to imagine that the power to annihilate mankind might one day rest in human hands than

it had been in 1894, and it was this expansion of imaginative power which made the year 1900 a genuine *fin de siècle*. The discoveries of Röntgen and Becquerel gave speculative fiction the imaginative ammunition needed to take technological fantasies far beyond the boundaries which had previously confined them, to perceive many new wonders and to see for the first time those unfortunate possibilities which lurked just beyond the imaginative horizon.

The Lotus Eaters

In 1930 Geoffrey Dennis published a painstaking study of the apocalyptic mythology of modern science, *The End of the World*. The book discusses the various possible ends of the earth revealed by contemporary knowledge, and considers the relative likelihood of each one. It considers also the possibility that man might become extinct before the death of the earth, and the possibility that men might actually outlive their home world by migrating to others. Concerning man's possible contribution to the end of the world, however, Dennis has little to say. The possibility of a war so destructive as to wipe out the race is not even mentioned *en passant* (though it looms large, for obvious reasons, in Kenneth Heuer's identically-titled study published in 1953). There is, however, one possible route to human extinction that he does consider in detail: the notion that man might doom himself to extinction by choosing a way of life that leads the species to gradual degeneration. Indeed, he summarizes — though he is reluctant to endorse it — a common contemporary argument to the effect that this is already happening:

Civilization is sapping man's vigour, blunting his senses, always reducing the scope for his endeavour. He no longer needs strong right arm nor mental resource, no longer need fend for himself, the super-State is his protector, his poisoner, according him cheap survival for an ever smaller expenditure of brain and brawn. State and faculty have joined their murderous hands. Medicine, while saving the individual, enfeebles the race; the proportion of weaklings is mounting like a tide of death . . . Tools do our "manual" work for us; the hand is losing its cunning, and with it a rich area of the brain its cunning also. When tools for mental work soon appear, the brain's brightest regions will follow little toe and little finger into atrophy.

Dennis was by no means alone in regarding this process of degeneration as the chief threat facing human life. The magazine *Today and Tomorrow* published in its first issue (October 1930) an article by C.E.M. Joad called "Is Civilization Doomed?" in which the author advanced a similar argument. Joad, too, is reluctant to endorse it as a true vision of the future, stating that he considers it his duty to be as pessimistic as possible in the hope of alerting his fellow men to dangers in time for them to take the appropriate action.

This kind of attitude takes its inspiration from the Darwinian theory of evolution, and in particular from the notion of "the survival of the fittest" in "the struggle for existence". If this were the key to evolutionary ascendancy, it could easily be argued that by exempting himself from the struggle for existence man might suffer a drastic loss of biological "fitness". In point of fact, the argument is based on a misunderstanding of the nature of genetic inheritance, but it retained its influence in the popular imagination long after the rediscovery of Mendelian theory. The line of argument is particularly obvious in the work of the early Wells — in the portrayal of the society of the Eloi in *The Time Machine* (1895) and in the careful attempt to preserve the biological fitness of the Samurai, masters of the new world in *A Modern Utopia* (1905). It was, of course, an argument very effectively deployed against technological Utopianism by E.M. Forster in "The Machine Stops" (1909).

Forster's version of the case is particularly strong in that it avoids the use of spurious

pseudo-biology. He simply imagines a society where all needs are mechanically supplied, and where people in consequence have become idle, impotent and depersonalized. They have neither the knowledge nor the spirit necessary to cope with the disaster that follows the failure of their machines. Other writers were prepared to suggest that such a dispirited society might not need the *coup de grace* of disaster: James Elroy Flecker's story of "The Last Generation" (1908) is an account of the mass resignation of the human race from the business of living, which has come to seem rather pointless. A much more elaborate explication of the same idea was provided by S. Fowler Wright a generation later in *The Adventure of Wyndham Smith* (1938). The sentiments expressed in these stories are genuinely anti-Utopian, arguing that if society should ever reach the point where all men can live in harmony, all their desires gratified without effort, then life itself becomes literally purposeless.

In his book on The English Utopia (1952), A.L. Morton points out that Utopian speculation, though it may represent the social aspirations of different classes and individuals in particular sets of historical circumstances, is rooted in a fundamental "image of desire" which he terms "the Utopia of the folk". His archetypal example is the 14th century poem The Land of Cokaygne, which describes "an earthly and earthy paradise, an island of magical abundance, of eternal youth and eternal summer, of joy, fellowship and peace." It is a land where no one has to do any work, where everything is free, and where there are no duties of religious observance. The last point is of cardinal importance, for the poem is an anti-clerical satire as well as a wish-fulfilment dream, and it serves to remind us that this Utopia of the folk stood to be condemned as deprayed. immoral and degenerate. The notion that a life of ease and comfort is both extremely attractive and utterly reprehensible is much older than the myth of Cokayene: it is embodied in the myth of the lotus-eaters who were briefly visited by Odysseus and whose way of life was recorded by Herodotus and Pliny. In this form, and in the 14th century poem, it is a myth of a miraculous ecology, but in its 20th century version it becomes a myth of miraculous technology.

The alternate world of Cokaygne becomes a technological reality in "The City of the Living Dead" (1930) by Laurence Manning and Fletcher Pratt, in which most of the inhabitants of Earth's cities elect to have their sensory organs removed and replaced with wires piping synthetic experience directly into their brains. The cities die as everyone retreats to live in his dreams. The people are helpless before the possibility of a malfunction, but it is not so much the prospect of their dying which is horrific as their predicament in life; in particular, the way that they have blinded themselves in order to control exactly what they may see.

The condemnation of the city dwellers in this story (which is offered, in fact, by one of their number) has two principal components. On the one hand, the wonderful lives which they lead are not real, and the acceptance of ersatz experience is seen to be a kind of moral failure. On the other hand, the universality of the practice has led society into a blind alley – it has put an end to progress. This double indictment recurs frequently in stories published during the last half-century, particularly those concerned with the invention of new media of communication. When James Olds discovered that direct stimulation of a particular area in the hind-brain of a rat had an effect so powerful that a rat given the means to self-stimulation would repeat the appropriate action until it dropped from exhaustion, tolerating no distractions, the implications fit readily enough into our

suspicions about human psychology.

The most comprehensive sciencefictional account of the fate of a society equipped with the technological means to take the philosophy of hedonism to its logical extreme is James E. Gunn's *The Joy Makers* (1961). The last part of the story — originally published as "The Naked Sky" in 1955 — features a more sophisticated version of the same imagery that was displayed in "City of the Living Dead". In Mack Reynolds' *After Utopia* (1977) a high-technology society which has solved all the social problems of today faces the spread of "dream machines" which threaten the same eventuality. A political radical brought forward out of our own time is set the problem of saving the world from stagnation, and accepts it willingly, inventing an external threat which convinces the people that they cannot yet retreat into themselves secure in the knowledge that they will be left in peace. (The solution seems, at best, to be temporary.)

The value-judgements expressed in these stories are taken so completely for granted that the moral philosophy behind them rarely becomes wholly explicit. It is not too difficult to see what the clergy of the 14th century had against the land of Cokaygne. In their view, men did have duties of religious observance which they must not shirk, and the means of production available to the society of the day were such that it could support very few idlers. Neither argument can be held to apply to the futuristic states imagined in these modern stories. Though condemnation is no less strong, the nature of the moral complaints has altered.

The fact that a preference for ersatz experience over real is seen as a moral failure has much to do with a conviction that lies at the heart of the rationalistic scientific world-view: that subjective experiences are worthless by comparison with "public" experience of the external world. This judgement is, of course, crucial to the ascent of empiricism to its privileged position in modern philosophy, and to its total dominance of the philosophy of knowledge. The worthlessness of experience which is private and cannot be corroborated by objective evidence is central to the contemporary philosophy of science. The advancement of this claim is held to provide the foundation-stone of a value-free science, but this should not obscure the fact that the claim itself is a value-judgement. It implies that dalliance with subjective experience is a kind of self-betrayal; a wicked preference for ignorance and illusion over the true path of enlightenment. It is this line of argument which has made the term "escapism" inherently pejorative. (There is a certain irony in the fact that sf, which is frequently charged with being pure escapism, often adopts a moral stance which is harshly critical of escapism.)

Positivism — the most radical form of empiricism — has declined in popularity in the last two decades, partly because of new fashions in the philosophy of the social sciences and because of the exploits of sociologists of knowledge, who have exposed allegedly fraudulent aspects of the orthodox representation of scientific method. One might expect what this will soon be reflected in sf by the appearance of apologists who will defend the city of the living dead against the well-meaning Luddites, but to date there is not much sign of this. It is, however, noticeable that a more tolerant attitude occasionally crops up. In the Star Trek episode "The Menagerie" the crippled starship captain, totally helpless in the real world, is allowed to retreat (along with his aged and enfeebled female companion) into a world of pleasant illusion, taking with him the good wishes of the entire dramatis personae. Perhaps more significantly, the concluding volume of Michael Moorcock's "Dancers at the End of Time" trilogy, The End of All Songs (1976), allows

the decadent immortals to continue their theatrical existence in a bubble of eternity sealed against the ravages of entropy, while a few of their number set off to create the universe anew. The creative few still have the moral advantage, but there is a sympathy for the lotus eaters which finds no echo in *The Joy Makers*.

The second change levelled at lotus eater societies — that they have forsaken progress - is perhaps easier to understand. The advance of technology, in the popular imagination, is progress, and the notion that it should someday lead to the death of progress smacks of paradox. The worthiness of progress has been doubted far more widely than the unworthiness of subjective experience, but this doubt has affected the sf community less than most, and in science fiction progress is often elevated to the status of the greatest good. In Mack Reynolds' "United Planets" series the sole criterion for the evaluation of a political system is whether or not it permits progress (i.e. innovation and the growth of scientific understanding). The growth of anti-technological movements in society has sometimes been subject to scathing criticism in sf - a good example is the examination of near-future prospects presented in "Spirals" (1979) by Larry Niven and Jerry Pournelle. One of the reasons why science-fiction writers are so prolific in their presentation of primitive societies (whether post-holocaust cultures or colonies on other worlds) is that it is easy enough in the context of such societies to see what counts as progress, and therefore what goals each society has. Considering the nature of the genre it is astonishing how shy contemporary sf writers are of imagining societies in which the problems of the present day have been adequately solved. Again, as the myth of progress declines in the real world, we may begin to see stories presenting apologies for non-progressive worlds, but what seems more likely to happen is that our definitions of progress will change. In its original meaning, the word "progress" had little to do with technology and much to do with the notion of moral perfectability, and science fiction already gives evidence of the return swing of the pendulum in the post-war mythology of future human evolution.

In the light of this characteristic emphasis on progress it is ironic that most stories criticizing lotus eater societies can find no solution to the problem except smashing the machines and starting all over again. The irony is revealed for appreciation in Isaac Asimov's "The Life and Times of Multivac" (1975), which takes a fresh look at the question of what happens when the machine stops.

The fact that there is no such solution to be found shows the real heart of the problem, which is a lack of faith in ourselves. The whole issue would seem quite unproblematic if we were not so ready to see in ourselves this predilection for degeneracy. We tend to see the society of the technologically-assisted lotus eaters as a "no-win" situation: in itself it constitutes a catastrophe of one kind, whereas the way out of the predicament involves a catastrophic return to primitive circumstances. We see no other alternatives because the ideative seed from which these images grow is so deeply implanted; it is the notion that human beings are, in their fundamental psychological nature, fatally flawed. No one believes that a significant fraction of the human race could actually withstand the temptation of the dream machines; we see ourselves as being helpless in the face of addiction to pleasure-seeking. It is, of course, highly significant that we chose to label the addictive circuit in the brain discovered by Olds "the pleasure centre".

It is this notion of basic flaws in human nature which lies at the heart of the mythology of man-made catastrophe. We no longer think of these supposed flaws as "original sin", except in metaphor, but their role has not changed. Sf writers, in particular, conceive of

them as the legacy of our evolutionary biology: primitive "drives" and "urges" which, for all our piety and wit, we cannot overcome, the moving finger of evolution having written indelibly upon our being. This notion has been bandied about in recent popular science and pseudoscience, notably in the works of Robert Ardrey and Desmond Morris, and perhaps most dramatically in Carl Sagan's exposition of the myth of the triple-brain, The Dragons of Eden.

The myth of the dream machine — of the technologically supported society of lotus eaters — is only one facet of this image of flawed humanity. Several others exist, and all are associated with particular traditions of catastrophist fiction. They are interlinked, but some of them are in conflict, and come to the verge of contradicting one another. Before we pass on, however, to look at some of the other fatal flaws which are popularly held to mar human nature, it is necessary to point out one variant of the myth of the lotus eaters notable for the extremism of its imagery. This is the line of thought which develops from Butler's "Book of the Machines" and which construes "degeneracy" not in a moral sense but in a physical sense as well.

Butler, commenting on the Erewhonian treatise on machines, offers the following summary of the case:

The one serious danger which this writer apprehended was that the machines would so equalize men's powers, and so lessen the severity of competition, that many persons of inferior physique would escape detection and transmit their inferiority to their descendants. He feared that the removal of the present pressure might cause a degeneracy of the human race, and indeed that the whole body might become rudimentary, the man himself being nothing but soul and mechanism, an intelligent but passionless principle of mechanical action.

Wells, of course, was to follow an identical line of argument in developing his image of "The Man of the Year Million" – a creature with a massive head and withered body, incapable even of supporting himself. We find this image repeated in many early pulp science fiction stories, most notably in "Twilight" (1934) and "Night" (1935) by John W. Campbell Jr. (writing as "Don A. Stuart") and in "Alas, All Thinking!" (1935) by Harry Bates. Several early stories by David H. Keller, including "The Revolt of the Pedestrians" and "Stenographers' Hands" (both 1928) feature more specific accounts of physical degeneration occasioned by unnatural selection.

The most significant thing about this line of argument (as opposed to that followed by "City of the Living Dead", The Joy Makers etc.) is that it is entirely false, having its basis in a pseudo-Lamarckian notion of inheritance. The fact that unused muscles will atrophy and become useless is irrelevant to any consideration of genetic deterioration, in that acquired characteristics are not transmitted from one generation to the next. It may be true that civilization — and modern medicine in particular — preserves within the gene pool certain genotypes which would otherwise be eliminated, but such an increase in the "genetic load" carried by a species does not set in train a degenerative process affecting all the individuals within the population. Even though the selection operating against deleterious genes is muted in its effects, it will still work in favour of more favourable genes, and certainly not in such a way as to exclude them from the gene pool, however gradually.

Fictions such as "Twilight", in fact, are not extrapolative at all, and have much more in common with the Victorian myths concerning the effects of masturbation: they represent an urgent call for moral rearmament, whose propagandist priorities override fidelity to empirical realism. Their plea is that we should not, and must not, relax and be

satisfied, and their fear is that a representation of the actual effects of succumbing to the fruits of the technological lotus is an insufficient deterrent. In that the fundamental assumption of this line of argument is that the temptation is virtually irresistible, they are very probably right.

Epimetheus Unbound

The fear that machines might make us all too comfortable is by no means the only anxiety which we feel concerning the advance of technology. Indeed, the danger that we all might retreat into private worlds of synthetic experience exists in parallel with the suspicion that our developing technology might ultimately destroy the very possibility of private experience. If machines have the power to give us all perfect freedom (albeit within the limits of an artificial solipsism) then they also have the power to take away our freedom altogether — to make us subject to manipulation and oppression and the most absolute of tyrannies.

There are two versions of this mythology. In the first, the development of new technology gives a ruling elite the power to perpetuate its rule indefinitely, and to refine progressively the extent of its command over the lives and thoughts of the underdogs. All the most striking images in 20th century dystopian fiction derive from this line of thought: the watchful mechanical eyes of 1984; the entire apparatus of social control in Huxley's Brave New World; etc., etc. In the second version the power elite has become redundant, and the machines themselves are the manipulators and oppressors, and sometimes the destroyers of humankind.

