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FOUNDATION

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THE REVIEW OF SCIENCE FICTION

IN THIS FINAL 1984 ISSUE

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FOUNDATION

THE REVIEW OF SCIENCE FICTION

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

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Number 32, November 1984

Editorial

Welcome to our second special issue to commemorate 1984, the year of George Orwell. In most people's minds, quite rightly, the novel *Nineteen Eighty-Four* is a pessimistic dystopia of hopelessness, warning of the destruction of the human spirit by dictatorship. It also, of course, represents a bitter reaction on Orwell's part to certain events in Stalin's Russia—and its grim vision of Ingsoc, English Socialism, can easily inspire Britain's latterday propagandist press to equate the freedom-crushing Big Brother with, say, an honest radical such as Tony Benn; while perhaps rather less is said about Britain's transformation into Airstrip One, crowded with foreign missiles.

It therefore seems timely to recall that before Orwell was a dystopian satirist, he was a socialist; and that socialism was the main current of his career. Hence this present special issue, devoted to socialism and science fiction.

Sf is in the business of metaphorically envisaging futures and alternatives. The sf which dominates the western markets is largely American, and to a considerable degree right-wing: libertarian/individualist, capitalist, Social Darwinist, even medieval-hierarchic. It is also notably vigorous. By contrast, committed sf from socialist countries which has appeared in translation, sometimes seems clunky.

The sf which we see most of frequently reinforces the status quo in one way or another —psychologically, economically, socially—all be it that it may play experimental games with future life-styles or technologies. Yet what should be more radical than sf; more questioning of human social relations, particularly under the impact of potentially liberatory technology? What genre should be more desirous that the world survives, in order to reach those stars about which sf has so long fantasized? And how can the world thrive if presentday economic and social values are reinforced?

Let us not imagine that fictions have no effect upon readers; or upon the shape of the future. If sf fails to *predict* the future, as it obviously must, nevertheless it influences the future somewhat—as witness the number of NASA engineers and scientists who have said they were influenced in their choice of career by reading sf. So therefore consider the effect of current sf which takes as premise the survivability of nuclear war—versus the effect of feminist sf novels which question and reconstruct those male/female role patterns which lead to oppression and militarism . . .

Can genuine liberatory sf be written, and effectively, in the west? Can socialist sf from other countries be as sprightly as its often malign western counterparts? (Or is the sprightliness of American-style sf in fact a slick confidence trick, programming its readers not to be able to respond deeply enough to appreciate work from other traditions?)

All literary work is, at base, political. Fiction presents us, however implicitly, with an ideology. There are no neutral texts; there is no innocence—however distant the planetary system. So this present issue of *Foundation* sets out to explore some aspects of the link between progressive politics and the science-fictional imagination.

As usual in *Foundation* we have aimed for a variety of fare. So here is a complex analysis of how a French theoretician views the sf of Ballard—and here too is humour, and poetry. Here is a study of feminist sf, an unsettling article on nuclear politics—and the thoughts of an sf novelist who has actually been part of a socialist government.

Pressure of space has forced us to hold over one piece which rightly belongs in the present issue: an essay by Gavin Browning of the Radical Science Collective, about the way in which the science in sf supports the status quo. This will appear in *Foundation* 33 in the Spring—accompanied by an interview with Chelsea Quinn Yarbo, and other things besides.

In issue 33 we also hope to start including, in every other issue, a review of an outstanding new foreign sf novel which readers might not hear about; or not, at least, for several years. The French end of this will be organized by the new French sf writers' organisation, *Infini*. Would-be reviewers in other countries are invited to contact the Reviews Editor with suggestions.

Fine foreign sf authors all too often find it very difficult to get known, and published, in the English-speaking world—which economically, and as regards reputations, tends to dominate the world sf scene (or at least so it seems to many Europeans). Recently Science Fiction Writers of America (SFWA) has taken steps to remedy this by specifically querying American publishers about their openness to foreign sf and their competence to assess it with a view to publication. The latest issue of the SFWA *Bulletin* (number 84) carries a market report detailing the results; and now American publishers can be divided into three groups—those who are willing and competent to assess sf in French, German, or whatever; those who are willing to consider foreign sf if presented in English; and those who have no interest at all. SFWA's next step will be to poll its members as to *their* competence in foreign languages, so as to establish in the *Membership Directory* a resource list of potential advisers and translators, of use to the willing publishers.

By running reviews of foreign language fiction, *Foundation* hopes to bring worthy new books to notice (though such reviews are not necessarily going to be favourable!). Potential reviewers in Germany, Italy, Japan, et cetera, please take note, and get in touch.

Ian Watson
September 1984

Brian Stableford is a member of the Sociology Department at the University of Reading. He scarcely needs introducing to Foundation *readers, as he has written more features articles for this journal than any other contributor. Here he makes some very interesting and important points about the art of "prophecy"—an art which is equally central to science fiction and to socialist theory.*

Marxism, Science Fiction and the Poverty of Prophecy: Some Comparisons and Contrasts

BRIAN STABLEFORD

Karl Marx was not a prophet. He did not regard the prediction of the future to be his primary aim. Nevertheless, he did have a good deal to say about future possibility and about the fate of the capitalist economic system. Many Marxists are reluctant to concede that Marx is really vulnerable to the charges brought against him by Karl Popper in the chapters of *The Open Society and Its Enemies* which deal with "Marx's Prophecy," but however just or unjust it may be to condemn Marx on the grounds of prophetic failure it is the case that Marx's ideas about the future are of some interest. It is also the case that Popper's attempt to analyze the question of why Marx failed to produce a competent picture of future developments is of some interest as a particular case of a general argument about the impossibility of prediction.

Science fiction is not prophetic either, despite the claims made by some of its early apologists—especially Hugo Gernsback. When we compare today's world with the many images of life in the 1980s contained in science fiction stories written many years ago, we can easily see that no one came remotely close to accurate anticipation. Because most of this antique sf made no claim to intellectual seriousness in the first place hardly anyone bothers to raise the question of why the writers were so completely wrong. Even where intellectual seriousness was a factor – as, for instance, in George Orwell's *Nineteen Eighty-Four* – it was not predictive seriousness, and commentators on such works are right not to waste their time in discussing the reasons why the real 1984 does not much resemble Orwell's. Nevertheless, the poverty of sciencefictional prophecy is of some interest with respect to Popper's arguments about the impossibility of prediction.

Popper's comments on the futuristic dimension in Marx's thought are held by their author to be a test of Marx's theory – a test which, in Popper's view, Marx fails. It requires only a shift of perspective, though, to allow us to consider these comments as a test of Popper's theory of prophetic poverty. From this viewpoint the relevant question is whether Popper has correctly explained why Marx's expectations were bound to be betrayed. It will help, of course, if we can confront Popper's theory with some other sets of expectations too, in order to see how it copes with the task of accounting for *their*

betrayal. This is why it should prove illuminating to compare and contrast the anticipations of Marx with the anticipations of science fiction writers.

Though it should need no emphasis, it may be as well to state flatly at this point that the poverty of the art of prophecy is not in dispute. No one can reasonably doubt that all attempts to foresee the course of future history have failed miserably. The question to be raised in this paper is *why* these attempts have always failed, and whether Popper's particular account of the impossibility of anticipation is the correct one.

Popper's principal work dealing with the impossibility of anticipation is *The Poverty of Historicism*. Although this was not published in book form in English until 1957 the thesis which it contains dates back to 1919-20, and was first committed to print in three articles published in 1944-5.[1] The evaluation of Marx's prophecies in *The Open Society and Its Enemies*—first published in 1945—follows fairly closely the main argument of *The Poverty of Historicism*.

According to this main argument, Marx's prognoses regarding the future evolution and ultimate fate of capitalism were mistaken because they erroneously assumed that certain "historical tendencies" or trends were actually laws of social development. Popper suggests that human scientists of the "historicist" persuasion believe that there are "laws of succession" which dictate the progress of patterns of social change.[2] Popper asserts that there are no such laws of succession at all, in any branch of science.

Actually, it is not altogether clear that the distinction between trends and laws is as radical as Popper makes it out to be; nor is it beyond dispute that there are no laws of succession at all. It is true that laws of succession in human science—for instance, Grimm's law, which deals with shifts in consonants during the development of the Indo-European languages—are pretty shoddy examples of scientific laws, but *all* the so-called laws in human science are pretty shoddy, and it is not simply the fact that some of them aspire to be laws of succession that makes them so. It is true, too, that natural science has not many laws of succession, and that the ones in biology—for instance, Haeckel's law, usually stated as "ontogeny recapitulates phylogeny"—are far from convincing. On the other hand, such laws of succession in physics as the half-life equations which describe the decay of radioactive elements seem reliable enough as instruments of prediction.

Even if we set aside these reservations, though, it remains highly dubious that human scientists—Marx included—really do confuse trends and laws in a naïve fashion, and that their anticipations of the future are silly *for this reason*. T.R. Malthus, whose first *Essay on Population* (1798) did refer to the tendency of human populations to increase geometrically as if this were a law, but he was quickly led by criticism offered by William Godwin and others to revise his view. In the second edition of 1803 he agreed that this tendency might be defeated by voluntary moral restraint, so that the trend might be turned aside. It is not easy to find examples after 1803 of human scientists who fell into the kind of trap that Malthus fell into in the first essay.

Of course, human scientists often have devoted a good deal of attention to historical trends—examples which figure large in social theory include the progressive accumulation of knowledge, the trend in Western European society toward secularization, and the increasing division of labour. Theorists have often tried to show how these trends are related to one another, and how they assist in the generation of other aspects of social change. It is not clear, though, that social scientists have frequently referred to such trends as laws in any other than a metaphorical sense. (What is more, *these* trends have

continued, and if social scientists have mistakenly anticipated the course of future change it is not their assumptions about the reliability of these trends as indicators that has misled them.)

It is true that Marx does refer to a number of trends which seemed to him to be implicit in the development of capitalist society, and that some of these trends did *not* continue into modern times—for instance, the tendency of capital to become concentrated in fewer and fewer hands, and the tendency for the bourgeoisie and the proletariat to absorb other social classes and to become increasingly polarized. It would be misleading, though, to suggest that Marx's mistake was simply to observe the trends and to conclude erroneously that they were actually laws. What he was actually trying to do was to look behind such trends in an attempt to find the economic mechanisms which were responsible for them. Popper concedes, in fact, that Marx did have some predictive successes, but argues that "it was nowhere his historicist method which led him to success, but always the methods of institutional analysis."[3] Unfortunately, it seems to be the case that it was his methods of institutional analysis which also produced Marx's failures rather than some distinctive "historicist method," and it may well be there that we have to hunt for the flaws in his prognoses.

Science fiction writers, like human scientists, also pay a lot of attention to trends. Indeed, it is they rather than the social theorists whose main interest in trends lies in their extrapolation rather than in discovering the logic which underlies them. There are a lot of sf stories which do produce images of the future simply by extrapolating trends. It is obvious, though, that most sf writers do not extrapolate trends naïvely, and they know full well that when they do so they are *not* in the business of prophesying. John W. Campbell's introduction to Groff Conklin's classic anthology *The Best of Science Fiction* (1946) explains quite clearly and explicitly why this method cannot be prophetic, and might be regarded as one of the important apologies for the poverty of sciencefictional prophecy.

Science fiction writers who play the game of "If This Goes On . . ." (an early novella by Robert Heinlein used this as a title) are usually very conscious of the implications of the *If*. Stories of this type are often satirical, making the point that trends are subject to *extrapolatio ad absurdum*. Some Malthusian sf stories fit into this category—Kurt Vonnegut's "Tomorrow and Tomorrow and Tomorrow," for instance. Non-satirical stories of trend-extrapolation are frequently alarmist—this category, too, includes Malthusian fantasies like John Brunner's *Stand on Zanzibar* and Robert Silverberg's *The World Inside*—and can best be understood as imaginative propaganda for "moral restraint." These stories "fail" as prophecies (they are not, of course, intended as such) because they do extrapolate trends further than is warranted, but it does not follow at all that the general failure of sciencefictional images of the future has the same cause. Indeed, the evidence surely is that sf writers do not invest much faith in trend-extrapolation as a means of prediction.

In fairness to Popper, it must be admitted that human scientists and sf writers alike are often inclined to be pessimistic about the prospects of trend-breaking. Malthus made room in his theory for moral restraint, but he was obviously sceptical about the probability of our ever managing to control the increase of population in such a careful and calculated way. Alarmist science fiction often has the same pessimistic edge to it.

One of Popper's chief arguments against Marx, therefore (and one of his main reasons

for disapproving of Marxism), is that Marx does not reckon much to moral restraint as a force in human affairs. Popper begins his description of Marx's method by emphasizing its deterministic character, and quotes the famous passage from the introduction to *Capital* where Marx alleges that even a society which has discovered the laws underlying history cannot "overleap the natural phases of its evolution" into a new era but can only "shorten and lessen its birth-pangs."[4] Marx and Engels, indeed, were always at pains to emphasize the difference between their "scientific socialism" and the "Utopian socialism" of other writers, which seemed naïvely to presuppose that a new era could be ushered in simply by political consensus.[5]

It is this fundamental determinism which, according to Popper, leads Marx to confuse trends and laws, and we must consider seriously whether it is here that the real fault lies. It is possible that Marx's anticipations failed simply because he did not realize the extent to which the shape of the future would be determined by the idiosyncratic choices of human beings, which are unpredictable simply because people can do as they like. Certainly, some apologists for the poverty of sciencefictional prophecy have made their case on these grounds; an example is the introductory chapter of G.K. Chesterton's *The Napoleon of Notting Hill,* where the fact that the future will always "Cheat the Prophet" is credited simply to human perversity.

We often hear this kind of argument offered as "common sense," where it appears to be widely believed that humans are innately perverse, irrational and unpredictable. Popper, though, does not labour this point, and his criticism of Marx's pessimism about the power of men to remake their destiny is cautious. Popper knows full well that the choices which people make are at least partly determined by their social circumstances, and that matters of collective decision are often severely limited. Chesterton knew this too, though he regretted it, which is why his tongue was in his cheek when he wrote the first chapter of *The Napoleon of Notting Hill* (not to mention the rest of it). Few human scientists have ever endorsed the view that human behaviour is innately irrational and unpredictable to more than a small degree—we need only recall Mill's argument that we all believe that when we know our friends well we know how they will react in different circumstances, or Spencer's observation that we need not deny free will in order to predict that a man in the path of a runaway carriage will avoid it if he can, to be persuaded of the fact ourselves. It is, of course, an important part of the human-scientific enterprise to attempt to explain *why* people make the kinds of choices they habitually do, and how this affects collective decision-making; no one seriously disputes that it does make sense to ask such questions and seek such explanations.