Like the story of the physical degeneration of the species, the story of the revolt of the machines is primarily of figurative significance. Many such stories make no pretence of realism, and invite a straightforward allegorical reading: Robert Bloch's "It Happened Tomorrow" (1943), Clifford Simak's "Bathe Your Bearings in Blood!" (1950, also known as "Skirmish") and Lord Dunsany's *The Last Revolution* (1950) are examples. There are, however, versions of the myth which are better rationalized, and since the second world war we have made such vast strides in the development of machine intelligence that a good many fantasies of the pre-war period have been re-endorsed with frightening plausibility.

The anxiety, in its simplest form, has been dubbed by Isaac Asimov "the Frankenstein Syndrome", and it is displayed with particular moral clarity in Karel Capek's work, particularly the play R. U.R. (1921). In this story the "robots" produced by man to do his work for him eventually become so perfectly adapted to the task that they replace him altogether, going to war to remove him once he has made himself quite redundant. In another of his works, the novel The Absolute at Large (1922), Capek describes a worldwide catastrophe precipitated by the development of an atomic engine, the karburator, which annihilates matter and releases the spirit bound up within it — a spirit with which man is ill-equipped to cope.

These stories represent the inventor not as Prometheus (a common 19th century metaphor) but as Epimetheus, unwisely accepting "gifts" from the gods, so that his curiosity may release a plague of troubles upon mankind.

Parables following up this line of thought ask not "what happens when the machine stops?" or "what will happen to us if it works as intended?" but "what happens when the machine malfunctions, or when our discoveries turn out to have unfortunate

corollaries?" Mechanical brains in science fiction show a distinct tendency to go mad, or to have no sense of social responsibility in carrying out their instructions. While sciencefictional machines quite frequently defy such trivial constraints as the law of conservation of energy, they hardly ever defy Sod's Law — the principle that if something can go wrong, it will.

Hugo Gernsback founded Amazing Stories in order to inspire young readers with magnificent dreams of the wonderful future that science would create. He himself was a Utopian optimist of indomitable naivety, but the great majority of the stories which were written for his magazines actually featured technology gone wrong: the marvellous machines fell more frequently into the wrong hands than the right ones, and very often they were troublesome entirely on their own account. The world was almost invariably saved, but the significant thing is the fact that it was constantly in need of saving. A particularly eloquent early example of mechanization-anxiety of this kind is Miles J. Breuer's Paradise and Iron (1930), in which the inhabitants of a Utopian island find themselves suddenly under threat when the artificial brain co-ordinating its advanced domestic and agricultural machinery begins to malfunction. Similar plots have remained a part of the staple diet of magazine sf, more modern variants being Philip K. Dick's "Autofac" (1955) and John Sladek's The Reproductive System (1968, also known as Mechasm). In contemporary sf computers frequently aspire not only to emulate man but even to emulate God. Asimov, the arch-apologist for technology in general and artificial intelligence in particular, has written numerous stories in which the usurpation of human privileges by robots is seen as being by no means catastrophic, and in "The Last Question" (1956) he was quite sympathetic to the Godly ambitions of a computer. Other writers, however, have taken a darker view of these prospects - examples include Philip K. Dick's Vulcan's Hammer (1960), Larger than Life (1960) by Dino Buzzati, Colossus (1966) by D.F. Jones and the surreal "I Have No Mouth and I Must Scream" (1967) by Harlan Ellison. The computer's view of the situation is amply represented by the satirical moral fable The Tale of the Big Computer (1966, also known as The Great Computer) by the Nobel prizewinner Hannes Alfven, writing as "Olof Johanneson".

An important aspect of this kind of story is that very often the artificial intelligences involved are not malicious. Sometimes they go mad because they are "too human" — as in several ridiculous stories in which robots or computers fall in love with their creators and subsequently suffer awful frustration and jealousy — but more often they cause trouble simply by trying to do their best. Machines which are too helpful are featured in several stories, including Murray Leinster's "A Logic Named Joe" (1946) and Jack Williamson's classic "With Folded Hands" (1947). Those stories which describe the logic by which computers come to consider themselves superior to man normally concede that there is some justification in the decision, and that the machines have an adequate warrant for their belief.

As time has gone by we have become more and more concerned about the side-effects of technology — the unintended consequences of discovery. Industrial waste has been with us for a long time, but it is only recently that we have begun to fear that the negative effects of industry upon the environment may outweigh the positive effects of its products on the quality of our lives. In recent years, too, we have become much more sensitive to the prospect of a major accident involving some product of our technology — the escape of a new bacillus or an explosion at a nuclear power station. Catastrophist fantasies

associated with these anxieties generally promote the allegation that we are downright irresponsible (and will be discussed further in a later section of this essay), but the indictments levelled by stories of the revolt of the machines and technological oppression are not primarily criticisms of human irresponsibility. Rather they serve to put the argument that knowledge and wisdom are not identical, and that we have far more of the former than the latter.

Curiosity, it is said, kills cats, and this proverb extends its implications into imaginative fiction in two ways. First, there is the story whose moral is that "there are things man was not meant to know" – stories where the truth is awful and enlightenment fatal. Archetypal examples are the fantasies of H.P. Lovecraft. Science fiction has little room for this kind of story, which is implicitly anti-scientific. There is also, however, the story whose moral is that in matters of scientific discovery one has to take the rough with the smooth – there is no guarantee that the technological possibilities revealed by the advancement of science will necessarily be edifying. This is a lesson that we have learned well enough by courtesy of the atom bomb.

Stories of disasters caused by new inventions usually stress that the real root of the disaster is the element in human nature which drives us to seek advantage over our fellow men. In stories of technological oppression the men who already have those advantages are given greater power to indulge them and to secure them. In stories where machines take over the world they are merely reflecting (often innocently) this basic tendency of their makers. Perhaps the most revealing stories of technologically-induced social collapse are those which steer a middle course between these two versions of the myth. In George O. Smith's "Pandora's Millions" (1945) and Damon Knight's A for Anything (1959) the invention of matter-duplicators destroy the social order by blasting apart the economic relations which bind it. In the former story civilization is "saved" by the development of a non-duplicatable substance which can function as a medium of exchange and hence restore Capitalism. In the latter, however, there is no such deus ex machina, and the social order is reconstituted, with possessors of the machines establishing themselves as an upper class dominating the lower orders whose sole function is to provide services. The point being made here is that no machine, whatever it does, is likely to be used in a way that benefits all men equally. Machine-power is an instrument in social intercourse, and is always likely to be used to create or support inequalities rather than to erode them.

Perhaps the most perfect ironic fantasy in this vein is "E for Effort" (1947) by T.L. Sherred, in which the invention of a device which can "see" through time and space threatens to destroy forever the very possibility of secrecy. No one who enjoys any kind of privilege at all can face this prospect, and immediately the news of the discovery breaks there begins a war of all against all as every power-group makes its desperate attempt to corner the use of the machine. By trying to keep it out of the hands of any particular power-group, the heroes of the story precipitate a war that will destroy mankind.

Stories of this kind are essentially ironic, not simply because (as with the Lotus Eater stories) they focus on our inability to withstand fateful temptations, but also because they habitually retain something else from the myth of Epimetheus: the notion that the Pandora's box of invention contains, as well as a host of troubles, such hope as we may legitimately entertain for the future. The machine-power which may turn against us also offers us the promise of a better life. The fact that the promise might be so easily betrayed

(whether after the fashion of *Paradise and Iron* or "E for Effort") cannot affect the fact that it has been made.

The feeling that underlies these Epimethean fantasies is that machines, one way or another, are getting out of control. We build them to be our servants, and somehow they seem to be threatening to enslave us. Even if we leave aside the potential exploits of artificial intelligence, this feeling is not entirely unrealistic. In the final analysis, political and economic power is dependent upon and shaped by the means of production available to society. It would be over-deterministic to say with Marx that the hand-mill will inevitably generate a feudal system while the steam-mill will generate capitalism, but it is nevertheless true that machines by making available new means of production, can destroy certain kinds of social structures and greatly encourage others. It is by no means easy to see what kind of new social order might emerge from the ultimate triumph of machine-production, and very different opinions are offered by various sf stories. Knight's A for Anything, which envisages a new feudalism, contrasts sharply with Jack Williamson's "The Equalizer" (1947), which foresees an anarchist Utopia emerging from the harnessing of free energy. The major difference between the premises used in the two stories is the simplicity of the machines; in Williamson's story the key to unlimited abundance is available to everyone, but in Knight's novel it is complicated enough to be cornered by the fortunate few. Neither author doubts, though, that it is the nature of the machine, constrained by the happenstance of scientific possibility, which will determine the form of the society which discovers it: the desires of men are impotent.

How impotent the desires and political philosophies of men really are remains open to dispute. There is no doubt, however, that there is sufficient cause for anxiety. It is, indeed, possible, that the advancement of technology will bring about great changes in the social order to which we are accustomed, and that we cannot hope to steer a course through those changes exactly as we would wish. Machines do control, at least to some degree, the range of possibilities expressed in our contemporary social evolution, and there can be no guarantee that they will not drive us into an upheaval so great that virtually all of us may consider it catastrophic.

It might be argued that the great failing of 20th century science fiction in its dealings with future invention is that it is not sufficiently catastrophist. The Epimethean fantasies considered here are, after all, a tiny minority of stories compared with the flood which foresee hardly any changes in the social, political and economic matrix which surrounds their inventions. On the other hand, it might be argued by some that when writers do foresee sweeping changes in social behaviour ordained by new technologies they are too enthusiastic in condemning them as evil by reference to our own transient and artificial value-system. After all, leaving aside those fairly unambiguous cases where humanity is wiped out, catastrophe is in the eye of the beholder. The point at which progress becomes too costly remains a matter for subjective judgement, and there is much lively debate in today's world between those who would place it in the future and those who would place it in the past. The debate has become urgent ever since 1945, when it became clear that technology could and would provide nations with the means to bring about that most unambiguous of catastrophes — a war which might annihilate the human race.

Weapons too Dreadful to Use

The war-anticipation stories of the period 1871 – 1914 were, on the whole, quite

cheerful and optimistic. War, even fought with airships and submarines, could be seen as a great adventure, and even where it was regarded as an unmitigated evil there was the commonplace assumption that in order to put an end to it one more final war would have to be fought. The one future war story written before the outbreak of the real war which attempts to show in full measure the horrific extent of the misery and destruction that a high-technology war must bring was The War in the Air (1908) by H.G. Wells, and even that did not represent the outlook of a wholehearted catastrophist. Wells feared the next war, but felt that it might do some good in tearing down the fabric of the old social order so that the construction of a new and better one might begin. It is not insignificant that his other major future-war novel, featuring the destruction of the world's major cities by atomic bombs, was written on the very eve of the Great War and was titled The World Set Free (1914). As the real war began Wells wrote a series of newspaper articles commending it as a marvellous opportunity - these were subsequently collected in the pamphlet "The War That Will End War" (1914). In 1916 he wrote Mr Britling Sees it Through, a novel providing a moral justification for the war, and produced non-fiction works dealing with the reconstruction of civilization which would follow it. That reconstruction, however, failed to make headway after 1918, and The Salvaging of Civilization (1921) heralded a decline into pessimism that was only occasionally to be alleviated during the remainder of Wells' career. The hope that perhaps the Great War really had ended war was steadfastly maintained by a few optimists, but it was a very feeble hope. Many speculative writers took the view that not only did war remain a possibility, but that it was well-nigh inevitable that it would break out again, and that the only way war would put an end to itself would be in reducing mankind to such a primitive state that he would no longer be capable of waging it.

Before the war there had appeared several novels in which scientific supercriminals blackmailed cities, or even the whole world. There had been others in which mad scientists embarked upon careers of spectacular vengeance. Now there was a new fear to set beside these: the fear that by following behaviour-patterns that were already well-established and quite normal the politicians of the world might duplicate or surpass the worst that any supercriminal or mad genius might do. It was appreciated that no one would go to war with the deliberate intention of exterminating the human race, but writers now became aware of the possibility of escalation which haunted local conflicts, and they also became suspicious of the logic of defensive deterrents.

At least one of the contributors to the war-anticipation story repented of what he had done. Erskine Childers, author of *The Riddle of the Sands* (1903), had espoused in that novel the notion that by being prepared for war Britain might actually preserve herself from war. Later, apparently, he recanted this view. Childers himself was executed in 1922 for his activities supporting the I.R.A., but his nephew added the following note to the 1931 edition of the novel:

"In The Riddle of the Sands, first published in 1903, Erskine Childers advocated preparedness for war as being the best preventive for war. During the years that followed, he fundamentally altered his opinion. His profound study of military history, of politics, and later of the causes of the Great War convinced him that preparedness induced war. It was not only that to the vast numbers of people engaged in the fostered war services and armament industries, war meant the exercise of their professions and trades and the advancement of their interests; preparedness also led to international armament rivalries, and bred in the minds of the nations concerned fears, antagonisms, and ambitions, that were destructive to peace."

This perspective, coupled with the knowledge that armaments had already increased in power sufficiently to make the destruction of nations practicable, caused the growth of a new kind of war-anticipation story which was genuinely apocalyptic in its mood.

Edward Shanks' People of the Ruins (1920) shows the survivors of a series of crippling wars scratching out a living as scavengers amid the wreckage of civilization, still involved in a constant war of "all against all". The Collapse of Homo Sapiens (1923) by P. Anderson Graham follows the career of a group of refugees hiding from the next war in a shebeen, and goes on to describe the barbarian science-fearing culture that grows up along the banks of the Thames in a desolated England. In Ragnarok (1926) by Shaw Desmond the survivors of the war live in sewers and caves, fighting against the rats for the means of subsistence while the surface of the world is devastated by bombs and poison gases. The use of poison gas — the most unselective of weapons — also figures large in the scenes of appalling destruction featured in Neil Bell's The Gas War of 1940 (1931 as by "Miles", subsequently retitled Valiant Clay), Ladbroke Black's The Poison War (1933) and Francis Sibson's Unthinkable (1933). New and more powerful explosives were also featured extensively: aerial bombing destroys Britain's cities in The Black Death (1934) by M. Dalton, and atom bombs wreak havoc in Day of Wrath (1936) by Joseph O'Neill.

The scale of the destruction envisaged by these stories grew steadily as the second world war approached. Alfred Noyes' *The Last Man* (1940) imagines the nations locked in war having simultaneous recourse to the ultimate weapon, with the result that only a handful of survivors are left to haunt the empty world. The same year saw the first publication of L. Ron Hubbard's *Final Blackout*, a frenetic political fantasy set in a Europe laid waste by the fury of war. In Alfred Bester's "Adam and No Eve" (1941) the destruction is so complete that the only hope for a new beginning lies in the bacteria which multiply in the body of the new "Adam" after his death, and which may perhaps commence the evolutionary story afresh.

The notion that war is too high a price to pay for any political aim or ideology was common in imaginative fiction during the 1920s and early 30s. Numerous sf stories represented it as the ultimate irrationality — examples include "The Gostak and the Doshes" (1930) by Miles J. Breuer and In Caverns Below (1935, also known as Hidden World) by Stanton A. Coblentz. A particularly sharp black comedy is John Gloag's Tomorrow's Yesterday (1932), in which a theatre company presents a play depicting various stages in the decline and fall of man as a result of war. The play is greeted with hostility and derision and forced to close just as the next war begins. As the 30s proceeded, however, the element of black comedy was eliminated and the notion that no price was too dear to pay for the avoidance of war became much less respectable. The Spanish Civil War of 1936 and Hitler's invasion of Czechoslovakia re-opened the question of the moral justification of waging war even in the shadow of Armageddon. For this reason, the waranticipation stories of the late 30s frequently recaptured something of the crusading fervour of those that appeared before the Great War.

The weapon too dreadful to use made its debut on the stage of history in August 1945, its use justified in that it put an end to the second world war, literally at a stroke. The relief brought by the atom bomb was, however, short-lived, for it endorsed in no uncertain terms all the apocalyptic anxieties which had built up in the 20s and 30s. It left no room for doubt that a third world war would be quite capable of destroying the world. Though it was not until 1953, following the advent of the H-bomb, that the U.S. secretary of

defence announced officially that the U.S.A. and the U.S.S.R. each had the ability to exterminate the human race, that prospect had been inevitable since 1945. Tales of atomic Armageddon followed in great profusion, the most notable being Shadow on the Hearth (1950) by Judith Merril, The Long Loud Silence (1952) by Wilson Tucker, On the Beach (1957) by Nevil Shute, Level 7 (1959) by Mordecai Roshwald and A Canticle for Leibowitz (1960) by Walter M. Miller.

The element of black comedy first featured in Tomorrow's Yesterday returned in full force in several extraordinarily embittered stories, ranging from Aldous Huxley's Ape and Essence (1949) to Peter George's Dr. Strangelove (1963). These stories spoke most eloquently to the motion that if the world was bound to end, it was no more than our just deserts. L. Sprague de Camp's "Judgment Day" (1955) provides a biography of a scientific genius whose childhood is a catalogue of miseries. Despite being bullied, harassed and vilified he survives to become a brilliant physicist and discovers the secret of the doomsday weapon. He knows that his political masters will use it, but he has no hesitation at all in giving it to them. A Canticle for Leibowitz is an account of how civilization is rebuilt after being bombed back into the dark ages, and shows the inexorable process which leads to its bombing itself right back again. Norman Spinrad's "The Big Flash" (1969) recounts the story of a rock band called the Four Horsemen who embody the spirit of their age, and whose climactic concert coincides with the countdown to world war three. The same author, in *The Iron Dream* (1972) features a science fiction novel written in an alternative universe by a German immigrant to the United States named Adolf Hitler, in which a heroic superman destroys Earth in "saving" it from domination by mutants but succeeds in sending the seed of his Aryan super-race to the stars. Here sf recoils upon itself, striking out at its own mythology and imaginative instruments.

The sf community was exultant in 1945, following Hiroshima. The events of history had provided editors, writers and fans with a golden opportunity to shout "I told you so!" The same exultancy is obvious in *Ape and Essence*, written by the man whose vision of *Brave New World* had provided a vocabulary of symbols for the adherents of antiprogressive pessimism in the 30s. It was not long before the followers of John Campbell realized in a similar fashion that their prophetic victory was a very bitter one. The pleasure which prophets obtain from being proved right tends to be rather perverse when their prophesies carry implications of doom. The prophets of the Christian Millenium had always avoided this perversity well enough by assuming that the end of the old world would be the beginning of the new — salvation for the chosen few, while only the wicked must go to the devil. The prophets of atomic apocalypse, however, had no such escape-clause. Radioactive fallout could not be expected to discriminate between the just and the unjust.

It has been argued that our consciousness of the world changed in a fundamental way after 1945 — Gunther Anders has claimed that the dictum "all men are mortal" was converted into "all men are exterminable", and that the change was not without consequence in terms of everyday social relationships and political calculations. Whether that is true or not, it is certain that science fiction changed dramatically in its characteristic attitudes, concerns and methods. Scathing satire and black comedy became common, there was much interest in religious themes which had previously been rigorously excluded, and there was an upsurge of misanthropy which worked wonders for the

fortunes of aliens and supermen (who had previously been subject to consistent chauvinistic discrimination). James Blish, in his essay "Cathedrals in Space" (1953) noted that the *genre* seemed to have become the showcase for a "chiliastic panic" whose like had not been seen since the year 999. In fact, the new situation was rather worse, in that it was now so difficult to believe that disaster might be tempered by the mercy of God. The view of modern man's existence embodied in T.S. Eliot's "The Hollow Men" (1925) persisted, even though it seemed that the world was to end with a bang and not a whimper after all.

Stories of atomic holocaust and its effects are so many and so various that it is difficult to extract from them a consistent opinion regarding the essential flaws in human nature which tend to launch it toward self-destruction. There are, of course, numerous stories which make overt moral points — a notable early example is Theodore Sturgeon's "Thunder and Roses" (1948), which insists that men armed with atom bombs cannot afford the luxury of retaliation — but there are numerous opinions as to which element in human nature warrants most criticism. There are attacks on militarism, on aggression in general, and on spitefulness. More often than not, however, it is not any positive trait in human nature which is stigmatized, but rather a negative one. In the final analysis, what these stories have in common as their fundamental assumption is that we do not — and perhaps cannot — care enough about one another. We are all estranged, and even when we do not find it all too easy to hate one another we still find it far too difficult to care much one way or the other what happens to people. This is not exactly a new discovery, but only in recent times has it come to be seen as a recipe for catastrophe.

What is perhaps most remarkable about science fiction of the 50s is neither its conviction that the future would be catastrophic nor its continual recourse to scathing black comedy in its manifold images of unpleasant futures, but rather the nature of the escape route which it found to allow its favoured few back to the tollpath to Utopia. It was in the 50s that the mythology of the spaceship really came into its own in sf. It was no longer the means to a new and more exciting kind of tourism but a vital and necessary method of outrunning the terrible destiny of Earthly civilization. If it could blast off for a new Eden, all well and good, but even if it was heading for a hell-planet like the Venus of The Space Merchants (1953) it was still necessary to get aboard. The reclamation of Earthly society came to be seen, characteristically, as an impossible task. Genre science fiction packed up the future in its kitbag and set off for the stars, while futuristic fiction outside the labelled enclave set about mapping the utter dereliction of our Utopian aspirations. Since 1960 there has been some remission of this condition as speculative writers have grown more accustomed to the everpresence of the H-bomb, but so far the forces of moral rearmament visible in the activities of various futurologists and the more technophilic sf writers have made little headway in displacing the conviction that every day, in every way, things are getting worse.

Looking back on the history of the last hundred years it is not very difficult to convince ourselves that the tide of progress somehow turned against us during that time. Most people, by inclination if not by nature, are optimists, and in the real world there has been no massive upsurge of despair. The nightmares of popular fiction — and those of not-so-popular fiction even more so — have little more effect on our mundane lives than the haphazard nightmares which visit us in our sleep. No matter how seriously one takes stories of atomic holocaust, the effect that they will have on one's everyday life is likely to

be slight. The exceptions remain exceptional. Nevertheless, the fact that the future now seems threatening to most of us has had its effects – notably in refocussing determined optimism on those aspects of life which seem least threatened. In the terms suggested by Frank Manuel, faith in "euchronia" – the better future for society – has evaporated, and has been replaced by faith in "eupsychia" – the possibility that we may (individually or in small groups) achieve a better state of mind. Mysticism has advanced its cause remarkably. So has psychotherapy. So has sex. We are more preoccupied than we have ever been with the problem of getting ourselves straightened out, and the reason is that we have lost all faith in the world getting itself straightened out. We have been set on this path since 1945, and it is not easy to see whether we can get off it again in the foreseeable future.

The point of all this is that the advent of atomic weapons did more than confirm a growing suspicion that the modern world possessed the means to bring about a man-made catastrophe of awesome dimensions. It helped bring about a consciousness of the future as a kind of continuing catastrophe — a mess which we had already made and would have to take special measures to escape. The lesson of Hiroshima was that it was already too late to avoid the dark and hostile future which had earlier been feared; the world was locked on course and only individuals might avoid disaster by locating and occupying boltholes of various kinds. In pursuing this new view of things, the sf imagination has for the last twenty years and more, with the active collaboration of many futurologists, discovered a host of man-made catastrophes which are already happening.

Catastrophe à la mode

Unlike Dr. Strangelove, most survivors of the second world war did not learn to stop worrying and love the bomb. What has happened, however, is that the prospect of atomic war has faded from immediate consciousness into the background of the imagination. There it has merged with a whole series of spectral bugbears which lurk in the shadows of the contemporary image of the future, waiting to devour us as the march of time carries us inexorably into their jaws. We have rediscovered the Malthusian logic of population explosion; we have become painfully aware of the extent to which the wastes of industrial society are poisoning the environment; we have realized how rapidly we are consuming non-renewable resources. In brief, we have begun to come to terms with the built-in obsolescence of the way of life which is followed in the "developed" countries.

When Malthus first published his "Essay on the Principle of Population" in 1798 he was an isolated cynic in an intellectual regime dominated by Enlightenment humanism and an optimistic mythology of progress. His thesis was severely criticised by William Godwin, who felt that human beings could surely rise above the "natural" tendency of populations to increase beyond the limits of their means of subsistence. Malthus was led by this criticism to modify his case, and added to the list of population checks which he had compiled (war, famine and plague) the notion of conscious population control by "moral restraint".

There is no doubt that Malthus' second thoughts offered a better analysis of the situation than his first. We live today in a world in which strategic action to cope with population growth, on an individual and on a political level, has dramatically changed the pattern of population increase in the developed countries. The means by which this has been achieved are not quite "moral restraint" in the Malthusian sense, but there can be no doubt that the intervention of cultural factors has robbed nature's tendencies of their

deterministic power. It is now obvious that the rate of population increase depends on human choice rather than the tyranny of "natural law". The trouble is that we have come to doubt whether we (or, more usually, other people) are making the right choices, or are capable of making the right choices.

A few sf stories of the 50s played with images of an overcrowded world. Cyril Kornbluth's "The Marching Morons" (1951) is a black comedy displaying the eventual consequences of the "negative eugenic" trend by which the stupid consistently outbreed the wise. Kurt Vonnegut's "The Big Trip Up Yonder" (1954; also known as "Tomorrow and Tomorrow and Tomorrow") envisages the world becoming hopelessly overcrowded because longevity has reduced the death-rate, forcing the return of the extended family to western culture. Frederik Pohl's "The Census Takers" (1956) is a sardonic story of the time when those keeping tally of the population will be required to adjust the actuality to their envisaged ideal. Heavily ironic fables in this vein continued to be produced for another twenty years, until the fashionability of the population explosion began to wane, but they were soon complemented by alarmist stories which took the central Malthusian thesis very much more seriously.

Robert Silverberg's Master of Life and Death (1957) follows a critical period in the career of the man responsible for the eugenic decisions which enforce the moral restraint which people are reluctant to supply on their own account. This was written in a period when it was still possible to imagine people submitting to laws embodving "scientific rationality". A decade later it was more usual for writers to take a bitter view of the likely outcomes of the democratic process insofar as the politics of population limitation were concerned. The most notable alarmist novels of this period are Make Room! Make Room! (1966) by Harry Harrison, The Wind Obeys Lama Toru (1967) by Lee Tung and Stand on Zanzibar (1968) by John Brunner. The extremes to which the world might be driven if required to contain a population several orders of magnitude higher than the present one are given detailed consideration in A Torrent of Faces (1968) by James Blish and Norman L. Knight and The World Inside (1972) by Robert Silverberg. Draconian alternatives in the matter of population controls administered without the benefit of democratic approval are envisaged in The Ouglity of Mercy (1963) by D.G. Compton, Logan's Run (1967) by William Nolan and George Clayton Johnson and "The Pre-Persons" (1974) by Philip K. Dick. The decade within which all of these stories were written was the one in which the population explosion was seen as the principal menace to the future wellbeing of mankind, though for the latter part of the decade it vied for primacy with the menace which subsequently replaced it: the bugbear of pollution.

Though the fundamental analogy which inspired the new alarmism was taken from science – the fate of yeast-cells confined in a test-tube with an unlimited food supply and their own toxic wastes – the term itself has religious connotations which are by no means out of context when one considers the upsurge of "ecological mysticism" to which this species of alarmism eventually gave birth. The moral tone of the crusades launched in the real world against industrial pollution (which quickly spread to the condemnation of other "ecological sins") has always implied that there are more than mere pragmatic concerns at stake.

In terms of the actual amount of waste materials produced, 19th century factories were frequently far worse than modern ones, and horses rather more profligate than motor cars. The fact that it was not quantity that mattered was first made clear to the world by

the publication in 1962 of Rachel Carson's Silent Spring. Carson pointed out that new organic compounds synthesized for various specific uses were introducing new components into the biosphere. Unlike the poisons manufactured by nature the new compounds were not biodegradable, and once released into the ecosystem they persisted in living tissues, gradually accumulating in concentration until they reached toxic levels in species at different points in the food-chain. Thus, chlorinated hydrocarbons used as insecticides, like DDT, were gradually being redistributed within the biosphere, threatening fish, birds and mammals (including man) with a kind of biological time-bomb. Once present, these compounds could not be eradicated — and, by an unfortunate stroke of irony, soon lost their effectiveness as pesticides because the insects they attacked, subjected to a ruthless regime of natural selection, quickly developed immunity. Heavy metal pollution, especially involving lead and mercury, also became a special cause for anxiety — where these elements had previously been locked up safely in their inert ores, technological usage was slowly releasing them into the biosphere, where their effects could be deadly.

As with overpopulation scare-stories, it is possible to find isolated examples of ecodoom stories in the science fiction of the 50s – Cyril Kornbluth's "Shark Ship" (1958) is a notable example. The boom in this species of alarmism, however, followed close on the heels of the peak in Malthusian alarmism. The most striking stories of this kind include "We All Die Naked" (1969) by James Blish, "The Lost Continent" (1970) by Norman Spinrad, The Sheep Look Up (1972) by John Brunner, The End of the Dream (1972) by Philip Wylie, "To Walk With Thunder" (1973) by Dean McLaughlin and Brainrack (1974) by Kit Pedler and Gerry Davis.

As with overpopulation stories, a dominant premise in these extrapolative fantasies is that nothing will be done to prevent disaster until it is too late. Two of the listed stories are apocalyptic in character, while two others look back with ironic approval at the self-destruction of the gluttonous West. McLaughlin's story is a particularly subtle political fantasy which suggests that as long as we have technological facilities to combat the direct personal effects of pollution we will be prepared to put up with it — he is frighteningly plausible in offering an account of the political circumstances which encourage people to permit the poisoning of the atmosphere while the wonders of technology can purify the air supplies to their own homes. The basic argument is that we are insatiable in demanding short-term gratification of even the most puerile of our whims, even if the ultimate consequences will include the suffering of future generations and the death of the earth.

By the time that the new Malthusian crisis and the destruction of the environment had taken their place alongside atomic weapons as seeds of the new apocalypse, other anxieties could fill only a peripheral role. The problem of dwindling resources never became the principal focus of any temporary glut of alarmist sf stories, but simply joined the list. So, too, did the gathering anxiety about our psychological and neurological fitness to cope with the pace of change, dubbed "future shock" by Alvin Toffler. Fears of a new economic depression of the kind experienced in the 30s could add no more than a few new drops to an ocean of anticipatory tears.

As pollution ceased to be the primary focus of near-future hysteria in science fiction, its place was taken by a much more generalized anxiety. The combined effect of overpopulation and pollution had been given a new name by Paul Ehrlich, who sketched a brief scenario for a nightmare future in "Ecocatastrophe!" (1969), and the notion of a

chain-reaction disaster precipitated by a combination of evil circumstances became common. John Brunner's novel *The Shockwave Rider* (1975), which completed a curious "apocalyptic trilogy", makes use of Toffler's notion of future shock, but the nature of the problematic morass into which its future America is sinking is actually much more elaborate and complex than those featured in *Stand on Zanzibar* and *The Sheep Look Up*.

Science fiction became, in the period when these stories were written, the principal medium by which this pessimistic image of the future was disseminated. Indeed, "nonfictional" speculation and sf began to overlap when those engaged in what has come to be known as "futurology" or "futures research" began manufacturing "scenarios" after the fashion of Herman Kahn and Alvin Toffler, and computer simulations of the future after the fashion of the Club of Rome's study of The Limits to Growth (1972). The nonfiction, by and large, attempts to make as much use of the sense of tragedy and of hypothetical moral predicaments as does the fiction. ZPG - a movement advocating Zero Population Growth as a political policy for the U.S.A. - published a science fiction anthology, Voyages: Scenarios for a Ship Called Earth in association with Ballantine Books in 1971, which was intended as propaganda. Several futures researchers have produced apologies for sf which put a strong case for its use in education. Meanwhile, sf writers and editors have been ready enough to accept a didactic role in this connection other sf anthologies which are overtly propagandistic in their alarmism include Nightmare Age (1970) edited by Frederik Pohl, The Ruins of Earth (1971) edited by Thomas M. Disch and Saving Worlds (1973, also known as The Wounded Planet) edited by Roger Elwood and Virginia Kidd.