It is true that Marx is overly deterministic in his thinking at certain key points in his theory. Most modern Marxists concede the point, and Marx's own later writings come to the very brink of surrender. The realm of politics is not quite so tightly constrained by the relations of production in the "economic base" of society as Marx sometimes alleged. The question still remains, though, of whether it is *this* flaw in his theory which is responsible for its failure to generate correct anticipations. Certainly it has something to do with it, but it is not the whole of the story and this is not a sensible place to stop the argument. If Marx's "scientific socialism" failed to produce accurate images of the future, so did the Utopian socialism from which he dissented. It is not enough to say that the future is undetermined because we can shape it with our political decisions; we still need to ask why we cannot anticipate what those decisions and their effects are likely to be. If we really did

live in the kind of world described in *The Napoleon of Notting Hill,* where an amiably perverse eccentric could be awarded dictatorial power by lottery, then we could simply give up on the project of anticipating the future, but we do not. Because we do not, we cannot give up either on the project of trying to explain why those anticipations always fail.

Science fiction writers, as we have noted, tend to agree with human scientists that human behaviour is not entirely irrational or unpredictable. They are often prepared to take an interest in the ways in which people's perceptions, ideas and behaviour are affected by their social circumstances. There is a considerable body of contemporary sf whose explicit purpose is to dramatize this point, by trying to imagine the thoughts and actions of people who find themselves in strange (sometimes bizarre) social milieux. One of the enduring themes of modern sf is the difficulty of making a "conceptual breakthrough" which will allow an individual to transcend the limits of his or her artificial horizons. Examples of this type of story include Clifford Simak's "Target Generation," Wyman Guin's "Beyond Bedlam" and James Blish's "Surface Tension."

It seems, therefore, that there is a degree of consensus here between all parties, to the effect that the realm of human choice *is* confined and constrained in certain important ways, which makes radical breaks in history very difficult to achieve. This implies very strongly that we must not shrug off the question of why it is impossible to predict the future simply by invoking the freedom of the will. Of course, we will not get anywhere by *denying* the freedom of people to make choices, but no one in fact does this. For all his pessimism about our inability to overleap the "natural phases" in social development, Marx clearly saw himself as a man who had achieved a "conceptual breakthrough," and felt that he might help others to do likewise in cultivating a proletarian class-consciousness, thus empowering them to become the midwives of the revolutionary birth of the new era.

In a preface which he added to *The Poverty of Historicism* in 1957 Popper offered a further argument relating to the impossibility of prediction, which supplements his main case about there being no laws of succession. This argument suggests that the course of history is "strongly influenced" by the growth of knowledge, and that it would be paradoxical to assert that we can have any knowledge of the future growth of this knowledge (how can we know today what we will not discover until tomorrow?).[6]

With reference to both Marx and science fiction, this is perhaps the most interesting of all the arguments about the poverty of prophecy, because it is in relation to this point that there arises the sharpest contrast between Marx's anticipations and the futuristic imagery of sf.

The growth of knowledge has a peculiar place in Marxist thought. There is very little attention paid in Marx's own writings to the advancement of scientific theory, and some of his modern adherents have been sceptical of such theory, considering it to be corrupted to some degree by bourgeois ideology. Jurgen Habermas and others have suggested that some of what passes for an objective description of the natural world is really a disguised attempt to justify aspects of capitalist exploitation, while the Soviet establishment's long-standing suspicion of Darwinian evolutionary theory and Einsteinian relativity theory is well-known. On the other hand, Marx pays a great deal of attention to the historical development of means of production—including technological means. He says hardly anything about the relationship between theory and technology, but his materialist

perspective and his suspicion of those theorists of history (Feuerbach, for instance) who give primacy to the history of ideas certainly suggest that he does not see the growth of technology as something generated by or dependent upon the advancement of theory.

Technology plays a strangely ambivalent role in Marx's theory. When he writes about the past, about the succession of economic systems which preceded and led to capitalism, he frequently refers to changes in "the forces of production" as explanatory factors. At times, as in the famous passage from *The Poverty of Philosophy* where he observes that "the windmill gives you society with the feudal lord; the steam mill, society with the industrial capitalist,"[7] he appears to endorse technological determinism—the thesis that social change consists of a series of institutional adaptations to the growth of technological resources. Contemporary opinion is divided as to whether Marx really was a technological determinist—W.H. Shaw argues that he was[8] while Angus Walker says that it would be absurd to consider him as such[9] but there is no need to argue the point. One thing that *is* certain is that when he speaks about likely future developments of the capitalist system he says nothing at all about the possible impact of new technologies. More machines may increase the proportion of constant capital involved in the production process[10] and hence help to increase the exploitation of the workers by squeezing profits, but new technological discoveries cannot, in Marx's view, make any real difference to the basic situation of developing class conflict. The coming revolution will be an all-out war between the contending classes, not a new Industrial Revolution.

Science fiction writers have typically taken a very different view of the relationship between theory and technology, and of the role which new technologies play in social change. They usually work from assumptions diametrically opposed to those of Marx. For Marx, the role played by machinery in productive processes is a subsidiary one, because in the labour theory of value which he espoused machinery cannot add value—a machine used by a worker is simply putting back into a production process the labour invested in its own making.[11] For sf writers, by contrast, machines are spectacular sources of value, conjuring up huge increases in productive power. Science fiction writers have always been fascinated by the idea that single inspirational discoveries have the power to transform the energy-economy of the world more-or-less at a stroke. The role played by the idea of atomic power in much early sf provides the cardinal example of this kind of thinking. New structural materials and manufacturing processes tend to be represented in sf as liberating forces which sometimes take human labour-power out of the productive process altogether.

There is, of course, some historical significance in this dramatic difference of perspective. Marx died in 1883; his major works were produced between 1844 (the *Economic and Philosophical Manuscripts*) and 1867 (*Capital* Vol. I) and reflect an era dominated by the clumsy gargantuan steam engines which drove mill-machinery and locomotives. It was still possible for a man whose idea of machinery was based on such cast-iron dinosaurs to hold to the belief that a working machine could only redeem the labour-power invested in its making before it wore out. The idea of machinery typical of science fiction was as yet unborn (and this shows up clearly in the futuristic fictions of the period—see Darko Suvin's comprehensive bibliography of *Victorian Science Fiction in the UK*). It was not until a new phase of the Industrial Revolution began with the multifarious applications of electrical power that ideas about the role and potential of machinery were forced to change. It is no coincidence that Thomas Edison, the prolific

inventor of electrical gadgets, was an important hero-figure in early American sf.

Thus, we find that even in sf stories which are closely based in Marxian *political* ideas—for instance, "Through the Horn or the Ivory Gate" in Anatole France's *The White Stone,* Ignatius Donnelly's *Caesar's Column* and Claude Farrère's *Useless Hands*—we find machinery playing a conspicuously different role from that allotted to it in *Capital.* It is highly significant that *The White Stone*—which includes the most thoughtful and sensitive attempt ever made to imagine and describe a Marxian communist society—is really a book about the poverty of prophecy. Anatole France already knew, in 1905, that the futuristic dimension in Marx's thought was crooked.

It could be convincingly argued, given all this, that it was his folly in holding to the labour theory of value—especially insofar as it related to the role played by machinery in productive processes—that led Marx to his mistaken prognoses regarding the future development of capitalism. Certainly, some modern economists, contemplating the things that have happened instead of the polarization of the bourgeoisie and the proletariat and their consequent mutual ruination, have used explanations which are heavily dependent on the role of technology: the cardinal example is John Kenneth Galbraith's analysis of "the imperatives of technology" in *The New Industrial State.* If we are to take this argument seriously, then it does seem that Marx fell into the trap described in Popper's preface to *The Poverty of Historicism:* he failed to anticipate the future evolution of capitalism because he failed to anticipate the future developments in scientific knowledge which generated the technology which transformed production processes and social relations of production.

Unfortunately, if we refer back to science fiction we will see that there is something odd about Popper's argument, which casts doubt on the contention that this really is the heart of the matter.

What Popper says is, of course, true. We cannot predict future discoveries in scientific theory. But scientific theory does not affect society *directly*—it does so most importantly by its effect on the growth of our technological resources. It is the machines we develop which are the powerful agents of social change (and we need not embrace technological determinism in order to accept this), not the theories themselves. Science fiction writers have never been able to anticipate future developments in scientific theory, but this has not prevented their being able to anticipate—often quite cleverly—the new kinds of machines that might become available by courtesy of such developments. Thus, as we have observed, ignorance of the actual theory involved did not prevent early sf writers from imagining atomic power, and sf writers did not need to wait for the invention of the silicon chip to start them thinking about the potential uses of sophisticated computers.

The great majority of sf stories deal with imaginary technologies that are radically different from ones which subsequently developed in actuality (to date, at least). There is, however, a substantial minority of stories which *do* deal with technological innovations that have been realized. There is a sense in which these stories are dodging Popper's prophet-trap—while not anticipating what we will know tomorrow, they are anticipating what that knowledge might allow us to *do.*

It is these stories which are sometimes held up as shining examples of the prophetic power of science fiction: atom bomb stories like Harold Nicolson's *Public Faces* or Cleve Cartmill's "Deadline"; innumerable stories in which rocket-ships carry men for the first time to the surface of the moon. If we look at such stories, though, it is easy to see that

their prophetic power does not extend much, if at all, beyond the actual gadgets themselves. Early stories of atomic power, from Wells' *The World Set Free* to John W. Campbell Jr.'s "Blindness," can hardly be said to have produced an accurate account of the social consequences of the realization of atomic chain reactions. Where science-fictional prophecies fall down, even when they are right about future gadgets, is in calculating how society will be affected by them. It is not future technology which sf writers cannot anticipate; it is what Galbraith calls "the imperatives of technology."

This may mean only that sf writers are incompetent, and that if they only had the analytical flair of a Galbraith (or a Marx) they could have produced much more sensible images of the 1980s in the 1930s. On the other hand, it might signify that there still remains something important to notice about the poverty of prophecy. It seems to be the case that the two Popperian arguments so far described *do* suffice to explain the poverty of Marx's anticipations (though it may be the one Popper discovered later rather than the one he uses in *The Open Society and its Enemies* that turns the trick) but it still may make sense to be suspicious of them as *general* explanations of the poverty of prophecy.

There is in *The Poverty of Historicism* another observation about the difficulty of prediction, which is discovered in the early pages[12] but which then drops out of sight for the remainder of the argument. This is a pity, because it is an interesting point, and one which is capable of confusing the whole issue quite considerably. This is the "Oedipus effect," which refers to the influence which a prediction can have upon the predicted event.

The reference to the myth of Oedipus here recalls the fact that Oedipus was abandoned to die by his father because a prophecy was made that Oedipus would one day become his father's murderer. Unfortunately, the abandonment of the child set in train a chain of events which led eventually to the murder. One kind of Oedipus effect, therefore, is the self-fulfilling prophecy, of which the best-known example is the anthropological anecdote about the witch-doctor who can instil fatal despair in his victim simply by informing him that he will die. Popper also observes that there are self-negating prophecies too. A simple example would be provided by a person who consults an astrologer about the prospects of an enterprise, and on hearing that it is doomed to disaster, alleviates the very possibility of disaster by doing something else instead.

Popper does not appear to think that the Oedipus effect has much bearing on social science, but he does mention it briefly in *The Open Society and Its Enemies*. The only mention of it in connection with Marx[13] suggests that even if Marx's prophecies had come true, they would not have proved his theory correct, because they might have been self-fulfilling prophecies. Popper clearly does not realize the significance of conceding this, because the other side of the same argumentative coin is surely that the fact that Marx's prophecies have *not* come true therefore cannot suffice to prove his theory false, because they might have been self-negating prophecies. It is not surprising that Popper does not make this comment, given the vital importance played in his philosophy of science by the falsification of predictions. If falsification lost its significance in respect of human science, then Popper's ambition to provide a single all-inclusive logic of scientific method would begin to look a bit sick.

Perhaps we should be prepared to give some consideration, though, to the possibility that Marx's anticipations failed to materialize because insofar as they functioned as prophecies they actually worked to negate themselves. If Marx failed to supply the

proletariat with the conceptual breakthrough which would equip them with revolutionary class-consciousness, perhaps he had better luck with the bourgeoisie. Perhaps it was *they* who were sufficiently impressed and inspired by his analysis to act in just such a way as to prevent his prognoses from being realized. After all, as the *Communist Manifesto* reminds us, the working men of the world had nothing to lose but their chains; the bourgeois capitalists had *everything* to lose, and thus every incentive to make sure that it could not be taken away from them by inexorable developments in the logic of the situation. As soon as they found out that the logic of the situation even permitted the possibility that "the expropriators (could be) expropriated"[14] they were surely motivated to alter the situation and subvert its logic. In all probability, the nineteenth-century capitalists did not need to read Marx in order to come to this conclusion; despite the alleged mystifications of their ideology they were surely able to see something of the logic of their situation by themselves.

This possibility adds a whole new dimension to our consideration of the poverty of prophecy. We have seen that Marx did fail to take proper account of the future growth of knowledge and its significance in altering—through the medium of new technologies—the social relations of production. Perhaps, though, this was not his only failure, nor even his most vital failure, when he tried to anticipate the course of future history. He also did not take into account the way in which the understanding which men have of a situation and its likely development (whether that understanding be correct or not) can affect their handling of the situation. Thus, for instance, men armed with Marxist ideas might act very differently from those who had not made the same conceptual breakthrough—something that certainly seems to have played a significant part in human political affairs ever since the Russian revolution of October 1917.

If we turn back again to science fiction, it may seem hard to believe that the Oedipus effect could possibly have a bearing on the failure of sf as prophecy, for the simple reason that no one takes sf stories seriously enough for them to be self-fulfilling or self-negating. However, at least some sf stories have been conspicuously successful in providing powerful images that seem now to play a leading part in our thinking about the future. Two novels—*Brave New World* and *Nineteen Eighty-Four*—have been especially important in this regard. It is true that no one seriously thinks that particular sf stories accurately portray the future, but when we *do* try to imagine what the future may hold for us, the ideas of science fiction (and not just the gadgets) do provide us with an important resource.