Whether sf is really effective as an agent provocateur inciting the development of a better social conscience is, of course, debatable. It might be suggested that by banishing contemporary (and quite real) social problems to the realms of imaginative fiction, where they take their place alongside invading Martians, giant insects, galactic empires, time travel and E.S.P., sf is defusing anxieties rather than amplifying them. Final settlement of this question remains a matter for empirical enquiry, but the correlation between the growth of science-fictional concern with ecocatastrophe and the growth of concern in the real world does not suggest that the feedback from image to political strategy has been negative. It is much easier to argue the case for a positive feedback.

Some commentators have found it difficult to reconcile the argument that these visions of man-made catastrophe have a constructive role to play with the fact that so many of them are characterized by black despair and a conviction of utter hopelessness. (The same, incidentally, is true of many futurological speculations, which claim that it is already too late for any action to be really effective — a cardinal example is the recent Delivrez Promethée (1979) by Jerome Deshusses.) In reply, the immediate temptation is to recover the argument used by Joad in his essay of 1930, to the effect that speculators have a duty to be as pessimistic as possible in order that they "may hope to irritate . . . readers sufficiently to provoke them to make the efforts necessary to prove (their) predictions false". Often, however, the arguments used in these stories are so completely nihilistic that it is difficult to construe them as anything other than exhortations to complete passivity. This is especially true of those sf stories which contain an element usually missing from futurological speculations — the element of jeering black comedy. Robert Silverberg's story of imaginary tourist trips to colourful apocalypses, launched

from a near future which is dying its own sordid death, "When we went to see the End of the World" (1972) is one of the more subtle examples; Kurt Vonnegut's "The Big Space Fuck" (1972) is surely the most bitterly hysterical. In their account of the "human nature" which precipitates catastrophe these stories not only leave no room for hope but suggest that if hope did exist it would be a violation of common justice. In so many science-fictional catastrophe stories of the last two decades we are urged to believe that we deserve every last moment of the suffering that we are bringing upon ourselves. It will, it is presumed, constitute an adequate payment for our sins, even though it will not constitute and expiation. Only a tiny minority of stories actually carry this "message" in manifest form, and many more reject it insistently, but the very fact that it exists at all is a matter of considerable significance, and it is, indeed, no more than the logical extreme of the line of argument taken by all the fiction which accepts the image of an ecologically sick future.

The true measure of the despair which has begun to gnaw at the heart of sf's image of the future is not so much to be found in the violence of its images of destruction, but in the way that the accusing finger which seeks to allocate blame so frequently leaves no exceptions. In stories written before 1945, whether they deal with lotus-eater societies or future wars, the allocation of responsibility is usually selective. For the most part, the clear-sighted middle-class intelligentsia are absolved of blame - it is the power-groups above them or the lower orders below whose greedy short-sightedness precipitates disaster. As most of the writers of these stories were members of the middle-class intelligentsia who saw their work as an attempt to send out warning signals, this exemption is not altogether surprising. After the war, however, attitudes changed markedly. The supposed moral neutrality of scientists came under suspicion, and the scientists had always seemed to represent the ideological spearhead of the intelligentsia. When the pollution crisis became dominant among the anxieties of the period, the culpability of the intelligentsia as a whole could no longer be doubted, for it was in maintaining the standard of living expected by the middle-classes that industrialism was threatening to run riot and poison the earth. To some extent, therefore, the absolutism of the note of despair sounded in some of these stories represents a kind of self-abuse on the part of speculators who have come to see themselves as active participants in the catastrophe they anticipate. Andrew J. Offutt, in his ecocatastrophe story The Castle Keeps (1972), quotes with approval the words of the comic-strip character Pogo: "We have met the enemy, and he is us!" - a comment which is highly pertinent in both a general and a special sense.

When we bear this fact in mind, it becomes easier to see why the note of despair sounded by the more extreme apocalyptic fantasies does not destroy the possibility of their filling a constructive role. As evangelical rabble-rousers discovered a long time ago, it pays to reduce your audience to despair by convincing them of their personal damnation before attempting to win them to the cause with conditional promises of salvation. It is a tried-and-true recipe for making converts (though the treatment has periodically to be renewed lest they lapse). The whole point about the eclectic catastrophism which is so prominent in contemporary sf is that it is not a warning about what they might do to us if we let them, but a warning about what we are doing to ourselves. The scapegoat-strategy by which we try to pin blame to other individuals or groups, to other people's ideas, or to facets of "human nature" which we have risen above while others cannot, seems (at long last) to be going out of fashion.

"What is sin?"

The question "What is sin?" is asked by Felix Hoenikker in Kurt Vonnegut's Cat's Cradle (1963), when one of his colleagues wonders (after the fashion of J. Robert Oppenheimer) whether the invention of the atom bomb constitutes a scientists' sin. Hoenikker is a scientist through and through, and all his concepts are scientific ones. The concept of sin is not among them. For him, all problems are theoretical, and have no moral dimension. Thus, when he is asked to find a way to freeze battlefields so that soldiers will not have to fight in mud, he does so. His invention, ice-9, will also freeze the entire world if a single drop ever escapes into the environment, but that is a problem which he leaves for his children — and, indeed, all the world's children — to cope with. In the end — which, of course, really is the end — they can't cope.

Cat's Cradle is exceptional among modern stories of man-made catastrophe because it sets against the hopelessness of our envisaged situation a very powerful note of pity. The irony of our impending self-destruction is allowed full rein; there is no doubt expressed within the story that we are getting pretty much what we deserve. Nevertheless, argues Vonnegut, we are to be pitied in our plight. It is this element of pity, also strongly expressed in Mother Night, God Bless You Mr. Rosewater and Slaughterhouse-5, which makes Vonnegut a unique figure in modern American literature. Those who recognize that the hopelessness of his stories is a kind of self-abuse are apt to construe the pity as self-pity, and are generally antipathetic in consequence, but it is not difficult to see why his attitude has seemed so attractive to those who have made Vonnegut a cult-figure. In Vonnegut's books we are all responsible for the coming catastrophe, but there remains a special sense in which we are nevertheless innocent. We are victims of samaritrophia (chronic degeneration of the conscience) but it is not really our fault — we are embarked upon a curious kind of "children's crusade".

The ideology opposed to Hoenikker's morally-blind scientific rationalism in Cat's Cradle is Bokononism, a mock religion which boasts of its falseness but claims that belief in its tenets is pragmatically essential because life is otherwise intolerable. Vonnegut echoes Voltaire in observing that since God does not exist it is necessary for us to invent him, and adds that we should not let the manifest absurdity of the project deter us in the least. Ice-9 will get us anyway, but there is a chance that some of us, at least, can go out thumbing our noses at the utterly indifferent universe which has sealed our fate.

This kind of catastrophist comedy re-emphasizes the message transmitted by catastrophist tragedy. (This is not surprising, in that the common subject-matter of comedy and tragedy is failure — they merely represent different attitudes to human fallibility.) The argument is that we have failed our children and our children's children, and in so doing we have failed ourselves. We are no longer required to believe that death will deliver us into purgatory or hell for our due punishment, but there remains a special sense in which we can be, and are, damned.

It could be argued that the sins which figure large in modern stories of man-made catastrophism are not so very different from the sins identified by our remote ancestors. Pride, covetousness, sloth and gluttony still make convenient labels to use in connection with Epimethean fantasies, the modern versions of the lotus-eater mythology, and anticipations of drowning in our own wastes. Mythical parallels are not only easy to draw but rather difficult to avoid. However, there is one vital, and perhaps all-important, difference between the concept of sin which is revealed and propagandized by modern

accounts of man-made catastrophe and the concept which figures in the Bible and other ancient mythologies. The character of the sins, insofar as they reveal human propensities for antisocial behaviour, has not changed, but the essential nature of sin itself has.

Our ancestors saw sin in the context of a static order of nature. They conceived of it as a violation of that order – a rebellion against it which would (or, at least, should) call down retribution. Because it was seen as a violation of some kind of rigid framework, sin was held to be *unnatural*. The tendency to sin might be universal – and, indeed, all men might be tainted by it even if they never actually *committed* any sins of their own, but sin was nevertheless a flaw in human nature from which men could (or, at least, should) be redeemed. The Christian mythology of sin is particularly clear in this respect, but this kind of attitude is one of the things which is common to all religious systems.

We no longer see sin as a violation of a natural order, but as part of it. The human propensities which seem to propel individuals and societies toward disaster are now seen to be a part of human nature rather than a flaw distorting it. This change of perspective, of course, became inevitable once we realized that we are the product of evolution rather than special creation. We are what circumstances have made us, and what is common to us all must be accepted as a part of what we are, not as an accidental deterioration which we suffered after our essential nature was determined. This recognition does not, of course, rule out the possibility of redemption, for if we are the product of past evolution then future evolution might remake us more as we would like to imagine ourselves, but it makes the process of redemption a much more difficult business than we had ever suspected.

The rationalistic philosophy of science claims that knowledge itself is morally neutral, and that the question of what is must be separated from the question of what ought to be. However, we must observe that even if science does not actually contain a moral philosophy, it nevertheless determines what kind of moral philosophy can exist. It denies validity to any moral philosophy which seeks to validate its commandments by embedding them in empirical claims, whether such empirical claims are true or false. It catches religious mythologies in a double stranglehold, making their claims false in the simple sense where they are genuine empirical claims, and falsely empirical if they are metaphysical in nature.

The result of this is that the only kind of morality which can genuinely co-exist with and complement systematic scientific knowledge is a pragmatic one, which makes the desirability of ends the sole criterion for the assessment of means. The true beauty of this is that the instrument by which we seek to calculate the outcomes of our present policies in order to discover the ends which we must weigh up, and by which we also seek to extend the repertoire of our available actions in order to widen the range of our possible ends, is scientific knowledge itself. Thus, though a pragmatic moral philosophy can make no claim to be science, it nevertheless depends for its potency entirely upon the competence of science. It is no use trying to evaluate an action by its consequences unless you actually have the means of calculating its consequences. Pragmatism cannot exist without science, and science is useful (and hence attractive) only in a pragmatic sense.

The essence of sin, in the age of science, is to be a bad scientist — which is to say, to fail to calculate correctly (and hence to realize fully) the consequences of one's actions. This becomes, in fact, the very nature of sin in a wholly pragmatic world. It seems at first to be a rather harsh and simple-minded doctrine, in that the cardinal sin then becomes

stupidity, and the register of deadly sins then becomes a list of different kinds of stupidity. The true situation is, however, more complicated than this, though we have perhaps only recently begun to realize the fact.

In the pre-war mythology of man-made catastrophe investigated in this essay, it is true that the ultimate crime, however it is characterized, is a form of stupidity. The stories of lotus-eater societies are perhaps the best example, for what those societies are seen to have abandoned is progress, foresight, and the use of intelligence. What has atrophied in such societies is precisely the capacity to make plans and to set up new goals. In the anti-war stories war is very frequently represented explicitly as a kind of stupidity or a kind of irrationality. If one studies the impassioned speeches made by the sympathetic characters in these stories, while they survey the wreckage of civilization or watch it collapsing about them, there can be no mistaking the consistent indictment of stupidity, and the taken-forgranted belief that if only the world were run intelligently and rationally everything would be all right. In catastrophist stories written outside the sf magazine-community, the intelligentsia were generally held immune from criticism, though the characterization of the class differs somewhat between, say, H.G. Wells and Aldous Huxley. In labelled science fiction, there was greater consensus on this matter in that the intelligentsia were more exclusively those educated in science.

As we have seen, however, this exemption is made far less frequently in post-war catastrophe stories. There are few people today who could commit themselves to the Wellsian ideal of a state run by technocrats. Stupidity may still be the essence of sin, but we have lost faith in rationality as the over-riding virtue.

The reason for this is simple enough. It is all very well for scientific knowledge to function (through technology) as the means of extending our repertoire of actions, and hence of options, and to be the instrument by which we may calculate the consequences of our proposed actions. The trouble is that none of this will help us to decide exactly which ends are desirable and which are not. The 19th century rationalists would have been unable to perceive a problem here — man, as the product of evolution, was considered to have his desires "built in" to his nature, and the Utilitarians were quite confident of their ability to add up social equations in terms of "hedonic units" of one kind or another. Even the Utilitarians, however, found practical difficulties when they began to weigh up immediate personal gratifications against long-term policies which would generate hedonic satisfaction only for future generations.

Obviously, it would be oversimplifying the case to say that post-war catastrophists discovered this problem, or even that they rediscovered it. What they have done, however, is to realize its immediate and urgent significance. For what they are saying, in its essence, is that our sin consists of gambling with happiness of future generations in the pursuit of immediate gratification for ourselves. They say further — and quite rightly — that the intelligent are more to blame in this sense than the stupid, for it is they that have the means to do it. Thus, sin is balanced against sin, and there is a curious sense in which, though we are all responsible, we are each in our different ways innocent.

It can readily be seen that this *new* sin, though it is different from the sin of stupidity, is still a sin in the pragmatic sense of the word. It is still a sin of *consequences*, not of violation of nature. It reveals the unanswered question which underlies all pragmatic philosophy: how far must I take my calculation of consequences before pausing to evaluate their desirability? In a crude sense, it has always been known to moral and

political philosophers as the question of how much I can take into account benefits which accrue to me if the actions which generate them cause hardship to others. The fact that in cases of man-made catastrophe the others I am forced to worry about include my own children adds a measure of poignancy to the question, but does not alter its character to any great extent.

The main reason why the question seems to be renewed and reinvigorated in these contemporary versions is precisely because the advance of science — the intrument of pragmatism — has ensured that the consequences of our present-day collective actions are so much greater, and that we are better able to calculate them. Along with a greater ability to make disasters has come a greater ability to foresee them. It is this second ability which has generated the immense wealth of recent catastrophist nightmares, but the fact that the stories themselves are "science fiction", using techniques of extrapolation in order to make predictions which (we fear) it may be too late to overturn, should not be allowed to distract us from the fact that the problem which they pose for us is not a technical problem but a moral one. In a way, this is a shame, because technical problems have solutions which are "already there", waiting only to be found. If moral problems have "solutions" at all, they have to be created, not merely discovered.

Whether we are "naturally" incapable of such collective creative effort is open to doubt, but one thing is certain: we haven't had much practice.

If we really are going to fail the examination to which circumstances are currently subjecting the human race, that will be the reason.

Letters

Dear David, April 1981

No one without personal acquaintance of Cyril Kornbluth is in a position to speculate on the depth of his mordacity. I venture to say no one who never met him has sufficient experience of what mordacity is, and anyone who assumes that Cyril ever wrote a line that was merely expository is making an assumption unwarranted in my close if brief experience of the man. Criticizing the science content of "The Marching Morons" is about as useful as criticizing it in *The Wind From Nowhere*. And that's that. But I will agree with Donald West that "Morons" is not a particularly good story when read today from the literal text, and on that face of it does not deserve ranking as a major of work.

Similarly, I'll agree with Christopher Priest that stories do not deteriorate; if a story is clumsy today, it was clumsy ab initio, and furthermore, many "classic" commercial sf stories are indeed questionable not merely as literature — that downfilled term with the night-sweated cambric slip — but as the sort of craftsmanship supposedly idealized in the Golden Age. That is, they fall short of their own hardedged standards, they always did fall short of them, and they have not changed in the meantime.

This is not quite the same as what Priest tries to force del Rey to say - that recent

sf work is inevitably better than less recent work simply because it is more recent. Lester is far_too bright to actually get out on that limb, and in any case has a far better acquaintance with literature beyond sf than Priest gives him credit for. But that's a passing comment, and I have no intention of broadening it into full-fledged participation in any debates which may now be mounted on behalf of one "side" or the other in either of these contentions.