The images of future society in sf are not *believed,* but they do not have to be believed in order to be taken seriously as warnings or reassurances. They do not tell us where our discoveries will lead us, but we can still take some of them seriously as arguments about where discoveries *might* be able to take us. The poverty of their prophecy thus might consist in empowering us to avoid the more frightening of their possible futures. (There is thus a curious sense in which, if science fictional prophecies of nuclear holocaust are to prove poverty-stricken, the stories will have succeeded as warnings in failing as prophecies.)

It will be clear now why this last argument about the poverty of prophecy confuses the whole issue rather than simply offering one more reason why prophets never get it right. It calls into question what we can and do mean by "getting it right." It is conceivable—though it is difficult to be sure—that the history of human science has been cursed by the

Oedipus effect. The history of economics, for instance, can easily be seen from this perspective as an ironic story of theories which, as soon as they begin to cast light on a situation, empower people to act in such a way that the situation promptly changes, and has to be interpreted all over again. It is possible too that the real utility of clever anticipations of the future (whether in human science or in fiction) has nothing to do with the likelihood of their coming true, and everything to do with their power to affect the choices and collective decisions that people make.

If this is so, then the poverty of prophecy might, after all, be its virtue and not its sin.

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3 Popper, K.R. *The Open Society and Its Enemies,* London: Routledge & Kegan Paul, 1945 volume 2 p. 197
4 Marx, K. *Capital* volume 1, London: Penguin Books, 1976 p. 92; quoted in *The Open Society and Its Enemies* vol. 2 p. 86
5 see Engels' essay "Socialism: Utopian and Scientific" and the attack on Proudhon in *The Poverty of Philosophy* (whose title, of course, inspired the title of Popper's exercise in table-turning).
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11 ibid. pp. 307 *ff* & 492 *ff.* See especially p. 509
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Let us not forget that while 1984 is George Orwell's year, it is also the 150th anniversary of another speculative Socialist author—for William Morris was born in 1834. Angus Taylor, currently resident in British Columbia, writes the following to remind us of this.

Pilgrim of Hope: William Morris on the Way to Utopia

ANGUS TAYLOR

> Forget six counties overhung with smoke,
> Forget the snorting steam and piston stroke,
> Forget the spreading of the hideous town;
> Think rather of the pack-horse on the down,
> And dream of London, small, and white, and clean,
> The clear Thames bordered by its gardens green . . .

These lines from *The Earthly Paradise,* pubished in 1868, a year after Marx's *Capital,* suggest the poet's dissatisfaction with nineteenth-century Britain, and his longing for an earlier, simpler way of life. Indeed, elsewhere in this work William Morris calls himself a "dreamer of dreams, born out of my due time" and "the idle singer of an empty day." Morris made no secret of his antipathy to the civilization he saw around him, and his utopian romance, *News from Nowhere* (1890), no doubt confirmed the impression of many that he was still living in the past. Yet between civilization and utopia lies a long journey, with many unexpected twists and turns along the way. Morris' journey to his own utopia shows that the way forward is not always a straight line.

As a student at Oxford in the 1850s, Morris was much taken with the ideas of John Ruskin, who deplored the tastelessness of contemporary industrial goods and argued that the success of medieval craftsmanship derived from the craftsman's pleasure in his work. At Oxford too Morris became friends with Edward Burne-Jones. Through Ruskin's writings the two were introduced to Pre-Raphaelite painting, and in particular to the work of Daniel Gabriel Rossetti, whom they soon knew personally. Burne-Jones became one of the leading Pre-Raphaelite painters, and Rossetti used Morris' wife Jane, as a model in many of his works—besides carrying on a long-lasting affair with her.

Morris himself enthusiastically took up painting and also architecture, which he decided to make his career after a tour of French churches. Yet he abandoned his job with an architectural firm after less than a year, and instead began making a name for himself as a poet. In the Pre-Raphaelite style most of his early poetry, such as "The Defence of Guenevere," dealt with medieval themes in an idealized fashion. Later, in 1870, Morris translated the Icelandic *Volsunga Saga* into English, and after visits to Iceland in 1871 and 1873 wrote his own epic poem, *Sigurd the Volsung.*

From 1861 onwards Morris was involved with his own firm for applied design. By the 1880s his wallpapers and printed fabrics were famous throughout Britain and North America. His patterns, with their flowing forms of leaves and plants, anticipated the *art nouveau* movement of the turn of the century. His concept of beauty was bound to the idea of simplicity and naturalness. He detested ostentation and luxury and was greatly vexed by the economic fact that many of his firm's fine products could only be afforded by the relatively rich.

In 1891 Morris founded the Kelmscott Press. He studied all the arts of book-making, and even designed a couple of new type-faces, modelled on those early European types he most admired. Rare collector's items today, the books produced by the Kelmscott Press had some influence in stimulating better book design. Among them were an edition of Chaucer, and Morris' own fantasy romances with enchanting titles like *The Well at the World's End* and *The Water of the Wondrous Isles.*

His active commitment to social causes began in 1876 when he became involved in a campaign to prevent Britain from going to war in support of Turkey against Russia. Soon after he formed the Society for the Protection of Ancient Buildings. His ire had been aroused by the kind of "restoration" to which British churches and cathedrals were being subjected. The practice was to rebuild them to one uniform style of "pure" Gothic, rather than leave them as they had grown up over the centuries, with a building often displaying more than one style. Morris himself was a great admirer of Gothic architecture—he called it "the most completely organic form of the Art which the world has seen"—but he found the nineteenth-century Gothic revival merely imitative. Modern architecture, he felt, while connected with the past, must at the same time be the expression of its own age.

It was Morris' views on art and work that led to his political beliefs. "Art is man's expression of his joy in labour," he proclaimed, echoing the sentiments of Ruskin. "Now the chief accusation I have to bring against the modern state of society is that it is founded on the art-lacking or unhappy labour of the greater part of men . . ."[1] The art involved in the ordinary worker's everyday production had, in Morris' view, been destroyed by the coming of capitalism, where production was for profit and in which new marvels of technology were not used to alleviate that labour which was merely painful or unnecessary, but to pile up wasteful luxury for the privileged.

In 1883 Morris joined the (Social) Democratic Federation and after a split in its leadership helped found the Socialist League. Among his colleagues in both organisations was Karl Marx's daughter Eleanor. Morris sold socialist newspapers on streetcorners, took part in demonstrations, and went on lecture tours of England and Scotland. The man who had been captivated by *Morte D'Arthur,* Thomas Malory's fifteenth-century telling of the Arthurian legend, was now studying *Capital* and co-authoring a volume entitled *Socialism: Its Growth and Outcome.*

What sort of future society did Morris wish to help bring about?

> It is a society which does not know the meaning of the words rich and poor, or the rights of property, or law or legality, or nationality: a society which has no consciousness of being governed; in which equality of condition is a matter of course, and in which no man is rewarded for having served the community by having the power given him to injure it.
>
> It is a society conscious of a wish to keep life simple, to forgo some of the power over nature won by past ages in order to be more human and less mechanical, and willing to sacrifice something to this end. It would be divided into small communities varying much within the limits allowed by due social ethics, but without rivalry between each other, looking with abhorrence at the idea of a holy race.[2]

These ideas and others, which Morris had elaborated in his political lectures, were embodied in fictional form in *News from Nowhere.* The story appeared in instalments in 1890 in *Commonweal,* the journal of the Socialist League, and then in book form in 1891. The immediate stimulus for its writing was Morris' reading of Edward Bellamy's *Looking Backward,* a utopian novel published in 1888 which was creating quite a stir among its readers. Bellamy's utopia was everything Morris detested.

Bellamy's hero goes to sleep in Boston, Massachusetts, one evening in 1887 and wakes up in the year 2000. He finds a great gleaming city stretching miles in every direction, with many open squares containing statues and fountains, and with public buildings "of a colossal size." In fact, almost everything is of colossal size. All business enterprises have been absorbed into a giant state monopoly, and the nation's work force is organized as an industrial army, run on military lines. (Could any American citizen of the nineteenth century, witnessing a military parade, "fail to compare the scientific manner in which the nation went to war with the unscientific manner in which it went to work?") Production and distribution are centralized. Shopping is done by ordering from samples in giant showrooms. Music, played by professionals, is piped into homes for entertainment. All citizens are educated by the state up to the age of twenty-one, when they enter industrial service for twenty-four years, being discharged at the age of forty-five. This period of labour is looked upon "as a necessary duty to be discharged before we can fully devote ourselves to the higher exercise of our faculties, the intellectual and spiritual enjoyments and pursuits which alone mean life." And this whole marvellous way of life has come to fruition as a natural outgrowth of capitalism, and without class struggle.

Morris' own tale takes place in southern England, along the Thames, a century and a half after the socialist revolution. The narrator, a man of the nineteenth century, awakes one morning to find himself in this post-revolution future, in a land wholly transformed. Yet the transformation is not what one might expect; the houses and dress of the people he sees make him feel "as if I were alive in the fourteenth century . . ." Morris' vision of utopia bears some resemblance to an idealized conception of the Middle Ages, which is not to say that at this point in his life Morris was blind to the deficiencies and injustices of that era. In another story, *A Dream of John Ball* (1886), he took as his subject the revolt of English peasants in 1381 and tried to situate that struggle of five centuries before in relation to his own day.

The socialist revolution, we learn, began in 1952, and involved a General Strike, followed by two years of civil war before the forces of reaction were vanquished. By now the world before the great change is virtually incomprehensible; to the inhabitants of utopia Morris' visitor from the past, their "guest", is a traveller from a distant land or perhaps even from another planet, so unfamiliar is their society to him, and his to them. One of the things that strikes the guest almost immediately, in addition to the beauty of the land and its people, is the prevailing attitude to work.

"What is the object of Revolution?" asks Morris through one of his characters. "Surely to make people happy . . . And happiness without happy daily work is impossible." Work for Morris is not a regrettable duty which must be made as tolerable as possible; rather, useful and creative work is a basic human need and one of the chief joys of life. "Fancy people not liking work—it's too ridiculous." In his utopia individuals do not confine themselves each to one sort of job, but seek out and try to become adept at many sorts. There is no formal education; children and adults learn what interests them in

their own time. Some individuals are particularly fond of "book-learning," though no more merit is accorded this than the manual arts. Work being pleasurable, there is no lack of incentive to learning the latter. Those whose chief interest is in mental work find it healthy to do manual work also.

Machinery has its place. "All work which would be irksome to do by hand is done by immensely improved machinery; and in all work which it is a pleasure to do by hand machinery is done without." Such an arrangement, of course, would be impossible in a capitalist economy, where the displacement of labour by machinery and the destruction of craft skills are imperatives of competitive commodity production. In utopia there is no buying or selling, and no money. Goods are produced not for profit but for use. This makes it possible that goods be not only useful but beautiful; the danger that the new society exhibit merely "a dull level of utilitarian comfort" is remedied by "the production of what used to be called art, but which has no name amongst us now, because it has become a necessary part of the labour of every man who produces."

So instead of avoiding work, everyone seeks it, and there is even a fear among some of a possible scarcity of useful work—though this fear is likely groundless, on account of the inexhaustibility of art and science. In this respect the inhabitants of the former British colonies, particularly of what was once the United States, are especially fortunate. Civilization made such a mess in those lands that there is the happy prospect of an enormous amount of work to do "in gradually making a dwelling-place out of a stinking dust heap . . ."

It is interesting that *News from Nowhere* is subtitled "An Epoch of Rest." It is rest not from useful work but from useless toil (a distinction Morris made in one of his political lectures), and from continual strife among human beings. The guest is told that "we pass our lives in reasonable strife with nature, exercising not one side of ourselves only, but all sides, taking the keenest pleasure in all the life of the world."

Relations between the sexes have changed since the revolution. "The men have no longer any opportunity of tyrannising over the women, or the women over the men . . . The women do what they can do best, and what they like best, and the men are neither jealous of it or injured by it." This does not mean that there has ceased to be any differentiation with regard to work. Women usually run the household. Morris recognizes that this perhaps "seems a little like reaction," but counters that housekeeping and the little matters of everyday life are far from unimportant; indeed, Morris' utopia rests to a great extent on the notion of creating the conditions in which real worth and happiness can be found in common everyday tasks. And while there may be a certain natural division of labour between women and men, there is also much sharing of work—such as in the fields—and the general relation between the sexes is one of mutual respect and comradeship. (Perhaps "neighbourliness" would be a better term, for "neighbour" is how Morris' folk typically address each other.) At one point we are introduced to a woman who is head carver on a crew of masons engaged in building a house.

With the end of private property has vanished the idea of woman as the property of man; and "families are held together by no bond of coercion, legal or social, but by mutual liking and affection, and everybody is free to come or go as he or she pleases." All of which does not rule out many of the problems that so often arise in the course of love. Quarrels do occur, and occasionally even killing, for "love is not a very reasonable thing, and perversity and self-will are commoner than some of our moralists think."

With the end of private property, the old civil and criminal law which upheld it have disappeared; there can be no crimes over property issues. There are no courts and no prisons. If a person is wronged or injured in some way, the remorse inevitably felt by the wrongdoer is the most effective remedy.

The shortest chapter (less than half a page) is the one entitled "Concerning Politics": the guest is told that "we are very well off as to politics—because we have none." In the next chapter we are informed that this doesn't mean there are no differences of opinion about matters affecting the community, but that such differences as exist "need not, and with us do not, crystallise people into parties permanently hostile to one another . . . For instance, it is clearly not easy to knock up a political party on the question as to whether haymaking in such and such a countryside shall begin this week or next . . ." Issues that affect the welfare of the community are settled by majority vote, with due time taken to try to encourage a consensus to be reached. The unit of management is the commune (or ward, or parish—there being little distinction between these names).

> We went on a little further, and I looked to the right again, and said, in rather a doubtful tone of voice, "Why, there are the Houses of Parliament! Do you still use them?"
>
> He burst out laughing, and was some time before he could control himself; then he clapped me on the back and said:
>
> "I take you, neighbour; you may well wonder at our keeping them standing, and I know something about that, and my old kinsman has given me books to read about the strange game that they played there. Use them! Well, yes, they are used for a sort of subsidiary market, and a storage place for manure . . ."

In utopia the stark contrast of former times between town and country has been broken down. The population is spread more evenly over the land, and the cities, shorn of ugliness together with many of their buildings and inhabitants (Manchester, indeed, has entirely disappeared), resemble the London envisaged in *The Earthly Paradise*. Factories are smokeless, and the guest is struck at once by how clear the water of the Thames has become. Travel is by horse and carriage, or by rowboat or sailboat, though heavy loads on land or water can be moved by "force vehicles", which operate without visible means of propulsion. Advanced technology is a last, not a first, resort. The mania for technological progress has been put aside. "You see, guest, this is not an age of inventions. The last epoch did all that for us, and we are now content to use such of its inventions as we find handy, and leaving those alone which we don't want."

What strikes one about Bellamy's U.S.A. of the year 2000 is its efficiency, its rationality, its dedication to man's ever-growing mastery of the natural world. By contrast, Morris' utopia adheres to a philosophy of "small is beautiful," in which technology is subordinated to the values of fellowship and beauty, and in which humankind is seen as an integral part of nature, in a relationship that is active but loving:

> The spirit of the new days, of our days, was to be delight in the life of the world; intense and overweening love of the very skin and surface of the earth on which man dwells, such as a lover has in the fair flesh of the woman he loves . . .

Morris makes a connection between the desire to dominate nature and a social system that promotes the domination of one human being by another. He suggests that a life of slavery (and here he includes most notably life under capitalism) instils an aversion to ordinary daily work and encourages the view of nature as something alien and apart from humans. "It was natural to people thinking in this way, that they should try to make 'nature' their slave, since they thought 'nature' was something outside them."

Here Morris echoes the *Economic and Philosophic Manuscripts of 1844* in which Marx wrote: "Man *lives* on nature—means that nature is his *body*, with which he must remain in continuous interchange if he is not to die. That man's physical and spiritual life is linked to nature means simply that nature is linked to itself, for man is a part of nature."[3] The inhabitant of Morris' utopian Britain is Marx's "real, corporeal man, man with his feet firmly on the solid ground, man exhaling and inhaling all the forces of nature . . ."[4] Yet Morris could not have been familiar with this early work of Marx, which was not published till the twentieth century. The theme of man's alienation from nature and from his own human natural powers is, however, implicit in *Capital*. It was part of Morris' genius that he made this theme his own, and elaborated his conception of it so explicitly, at a time when most socialist thinking was caught up in the myth of the technological cornucopia. Morris was not a simple follower of Marx, but someone whose vision of the socialist future arose from his own life experience and who considered that Marx was "on our side."

With his rejection of parliamentarianism and his conviction that the revolution would inevitably involve some violence, Morris stood apart from many of his socialist contemporaries. Indeed, in 1872 Marx himself had predicted that the particular institutions and traditions of Britain and the United States would permit the workers of those countries to gain power by peaceful means. But it was in his vision of work, technology, and nature that Morris was really swimming against the tide. Bellamy's dream of the society rationally managed in the interest of efficient production was part of a tradition of nineteenth-century utopian thinking that included Henri, Comte de Saint-Simon, prophet of the scientific-industrial society, and August Comte, the father of sociology. By the end of the century Fabian moderates as well as many socialist revolutionaries were imbued with the technocratic spirit. Soon the Russian Revolution, whatever the intentions of some of its partisans, was to prove itself the manifestation of that spirit.

Lenin's outspoken admiration for the management techniques of American capitalism has been reflected ever since in the attempt to run the Soviet economy as a single giant business enterprise. The Soviet experiment was to aspire, in effect, to be what Bellamy's fiction had celebrated as "The Great Trust," the logical apotheosis of capitalist development which, now stripped of its imperfections, would "open a golden future to humanity." The nation was to become, in Bellamy's words, "the one capitalist in the place of all other capitalists, the sole employer, the final monopoly in which all previous and lesser monopolies were swallowed up, a monopoly in the profits and economies of which all citizens shared." Interestingly enough (and ironically, in light of the subsequent role of the Soviet Union as American bugbear), Bellamy saw this form of social organisation as the very embodiment of traditional American values of social and economic equality together with the Christian principle of cooperation—values that were being undermined by the rapacious competitive capitalism of the late nineteenth century.

That the socialism of the Soviet Union bears some resemblance to a giant capitalist monopoly is of course not simply the result of one man's admiration for the ideas of scientific management. More significantly, it is evidence for Marx's contention that technological advances of the type engendered during the long-term evolution of capitalism are a prerequisite for the secure establishment of non-alienating social relations. It follows that without such technological foundations socialism can exist in name only, the centralized economy attempting to perform the role that would otherwise

have been left to the capitalist market. For his part, Morris foresaw the growth in Britain of what he called "state socialism." But unlike Bellamy, who saw the state's entry into the capitalist economy as the very vehicle to the golden future, Morris saw in this merely a (rather inefficient) perpetuation of the existing system, with slightly better conditions of servitude for the workers.

In the very different utopias of Bellamy and Morris is reflected a struggle for the very meaning of socialism. Bellamy repudiated Marxism and in fact preferred to call his position "nationalism" rather than "socialism." Morris embraced the fundamental ideas of Marx and even called himself a communist. Yet if we look at the socialisms of the twentieth century, we see that whether they are of the social democratic variety or the Marxist-Leninist variety, they approximate more closely to Bellamy's technocratic ideal of the centralized state, dedicated to material accumulation and "progress," than to Morris' ideal of a decentralized mosaic of small communities, "more human and less mechanical."

Apart from a few cursory remarks, Marx refrained from envisaging the post-revolutionary society. Imaginative speculation on the nature of the society of the future, including its shape, its value and ideals, and its possible problems, has tended to be dismissed by Marx and his followers as "utopian"—meaning unscientific. E.P. Thompson argues[5] that Marxism must reassess the alleged incompatibility between the "scientific" and the "utopian" and recognize the validity of the kind of utopian speculation embodied in *News from Nowhere*. The (disciplined) imagining of new human possibilities provides a necessary complement to any more scientific analysis of the shape and direction of society.

> I see the deeds to be done and the day to come on the earth,
> And riches vanished away and sorrow turned to mirth;
> I see the city squalor and the country stupor gone.
> And we a part of it all—we twain no longer alone
> In the days to come of the pleasure, in the days that are of the fight—
> I was born once long ago: I am born again tonight.
>
> (from *Pilgrim of Hope,* 1885)

Morris' conversion to socialism turned his sights, and hopes, toward the future. The idle singer of an empty day, who had feared that human history was to end "in a counting-house on the top of a cinder-heap," now believed "that amidst all this filth of civilization the seeds of a great change, what we others call Social-Revolution, were beginning to germinate." It was the province of art, wrote Morris, to set before the worker the ideal of a full and reasonable life in which the perception and creation of beauty would be felt to be as necessary as one's daily bread.[6]

Morris never abandoned his passion for the past, but it was now subsumed in his practical striving for a better future. *News from Nowhere* shows Morris' visitor to utopia, after a leisurely journey of several days up the Thames from London, arriving with the vibrant young woman who is his rowing companion at the village where they are to help with the haymaking. Leaving their other companions for a while, they approach a "many-gabled old house built by the simple country-folk of the long-past times"; even now it is lovely, and it seems to hold in it "the gathered crumbs of happiness of the confused and turbulent past."

> She led me up close to the house, and laid her shapely sun browned hand and arm on the lichened wall as if to embrace it, and cried out, "O me! O me! How I love the earth, and the

seasons, and weather, and all things that deal with it, and all that grows out of it—as this has done!"

I could not answer her, or say a word. Her exultation and pleasure was so keen and exquisite, and her beauty, so delicate, yet so interfused with energy, expressed it so fully, that any added word would have been commonplace and futile.

The house is in fact Kelmscott Manor, Morris' own home in Oxfordshire. Built in Elizabethan times, it links the past to utopia across the age of "civilization." Morris' traveller has arrived home after his journey of learning, and he now understands the way that humanity must travel to reach that time of harmony and rest—not before the age of capitalism but *beyond*—"when mastery has changed into fellowship." Looking around him, he cannot help but marvel at his native land, "all peopled now with this happy and lovely folk, who had cast away riches and attained to wealth."

To many persons of his time and later, William Morris must have appeared a naïve romantic who refused to face the inevitable. The twentieth century was to see a further explosion of many of those features of life he detested: huge impersonal cities, tasteless mass-produced goods, wasteful luxury, the abuse of political power, the degradation of the human spirit. Even the socialist movement was to succumb in varying degrees to this trend.

Yet Morris himself was aware of this possibility, and believed that even if his hopes for social revolution were realized, the world might still have to pass through an era of utilitarianism before a truly human society could be established. Today, when a reaction has begun to set in against the simple equation of progress with unregulated growth and when humankind is beginning to see itself not as lord of nature but in an ecological light, Morris' ideals no longer seem so naïve.

At the end of *News from Nowhere* it is—significantly, I think—not utopia and its inhabitants that fade into insubstantiality, but the visitor from the past who fades from the perception of his hosts, who continue with their evening meal, unaware now of their temporary guest, whose strange ideas and inhumane world they have in any case always had difficulty in comprehending. Morris concludes his story with the hope that if others can see the day of "fellowship, and rest, and happiness" as he has seen it, "then it may be called a vision rather than a dream."

Notes

1 A.L. Morton (ed.), *Political Writings of William Morris* (London: Lawrence and Wishart, 1973), p. 67.
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3 Karl Marx, *Economic and Philosophic Manuscripts of 1844* (Moscow: Progress Publishers, 1974), pp. 67-68.
4 *Ibid.*, p. 134.
5 Postscript to E.P. Thompson, *William Morris: Romantic to Revolutionary* (New York: Pantheon Books, 1977).
6 Morton, *op, cit.*, pp. 244-246.

Alexei Sayle, with Albanian genes but bred in Liverpool, is a former member of the Communist Party of Great Britain (Marxist-Leninist) and a stand-up comic and radical satirist, his face familiar to British television viewers from such punk comedy shows as The Young Ones, *and also to be glimpsed world-wide as a Muscovite black marketeer and KGB informer in the film* Gorky Park. *He has produced two LPs, second of them* The Fish People Tapes *devoted to his creation, first presented on Capital Radio: Alexei Sayle, Community Detective, Stoke Newington's answer to Raymond Chandler. The title of his single,* Ullo John! Gotta New Motor?, *is now a familiar greeting among the unemployed youth of Thatcher's Britain. His recent novel, illustrated by himself,* Train to Hell *(a Methuen paperback), is a gut-splittingly funny murder mystery set on a football hooligan outing from Liverpool to Italy, and a burningly vigorous satire, a Jonathan Swift vindaloo for the Eighties. But Marx was not the only influence on him; as an sf reader, Van Vogt too cast his spell.*

Alexei Sayle has recently joined the community of socialist artists in the village of Moreton Pinkney, Northants, where active Labour Party membership stands at 10% of the population.

Why I Should Have Been the New Doctor Who: The Case for a Marxist in the Tardis

ALEXEI SAYLE

For many children and young adults throughout the world their first exposure to science fiction is via *Doctor Who.*

Early Saturday evenings after the giant kipper ties and weird haircuts of "World of Sport" and "Grandstand," the youth of Starship Britain would watch Hartnell or Troughton or Pertwee or Baker—the loner, the individualist, the eccentric—triumph over pan-galactic evil armed only with the eccentricities of the wardrobe department, his brains and a sonic screwdriver.

It seemed as if the show could go on forever, constantly regenerating and never slipping into that terminal phase which is often signalled in American series (such as "Happy Days" or "Mork and Mindy") by mawkish story-lines featuring blind people, sick puppies and spin-offs into other series.

It was obviously time for Tom Baker to go and in true Doctor Who fashion he lay on the floor while the vision mixer faded him in and out, mixing him with the new face, the face of PETER DAVISON!

Peter Davison! I was nearly sick on the spot. *Peter Davison!* Before that awful day each Doctor Who had been a masterpiece of inspired casting, the result of hard work scouring fringe theatres and actors's drinking clubs. However at the time of his casting

Peter Davison was already appearing simultaneously in seventeen different sit-coms on TV. These included "Whoops I'm A Vet," "My Wife The Vet Next Door," "That Vet's Got No Trousers On" and "Oh Crikey! Where's My Trousers." He was also appearing in twenty-eight different TV commercials plugging coffee, saucepans (with his simpleton wife who adopts a squeaky American accent to appear interesting) and Cheese Spread For Choosy Dogs. He was also guesting on seventeen thousand game and quiz shows. Presumably the casting director, too drunk or too lazy to go out, had merely switched on the TV, seen Davison on all four channels and booked him on the spot. Or was it something more sinister? Perhaps part of a right-wing putsch in the BBC Children's Department? Would Derek Jacobi soon be reading extracts from Milton Friedman on *Jackanory?* Would *Blue Peter* be showing you how to make a Panzer Division out of old yoghurt cartons?

Whatever the reason Doctor Who the individualist, pacifist and eccentric became Doctor Who the TV Personality, charity show-biz eleven dick-head. K-9, the show's most perceptive Marxist theoretician, got the chop at the same time and the programme also moved to Tuesdays and Thursday when everybody knows I go to my non-sexist quilt-making workshop.

Slowly Doctor Who slipped from my mind. Occasionally I would tune in to have my worst fears confirmed—increasingly tacky story-lines, wonky special effects and more frequent appearances of the Time Lords—obvious right-wing authority figures.

Then suddenly there was a ray of hope! Davison was to go! Could the rumour be true—that K-9 hadn't been dismantled but was instead waging a guerrilla war from a stronghold in the accounts department of Television Centre?

This was my chance. As an actor, comedian, Marxist and favourite with the kiddies I would become the new Doctor Who and would lead the kids down the twin shining paths of socialism and science fiction. I tried everything—wining and dining, whining and crying, death threats. I bribed children to rush up to me in the BBC canteen shouting "Oh Uncle Alexei, we love you. Why are you not on the telly more often, as Doctor Who for instance, perhaps, maybe."

But then disaster! It was announced that the new Doctor would be some jerk called Colin Blake who'd already *been* in the programme while playing a tedious Time Lord. Again the casting department hadn't done much scouring to come up with him. What's more when I saw photos of him he looked like bloody Davison.