What I would like to point out is that it's an error to feel that a simple contemporary examination of the text of "Morons", or any other seminal work in commercial sf of the "Modern" science fiction Golden Age ending 1950, or of the post-Modernist period ending 1960, will yield all the clues needed for a definitive evaluation of either the stories or the field that generated and then responded to them.

"Morons" has never, to my mind, been as good a story qua story as Kornbluth's earlier "The Little Black Bag", which fully implies all the social statements later uttered in "Morons". The latter story is the one first encountered when backtracking from thirty years after the fact, so there's a tendency to cite it in preference to its antecedent. It's also far balder, and that, too, makes it more memorable if it's considered not as a story but as a signal, which is primarily what it was.

I don't speak for how others took it at the time, though I'd be surprised if any of us who were publishing in the 1950s saw it much differently from the way I did: By publishing such an outrageous statement in Galaxy, Cyril affirmed that the Campbellian primacy was dead, and furthermore that he had arrived at the public zenith of sf while still wearing exactly the same head that had once made him a hero of the oppressed underground. It takes only an understanding that for a decade there had been what's tantamount to a political Armageddon between Campbellism and the Futurians; seeing that, one can see the encoded message clearly. * It looks exactly like the ragged banner raised upon the gutted and captured citadel. Within certain limits, even the content of "Morons" is irrelevant to its significance; what counts is its voice.

Cyril in fact had enduring flaws as a technician, even though his vocabulary was superb and his craftsmanship, sentence for sentence, was well beyond average standards. This was not as important in his time as the fact that he was writing at all, and specifically that he had achieved the ability to place his writing in the leading media. Since his essential quality had not changed from the days when he was literally giving it away to nearly nonexistent publications, the only conclusion even an uninformed observer could come to was that the definition of what was "good" sf had drastically changed. An informed one would have added the comment that it had been changed; that a wilful and deliberate process had been undertaken, and had succeeded.

Actually, one could probably prove the thesis that Kornbluth was the gun Pohl dragged up to finish the job Pohl had set out to do on Campbell. (To make that work, you have to believe that Pohl was heavily influential on *Galaxy* from its beginnings, that H.L. Gold was often irrelevant to what was potent in the first few potent years of *Galaxy*, and that Fred Pohl is a Deep One. You can find plenty of people on this side of the water who will concede those points without raising an eyebrow).

So in a sense Priest is quite correct in regarding the U.S. establishment view of sf as

^{*} The reference is to the politics of the sf community at that time, not directly to any mundane political affiliations of the participants, although the two are not fully separable.

doctrinal rather than literary or historical. But he is therefore incorrect in lambasting a list of the accepted "classics" of the Golden Age on textual grounds only. West is more useful in that he does attack an asserted Kornbluth subtext while citing the text, although, as I've said, in my view none of that is relevant.

You'll note I speak of an establishment view for Priest to take as a target. But clearly any belief in an establishment over here is as hampering as a belief in a "New Wave". That Pohl and del Rey can now comfortably break bread together — as they have been doing since at least 1952 to my personal knowledge — and that both of them can in turn treat Harry Harrison in a decent, civilized manner, only testifies to what time can do to principal figures in any revolution.

Although of course the fellow who blew down the drawbridge and breached the portcullis was Fritz Leiber, with "Coming Attraction", another story whose technical shortcoming will doubtless be exhaustively pointed out at some time in the next few years, with as much relevance to its influence on the developmental structures of commercial sf.

If the ground over here has been littered with misunderstandings of U.K. sf at least ever since New Maps of Hell – and it surely has – nevertheless there is a converse inability within most U.K. observers, and Priest and West display it. In either aspect, I think the root cause is a fundamental difference in the delivery of the Golden Age to its readership.

The hypothesis I advance has to do with the fact that Campbellism lay athwart the second world war. Over here, the surviving periodicals nevertheless delivered their work in measured serial order, allowing time for associations and reactions to occur between what might be regarded as evolutionary stages. The American view of the Golden Age, "Modern" sf, and everything that came of taking it as gospel or from reacting against it, is essentially anthropological.

I'm under the impression that it was not so in the U.K.; that Campbellian and contemporaneous non-Campbellian work arrived in batches, and sporadically. We are told here that most Yank magazines made their way to England as ballast and packing material, when and if. The Golden Age to a U.K. observer would then be a stratification of material *in situ*; its study would be a species of archeology, slicing down through all the epochs in an afternoon.

Even granting that considerable time has passed, I would argue for a lingering difference occasioned by these circumstances. Per capita within our sf community, there would always be many more individuals articulating remembered personal experiences of the Golden Age than there would be in the U.K., and this factor would tend to preserve certain purely attitudinal influences that would have no significant counterpart in the Eastern Hemisphere, common language or no.

However that may be, one thing is very clear to me, and you may judge its value any way you please: Encountering "Coming Attraction" and "The Little Black Bag", and to some extent "Poor Superman" and "The Marching Morons", in their first publications, had a profound effect on me, and has surely conditioned every word I have written since. And not because I considered them models of technique, style, or anything else of that sort visible in the bare text, but simply because they irrevocably changed what I had previously thought was fully understood. I doubt I was the only one.

Much the same, I think, can be said of the effect of New Worlds, in its time and for those who were exposed to it as a continuing experience rather than as an exhibit. Or those who, even more, realize that New Worlds was the visible expression of something far more ramified and deeper, and the resultant of contentions, alliances, affinities and overthrowings whose dynamics were subtextually clashed one against another in what appear to be merely stories.

Algis Budrys Evanston, Illinois

Dear David, April 1981

Christopher Priest's polemics on Lester del Rey (Foundation 21) are quite damning, especially his comparisons of the recommended books. I think that the "evolutionary" viewpoint of science fiction history which Priest exposes as nonsensical may have come about because historians like del Rey viewed science fiction scientifically, and thus thought that literature must undergo progressive evolution just like technology, ever increasing in sophistication and complexity. Instead, changes in the arts are more like changes in fashions, and may be mostly irrelevant. Del Rey could have argued that changes in technology and science have affected changes in sf (in the types of material used or attitudes portrayed), but he didn't do this. I am glad Priest exposed that del Rey's "chronological development" premise is "cockeyed".

One of Priest's other ideas makes me less glad. I think his "fine distinction" between Poe, Verne and Wells, "writers who did more; not just other 'types' of work, but they have qualities above and outside of science fiction", and other science fiction writers just doesn't exist. This "fine distinction" consists of the fact that the "reading public" is able "to summon up a generalized but accurate impression of their work" but can't repeat this feat when it comes to Asimov et al.; thus "Asimov and the others have never transcended the limitations of the genre, but have risen only as high as it is possible to go."

Does this make any sense? If the "reading public" can't summon up a "generalized but accurate impression" of Asimov and Clarke and Bradbury, but can only lump them together, is this an intrinsic fault of the writers of sf, or is it the fault of the reading public? Is it anyone's fault at all? Is it my fault that I lump together the French Symbolist Poets because I'm not familiar with them all; is it a fault to do this or a convenience? Does it have the slightest thing to do with literary quality? Does the reading public really keep Poe, Verne and Wells carefully cordoned off in their brains from Asimov and the others? Or would it be better to term Priest's "fine distinction" here "cockeyed" and be done with it?

I hope I don't give the impression that I disagree with the rest of Priest's article; he did a good job on a book that many would be too squeamish to attack. There are worse creatures in the sf underworld, however, then Lester del Rey. I think Spider Robinson's book reviews are the absolute nadir . . . the black hole of what passes for "critical thought" in science fiction.

Cy Chauvin Detroit, Michigan

Dear David Pringle April 1981

The enclosed MS crossed my desk the other day, from a source which I am not at liberty to mention — although I am empowered to send it on to you. Something about it, I hardly know what, made me think of *Foundation:*-

A Day of Strings

Tuesday, May 9 Things are moving slowly at the lab, but I finished the novel at ten this morning and wrote a couple of short stories and answered several Polish fan letters before the luncheon meeting with General Haig and the others. Rather dull; shoptalk. Spent the afternoon rearranging quanta. I must remind myself: stop writing in the past tense; it is passé.

Wednesday, May 8 Crisis at the Department. It turns out Professor Oobin has been caught in the circuitry since 1977. This may explain why the plasma experiments failed. I release Oobin, calm the chairman, prescribe Valium to three graduate students, pass the California Bar Examinations, dash off a note for Science on a little thing I noticed about Riemann Space recently, and have lunch with the quasar people from MIT. The Chandon is passable. In the afternoon, play a few sets of tennis with local pros, plot the next few novels, and go to San Francisco by balloon. Dinner at Jack's. Adequate veal, of which I eat 225.6 calories, my veal allotment. Back home by glider. Dull trip. Variable metabolism, perhaps due to veal. Home in time to watch Flo on the telly. How strange Americans are. How strange that I am one.

Thursday, May 7 I call NYC and stop the presses on the galleys of the novel-before-last in order to change the word put on galley 281 to "set". Publisher is peeved but of course understands nothing of science, although I explain patiently that information I have received from sources deep in NASA concerning certain Soviet data make the change imperative. How good it is to be in the know. It's beginning to look as though the plasma series will work now that we have got rid of the weakly relavistic electrons and Professor Oobin. At noon I give a talk to four thousand weakly turbulent members of the Southern California Adoration Society, on Early Italian Harpsichord Music and Its Relation to Schopehnauer, Neils Bohr, and Media Advertising in the Late 70s. Have made no notes, of course, but ideas occur as I talk and the speech goes over well, many persons coming to kiss my hands and feet afterwards. A quiet afternoon finishing the current novel and reading War and Peace. Pretty good. I understand gravity now. There are times I wonder if I know too much, but then my sheer expertise in everything I do reassures me that this is quite impossible. Only a few questions remain unanswered, such as: Why is Gene Wolfe?

Friday, May 6 After a quick jet jaunt to Miami and back, lunch with several writer friends. We talk about money, advertising, and sex, of course. Decide that compared with most artists I have got my priorities in the right order. While driving home arrive at a rather promising new approach to a unified field theory. Might be useful next summer, at the meeting in Telluride. What is the difference between Tolstoy and

science fiction? Curious. Complete the unified field theory before dinner. Compare myself with all other writers. Poor devils. My problem is the same as Shakespeare's: Lack of a critical audience which can mirror our concerns. The critics are busy unearthing Wells, embalming Le Guin, freeze-drying Borges, metabolizing McIntyre, decomposing Dick, so a practicing writer gets no useful feedback. Thank God, what if they said something nasty? Go to bed with Faulkner.

Saturday, May 5 I wake up in the evening with a curious feeling that something will have been odd about this week. Has regular use of the present tense not helped after all? But it must be good; it sells. Am I not a doctor? What kind? If Jerry Pournelle is I must be. I will go to bed this morning after lunch. All the frayed details ravel together here by the unpacific ocean. Go to bed. Quick!

Ursula Le Guin

Portland, Oregon

Dear David Pringle,

April 1981

D. West has mounted a brilliant attack (Foundation 21) on "The Marching Morons". But Kornbluth's story is no futurological warning: it is a fable. Of course its science is nonsense: Kornbluth cannot have expected readers to take seriously Black-Kupperman's Svengalization (from the distance of the North Pole) of a Senator and a President of the United States, respectively into a complete speech, and a decision for the whole government to take to spaceship. The Marching Morons is a piece of blackest irony about the insane, the Gadarene, human race, and the extent to which it is doomed to super-crises, to lying control, and to the toleration of cruelty, murder and genocide. (Its insanities are indeed as rife in those of high intelligence as in the less intelligent.)

Charles Galton Darwin's *The Next Million Years*, 1953, chapter VII, saw Man as a wild animal who will never be anything else (will never be domesticated by a Master Breed): I cannot imagine that any reasonable reader will seriously identify with Kornbluth's hyper-intelligent few. The absurdly extreme dysgenic development has, as in Kornbluth's "The Little Black Bag", been invented for the sake of the fable and his familiar motif of betrayal.

David I. Masson

Leeds

Dear David Pringle,

April 1981

Public response to a less than favorable review is, I am sure, unsound literary practice. But, however tenuous the transatlantic connection, I have a certain family feeling towards *Foundation*. And the questions about *White Light* which Colin Greenland has raised are interesting enough to deserve answers.

"What is Felix's mission, and why doesn't it matter that he doesn't properly complete it?", is the first question which Greenland raises in his Foundation 21

review. Basically, Felix's mission is to solve Cantor's Continuum Problem, viewed as a special case of the One/Many problem. In a sense his ability in Part III to move back and forth between One and Many represents a solution . . . in somewhat the same way that *satori* is a solution to the split between mysticism and rationality. His mission is also to produce a book of some sort . . . but more on this later.

This is not yet the answer that Greenland is looking for. The mission he has in mind is the mission which Felix is given by Jesus, viz. to take the spirit of Kathy up towards the White Light. Felix does this, accomplishes it admirably and I cannot understand why Greenland and the Panshins (in SF in Dimension) should say otherwise. Perhaps they feel that Felix should shovel Kathy into the White Light like peat into a furnace . . . but this would vitiate the girl's free-will. Jesus's remark that Felix should be sure not to let Kathy follow him back is a warning for Felix's own good . . . not a divine injunction.

"What is the origin of the mysterious guide to Cimön he finds in the bookshop?" There are really four books involved here: i) the novel White Light, ii) the infinite book The Lives of Felix Rayman, which dwindles to pamphlet size and disappears. (Incidentally one of the misprints in the Virgin edition reads on p.56, The Lives of Felix Rayman or The Lives of Rudy Rucker, where in fact should be, The Lives of Vernor Maxwell or The Lives of Cobb Anderson; these being the protagonists of my other two novels, Spacetime Donuts and Software, out from Ace in October, 81, and February, 82, respectively.) iii) the pamphlet Cimön and How To Get There, by F.R., and iv) the "one killer of a surrealistic novel," which Felix plans, (mentioned on pages 107 and 127).

These four books are one and the same book. The description of the writing of *The Lives of Felix Rayman* on p.55 describes the office in Heidelberg where I wrote *White Light*. The whole winter I was writing it, I carried the manuscript around with me like Felix with his book. When it was nearly done it slipped from my fingers and drifted back to appear in Chapter Four in a bookstore I used to frequent. After Felix was fired, as I was, he went to write *White Light*.

But who *put* the pamphlet in the bookshop? Well, I don't know. If I didn't, then maybe the Devil did in hopes of luring Felix out of his body.

"What was the message of the Beast under the desk?", is Greenland's third question. Well that's easy. A simple case of synchronicity and/or reverse causation. The tag number is 443,556 which is 666², so the Beast says "square my number for the tag." After a while one expects this sort of thing . . . like Heinlein coming up with the same title at the same time: "The Number of the Beast".

"What does happen to Kathy's spirit when she steals Felix's body?" When Felix leaves his body to go down to check the lab Kathy is able to take possession of it. One precedent here is Sheckley's Immortality Incorporated, the scene where a free-floating spirit manages to squeeze in ahead of a rich old man who's supposed to get a new body. That spirit, you may recall, was in fact the spirit of the man who the protagonist had killed in a car accident on page one. And this spirit had been dragged along in the protagonist's wake much as Kathy in Felix's.

But how does Felix get back into his body? The assumption is that there would be a natural mechanism which would draw an astral traveller back to his body if it experienced injury . . . analagous to the way in which a dreamer will awake if he wets

his bed. I suppose that at the time of the accident Kathy may have either a) jumped out of the body thinking it done for and not wishing to experience another painful death, or b) been bumped out by the force of Felix's sudden and violent return.

And what happened to Kathy then? Maybe she hung around Earth too long and got nabbed by the Devil. Maybe she went back up to Cimön. Maybe, now that Felix is well, she follows him around hoping he'll leave his body again. You just never know.

Rudy Rucker

Lynchburg, Virginia

Reviews

VALIS

by Philip K. Dick (Bantam, 1981, 227pp, \$2.25)

reviewed by Michael Bishop

Anyone unfamiliar with at least five or six of the most compelling of Philip K. Dick's novels lacks a comprehensive grounding in contemporary science fiction.

All right, fair enough, you say. But suppose that for "science fiction" in my opening statement I substitute the word "literature" — what then? Try it out: Anyone unfamiliar with at least five or six of the most compelling of Philip K. Dick's novels lacks a comprehensive grounding in contemporary literature.

Shocking? Well, probably not necessarily to many of Foundation's readers — but to America's literary establishment, by which I mean English-department academics and big-city newspaper critics, this last assertion would seem to sizzle with the disreputable aroma of fry-cook criticism, the kind that gets flipped onto your breakfast plate like a burnt sausage patty. I urge such people to give it a taste anyway. If they don't like the assertion, they may like the fiction.

Over the past quarter century Philip K. Dick has produced more than thirty idiosyncratic, quasi-absurdist novels. Approximately two-thirds of these titles were first published as paperback originals, and all but one proudly sport the category label "science fiction". (The exception is *Confessions of a Crap Artist*, written in 1959 but not published until 1975.) Dick's first new novel in four years, *VALIS*, fits both these prejudicial patterns, either one of which is usually enough to coldcock a writer's hopes for respectable bestsellerdom or serious critical attention outside of our own specialized forums.

And yet Dick is a metaphysical black humorist of withering integrity and conviction, a much more single-minded and interesting writer than, say, Kurt Vonnegut or Richard Brautigan; and VALIS signals the full resurgence of a unique talent. As he has done many times in the past (in such books as The Man in the High Castle, Martian Time-Slip, Ubik,

A Scanner Darkly, and others), Dick plunges his readers into a convolute existential maze without permitting either philosophical speculation or the exigencies of plot to overwhelm the humanity of his characters, many of whom are driven by madness or disease to hurt the very ones who are attempting to help them. Indeed, many of the most painful situations in VALIS — the hatefulness of Sherri Solvig, Horselover Fat's obsessive commitment to the writing of a complicated religious "exegesis", his confinement in the psychiatric ward of a county medical hospital — are apparently drawn from Dick's own experience.

The theological underpinnings of this new novel are Valentinian Gnosticism, an early Christian heresy that held that our universe is the irrational creation of an imperfect deity, and that the True God above this incompetent creator has repeatedly introduced "microforms" of himself (e.g., Elijah, Zoroaster, Christ, etc.) into the illusion of human history in order to heal us. Dick offers a sustained dramatic gloss and several mind-boggling variations on this heresy in VALIS and concludes his book with an appendix entitled "Tractates Cryptica Scriptura" containing the gist of a theological system divinely revealed to the main character, who, of course, is Dick himself.

If this summary of the novel's metaphysical thrust sounds forbidding, let me point out that the science-fictional elements of *VALIS* are embedded in a setting altogether familiar, even commonplace. Most of the characters are recognizably American, and the action occurs in California during the decade just past, primarily in Santa Ana and Sonoma in 1978. Although spatiotemporality and causation are abrogated in the main character's mind, the reader is not likely to get lost in the novel's quintessential, twentieth-century setting. As usual, Dick takes you for a trip but he gives you a strap-handle to hang on to.

VALIS, by the way, means "Vast Active Living Intelligence System," and Dick's characters discover the acronym in a film of this title starring a rock musician supposedly comparable in stature to David Bowie or Alice Cooper. In fact, just as Thomas Pynchon in *The Crying of Lot 49* provides an act-by-act synopsis of an apocryphal Jacobean drama entitled *The Courier's Tragedy*, Dick synopsizes the apocryphal 1977 film *Valis* to add an enigmatic undergirding to the progressively more outrageous findings of his characters. Besides being fascinating in itself, this technique imparts the feel of reality — after all, everyone believes in movies — to essentially irreal events. This is no mean accomplishment, for Dick's new book grows curioser and curioser as it goes along, and our middle-class apprehension that the world of film makers and rock musicians thrives on the outré seduces us into accepting the weirdnesses that come tumbling over us in the novel's final quarter.

The quest of Horselover Fat, Dick's protagonist, for the latest "microform" of the True God gives the novel a poignant, sometimes acerbically funny human dimension. ("Phillip" is Greek for "lover of horses", while "Dick" is German for "fat".) Further, because Philip K. Dick appears in VALIS as both an analytical choral voice and a trapped participant in the action, and because Horselover Fat is really a wounded avatar of the wounded author, the portraits of these "two" men eventually merge into a single vivid, binocular characterization. A meeting in Sonoma with humanity's suspected savior – tellingly, a two-year old girl named Sophia, Divine Wisdom – automatically fuses the contending elements of the narrator's personality.

After the unexpected death of Sophia (which Dick almost cruelly springs on us), Fat

and the author again become distinct personalities. However, VALIS concludes with the upbeat implication that one day this breach – like the breach between us and the True God – may be permanently repaired. If the fallible human author and his imperfect fictional counterpart can be made whole, Dick seems to be arguing, so can our imperfect world. Faith and a hopeful receptivity to revelation are the keys.

Some readers, I fear, will find VALIS an exasperating or an upsetting book – convolute, dark, and difficult. As few of Dick's novels are, it is by no means a perfect narrative; its symmetries are often intellectual rather than aesthetic. Nevertheless, no one who perseveres will find VALIS devoid of emotional impact or disturbing ideas; and if you come away doubting either your own sanity or the author's, then you will have brought with you the peculiar essence of Philip K. Dick, a writer in full pursuit of answers to questions that are almost as old as our species.

Topology of a Phantom City

by Alain Robbe-Grillet (translated by J.A. Underwood; Calder, 1980, 142pp, £3.95)

reviewed by Colin Greenland

The city is Vanadium, site of the temple of the goddess Vanadis, known as the Victorious (or perhaps the Vanquished). It is

a city that has been three parts destroyed, but a modern city, or at least one where the buildings were not more than a century old at most. As a result of some cataclysm - a gigantic fire, possibly, or aerial bombardment - all the houses, which were originally about four to five stories high, have partially collapsed, and not a single habitable block appears to have been left standing.

Perhaps the destruction came by sea - the giant soldiers, the evil corsairs - before the first war, or toward the end of the last century; or perhaps it has become confused with a historical disaster, in 39 BC, an earthquake, or a volcanic eruption.

These, at least, are the facts:

The architects and the provisional administration have concluded an agreement to put in hand a vast pleasure complex in the historic center itself. The monuments damaged by the explosion are not to be rebuilt but instead carefully preserved in their present unstable condition as a permanent reminder of the catastrophe; this will of course involve extensive and dangerous clearing, consolidation, or shoring-up operations in order to safeguard the precarious equilibrium of the ruins.

Topology of a Phantom City is a pleasure complex and a reminder of the catastrophe, a careful preservation

of dilapidations connected with the recent events (the precise nature of which has slipped my mind for the moment: bombardment, sack, earthquake?)

What is the nature of the catastrophe?

Is it best to start here, or elsewhere?

In his first novel, Les Gommes (1953, published here in 1966 as The Erasers), Robbe-Grillet was primarily concerned with doing some of the ruining. Like Burroughs's scissors, Robbe-Grillet's erasers are the weapons for an attack on the arbitrary powers of language and the presumptions of authors. Literature, he would say, is a conspiracy to conceal the flux of reality behind a verbal façade. The novel pretends to investigate and

explain life, but offers instead an attractive replica, sequential, systematic, and false. Fiction is not fact: such a truism that writers and readers ignore it and exclude it from their accounts. This leaves a gap into which the writer can insert, consciously or not, all manner of ideological bias, myth, and propaganda, which the reader may not distinguish, let alone evaluate. The fiction produced in the cause of demystification is irregular, self-contradictory, relentless in the exposure of its own paradoxes and pretentions, cunning in tripping the reader with some irrational banana-skin or shove of blatant misdirection into a manhole left uncovered by his preconceptions.

The application of this disillusionment to sf was direct if unpredictable. As a pulp genre, unsupervised by academic excisemen, sf has smuggled a prodigious weight of undeclared ideology with impunity. Currently punishable tendencies include fascism, sexism, and technolatry; one day there will be different ones. Suvin and Scholes, Delany and Russ have made the first contributions to a criticism which detects such illegal imports and tariffs them accordingly. It may be objected that these critics merely work for a different ideology; but it is certainly in the interests of science fiction readers of any persuasion to learn to distinguish between natural and cultural values, between inevitable and acquired characteristics, or how are we to appraise future changes and alien conditions?

Not only academics and critics but also authors have reconsidered sf in this light, for sf is one mode which has never concealed its status as artifice. The formula is "What if —?" not "Once upon a time": declared conjecture, not pretended history. The conditions described in each text obtain for its duration, not (necessarily) anywhere else: no author would ever fool himself into offering them as facts (pace L. Ron Hubbard). The modes and conventions of sf were quickly adopted by writers who wished to emphasize the fictionality of their work, the "fabulists", from Durrell to Lessing. At the same time the new theory gave an opportunity for some writers within the genre to take an entirely new approach to their imagined worlds and artificial realities, one which emphasized the imagination instead of the plausibility.

Within this scheme the personal influence of Robbe-Grillet on sf has not been large, probably because he first took the path of minimizing the fictionality of his work rather than flaunting it. Stripping the prose of authorial comment both explicit and implicit, replacing adjectives and adverbs by data and measurements of objects that nonetheless remain eternally blurred and incomprehensible, he indicated only by omission how large a part of perception, description, and reading consists of imaginative intrusion. This could be presented as a parody of the obsessions of the "nuts and bolts" school of sf, but not many writers took it up, except for Giles Gordon and Brian Aldiss, whose Report on Probability A is directly in line from Robbe-Grillet's Jealousy.

Robbe-Grillet has moved on since then. Though *Topology* contains passages of the old detached, geometrical description, particularly in the opening sequences in "the generative cell" of the reformatory where nude, preoccupied young women prepare to paint or impale one another, it becomes far more varied in style and reference. It echoes *The Erasers* but also *Marienbad* ("It is morning. It is evening. I remember."), and includes delicate and resourceful passages whose neutralizing effects are achieved not by suppressing adjectives but by compounding them:

Yet it is as if the girl's face has changed imperceptibly, as if an imperceptible smile had appeared on her unpainted lips, a smile that is like the reflection of an ineffable secret,

remote, fragile, and fleeting, probably nonexistent, a smile possibly of innocence, possibly of collusion, an empty smile.

The subject could be La Gioconda, the reverie could be Pater, but the lady vanishes. Robbe-Grillet inserts asides commenting on narrative, sometimes jokingly, as in reference to "a book one pretends to be seeing for the first time," observing later, "This whole passage is already pretty familiar." He opens one section: "Repeatedly upon a time (in fact one could say as a rule)", but soon offers: "To console you I'm going to tell you our true story", introducing an utterly bizarre Arabian nocturne. He declares his disinterest in traditional narrative:

We've had enough of outings into the country, voyages, adjectives, and metaphors. We tried that for fun; it wasn't much fun.

These are his own tricks, but he also reaches out to implicate the works of others in his own, and makes it fairly clear he has been reading some of the new writers he himself influenced. Crucial scenes describe (though with alterations) paintings by René Magritte such as *The Menaced Assassin* and *The Domain of Arnheim;* there are more general evocations of Paul Delvaux and the later work of Giorgio di Chirico. Most of the ambience is theirs, the turn of the century and the imaginary Ancient Greece of tourist kitsch, but it also envelops the present: these oppressed and oppressive women are also the "all-night girls" of Bob Dylan's "Visions of Johanna" and Van Morrison's "Madam George". Detectives deduce a fourth murder from the locations of three others, at "the fourth vertex of a perfect square", a direct reference to Jorge Luis Borges' "Death and the Compass". The eternal ruins are William Burroughs' and Michael Moorcock's, and certainly J.G. Ballard inspired the sculptures of crashed cars, one driven by a "handsome gangster". In 1962 Ballard prophesied:

The first true sf story, and one I intend to write myself if no one else will, is about a man with amnesia lying on a beach and looking at a rusty bicycle wheel.

He fulfilled the promise four years later in "The Assassination Weapon"; now Robbe-Grillet has borrowed that image, together with a stranded mannequin from "The Terminal Beach", who lies on an old bedstead "apparently trying to reach, as if it had been a lifebuoy, . . . the tall, rust-fretted wheel of a bicycle."

Vanadium is a phantom city, an

uncertain, absent place with its succession of demolition sites, patches of waste ground, tall fences occasionally concealing the bases of disproportionately large, frail, provisional-looking metal structures.

In a "huge excavation . . . machines are moving about, apparently probing with their headlights for remains of some civilization buried at an unusual depth"; "near a tangle of tubular structures from which still hung a red placard bearing the word *Information*, a veritable cataract pours from a gutted window." Vanadium is the capital city of inner space, "almost at the frontier between the visible world and the invisible". *Topology* is a documentary of a dream of entropy.

This is Robbe-Grillet's seventh novel, published in France in 1976. The *nouveau roman* is no longer new. The death of the novel, much celebrated in the last twenty years, continues to be a fertile source for literary creation. To say that *Topology* was very satisfying, magical, full of poignant beauty, may seem a perverse form of approval and not what the book is supposed to be at all; but its tricks, its trapdoors and false perspectives, still work with the old ease, and its evanescent characters continue to haunt. Probably, as B.S. Johnson regretted, the techniques of disorder rapidly become a new

and more insidious sort of order; before long someone will deconstruct Robbe-Grillet and reveal the systems secretly underlying his apparent anarchy. Until then, and possibly thereafter, he remains proud prince of these ruins.

Under Heaven's Bridge

by Ian Watson & Michael Bishop (Gollancz, 1981, 159pp, £6.95)

reviewed by Brian Stableford

Collaboration between writers is a fairly rare phenomenon, except in science fiction. The principal reason for the unusual prevalence of co-operative ventures within the genre is, of course, the fact that the community of science fiction enthusiasts is so tightly-knit indeed, almost incestuous. Some collaborative partnerships - most notably Pohl and Kornbluth - have achieved great things, but it remains very much a matter of opinion whether there has ever been a team which added up to more than the sum of its parts. The reverse, of course, is definitely not the case - partly because collaboration was for some (Garrett and Silverberg, for instance, or the early Futurians) a way of easing the burden of mass-producing routine work. Under Heaven's Bridge is billed by Gollancz as the first transatlantic collaboration in sf - a legitimate claim, I think, although Daw Books has billed several translations as collaborations — but whether this prospect is likely to excite readers is a little doubtful. The knowledge that the two authors conducted their transactions mostly by mail is unlikely to reassure us on the question of whether they might have reached the same level of rapport as the brothers Strugatsky or Mr and Mrs Henry Kuttner. It comes as a great relief, in fact, to discover that the book reads a good deal more evenly than it might have.

Watson and Bishop share several areas of interest, including hypothetical alien anthropology and Japanese culture, and they have relied heavily on these aspects of common cause in the construction of this novel, which confronts a Japanese linguist with the enigma of a highly unusual alien culture. The fascination which both men have previously shown with the notion of confrontation between human characters and the mysteries of an alien Weltanschauung (Watson most memorably in The Embedding, Bishop in *Transfigurations*) is here freely indulged, presumably on the assumption that a pleasure shared is a pleasure doubled. The book's virtues derive mostly from the obvious care and ingenuity which went into its planning: the alien cyborgs inhabiting a world swapped back and forth occasionally by the two elements of a binary star are beautifullydesigned to defy the assumptions and attempted explanatory accounts of the human observers while still allowing the reader and the central character to glimpse the rationale of their extraordinary existence. Careful preplanning, however, can only go so far in guaranteeing a final product, and in a collaboration rather more than in a solo effort it may act also as a restraint in preventing constructive mutation during the actual writing. Where Under Heaven's Bridge occasionally seems weak, its weaknesses may well be the result of an inability to cope adequately with problems arising during the attempt to realize the plan. These weaknesses are manifest as an occasional faltering in the narrative voice, and uncertainty about what is actually being achieved by a particular section of the story. Oddly enough, both these faults were present in the early work of each author, though more recent work had, until now, seen them all but disappear.