So now there's nothing for it. I've tried peaceful means, but they've pushed me too far. I'm collecting a force together, mercenaries, unemployed Daleks, revolutionaries. One night soon we'll storm Studio 8 at TV Centre. Our laser guns will be set to "kill." We will show no mercy and in the morning I will be installed as the people's Doctor Who and Saturdays will never be the same again.

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Jean Baudrillard on the Current State of SF

JONATHAN BENISON

> In a way, Baudrillard is that political theorist of the science fiction age we have all been waiting for. (John Roberts in *City Limits,* Oct. 28th – Nov. 3rd 1983, p. 25)

The writings of the French sociologist Jean Baudrillard are of interest to readers of sf in two senses; he has written about sf in two articles which I will discuss in detail, but perhaps more significantly, he has come to the conclusion that the system of technologically advanced neo-capitalist societies imposes on us "a hypothesis of science-as-spectacle (science fiction)."[1] By this he means that scientific know-how is embodied in such technological apparatus as the mass media, satellite surveillance, instantaneous global communication, rapid transit systems, data processing and simulation techniques and so forth, and that this apparatus is disposed in such a way as to reproduce itself. Such a system, argues Baudrillard, is "ahead of us by a revolution," "its new logical perspectives" are those of a system of "simulation"—that is, the input for one sub-system is the output of another: there are only copies of copies. The system has produced to its limits and is now undergoing a controlled "implosion" says Baudrillard. Other authors have developed the argument about how 'performance,' governed by the criterion of efficiency, is the sole operative principle in such 'postmodern' conditions, and about how the system is self-legitimizing. Baudrillard himself seems to prefer to stress the various lures of the surface reality and addresses the problem of how such a system persists in terms of ambivalent categories such as seduction/fascination, challenge/sacrifice: this means that his writings have a decentred, ambiguous quality to them. He is careful not to lend legitimacy or positivity to, for example, the election process and the political power it induces: for Baudrillard one can write about the effects of power without admitting that power exists—indeed, one must.

Baudrillard's recent speculative work has an immediacy and urgency in a "science fiction age," heightened by his use of an idiom (black holes, implosion) often borrowed from sf; he chooses to deal with such phenomena as hijackings, terrorism, obesity, funeral homes, sf, free radios, cloning, the Pompidou Centre, porno films and hypermarkets to *highlight* the logic of the system. This approach has an obvious relevance to daily experience of an order of things that gets more and more capillary, more over-

saturated by its own coding operations and more absorbing the more talk there is of 'crisis' and of the threats of 'economic decline,' 'disorder', 'loss of values' and who knows what else.

There is bound to be a radical ambiguity in this position—as Baudrillard has emphasised in an interview[2]—since it tries to take stock of such realities as simulation games, mediatized politics or obligatory 'escapes' to packed holiday beaches, without lapsing into facile condemnations and without underrating the achievements of this disposition of systems. This means, for example, abandoning the prop of 'alternatives' when considering conditions whose prime characteristic is that they annul all alternatives. Baudrillard's response is epitomized in his fascination with the "suspended eternity," the "liquidity of life, liquidity of signs and messages," the "circulation without sense or desire" ("insensée et sans désir"), in short, the "dizzy disconnectedness which reigns supreme in the deserts and cities" of the West Coast of the United States. Baudrillard's piece on Los Angeles, "Desert For Ever" (*Traverses,* No. 19, June 1980, pp. 54-58) exemplifies his *théorie-fiction:* it starts out from an intuition, trusting, as any sf writer must, the impulsion of an experience (in this case a European repelled and fascinated by L.A.), holding tight to the most intense commotion and worrying at it . . . If strong metaphors cannot be decorative substitutes for what could have been said 'literally,' and if they do more than merely compare items with similar attributes—if they depend on interaction as Max Black has argued, sparking-off interference patterns which *se-duce* their components, and if /L.A. is a desert/, then the only way to document this concretized metaphor is to oscillate with it. "Why L.A., why deserts are so fascinating—it is that all depth is resolved there, you are delivered of it—brilliant neutrality, moving and superficial, defying sense and depth, challenging nature and culture, ulterior hyperspace, without origin by now, without references" (p. 56). Baudrillard is not saying this is 'the truth' of L.A. or deserts; he is moving across a post-disaster terrain that he himself has opened up by asking what it would mean if the strong contrast between 'normalcy' and Nihilism (ie self-dissolution, reactive annihilation of prescribed values) were to become decharged, if not meaningless, because an enweakened version had perfused the dead social tissue. Such would be low-key nihilism: eternity now, going with the flow, an "immense collective act, to roll, to unwind without a break, without aggressivity, without aim—transferential sociality, the only one no doubt for a hyper-real technological era, soft-mobile, exhausting itself in surfaces, networks, soft technologies" (p. 57). He asks, in the manner of Philip K. Dick, what if No One Is In a Position to Notice (that, so to speak, "Since Copernicus man has been rolling away from the centre towards x": Nietzsche, *The Will to Power,* Bk. 1, "Toward an Outline", 5) for the simple reason that we are in permanent orbit—and Most of Us Don't Realize It . . . Yet.

"In orbit"?

> Participation in the network means being inserted in the whole system: television pictures, free radios, telephone. It's a sort of continuous gravitational effect from which one cannot extract oneself. Even this participation in relatively indifferent phenomena can have a certain fascination, though only a minimal implication is involved. The important thing is to always keep in the band, to participate on more than one track. In this system, seduction equals passage of flows, circulation of networks, the possibility for all to let themselves be carried and recarried in the system, to be drawn along, to be forever in orbit. To submit, yes, to a force of attraction, but in empty space.

Thus 'fascination,' in Baudrillard's terminology is cool, "a seduction with nothing

passionate in it" which can be engineered on a large-scale "in such a way that one passes from one punctual and ephemeral seduction to another." It is contrasted with seduction itself which is "a non-'liberated' form in which there exist rules of the game and required signs": this has to do with dual positions which, driven by the logic of the pact in which they are caught, arrive by challenge and foil at a dissolution—in the snares of the seduction—of all would-be relations of power (control and dominance). Only this *contrast* between the 'achievements' of the system as it is (as an imposture, a massive pacifying holding operation) and the *possibilities it reveals despite itself* for developments directed by a *social* logic, gives significance to the pair fascination/seduction. Baudrillard is aware that this advocacy of 'non-liberated' forms could seem "reactionary," and he explains:

> I would, rather, be for extreme positions in which a necessary ritual order is preserved, where the game is possible thanks to rigid obligations, to a symbolic pact. If this has to be lost, I prefer to go right to the bottom with fascination, to the limit of seduction, as far as total undifferentiatedness. Let's think of the United States: contents, meanings have been volatilized, we are in total unculture in the sense that everything is functionalized, in a sort of desert of meanings.[3]

Baudrillard concludes: "The desert is no longer a landscape, it is the pure form that results from the abstraction of all the others" ("Desert For Ever," p. 58). The familiar sf term "media landscape" is too impregnated with the tragic sense of a loss of meaning through manipulation/alienation to really seize this desert topos: it is the "pure form" of self-referentiality (every bit of desert contains the whole) and circularity (deserts do not mean, they *are*), and as such it can serve as an extreme metaphor for stasis, No Future. As Max Black notes, in scientific experiments "the method of 'going to extremes' has proved especially valuable: 'When the scientist studies extremes he is often as not rewarded by both knowledge of abnormal facts and also by a new viewpoint on the normal' " (W.H. George, quoted in Black's *Critical Thinking*). Maybe this is another reason why Baudrillard chooses to work away at the periphery and interstices of the system *and yet* leads one to believe 'the margins are at the centre.'

The same goes for another of his latest terms: "l'ob-scène." When Baudrillard talks about obscenity, "it is not the traditional obscenity of what is hidden, repressed, banned, dark, but rather that of the visible, of the over-visible, of the more visible than the visible—it is the obscenity of what no longer has secrets and is completely resolvable into information and communication." Its 'history' can be traced through object-systems or coding-systems—but for Baudrillard what matters here follows above all from what they have in common. Marshall McLuhan—who has suffered so much from the entropy of the very systems he brilliantly described that his thought has been reduced to, precisely, *obscene* formulas, "A Guide to H_2O for Fish"—supplies the link: medium as message, message, mass-age. "Environments are not just containers, but are processes that change the content totally. New media are new environments. That is why the media are the message." Had he not already said—"One could write a kind of science fiction story of the future of consciousness, the future of the unconscious, 'the future of an erosion' "? The real, the unconscious "is being eroded at a furious pace: it is being invaded by dazzling investigations and insights, and we could quickly reach a stage in which we had no unconscious. *This would be like dreaming awake"* (my emphasis: this is an example of reversion—the collapsing into each other of 'oppositions' when they achieve their "pure forms").[4] Now Baudrillard:

> The obscenity of merchandise comes from its being abstract, formal and light, against the weight and density of the object. Commodities are legible: in contrast to the object, which never ever lets on its secret, the commodity always manifests its visible essence, which is its price. It is the formal place of transcription of all possible objects: through it they can all communicate—it is the first great medium of communication of the modern world. But the message it delivers is extremely simplified, and it is always the same: it is exchange-value. Thus at base the message already exists no longer, it is the medium that is imposed in its pure circulation. (*Les Stratégies Fatales,* p. 94).

The whole drive of Baudrillard's thought is contained here: the spread of a form which comes to take itself as an end in itself . . . A simulation which is an imposture: what Baudrillard adds to Marx and McLuhan is a sense of the enigma, the strangeness, of our attraction to such a mock-up job—our fascination with obscenity.

By now the reader will have some idea of Baudrillard's approach and in particular of the post-growth, saturated world that supplies its horizons. His familiarity with sf, apparent to an attentive reader throughout his work, comes into its own in this latest book of his, *Les Stratégies Fatales* (1983, hereafter *Stratégies*); we will see that he uses the repertoire of sf in his speculations to arrive at a theoretical model of "the form of catastrophe innate to the era of simulation" (p. 27). The next section will develop this theme as a prelude to the discussions of Baudrillard's two articles specifically about sf. It may be helpful, though, to give a foretaste (prior to the discussion in my third section) of the main propositions contained in the paper Baudrillard gave in October 1978 at the international meeting that took place in Palermo under the title "La fantascienza e la critica"; this will allow me to introduce the notion of simulation, that is to say, the pre-empting of reality by models, or rather, a system of models. This is central to all Baudrillard's recent work.

Baudrillard makes two key propositions about simulation and sf: first, if the science fiction is already 'out there,' if the system has finished expanding and is now simply re-cycling models generated *within* itself, then classical sf is no longer pertinent to such conditions since it always wants to *produce* "worlds," as if there were hope for expansion "based on energy, force, its materialization by means of the machine and into a whole system of production."[5] According to Baudrillard there is only scope for 'meta-sf', that is, sf about science fiction ("science-as-spectacle"). The second proposition is that 'the real is our utopia'; this enigmatic statement relates to the way systems of signs and codes in general can become self-sufficient, apparently cut adrift from the referents they supposedly once denoted.

Both these propositions have to do with a process of usurpation: first, something as yet undefined and incalculable is subjected to a coding of some sort—for example, with the development of capitalism all sorts of previously incommensurable items are lumped together as commodities; as such their differences are annulled in this same movement that recognizes only differentiations *within a system* (of equivalences—of actual or potential values). Secondly, this system becomes global; it no longer attempts to negotiate with or encompass anything outside itself. There is no 'outside': in the case of commodification everything has, or can have, a price.

More pertinently for my topic, a precisely analogous argument applies to the scientific method. This method derives from a non-innocent decision "to objectify the world"; the science of linguistics, for example, makes language its 'object of study.' "Science takes account of things preliminarily chosen and formalized to obey it—'objectivity' is nothing but this, and the ethic that comes to sanction this objective knowledge is never anything

but the system of defence and disavowal that wants to preserve this vicious circle." Baudrillard goes on to quote Nietzsche—" 'Down with all hypotheses that have allowed belief in a true and real world.' "[6] (Even here, though, Baudrillard is careful not to endorse this imposture by science; he stresses that it never *in fact* achieves these aims since undecidability hampers the statistical sciences and the hypotheses of the precise sciences are subject to reversibility.) There was no cut-and-dried language-object until linguistics created it: "the separation of the sign and the world is a fiction"—and it is specifically a fiction proper to the science of linguistics which needs a reference world "governed by the sign" as its "reflection." "This 'world' that the sign 'evokes' (the better to distance itself from it) is nothing but the effect of the sign, the shadow it carries about . . .". The imposture of linguistics consists of taking this "fiction" for the truth; in this way "the level of contents" *within* the language system it devises is taken as a given: "the logic of equivalence, abstraction, discreteness and projection of the sign engulfs the Referent as surely as it does the Signified."[7]

At this point the second part of Baudrillard's argument comes in: certain social and technological developments associated with the development of science have by now 'actualized' this latent insubstantiality or unbasedness of equivalence systems, and have swamped reality with perfect copies of other copies, so that it would be better to speak of hyper-reality—a state of affairs in which a sense of reality is no longer achieved by reading these various fictions realistically (as if their referents were the ultimate truth); yet it no longer matters that they cannot be *representations* in the old way because there are so many of them, they are so complex and they can be made so persistently available that they can legitimate themselves by imposture. A coefficient of reality is achieved instead by exaggerating the marks of differentiation, by playing on the pseudo-differences of distinguishing features between aspects of the same system. (As in some Super-realist painting and 'sculpture'). Science enters the era of fashion, of styles—it *performs* as part of the system.