By comparison with such travesties as the ill-fated Dick/Zelazny collaboration *Deus Irae, Under Heaven's Bridge* is a very solid and rewarding piece of work. Its basic premise is original and intelligently worked-out, and the storyline sustains the fascination of the reader throughout. Nevertheless, it seems to me to fall slightly behind the standard set by recent solo works by either of the two authors. The personal touch which stamps their work has inevitably been diluted. Ideally, one looks to the combination of two striking talents to have some kind of quasi-synergistic effect that will give the partnership its own distinct and powerful voice, but this has not happened here any more than it usually happens elsewhere; the expectation is unrealistic, and perhaps irrational. *Under Heaven's Bridge* is a book well worth reading, but it is not an outstanding work in either author's canon.

Interfaces

edited by Ursula K. Le Guin and Virginia Kidd (Ace, 1980, 310pp, \$2.50)

reviewed by Nick Pratt

A heterodox selection of "speculative fiction", *Interfaces* combines science fiction, fantasy and the unclassifiable. The editorial intentions were (avowedly) to give contributors total freedom and (implicitly) to undermine rigid sectarian definition. Le Guin and Kidd point out the inherent weaknesses of theme anthologies and explain that they set absolutely no conditions or guidelines. This is ingenuous: it would be impossible to write for two such editors without some preconceptions, just as few readers will approach the book without certain expectations. Intelligence? Yes, everything here is thoughtful and highly literate. Humanitarian concern? Yes, despite wide variations in background and subjunctivity, these are stories about people. And yet the anthology itself remains less inspiring than its original rationale. There is an underlying unity: nothing is static and in each instance characters are involved, somehow, in re-ordering their world views (building new interfaces with reality?). Unfortunately, presentation of either the process or the new awareness is rarely fresh or striking.

However, to lead off with John Crowley is a triumph of editorial arrangement: "The Reason for the Visit" foreshadows the best aspects of the whole. In a very personal reflection ("story" would be a misnomer) on time travel Crowley touches upon perception of change, expectations, cultural differences and the barriers raised by the most casual assumption. Few writers could encompass as many of science fiction's serious concerns in eight meticulously written pages: sensitive, elegant and a pleasure to read. Robert Holdstock uses time travel more traditionally in "Earth and Stone", as Farrel, archeologist and anthropologist, travels back to a primitive Tuthanach settlement. His numerous motives gradually combine as he realises the power of participation in nature and the comparative sterility of his own civilization. Tuthanach culture is complex (and thoroughly alien): in sharing Farrel's learning process the reader is drawn with him towards an increasingly inevitable climax. The story is unsurprising but, given Holdstock's control of tension and atmosphere, compelling.

In "Everything Blowing Up", Hilary Bailey makes use of Michael Moorcock's Una Persson from the Jerry Cornelius novels, creating a strong and believable character: where Jerry Cornelius would react with one eye on his image, Una reacts as a human being, taking what pleasure she can, suffering when she must (which may be a lesson for us all). Though nothing in this contradicts the original Persson, the central focus on her in "Everything Blowing Up" makes this story one of the most independent additions to the Cornelius-inspired mythos. An artful and humorous seeding of allusions does nothing to threaten that self-sufficiency: unobtrusively integrated, the references enhance a cohesive story.

Edward Bryant moves further into the morass of entropy with a first-person narrator whose every connection with objective reality is flaking away. "Precession" is tightly constructed and the most overtly "experimental" piece in the book. A close reading reveals an insidious (and fascinating) implication: our only certainty is our projection of preconceived roles for others to play out. Jean Femling's "For Whom are Those Serpents Whistling Overhead?", a tale of a woman's ambiguous relationship with a metaphoric anomaly (a mythical beast in downtown Normality), almost matches "Precession" for psychological impact. However, this is abreality by nuance rather than by participation. Understatement is too bald a word: Femling controls her language to tantalize and to hint at feelings just beyond definition.

Five prominent contributions; then there were thirteen. Both Vonda McIntyre and Philippa Maddern write of isolated women who wander into deserts (let's keep the symbolism comprehensible, now). Like Crowley, McIntyre is concerned with contemplation rather than story-telling. Her use of a more conventional narrative framework is incongruous: though too intrusive to remain an archetype, her aged, anonymous protagonist is too flimsy to bear the freight of her sensitive musings. Odo, unfortunately, is dead. In "The Pastseer" Maddern gives similar emphasis to thoughts and feelings as Ayanti suffers strange visions, loses her talent for pastsight, and fails to guide her tribe. Here the personal observation is close to clinical, the outside distractions insistent. So unaware of their own integrity, how do tribe members lead individual lives? Surely such helpless determinists would lynch a defecting pastseer in blind panic? For science fiction traditionalists, what about the aliens? But Maddern is not telling. Could she be holding out until a novel?

Michael Coney's "The Summer Sweet, The Winter Wild" is a caribou's view of interspecies empathy. Although the story begins as a parable of peace and harmony, all is not well in the Garden: the characteristic concluding twist brings some redemption to an uneasy mixture of hard realism and soft emotion. Equally characteristically, D.G. Compton deftly sets up a brave new world and a character to have an "I.I." (irrational impulse). End of familiar story, but the redeeming factors here are Compton's expert pacing and sense of the wry. However, humour is a delicate thing, as shown by the two contributions which depend upon it totally. Gratingly told in hip parlance (Robin Scott Wilson manqué), "The New Zombies" is a reductio ab adsurdum of a sitting-duck lifestyle; a salutary example of satire degenerating into parody; cossettingly predictable; and, coming from Avram Davidson and Grania Davis, a surprising failure. Gene Wolfe tries valiantly to show how it should be done with "A Criminal Proceeding". This is satire, and that individuals have disappeared under a self-generated avalanche of sheer spectacle reinforces its point. But sensationalism and the all-consuming mindlessness of the popular make a large, easy target: Wolfe fails to apply the full sharpness and precision of his best work.

A handful of relatively neutral stories and poems brings us to James Tiptree Jr., whose

contribution is the longest, the last, and contrasts young love with the lure of immortality. Typically, Tiptree expands her implications, making it increasingly clear that "Slow Music" (and all fiction) is a metaphor for life and death. Sadly, an apt (if somewhat clichéd) perspective with which to close the book is marred by a saccharine poignancy and startling stereotyping (She: temptress, homemaker. He: questing spirit, ensnared). It is possible to read "Slow Music" as a very subtle attack on the naivety of superficial romanticism: it is far easier to flounder amidst the sentiment. I believe there is mythology behind it: a poor excuse, for fiction of this ilk usually thrives by conditioning pubescent schoolgirls. Tiptree, more than most, should know better.

Interfaces is an uneven book (anthologies usually are) but, as Le Guin says, there is room for disagreement about the merits of individual stories. Her hope that the selection represents science fiction come of age is more disquieting. Granted, the cardboard cutouts of old are mouldering inside their space suits. But too few will be replaced by three-dimensional people until more writers, readers and critics realise the difference between living characterisation and solipsism. Instead of presenting thoughts and emotions within a character's experience there is a growing tendency for modern science fiction (Interfaces has its examples) to explain how a character feels about those sensations. The technique can be a valuable one: more often it leads to the barrenness of easy attribution.

Optiman

by Brian M. Stableford (DAW, 1980, 190pp, \$1.95)

reviewed by Colin Greenland

If you can make your way through the great heap of names and information dumped in Chapter 1, you'll be all right. The Terran deserter is more or less working for the disgraced private army of one alien race on a planet inhabited by another to the detriment of a third, the indigenes, while, overhead, the masters of the tedious interplanetary war start to turn their attention to the remnants of prehistoric fourth and fifth races that litter the desert. In fact, you don't have to keep all that in your head, because most of the book consists of characters sitting around against perfectly unrealized backdrops explaining the plot to each other, and Stableford takes care to remind us of anything they forget to mention. As adventure stories go, it's fairly mild; for a complicated plot, it's fairly straightforward. The prose is neither brash nor subtle, but preserves a patient and unassuming prolixity:

Two men were grappling in the area defended by the wagons, rolling on the ground close to the pen which confined the restive horses of the expedition. He saw one rise, leaving the other dead, and knew as the flare's light caught a gleaming blade that it was not the human who had won. But then a bullet evened the score, cutting the kresh down before he could take another stride.

It's a very reasonable book, motivated entirely by logic, free of all but the most perfunctory passion. Whenever a character does something without quite knowing why, Stableford honestly admits it.

The title *Optiman* is DAW's, not Stableford's; that and the cover design (all too accurate, for once) have caused him some annoyance. The original title, which should be restored when the book is published in Britain, is *War Games*, which is exactly what it feels like: loose alliances and oppositions of flat characters of various species and talents engaged in a perfectly determined race for a buried alien artifact, a safe scenario to while

away damp Sunday afternoons on campus. You can almost hear them totting up the experience points and hit points:

"If we mount a guard," she said, "then it ought to be me. I have night vision. The sky is clouding over."

This is a routine book by an author who keeps revealing that he's really too intelligent to be writing it; but at least his intelligence keeps him from the offensive excesses and stupidities the genre encourages. If you read it, the worst you risk is boredom.

The World and Thorinn

by Damon Knight (Berkley Putnam, 1981, 214pp, \$12.95)

reviewed by Brian Stableford

This is Damon Knight's first novel since Beyond the Barrier way back in 1964. It belongs, at least partly, to the sixties itself: the first third of the book (85 pages, to be exact) appeared in Galaxy as three rather shapeless short stories during 1968. Why Knight put the novel aside then I have no idea, but it may have been the fact that the story seemed to be going nowhere and for no good reason. Though he obviously rediscovered sufficient enthusiasm to carry him through the project eventually, this was not, seemingly, because he managed to figure out an appropriate destination or purpose.

Like many of the sf writers reared on pulp fiction, Knight has always seemed to have difficulty mustering the stamina to write effectively at novel length. Among his fellow Futurians, this was a particularly pernicious complaint. Cyril Kornbluth died without once managing to stay the distance convincingly, and Frederik Pohl had been writing for more than thirty years before he managed to carry through a solo novel with conviction. Among Knight's earlier novels, Hell's Pavement is a fix-up which deteriorates steadily as it proceeds, A for Anything is an uneasy adventure developed from the premise of a brilliant short story, and Beyond the Barrier is plain awful. The Other Foot and The Rithian Terror, listed here on the credits page as novels, are really only novellas halfheartedly inflated to minimum book-length, and are no more impressive for being lengthened than the uninflated novellas collected in Three Novels and World Without Children and The Earth Quarter. It is difficult to believe that this inability to deploy at novel length the talents that made him a fine short story writer was insuperable, if only he had managed to keep trying with the same dogged determination that Pohl and James Blish showed in triumphing over similar adversity. However, he did not, and it may well be too late now. The World and Thorrin holds little or no promise for the future – it is long, but its length is simply a product of the fact that it rambles on and on and on, with no shape, no characters, no plot and no imaginative vitality. It is a terrible shame that a writer of such wit and cleverness, whose criticism is so incisive and insightful, could permit himself to be so utterly tedious.

The World and Thorinn is set in the far future, when life on the Earth's surface is hard and all mankind has reverted to barbarism. Thorinn is a youth adopted by the outlaw Goryat to be slave to his household, though it appears that he is rightfully a king. At the beginning of the story Goryat, surprisingly careless of his investment, is persuaded to offer Thorinn as a sacrifice to the god Snorri, and seals him up in a well. Thorinn escapes from the bottom of the well into a series of underground caverns, and spends the rest of

the book exploring them. He finds various remnants of civilized mankind whose ancestors took refuge beneath the surface in order to escape disaster in the distant past; most live a life of relative ease and blissful ignorance, ambivalently protected by machines which have begun to evolve on their own account. Thorinn disrupts life in one of these enclaves, and several times attracts the baleful attentions of the machines, but is aided by a "magic box" which can speak to him and which becomes his adviser and mentor. His final confrontation is with a mechanical intelligence named the Monitor, which might or might not be running the entire world. He learns a little (though less then he might) and achieves almost nothing, and it is difficult to imagine that he benefits from his experiences any more than do the readers who follow his exploits, which is not very much. There is little here that has not been featured in a dozen other works, and there seems to be no reason whatever for being ushered through the familiar scenery yet again. Thorinn occasionally exhibits remarkable powers of invention, but spiritually he is an oaf, and he makes very poor company for an interminable odyssey through dark tunnels and silly quasi-paradises. As for the redoubtable magic box - well, if only pocket calculators could talk . . .

Damon Knight well deserves to be remembered for his contributions to the growth and development of science fiction in the fifties, and for his exploits as an editor during the sixties and seventies. He has played a considerable part in encouraging some of the best emergent writers of the last decade, including Gene Wolfe and Gardner Dozois, and has performed a great service to readers in assisting the career of his wife, Kate Wilhelm. There is a certain tragedy in the fact that his greatest achievements may have been covert, while work such as this makes a mockery of his capability.

Science Fiction: Its Criticism and Teaching

by Patrick Parrinder (Methuen, 1980, xx + 166pp, £5.95; pb. £2.75)

reviewed by Colin Greenland

This is one of the Methuen "New Accents" series, following volumes on semiotics, linguistics, criticism of drama and television, and so on: recent developments in or extensions of the scope of literary criticism. It is a review, rather than a history, a theory, or a practical manual. Parrinder has undertaken

both to elucidate science fiction's generic identity and to review the various critical (and, in the final chapter, pedagogic) approaches which have been made to it.

For whose benefit? The introductory style of the series suggests a reader who wants to find out about the subjects on its list: Parrinder is addressing people who may not be expert in sf. At the same time, his tone is sufficiently detached, his account sufficiently balanced, to hold his book apart from any of the entrenched arguments, so that it can offer anyone already involved in sf a view that is fresh, clear, and relatively objective.

Elucidating science fiction's generic identity is a labyrinthine venture with plenty of dead ends, as previous explorers have demonstrated. Parrinder makes a worthwhile job of it by consistently treating genres as corridors rather than enclosures, as aspects rather than sub-divisions of literature. In a brief account of origins he cites various contributors and prototypes (Hawthorne, Stevenson, Wells; Romantic, Gothic, utopian fiction) without claiming primacy for any. In the same way he maintains that sf is not a special

case of any one named genre, but derives from and corresponds with many, and "consistently innovates upon the older forms to which it may be referred." Sf can be a sort of romance, a tale set outside mundane laws which invites and satisfies various conventional expectations in its audience. It can be a sort of fable, an exemplum to be taken as a comment on our own conditions and habits. It can be a sort of epic, a sequence of virtual history involving principles and destinies on the largest scale, racial rather than personal, universal rather than local, though the "truncated epic" deals with the grand themes by focusing on a crucial or representative incident, person and location. Parrinder shows in what respect each generic model is applicable, how the genres complement or shade into one another, and where their limits lie. He avoids abstract assertions, preferring to concentrate on models that have been used by critics and to exemplify each from fiction.

Traditional literary critics still commonly protest that most sf is so stylistically horrid as to place it beneath regard. Parrinder makes the necessary reply in a chapter on the linguistic approach. Beginning by demonstrating that within the restricted scope of the reportage used by Heinlein, Asimov, and Clarke there is a coherent world-view, he goes on to outline the semiotic thesis of Delany and Angenot, that the language of sf fulfills entirely different functions from those of mundane fiction, establishing a different set of relationships between the world of the text and the world of the reader's experience. In other words, it is traditional criticism that is inadequate for sf, not vice versa. Applying his various analyses to works by Dick and Lem, Parrinder show that criticism by generic derivation and analogy and assumptions of absolute generic distinctness are both valuable.