This means that sf, surprisingly, is a form of nostalgia. In its heyday the 'myth' of "continuous expansion . . . an indefinite liberation of energy" (*FC*, 52) was already out of touch with the direction of future developments. The inversion of the same mindset, offered by 1970s pessimistic and ecologically-aware sf, is no solution: "If one speaks of environment, it is because it has already ceased to exist"—"ecology" attests to the fact that "the great signified, the great referent Nature, is dead, replaced by environment, which simultaneously designates and designs its death and the restoration of nature as simulation model (its 'reconstitution,' as one says of orange juice that has been dehydrated)."[8] It is as well to be clear: no one, least of all Baudrillard, is saying that pollution should continue. What he is saying is that ecology, for example, (though the same would apply to political economy, structuralist linguistics or Marxist anthropology, and so forth) cannot be self-explanatory: it can only be accounted for if placed within the total system of which it is a part and of which there is no 'science.' Thus one necessary blind-spot of ecology is that which will allow *both* environmentalists *and* industry to wave its banner while a new controlled order is set up: such an order may be identical to the previous one if simulation techniques permit (though it is likely to be a simplified version, beset by the kind of 'catastrophic' events associated with unstable systems and established by a period of 'primitive disaccumulation' in which items uncongenial to systemization will vanish)—but it will differ in a fundamental way in any case. It will have no depth

—nothing will be hidden in it and nothing will be evoked by it. A kind of ersatz depth will be given to it however, by means of doubling—it is the media-differences generated between, say, the countryside you walk in and drive through and the one seen on television and re-created in the computerized eco-systems of the future that will lend a coefficient of . . . hyperreality to the affair. Baudrillard's prediction is that humans in such conditions will invest heavily in these "superficial abysses" and will live in a state of "fascination." This 'extrapolation' (which he claims is fully realized) derives from the premise that something else is in fact at work throughout these developments—the law of reversibility, or ambivalence, which enters Baudrillard's work as a conceptualization of what it is in tribal societies that makes their disposition of "symbolic exchange" *both utterly different* from the economic and intellectual systems which have exterminated them *and yet* uniquely able to suggest the difference which drives the latter as well.

To grasp the notion of "ambivalence" one has to conceive of the possibility that the process of knowing, especially as displayed in the scientific method institutionalized in our society, is destructive of its object of study. That is to say, some kind of distance and difference is intrinsic to having a supposed 'object of study': if this otherness were completely exhausted, if the whole truth were known, the 'object' would have been lost. Hence there can be no end-point: rather, there is a process of reversion. Actually Baudrillard's argument is less simplistic since in the form just given the project of the scientific method is implicitly taken as coherent and feasible up to a certain point; the wager Baudrillard makes is that the project was always supported by an imaginary component and the critical point is not when 'the real,' the truth of the object, is attained but rather when there is *no room left to imagine* the unknown. It was not, of course, the job of 'science' alone to supply space for the imagination; it was aided by the technological offspring of scientific discovery and the expansionist social organization it belonged to—and, therefore, concludes Baudrillard, sf had an authentic historically appropriate role only during the era when this programme was still valid.

This is the context in which his slogan about 'the real as utopia' makes sense. "The imaginary was the alibi of the real, in a world dominated by the reality principle. Today it is the real that has become the alibi of the model, in a universe governed by the principle of simulation. And it is paradoxically the real that has today become our true utopia—but it is a utopia that does not belong any longer to the order of the possible, because it can only be dreamed of as a lost object" (*FC*, p. 53). "Paradoxically"—because it is just when this metaphor of the lost object can be taken literally that it loses all sense. One cannot inhabit paradoxical figures, however, and if the "aesthetic, mythic, ludic" dimension or distance—which, says Baudrillard, requires "une scène" and therefore "a minimum of illusion"—is gone, its place is immediately taken by a pseudo-distance, that of the voyeur:

> What had been kept secret, or even did not exist has found itself expelled by force into the real, represented beyond all necessity and all verisimilitude. Forcing of representation. Look at pornography: orgasm in colour and close up is neither necessary nor credible (vraisemblable)—it is only implacably true, even if it is but the truth of nothing at all. It is only abjectly visible, even if it is not the representation of anything at all.

And, he goes on, the same applies to "the events of Biafra, Chile, Poland, terrorism or inflation, or of nuclear war. We have an over-representation (surreprésentation) of it through the media, not true imagination"—"we are voyeurs without illusions" courtesy also of the "uninterrupted social commentary," the "soft technology of culture" (*Stratégies*, pp. 90-91 and pp. 82-83).

The idea that "we are living the realization of utopia tout court" (*Stratégies,* p. 86), meaning the end of utopia as a hope, "its sinking in the real," is an example of the reversions that abound in Baudrillard's thought. "If all the enigmas are resolved, the stars go out": "Bringing together the maximum of information on the universe can put an end to the world. It is like in the tale of the nine billion names of God" by Arthur C. Clarke (*Stratégies,* pp. 78 and 129). Baudrillard inherits from Nietzsche this conviction that an end-point is unattainable because the perfect model of x, being indistinguishable from it, will annul the very parameters by which this likeness is measured—there is an "upbidding of a quality over itself towards its pure form" (*Stratégies,* p. 77) and this can only introduce another order of . . . not truth, but *appearances.* Be thankful for appearances, then, for they alone, "that is to say *signs which filter out sense,* protect us from this radiation, from this leakage of substance in the empty space of truth" (*Stratégies,* p. 84). A more powerful hypothesis than linearity (and hence, accumulation of knowledge) is that of tribal societies, of 'the symbolic,' which decrees that everything returns; beyond our ken in a "world become pure" (in the above sense) there can only be "an incessant cycle of metamorphoses, a seductive interconnectedness under pure forms and appearances, that are not relative to a subject . . .".[9] Thus, in the *hypothetical* moment that science reaches its goal a reversion takes place—"if all illusion is given up for transparency, then the heavens become indifferent to the earth" (*Stratégies,* p. 78). In *reality,* "transparency"can be only obscenity—lack of the scenic . . .

It is perhaps no accident that the whole theme can be captured in one sf image. Baudrillard notes that "science fiction has always been attracted by faster-than-light speeds," but "much stranger"would be "to generalize the case where light reaches us from stars long dead—their image crosses light-years to reach us yet. If light were infinitely slower, a mass of things, the nearest ones at that, would have already undergone the destiny of the stars: we could see them, they would be there, but they would be there no longer. Wouldn't this case capture the real itself: something whose image reaches us still, but is already no more?" (*Stratégies,* p. 25) (As he says, things "would crash into us without our having seen them coming.") What gives this line of questioning bite, though, is that it claims to be addressed to our present—Apocalypse Now: enough of trying to extort things to be objectively true. According to Baudrillard, this project, whose "limit of dis-illusion is that of death," of the corpse, and of "all that which is so confused with itself that it is not even capable of playing on its own appearance any more" (*Stratégies,* p. 72) reverts, when it reaches its 'goal,' to appearances. "When all is overcharged with meaning (sursignifié), meaning (sens) itself becomes ungraspable"—if it ever appeared that it could end otherwise this can be put down to the "forcing" or "exaction" already mentioned, when things are made to mean by force—"But perhaps things are never 'true' except at this price: to be brought out under too harsh a light, with too strong an index of fidelity" (*Stratégies,* pp. 84 and 82).

1 The endless 'end of the future'.

It makes a fundamental difference to one's strategies whether one considers catastrophe to be imminent or immanent; the sf habit of extrapolating is attached to the first outlook whereas Baudrillard never ceases from trying to impress upon his readers that The Dreadful Has Already Occurred (and that, since most of us are still around, maybe it was not that bad after all . . .). Brian Stableford's thoughtful recent essay "Man-

Made Catastrophes" considers some typical sf extrapolations of what he calls "Lotus-Eater Societies"; in these, desire (of all sorts) becomes an end in itself which means that it short-circuits itself, being reduced to the lowest common denominator of all human drives—satisfiable pleasure. This (parody of) paradise "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."[10] Such a scenario is moulded so that it cannot fail to bring out the 'ersatz' quality of experience there (the moral issue) and the stagnation involved (an issue which is political, in the widest sense of that word). Baudrillard, on the other hand, argues that the "critical faculty that permits our senses to perceive the world according to that 'proper' distance that regulates, through our senses, our awareness of the outside world" and which is the basis of "the 'aestheticizing' body, is *today* threatened by the 'psychotropic' body, which substitutes for the other a potential body, completely manipulatable by drugs, biochemical or endocrinological impulses, by sensory prostheses, etc."[11] This is part of what he calls "shortcircuiting"—in 'the masses', where what used to exist in "the dialectic of social relations" and the scene of politics, now proliferates by 'touch' (the prodding of the media to 'be connected', 'have an opinion', 'relate') and metastasis (rashes of this and that, panics and so forth); or in the media, the saturation of information 'means' that history (ie repercussions and sense deriving from the placing and timing of events) is short-circuited, no longer significantly concretized or localized. It takes ever bigger and less irrevocable events to (temporarily) disrupt this screening process: hence the paradox that this "gentle vertigo", these 'safe forms of death', do not end progress at all—the would-be subject of history, says Baudrillard, "is taken up in a sort of melodrama of its disappearance, but it cannot come to disappear, it is dead really, but it has not managed to disappear"—and it torments itself with visions of perfect disasters, for that at least would lend some sense to the present, in which "it is no more than a slough incapable of representing itself in the universe."[12] On the positive side it also 'invests' new areas, and gets a taste for *apparition* and *vanishing* on the 'other side' of the tracks and screens which have, in any case, shortcircuited between themselves the old securities of meaningfulness and ultimate referents. I cannot dwell upon this aspect of Baudrillard's work here.

If extrapolation is replaced by analysis the *reassurance* which emanates, despite the author's intentions, from giving the reader a destiny (even a doomladen one), is avoided. Stableford argues that it is the "notion of basic flaws in human nature which lies at the heart of the mythology of man-made catastrophe"—the reader will tend to recognize his or her fate in the projected 'lotus-eater society' because "No one believes that a significant fraction of the human race could actually withstand the temptation of the dream machines; we conceive of ourselves as being helpless in the face of addiction to pleasure-seeking." But there is a contradiction here (and I guess it will be thrown up in any examination of imaginary catastrophes): the sense of helplessness must have its roots in the humus of the present yet the zero-world is the zero-world only by virtue of the substantive part of the claim to do with the role of "addiction to pleasure-seeking"—in terms of which this world is not (yet) catastrophic. The extrapolation is *realistic* to the extent that it flows from the latter premise (from which "no one" dissents); but to be *valuable* as an admonition this premise must be plausible and powerful—it must account

for the sense of helplessness (which is *already* underway)—*and* it has to rely on the notion of choice, the possibility of controlling this 'destiny.' But the inescapability of the sense of helplessness—which is why such scenarios interest us—implies there is no choice . . . whereas, if we were not "helpless" after all, the extrapolation cannot be plausible —indeed, It Could Never Happen Here. One way out of this double-bind is to suppose that "it" has always happened, as Baudrillard does; this leads him to cast a speculative eye on 'normal' conditions, as if to investigate a disaster.

Strangely enough it could be argued that, in effect, sf was always best seen as speculative fiction (in the above sense)—"The new mythology of man-made catastrophe —the essentially *science fictional* mythology—stressed that the *mundane activities* of ordinary human beings might set in train sequences of cause and effect which *would destroy civilization"* (Stableford, op. cit., p. 102—last two emphases added). If this is the case, the actualization of the catastrophe in an empirical disaster is, in a way, irrelevant—indeed it will act as a safety valve insofar as subsequent emergency measures and so forth will divert and hold attention. The disaster relieves the tension associated with the immanence of the catastrophic (in René Thom's mathematical sense of "points where small variations in some variable may cause large variations in a dependent variable")[13]; *projected* dooms can always be read as endorsements of the present and, I suspect, usually have been.

2 Simulacra and science fiction

"Does that distance between real and imaginary still exist which renders science fiction possible?" Luigi Russo points out in his introduction to *La fantascienza e la critica* that Baudrillard's paper raises this question which "circulates widely, as suspicion-doubt-fear, in the contributions to the volume" (*FC*, p. 21). The question makes sense if we remember that reality is seen by Baudrillard as a kind of middle ground between 'the real' and an imaginary order encapsulating the hopes and fears to which everyday reality gives rise; this is not a version of idealism or solipsism though—it is simply insisting that 'the real' cannot be brought into the arena of testable reality, of would-be certainties, and still be 'the real' as it has been in the past. An otherness, a distance, an unknowable quality was essential to it; it was, in short, a working hypothesis sanctioned by the imaginary. In the era in history when utopias were plausible this "distance" was an unbreachable gap; it persists in the era of projection which Baudrillard (perhaps too sweepingly) sees as typifying science fiction; nowadays it has reached total self-absorption (though of course this is not readily apparent). In this short paper Baudrillard only has time to hint at what it is, in the "implosive era of models," that sees to it that the limits of the transcendence or projection (available once to utopian writing and sf respectively) are these days to be measured by the thickness of the following "coin": "Any business game could be used for some form of research; the obverse of the coin is that any simulation could be used for training."[14] Indeed he is apparently not interested in trying to *prove* the point by analytical argument; perhaps it starts as an intuition—it cuts through his writings as a hypothesis with which to revolt against an oppressively circular and closed order. A kind of challenge, then, a wager against the status quo: "Only the field of simulation in the cybernetic sense remains open, that is to say the field of manipulation in every direction of these models (scenarios, enactments of simulated situations, etc.), but then nothing distinguishes this operation from management, and from the operation of the real itself:

there is no longer *fiction*" (*FC*, p. 53—or, there is nothing but "fiction": it comes to the same thing).

Classic science fiction, then, belonged to a world in expansion—space exploration was appropriate to this; with what Paul Valéry called the "era of the finite world" there is a closing-up ("a universal market, not only of commodities, but of values, signs, models, leaves no space to the imaginary" and the "cosmic, mental, technical, 'exploratory' universe" of sf stops working too (*FC*, p. 54). At this point it might be helpful to turn to Baudrillard's splendid article on "The Beaubourg Effect"[15] because 'Beaubourg' is a model of how areas of social reality, once they have developed in a haphazard way through history to extreme complexity, can be subjected to an analysis of the way all the various parts *function* (as if it were their raison d'être to function) and then *re-assembled* on the basis of this analysis. This is "the general process of implosion" which takes over when expansion is no longer feasible. The goal of such a process is institutionalized in the Pompidou Centre: this " 'hypermarket of culture', is . . . the model of all future forms of controlled 'socialization': the retotalization of all the dispersed functions of the body and of social life (work, leisure, media, culture) within a single, homogenous space-time; it is the retranscription of all contradictory movements in terms of integrated circuits." It is typical of Baudrillard—and this is a mark of his affinity to sf—to make the point by describing a concrete example which epitomizes a widespread drift; nevertheless that drift is clearly the same one covered by such authors as Niklas Luhmann (who speaks of 'reduction') or by Michel Foucault, Robert Castel and Jacques Donzelot under the headings of administering social relations, policing families and infesting the social organism with micro-powers.

> A commission open to smallholders in an area council, a family consultancy, the collective management of a nursery or an elementary school, a school or district council . . .: together with many others which it would not be hard to list, these situations could be called *social*, but in a sense that escapes the meaning one usually gives to the Social, contrasted for example with the Political, referred to the Economic, or compared with the Private or the Public. Situations in which the social is a strategic node, the meeting point of the dimensions in which is exercised the possibility for people to stay together . . .() In conclusion, social situations, but in which the sociality is as far from an idea of naturalness as a dead body with a grafted-in artificial brain is distant from an image of life.[16]

The 'Beaubourg effect' amounts to the *controlled* emission of "an *implosive* violence," itself a response to "a universe of networks, permutations, and flux," of institutions that "implode themselves by the power of ramifications, feedback, overdeveloped control of circuitry. *Power implodes;* that is its real form of disappearance." This process Baudrillard calls *"social inversion."* He finds the Pompidou Centre a reaction to and reflection of the way social relations implode, ever faster, by becoming—as stars do—"involuted systems that absorb all the surroundings energy until they become black holes." The metropolises become "centres of absorption and re-absorption and their characteristic product is the *"mass(es) . . . that space of ever greater density into which everything societal is imploded and ground up in an uninterupted process of simulation."* And "Beaubourg", that great love of these "masses," is also their "concave mirror," capturing the process.

So, to resume the argument about sf with this idea of implosion in mind, Baudrillard declares that the principle of reality disappears as the reserves left to the imagination dwindle—space conquest is thus seen by him as "an irreversible threshold towards the loss

of the terrestrial plane of reference." Again this is not so much argued analytically as punched home in an image—that of "two rooms/kitchen/shower raised into orbit": the lunar module. By raising the unexceptionably typical earth habitat to "cosmic value," its original is somehow de-specified, human space made unreal—it is, says Baudrillard "the satellization of the real in the transcendence of space—it is the end of metaphysics, end of fantasy, end of science fiction, it is the era of hyper-reality that opens up" (*FC,* pp. 54-55).[17]

From this point on the way is clear—Baudrillard has to suggest what will replace sf and provide examples. One of the examples is Philip K. Dick, not simply because he speaks about simulacra, but because the worlds he creates are not parallel (well, not usually . . .), nor even possible, and it is not a case of a double—that has disappeared: "one is always already in the other world which, however, is not an other, with no mirror nor projection nor utopia that can reflect it—simulation is insurmountable, opaque, without exteriority—we shall no longer pass so far as 'the other side of the mirror': that was still the golden age of transcendence." But his key example is J.G. Ballard's *Crash:* this contains nothing " 'invented,' " it involves the "acceleration of our models, of all the models that surround us, mixed up and hyperoperationalized in a vacuum." *Crash* supplies a "universe without conscience, but also without an unconscious": Baudrillard's reading of the "hyper-reality" it evokes (matched, he claims, only by *Bug Jack Barron* and certain passages in *Stand on Zanzibar*), will be dealt with later.

These works have realized that, since one cannot base the imaginative process in 'the real' and go in search of the unreal, the process has to be the opposite one—"it will be a matter of actualizing decentred situations, models of simulation, and to do one's best to give them the colours of the real, of the banal, of the lived, to reinvent the world as fiction, precisely because the real has slipped out of our lives." This new-style sf would have the task of "revitalizing, re-actualizing, re-normalizing fragments of simulation, bits of that universal simulation that has become for us the world that calls itself 'real' " (*FC,* p. 55). Of course, hybrid forms are likely to emerge: computers and cybernetic machines (which belong to the third order of simulacra, the "operational," belonging to the chance and flux of "metatechnics") will appear in the guise of super-robots (i.e. machines—whose status is "operatory," productive, belonging to the mechanical use of energy). In this case, the real 'novum,' the stakes in a 'simulated world' game, are lowered (as Stanislaw Lem has already argued—in his own way).[18] The heart of the mystery of this new order —and, as Marx showed, it wears it on its sleeve—is that its beginning and end is its operationality. "Putting an end to its myth of origins, it ends its internal contradictions" and absorbs all finality: it needs no 'rationale,' it is "a world without secrets," as 'transparent' as you wish, "mais ça fonctionne."[19] Again Baudrillard backs this claim up with, as it were, an icon of "obscenity:" those German factories in which the unemployed fill all the usual work places but produce nothing—it is a simulation. "The whole material production reproduced in the void (one of these simulacrum-factories has really gone bankrupt, firing second time round its unemployed)" (*FC,* pp. 56-57). For Baudrillard the main point is that the "science fictional quality of the episode" does not need to be thought up—it is there, a surrealistic ready-made which brings into question everything 'outside' the factory/museum too. "What fascinates here is not the contrast true factories/fake factories, but on the contrary the non-distinction between the two, the fact that all the rest of production has no greater referents or profounder ends than these business 'simulacra' " (*FC,* p. 57).

3 "Crash!"

> I don't say that I expect the world to end in a sort of automotive apocalypse fed on sex and violence; I offer this vision as one extreme hypothesis because it seems to me inscribed in the present (J.G. Ballard, c. 1974).

The first words of Ballard's introduction to the French edition of his novel *Crash* (1973) state: "The marriage of reason and nightmare which has dominated the 20th century has given birth to an ever more ambiguous world." *Ambiguity*—we have seen that this is just what Baudrillard "attributes to the nature of the system itself, to the essence of the consumer society, which would be supported by what contests it no less than by the consumption of it."[20] *Crash* is special in Baudrillard's eyes because it it more than equal to this diffuse ambiguity; it makes of it an "asymbolic universe" and restores a potent ambivalence to it in that "by a sort of turning inside out of its mass-mediatized substance (neon, concrete, car, erotic mechanics), it appears as if shot through with an intense initiatory force" ("Crash!", *Traverses,* No. 4 May, 1976, pp. 24-29: p. 29—hereafter referred to by page numbers alone). The two key terms in this article on *Crash* are hyperrealism and hyperfunctionalism. Whereas the doctrine of functionalism presupposes a reservoir of needs to be fulfilled, hyperfunctionalism involves a perfect mirroring of wants and satisfaction. Likewise, with realism indistinct 'natural forms' are supposed to be represented; if nothing 'untouched' remains, then this (illusionary) process cannot sustain itself. This means "the collapse of reality into hyperrealism, in the painstaking duplication of the real, preferably on the basis of another reproductive medium—advertising, photography, etc.: from medium to medium the real is volatilized; it becomes an allegory of death, but it is strengthened also by its very destruction; it becomes the real for the real, fetishism of the lost object—no longer object of representation, but ecstasy of negation (dénégation) and of its own ritual extermination: hyperreal" ("The Hyperrealism of Simulation" in *L'échange;* trans. *Simulations,* pp. 141-2). The terms refer to tendencies "inscribed in the present"—this is what makes Baudrillard say "*Crash* is *our* world, nothing there is 'invented' "(*FC,* p. 56): nevertheless, these basic conditions are *transfigured* in the novel.

In his article on the book Baudrillard uses the phrase "baroque and apocalyptic" to suggest what it is that pushes its vision of technology beyond the " 'rational' persepective" of Marx and McLuhan (which sees "technology as an extension of the body") into the more ambiguous possibilities of "a body confused with technology in its dimension of violation and violence." A gloss may be supplied:

> So it goes for the social, history, economics, sex. The point of maximum extension of these erstwhile distinct and specific categories marks their point of banalisation and the inauguration of a trans-political sphere which is at once that of their vanishing. No more strategies of inevitability—the strategies of the banal are underway (Fin des stratégies fatales—début des stratégies banales).

In the face of "indifferentiation in an ideological and analytical fog" it "would be necessary to think towards (. . .) baroque effects of transfiguration—effects visible in the United States in the violence of the indifference, violence of juxtaposition, violence of promiscuity—new scene of the obscene. But then the obscenity is as it were transfigured by the acceleration, by the corpuscular speed of bodies, of signs, of images" (Stratégies, pp. 80-81). The important thing, then, is not the *apparent* violence of car crashes (the desperate irony of the functional scientific/medical language distances, and shows the

futility of a pornographic, 'cheap thrills' reading anyway); no, what matters according to Baudrillard is that in pushing this possibility up to *and beyond* its limits, so that "the savagery of this mixture of the body and technics is immanent," the whole world of the novel comes under the aegis of a *formal,* far more lethal savagery—that of nonsense, of the "immediate reversion" that occurs when what seemed an 'extension' becomes the environment. And "from this results a sexuality without antecedents—a sort of latent dizziness (vertige potentiel) tied to the pure inscription of the ex-signs (signes nuls) of this body." So, the fact that *Crash* focuses on sexuality and violence is not of major concern to Baudrillard—it could have been another area of human experience: of more interest is that this focus should be both obsessively omnipresent (beyond 'mood,' 'colour,' 'atmosphere'—whatever else belongs to so-called realism) and "sans référential et sans limites" (". . . if all the information is found in each of the parts, the whole loses its meaning").[21]

In this reading, *Crash* is a sophisticated text and the only thing perverse about it is the way its surfaces mislead one ("superficial abysses" . . .): the only way to get rid of 'sex' is to talk about it all the time—"Death, wounds, mutilations are no longer metaphors of castration, exactly the inverse—not even the inverse any more. Only the fetishistic metaphor is perverse, the seduction by Model, through interposed fetish, or by the medium of language. Here, death and sex are one with the body, without fantasy, without metaphor, no mincing of words . . ." Now, there is no appeal here to some 'primitive' unspoiled sexuality; quite the reverse. The lesson of Symbolic rituals is that "only the body wounded symbolically exists"—it is not a 'given' (object) which then 'becomes socialized.' Sexual pleasure *always* implies a medium—most often of fantasies, but in any case "an intermediary manipulation of scenes and gadgets" and there never was any 'message' but this. What can happen, though, is a *supplementary* short-circuiting, when "the obscenity of all that is unceasingly filmed, filtered, re-seen and corrected under the wide-angle lens of the social, the moral and of information," "the uninterupted social commentary" *(Stratégies,* pp. 82-83) becomes itself the aim of a sort of exteriorized narcissism. In *Crash* just such a regression is well advanced: Vaughan, whose project is relayed in a "functional language" whose "erotic terms are technical," is the dupe of the system. There is a complete circularity between the fantasies and what evokes them—which came first? But then, what does it matter? Every *real* car deserves its Vaughan, and one day a perfected model of him will be supplied as a fitted 'extra.' "Here, sexual bliss (jouissance) is but orgasm, that is to say mixed-up on the same wavelength with the violence of the technical apparatus, and homogenized by technics alone, and technology summed-up in a single object: the automobile."

But if that was one side of the coin, the implosive aspect, the hyperreality of layer upon layer of 'functionalisms'—objects, environments, verbal systemizations—each confirming the detailed point by point exactitude of the others, then how does *Crash* outbid this order? First, by playing the same game—assume a "universe of simulation" and "character-situations" *at one* with it. Then push the implosive self-referentiality past the limits it can endure—functionalism *needs* its nostalgia for a state of nature, it needs 'needs,' the purposes of which it can then mimic and foreclose; it has to base itself on the programmable (the 'rational') and to make an "exception" (p. 25) of the Accident, that is, it has to negate it—admit its irreducible presence but only in an ineffectual form. Almost all science fiction, says Baudrillard, "still centres, most of the time, on the old couple function/disfunction"—if "fiction surpasses reality here (or the inverse: it's more

subtle)" (*FC*, p. 56), it does so "according to the same rules of play"—the usual sf crises of over-planning or total breakdown. Ballard's fictional space, however, is of "a radical functionalism, which reaches its paradoxical limits and burns them." It can only be called "hyperfunctional"—and Baudrillard doesn't let the chance go by: disfunction is banished from its horizons—and at once everything inspires avid interest because it cannot be judged (by what standards?) and is therefore "ambivalent", a gauntlet thrown down.[22]

Ballard does not try to 'evoke' or re-create the processes that give rise to a Vaughan and an environment of non-stop circularity—that would be to give it the sense of a totality, which is just what has to be missing if this is to speak to our modernity. Rather, the fictional world of *Crash* seeks to regain the seductiveness and challenge defused/diffused in modern conditions in the only way which has ever been possible: by asking "questions to which there is no reply" (*Simulations*, p. 122) which defy the reader to reply with larger questions (in a kind of symbolic exchange)—and these the reader must bring from his or her zero-world, of course. There is no "ideality of meaning" (Derrida) waiting pre-formed 'in' *Crash*; if it brings on anguish, disclaimers, joy(?), laughter or whatever this can only be because its 'gift' has to be countered—isn't the typical response ("extremely alarming", *British Book News*) a kind of potlatch, a throwing down of arms before it? "I set up the book like an experiment"—"It's the reader's reactions that assure the functioning of the book," were Ballard's own comments.[23]

So, to summarize Baudrillard's argument, we can say that the challenge of a text like *Crash* is that it makes oppressively present to the reader a world completely given over to functionalism in both language and landscape (proliferation) and at the same time saved from a dramatic, tragic or critical response by the way the images of this world are always decharged in being *so clearly* 'media-tized', self-parodying, hyper-real (implosion). Two movements, then, are made concrete: proliferation/implosion. Ballard does not seriously attempt to build-up this world, to sell it to us as the product of some prior expansive moment; most sf would do so, and that is why it belongs to the second order of simulacra, those of a production-orientated mindset. Ballard's world belongs to "the simulacra of simulation, based on information, the model, the cybernetic game—total operationality, hyperreality, project of total control" (*FC*, p. 52): the third order. In this case the world is spontaneously generated by the code of language, with its ready-made double-meanings (a ploy Ballard learned from the surrealists). If the reader wonders how things came to be the way they are in *Crash*, the only real answer is—through the duplicity of the word 'accident.' The book 'functions' (as Ballard wittily puts it) because readers *do* use the same word for anything without significance on our statistical horizons as well as for what is, I suppose, a kind of consecrating sacrifice to a whole way of life for 'alarming numbers' of people every day—the car crash. (But this resonance is normally submerged; the writing takes it as read therefore, the reading takes it as written into the language. Ballard's personal views have nothing whatsoever to do with this).