Congruent with semiotic analysis is sociological criticism of sf. Parrinder discusses ways in which its social function can be considered. This is the area of my only disagreement with him, arising from my own pessimism: he distinguishes the fan as a special type of sf reader, but over-estimates him, I think. Fandom may be a sub-culture for social dissidents with lively and inquiring imaginations, as Parrinder presents it, but I see little evidence that fans are capable of exercising these faculties on anything but sf and each other. They do not seem willing to apply them either to this world or to their lives in it, or to that third and vital zone (as Ballard would put it) where those two areas overlap. Parrinder builds enthusiastically on Tom Shippey's image of sf (elaborated in Parrinder's previous collection, Science Fiction: A Critical Guide) as a "thinking machine" for confronting ideas and problems excluded by orthodoxy. It seems to me that if sf is a thinking machine then most fans are inextricably plugged into it, like the teams in Dick's A Maze of Death or Priest's A Dream of Wessex, reluctant to bring home any of its inspirations or implications. Parrinder's view is brighter than mine, enabling him to make a fairly unproblematic account of the teaching of sf in his final, rather short chapter. He stresses the need for some kind of consolidation of the sf course, both internally and in its complex inter-relations with other disciplines; I wish he had illustrated this from his own experience in the classroom, which he mentions was essential to the writing of this book but does not describe at all.

SF: Its Criticisms and Teaching is a very balanced review, whose virtue is not in any single contribution of its own, but in the justice and clarity with which it maps what has been achieved so far. It should be required reading for every graduate student, recommended to every undergraduate and every serious reviewer. Sf studies are still, I hope, a small enough area for every critic to read it too, and not to assume it must be beneath his

intelligence or dignity. Parrinder remarks that the secondary literature is presently overfull of "text-books, articles, dissertations, bibliographies, and scholarly reprints", while "genuinely innovative criticism of SF is much rarer." Properly attended to, his book could clear the way for innovation.

Port of Saints

by William S. Burroughs (Blue Wind Press, 1980, \$5.95)

reviewed by M. John Harrison

We ran on and burst out of a black silver mist into late afternoon sunlight on a suburban street, cracked pavements, sharp smell of weeds.

What do you call William S. Burroughs? Not a science fiction writer (however much he or anyone else may claim he loves the stuff, can't get enough of it while fixing up or staring down the toilet bowl, was brought up with it or on it, uses it to ends never before imagined by science fiction writers, etc, etc) because he still reacts primarily to the world. His litmus turns pink – although not with embarrassment I would bet – before the organism, there on the real street. Thus *Port of Saints*, though odd, is simply fiction of a good quality; or perhaps odd autobiography of not quite such a good quality.

You will not care when you are reading it.

Blue Wind Press tell you that this is "the mind boggling story of a man whose alternate selves take him on a fantastic journey through space, time, and sexuality" and so on and so forth. I don't believe this for a second. Burroughs merely has a loose and oblique relationship with The Moment — as loose a relationship as Ginsberg ("I saw the best minds of my generation destroyed" etc), as oblique a one as Patchen before him, a very American sense that everything happens at once and goes on happening. I wouldn't be surprised if Burroughs, at this end of his life, was showing his roots. He reminds me more and more of Henry Miller. If not roots, well then pseudopods put down in common soil.

Not that, reading him, any of this will be important to you either.

For those of us who simply love him and require only a progress report: here he is, just the same (as this page opened at random will show) and that's all that counts:

Two snake boys with receding foreheads and blue black eyes wearing fishskin jockstraps. They have a hissing language sets your teeth on edge. We take them to the cutting room and put tubes up both of them. They lay there looking at each other with unblinking snake eyes.

How you better this — as William Burroughs, as "poetry", as the recreation of The Moment right in front of the reader's eyes in appallingly few words — I don't know. "They have a hissing language sets your teeth on edge." What can you say? That he improves with age? Not quite. The further he moves away from Junkie, the further he seems to get from any major engagement with the world. These are forays, fumbles, little orgasms: Port of Saints shows a lack of stamina I wouldn't expect to find in such a veteran, a crumbliness. Or to put it another way: although every part is machined accurate to one thousandth of an inch they don't make anything when you fit them together.

If you want a heresy it's that I wish, just for once, that Saint William Burroughs would sit down and write a proper book. Cruising about under his skin like a huge predatory fish there is a realist and a naturalist of surprising power. If you don't believe me listen to this.

It was bitterly cold on the Halifax wharf, clear and bright in late sunshine. The fresh offshore wind had dropped somewhat when John Hamlin reached the Mary Celeste. He had signed on

as third mate. As he stepped aboard he saw a boy standing about ten feet in front of the gangplank, as if to welcome him aboard. The boy was about sixteen, with a pale wasted face, green eyes and ruffled brown hair. There was a jagged half-healed scar on the left cheekbone, livid in the red rays of the setting sun. Dressed in a blue shirt and tattered grey jacket, he seemed not to notice the cold.

The Mary Celeste!

You don't care how good this is as pastiche or parody or whatever was intended. You want to know what happened. Burroughs could tell you if he wanted to. Or could he? *Port of Saints* is a lot of good openings and a lot of good endings — more of them than any writer deserves. But there isn't any movement here — only the swaying of boys like underwater weed — only The Moment on which we are focussed — and that disappoints me obscurely. I should know better I suppose.

Port of Saints is an almost Beckettian flickering on and off of memories: or not so much memories as intimations from the universe of junk and boys. Brief little flares of light show where the eye is focussed. It is like some very old machine, randomly accessing stores of data which might or might not be its own, very much like Krapp and his tapes, only these are the files of the Nova Cops, whose wire recorders spin in the very cells of the junk brain, recording with equal deadpan the deaths of snake boys and the sound of works clinking down the toilet pan. It is a bit like John Cale, like abused old synapses firing off in disorder, but then so was The Wild Boys, so was The Naked Lunch.

The thing about Krapp is that he provides, if not a summation, then at least a coded series of glimpses of life as we experience it. Burroughs hardly ever does. I didn't miss that while he was close to *Junkie*, but I do now.

But to dip into, the way you would dip into Patchen or any other poet, this is your book! Everything that was always there remains there: the dope, the city rooms, the nova mobs, like fruit salad spilt all over a street on some other planet with a loony resemblance to our own. The pastiches and parodies (and self-parodies, it would appear), the stuff you know must really have happened (and like every other Moment is still happening, somewhere along the junk timelines). And the unbelievable humour:

"One day when the first man was having intercourse with a shy lemur he was slapped from behind by a fat cop."

Surely it's worth owning that.

Neglected Visions

edited by Barry N. Malzberg, M. H. Greenberg and J.D. Olander (Doubleday, 1979, 212pp, \$8.95)

The Science Fiction of Mark Clifton

edited by Barry N. Malzberg and M.H. Greenberg (Southern Illinois University Press, 1980, 296pp, \$15)

Federation

by H. Beam Piper (Ace, 1981, 284pp, \$5.95)

reviewed by John Clute

In his Afterword to *The Science Fiction of Mark Clifton*, a collection of 1950s stories whose appearance in book form was long delayed by the fact that their author, like

H. Beam Piper, died intestate, famed guilt-bearer Barry N. Malzberg speaks with characteristic funereal menaces of the present obscurity of Mark Clifton, suggests that "It is possible to envision him dying an embittered man, destroyed by the perception that science fiction could not be taken seriously because its very audience, largely juvenile, could not assimilate seriousness," and claims that he (Malzberg) could name twenty other science fiction writers as prominent as Clifton had once been, and as badly done by. The tone of all this is lamentoso, paranoid, inflated, lachrymose, accusatory; it's a guilt trip. It's a tone which pervades even his moving obituary (Locus 240) for Kris Neville, perhaps the most highly talented of the authors collected in Neglected Visions, who died just before Christmas last year. It is also a tone which makes a procrustean demand of those authors whose failed careers it accuses us all of; it demands that their lives and works testify to personal immolation on the wheel of fire of the creative act, and to broken-backed despair when that creative act did not bring the kind of public response that (quite often rightly) Malzberg argues was appropriate. More then appropriate. Due.

It is of course after an author's death that the full organon of accusation and guilt bells forth. In Neglected Visions, Malzberg describes Neville "as among the few contented people I have ever known," and in the Locus obituary as a person "unable to push for entrance into something (ie the science fiction market) which he knew had wrecked his spirit." With a little effort one can build a portrait of Neville complex enough to assimilate both statements, and to coordinate the rhetorics that underlie the two versions of portraiture. But our capacity to make sense of two discordant rhetorics is hardly the point. The point is that in his obituary rhetoric, which also permeates the memorial Afterword to the Clifton volume, Malzberg foregrounds a style of utterance that tends to obliterate, by hypostatizing them as victims, the individuals to whom homage is being paid so threateningly, and who may well have warranted not only the grief of friends, but familial gestures of reparation as well, from those of us who have read them, tasted their painful wares, forgotten them. Reparation-venues are hard to come by under conditions of late capitalism, and it may be for that reason Malzberg hypostatizes not only the victims of his choice but the procrustean framework that racked and ruined them. That framework is of course "science fiction," and its articulation through time is of course "The true and terrible complete history of science fiction."

All of which is a lot of quick-frieze positivism.

The true and terrible complete history of science fiction may or may not bear more poignantly upon the human condition than the true and terrible complete history of the choo-choo train, but one thing is pretty certain: science fiction reified into Medusa dentata inhabits a different realm of discourse than lives seen in terms of their enacted meaning, Kris Neville seen as a person who enacted meaning vividly enough to engage Barry Malzberg's love. Because of this love, and as a survivor, Malzberg has every right to pay dues, for himself. But when, in addition, he attempts the institutional task of creating martyrs for Our Church of Medusa Dentata, the sermons he fabricates for that task – into whose rhetoric he infuses all too liquidly the signs of his love/hate for the Bitch – do more to reify dehumanizing assumptions about the relationship between people (as objects) and the medusoid venue (as fetish) than they do to expose that relationship. The suffering which Kris Neville may well have experienced in his life becomes a Church ritual; dogma ("It is possible to envision him dying an embittered man") demands the same of Mark Clifton. We end up with an entablature of martyrs, installed with due ceremony,

with attendant vicars in the cothurnus, and paparozzi like Spider Robinson in sneakers hawking polaroids of the anointed.

And all those neglectees; something's wrong there, too. There are far too many of them. No Indians. In addition to the Chiefs chosen for installation in Neglected Visions, Malzberg in his Introduction offers a further sample of writers who have spent at least part of their careers racked by insufficient recognition/reparation from the Church: they are Raymond F. Jones, Winston K. Marks, T.L Sherred, Eric Frank Russell, Laurence M. Janifer, Jim Harmon, Raymond E. Banks, Evelyn E. Smith, Chad Oliver, Daniel F. Galouye, Stephen Barr, Roger Phillips Graham, Mildred Clingerman, Ralph Williams, Margaret St Clair, Charles Harness. The problem with a list of this menacing dimension is not that the writers it includes are inconsequential, for certainly most of them are not, and in any case most long-time readers of sf have unwritten lists of their own (I certainly do). The problem with the list, in the context Malzberg presents it, lies in its underlying transmogrification of writer's act into writer's Role, a Role insufficiently given recognition by the Church and its congregation. Sure: Role and Medusa legitimately intersect at conventions, session highs, other eucharists: but this should have little to do with the act of writing and the work itself. How else? What's wrong with Malzberg's huge list of Chiefs is that it is a list of failed Roles (and in any case probably too extensive for the relatively small sf market to cope with properly); the reasons for the inadequate filling of these Roles must be extremely various (from disdain to corpsing; bad luck to oppression). But Role must always be subordinate to the act of writing, and to the work itself. Because when Role assimilates to Church it wags the dog; the only genuine relation of Church to work is misprision.

As an anthology, Neglected Visions is strikingly good. Anvil's "Mind Partner" (1960), Neville's "Ballenger's People" (1966), Phillips' "Lost Memory" (1952) all share an intensity in which craftsmanship and obsessive vision seem somehow to feed one another, like Antaeus twins. Garrett's "The Hunting Lodge" (1954) and Wallace's "Delay in Transit" (1952) are nearly as good. Kagan's "Laugh Along with Franz" (1965) seems weirdly dated; Guin's "My Darling Hecate" (1953) lacks the compulsion of his very best work; Abernathy's rather famous "Junior" (1955) suffers from Galaxy whiplash. All in all, though, a welcome reminder of certain works (but let's not get into all of that again).

The Science Fiction of Mark Clifton may be a first fruit of the programme of reparations hinted at in the earlier volume, or may simply be published now because rights have become available at last, or both. One story, the overrated, smug "Clerical Error" (1956), appears in both volumes. The remainder of the book comprises stories I (for one) had not read for twenty years or more; as with most reunions, one feels afterwards a combination of rediscovery and refusal. Rediscovery first: Clifton (1906-1963), though by no means elegant in his effects, gives off a powerful sense of authenticity through all the genre trappings he never quite mastered and the loony Rightwing bunkum about the evils of government he was forced to feed into stories, especially those for Astounding, whose subtexts bit just as deep into the corporate state as they did into Federal bureaucracy. A melancholy subtext also haloes and deepens, perhaps inadvertantly, the portrait of his central character, industrial personnel director Ralph Kennedy, who narrates "What Thin Partitions" (1953), "Sense from Thought Divide" (1953), "How Allied" (1957) and "Remembrance and Reflection" (1958), and who, under other

names, appears in other stories as well. Kennedy is gregarious, efficient, successful, but exhibits at times the touchy humourlessness of the autodidact, usually when matters of ESP come up, and I don't think Clifton was quite aware of the effect. This, and the fact that Kennedy is apparently unmarried, visibly uneasy with women (whom he busily categorizes out of any agent status), a natural bachelor, gives one a sense of selfportraiture that goes far to excuse Malzberg's assumption, in Neglected Visions, that Clifton himself was a bachelor. When he began publishing, he was a divorced man; nothing much else is known about his last decade, except that he was unhealthy and did not always live alone. Judith Merril's sprawling Memoir, which prefaces the collection, does little to fill out the picture, though there is one highly suggestive anecdote. She and Clifton had known each other only through correspondence until a convention in 1955, when they met; "but some curious inverse chemistry sent each of us away with a sorely wounded sense of rejection by the other," Merril reports, though without drawing any conclusions about the possible bearing this personal disaster might have on the portrait of a man who, as a personnel director himself, boasted of having conducted over 200,000 interviews, claimed to have worked out decoding principles that enabled him to read interviewees like open books, and created (in Ralph Kennedy) an alter ego whose capacity to read the souls and aspirations of others is almost uncanny. There's something skewiff here. Failure. Sorrow. Pain. Solitude.

That the texts of his fiction fail to expose the human complexities he must have been intimate with in the mirror does go some way to explain one's refusal of these texts, just as the subtextual hints of the same complexities help explain the warmth of one's rediscovery. But refusal there certainly is. The hamhanded storylines; the truculent pieties about ESP and about the closed minds of so-called scientists; the specious carapace of the Ralph Kennedy alter ego: all work to justify one's refusal by themselves fending one off. Clifton retained his privacy, but it closed him in, and his stories too. Malzberg makes rather a meal of the decline of Clifton's career, and in doing so ascribes (it would seem) too much of the blame to the outside world. (He goes so far as to claim that Clifton's last two novels had no mass market editions in his lifetime; my own limited references show that both of them were SFBC releases, and that Eight Keys to Eden, published 1960, was mass-marketed by Ballantine in 1962.) But it is also true that he was not a well man, nor by all the signs available to us was he a happy one. About his life and health Clifton maintained (it would seem) an intense privacy; only the works remain, and they are like clams, too.

The rest is dogma. Church-talk.

Addendum: The intestate H. Beam Piper is also being brought down from the attic; first of a planned series of volumes is *Federation*, a collection of stories very loosely connected by occasional references to the eponymous Toynbee wank. As a concept, the Federation is as nearly void as a word with a history can be, but if it served Piper let it pass. You don't read libertarian autodidacts tugging their forelocks to John W. Campbell for complexity of insight into the multivalency of Vienna in 1900, like. You read Piper for solemn fun, crafty action, easy enemies, heroes who fit over your face in the mirror when you're dreaming of winning the pools. In *Federation*, all of this you get. Don't we have fun.

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