If we accept this point about polyvalence as a premise, then we can relate to the world of *Crash* on a new level; it becomes a conceptual rather than a mimetic landscape (sf—a "literature of ideas" says Ballard). It is not like our world because it 'looks like it' but because it corresponds perfectly to the hidden necessity for a self-modifying open system to feed off chance occurences: the unpredictable may *seem* marginal to a meta-stable self-generating system (and for Baudrillard and Luhmann and others that is the nature of our social formation) but it is crucial to its very existence. In *Crash*, "there is nothing left but

the figures of traffic incessantly circulating (figures incessantes de la circulation), and the Accident is throughout it all, elementary figure, irreversible, banality of the anomaly of death. It is no longer on the sidelines, it is at the heart" (p. 25). This reading comes perilously close to making of Ballard's book a rather trite allegory achieved by literary tricks. It could have been that if the author did not also carry off a skilful manipulation of an obsessional point of view (within a world) so that it reads as a whole world; moreover, the focus of this metaphor—the vehicle—is able to stand metonymically for the entirety of science and technology in that world, which itself becomes therefore an elaborate metaphorical statement of the world order they promise. At this level of 'lived allegory' (if I may call it that) Baudrillard sees a message for those who wish to eliminate all the black areas in the map of knowledge: if all were truth and light, "heaven . . . come down to earth" the result would "uninspiring"—"*No future*"[24]; and it will never arise for that very reason—secretly it has been the unknown and unexpected which has put the spark in life. This is why, when these issues are pared down to an allegorical core and allowed to generate pictures, "All is inverted. It is the Accident which gives form to life, it is this mad figure of senselessness which puts *the sex in life* (c'est lui, l'insensé, qui est *le sexe de la vie*). And the automobile, the magnetic sphere of the automobile, which ends up infesting the whole universe with its tunnels, its motorways, its fly-overs, its sliproads, with its mobile capsule as universal prototype, is nothing but the immense metaphor of it" (p. 25).

Yet Baudrillard insists that *Crash* "would be nothing" if it did not also convincingly show how characters can pass time in the relays of various media—"in orbit" in the *environment of hyperreality* surrounding the central metaphorical intuition. There is the photographic and cinematic "dimension," represented in the novel by Vaughan's cataloguing and doubling of the "shining and saturated surface of traffic and of accidents" (p. 28) and by the "general repetition of the crucial event" he carefully sets up—his and Elizabeth Taylor's death: this is the implosive moment which makes *Crash* "our world" according to Baudrillard. Ultimately, then, his is an appeal to the *pertinence* which sf can have only if it addresses itself to the "general economy" of the zeroworld and then, specifically, in such a way that this disposition becomes questionable once again:

> Only the doubling, only the opening up of the visual medium to the second degree can effect the fusion of technology, sex and death. But in effect, photography is not a medium here, nor is it of the order of representation. It is not a matter of a 'supplementary' abstraction of the image, nor of a compulsion for the spectacular, and the position of Vaughan is never that of the voyeur or pervert. The photographic film (like transistorized music in cars and apartments) is a part of the universal, hyperreal, metallized and corporeal film of traffic and its flows (p. 28).

Because ours is in many ways "a universe where the anticipation of the event coincides with its reproduction," *Crash* is the question it raises, posing as a reality—here "the eye of the camera . . . is substituted for time, as it is for all other depth, that of affect, of space, of language. It is not another dimension, it means simply that this universe is without secrets."

Notes

1 See "Domande a Jean Baudrillard, a cura di Giuseppe Bartolucci" in *Paesaggio Metropolitano,* eds. Giuseppe Bartolucci, Marcello Fabbri, Mario Pisani and Giulio Spinucci (Milan: Feltrinelli, 1982), pp. 61-70. (A very valuable recent interview.)

2 "Qualche domanda a Jean Baudrillard, *"Alfabeta,* No. 2 (June 1979), p. 14. See also Furio di Paola, "Noialtri barocchi e Baudrillard" ("We Baroques ones and Baudrillard": hereafter

"Barocchi") in Jean Baudrillard, *Simulacri e impostura* (Bologna: Cappelli, "Indiscipline", 1980), pp. 113-185.

3 Jean Baudrillard, "Il mormorio della rete," (an interview with Dominique Wahiche; Paris, 5/10/81, trans. into Italian by Silvia Cargnel), *media e messaggi,* 1, No. 1 (1981), pp. 146-152. (Bloom Edizioni, Padua). For an application of the term "social logic" to consumption of commodities, see Jean Baudrillard, *La Société de Consommation* (Paris: Denoël, 1970 and Gallimard, 1974), Part 2, ch. 1.

4 Marshall McLuhan, "The Invisible Environment: The Future of an Erosion," *Prospecta* (Yale Architectural Journal), No. 11 (Fall, 1966), pp. 165, 167.

5 "Simulacres et Science-fiction", now in Baudrillard's *Simulacres et simulation (SS),* pp. 179-188. I am using the first-published Italian translation in *La fantascienza e la critica: Testi del Convegno internazionale di Palermo,* ed. Luigi Russo (Milan, Feltrinelli, "SC/10", 1980), pp. 52-57. (Hereafter *FC*). The quotation is from p. 52; c.f. p. 56—" . . . science fiction is nowhere any longer and it is everywhere, in the circulation of models, here and now, in the very axiomatics of simulation that encircles us."

6 See "La métaphysique du Code" in *L'Échange symbolique et la mort* (Paris: Gallimard, 1976); trans. *Simulations,* pp. 103-115.

7 Baudrillard, *For a Critique,* p. 152. "The crucial thing is to see that the separation of the sign and the world is a fiction, and leads to science fiction" (ibid.).

8 *For a Critique,* p. 202. Baudrillard's argument about "semiological reduction" is placed with those of Lyotard and Deleuze/Guattari to form three "theoretical models" of "the figure of capitalism" by Boris Eizykman in his *Science-Fiction et Capitalisme: Critique de la position de désir de la science* (Paris: Mame, "Repères," 1973), p. 69. Baudrillard's own thoughts on sf took a rather different course, though I will not elaborate on these divergences here.

9 "Estasi dell'oggetto puro," in *Le Rovine del Senso,* eds. Paolo Meneghetti and Stefano Trombini (Bologna: Cappelli, 1982), pp. 117-118. See also "Interconnections" and "Reversions" in "Fatality or Reversible Imminence" = *Stratégies,* p. 215 ff and p. 231 ff (orig. in *Traverses,* No. 23, 1981). C.f. Eizykman (op. cit., note 8), p. 80.

10 Brian Stableford, "Man-Made Catastrophes" in *The End of the World,* eds. Eric S. Rabkin, Martin H. Greenberg, Joseph D. Olander (Carbondale and Edwardsville: Southern Illinois University Press, "Alternatives", 1983), pp. 110. The later quotations come from p. 113.

11 Jean Baudrillard, "Circuiti e cortocircuiti," in *Oggi l'arte è un carcere?,* ed. Luigi Russo (Bologna: Il Mulino, "Aesthetica", 1982), p. 52 (my emphasis); see also "The Tactile and the Digital" in *L'Échange* (trans. *Simulations,* p. 115 ff) and Eizykman (op. cit., note 8) p. 101 on capitalism's "rigorously immanent functioning." Baudrillard's use of 'we' and 'our' is questionable; where, for example, do 'Third world' countries fit into all this? Gérard Klein's influential article, "Discontent in American Science Fiction," *Science Fiction Studies* 4 (1977), 3-13, argues that "*the real subject of a literary work (or group of works) is the situation of the social group the author belongs to*" (p. 4). In that case "the social group of sf," as well as that of university teachers such as Baudrillard, and any others which "can no longer avail themselves of any qualitative privilege, especially of any intellectual privilege" and are, in effect, "threatened by servitude" (p. 8) and a purely operative role *alongside* "the mass of ordinary humans, workers and unemployed workers" (p. 12), may represent this local, group crisis as a global event—"Somewhat like an individual who has a totally illogical tendency to make of his death a universal event, the moment when the stars go out, a threatened social group too has a tendency to confuse its dissolution with the disappearance of civilization" (p. 8). Aside from the magic link which 'produces' texts as 'mirrors' of a social reality (see the first quotation above) we can note that in the very next paragraph Klein writes that "sf is aware that it speaks in the name of very great number of people" (p. 8): perhaps, then, these fictions, and theories like Baudrillard's should be assessed in respect of *the readings they elicit,* which undoubtedly transcend the terms of class analysis. For, if *many* groups are facing homologization in the "undifferentiated mass" then "the temptation of turning the crisis caused by this threat into a crisis of humanity as a whole . . ." (p. 11) (to which Brunner succumbs, in Klein's view) is perhaps better seen as a mark of what makes Ballard, Moorcock and others authentically *modern* for their wide readership. If so, then paradoxically it is through giving this 'crisis' a generalized nature that the 'temptation' of foregrounding *proximate* 'causes,' such as class interests, is resisted. In ways more adequate to the perceived ubiquitousness of the processes of homologization, they like Baudrillard, are trying to turn to advantage the *effects* of twentieth-century developments which are undoubtedly here to stay.

12 Baudrillard, "Estasi dell'oggetto puro" (see note 9), p. 114.

13 C.A. Isnard and E.C. Zeeman, "Some models from catastrophe theory in the social sciences," in *The Use of Models in the Social Sciences,* ed. Lyndhurst Collins (London: Tavistock Publications, 1976), p. 44.

14 J.M. Kibbee, "Management Control Simulation," quoted in Richard E. Dawson, "Simulation in the social sciences" in *Simulation in Social Science: Readings,* ed. Harold Guetzkow (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1962), p. 9.

15 Baudrillard, "Beauborg". See also *Simulations* p. 57 ("The Precession of Simulacra") and *In the Shadow of the Silent Majorities* (passim).

16 Alessandro Dal Lago, "Metamorfosi del sociale e strategie di assoggettamento," *aut aut* n.s. Nos. 179-180 ("Sull'immagine postmoderna") (Sept.—Dec. 1980), pp. 16,17.

17 See also "Orbital and Nuclear" in "The Precession of Simulacra" in *Simulations.* The whole theme is explored in *Au Temps de l'Espace,* Centre Georges Pompidou/Centre de Création Industrielle, Paris, 1983; this is the catalogue of an exhibition with strong links to sf and articles by Boris Eizykman, Daniel Riche, Nathalie Reymond and others on sf/space. Of note: an advertisement reproduced on page 29 shows an Omega wristwatch in orbit around the earth.

18 See Stanislaw Lem, "Robots in Science Fiction" (1969) in *SF: The Other Side of Realism; Essays on Modern Fantasy and Science Fiction,* ed. Thomas D. Clareson (Bowling Green, Ohio: B.G. Univ. Popular Press, 1971), pp. 307-325. (See esp. p. 320 ff).

19 "La métaphysique du code," in L'Échange, ch. 2 (trans. *Simulations,* p. 112) and *Stratégies,* p. 85.

20 Mario Perniola, "Scambio simbolico, iperrealismo, simulacro," *aut aut,* Nos. 170-171 (March-June, 1979), p. 69. The section in Renato Giovannoli's *La scienza della fantascienza* (Milan: Espresso Strumenti, 1982), ch. 4.3 on "The secret name of God" deals with these issues; he discusses Dick, Borges, Pohl and Baudrillard but resists the chance to consider whether the fact that, in Dick for example, "the divine power which constructs (simulates) the world is often of a technological nature" (p. 84), means that the traditional philosophical framework of truth/falsity, idealism/materialism may be disrupted. For him Baudrillard's work on simulacra can only "repropose for the social sciences the philosophical problem of the insubstantiality of reality" (p. 88)—a form of idealism: a surprising resistance to paradigm-disturbing hypotheses, perhaps, in a generally very worthwhile book.

21 Jean Baudrillard, "Le télépatique" in *De la séduction* (Paris: Galilée, 1979). C.f. "Crash!", p. 26: ". . . the range of symbolic wounds, which is a sort of anagrammatization of the sexual organ over the entire area of the body—but then this is rightly speaking not the sexual organ any more, it is something else . . ."

22 Baudrillard also describes *Crash* as "hypercritical," beyond the critical, and therefore not "cautionary," not "a warning against that brutal, erotic and overlit realm that beckons more and more persuasively to us from the margins of the technological landscape" (Ballard's words in the "Introduction" to the French edition). Later, Ballard was to say, "I felt that I was not altogether honest in this introduction because I did imply that there was a sort of moral dimension which I don't really think is there:" from an interview with Catherine Bresson, March 1982, "J.G. Ballard at home", p. 24: in *Métaphores* No. 7, "S.F. Fantastique" (1983), pp. 5-29. (From the Faculté de Lettres, Nice).

23 J.G. Ballard, *Métaphores,* No. 7 (see note 22), p. 25 and "Some words about *Crash!*," *Foundation* No. 9 (Nov., 1975), p. 52. On gifts, symbolic exchange and the potlach see Marcel Mauss, *The Gift: Forms and Functions of Exchange in Archaic Societies,* trans. Ian Cunnison (London: RKP, 1966).

24 Jean Baudrillard, "De la croissance à l'excroissance," *Le débat,* No. 23 (Jan., 1983), p. 7.

Other writings by Jean Baudrillard: (not those whose full details are given above).

1 *Works referred to in abbreviated form in the text and notes:*
- *For a Critique of the Political Economy of the Sign* (orig. Gallimard, 1972), trans. Charles Levin (St. Louis, MO: Telos Press, 1981).
- *In the Shadow of the Silent Majorities* (orig. 1978; new ed., Denoël, 1982) (New York: Semiotext(e), "Foreign Agents Series", 1983)—this includes a translation of *L'Effet Beaubourg; Implosion et Dissuasion* (Paris: Galilée, 1977) and now in *Simulacres et simulation* (Paris: Galilée, 1981). (*SS*).
- *Les stratégies fatales* (Paris: Grasset, "Figures", 1983).
- *Simulations,* trans. Paul Foss, Paul Patton and Philip Beitchman (New York: Semiotext(e), "Foreign Agents Series", 1983); this consists of translations of "La précession des simulacres," *Traverses* no. 10 (Feb., 1978) and of "L'ordre des simulacres" from *L'Échange Symbolique et la Mort* (Paris: Gallimard, 1976).
- "The Beaubourg Effect: Implosion and Deterrence," trans. Rosalind Krauss and Annette Michelson, *October* (M.I.T., Mass.) No. 20 (Spring, 1982), pp. 3-13. ("Beaubourg").

2 *Other works of interest in English:*
- *The Mirror of Production* (orig. Casterman, 1973), trans. Mark Poster (St. Louis, Telos Press, 1975).

– "Forgetting Foucault," trans. Nicole Dufresne, *Humanities in Society* (Univ. of California Center for the Humanities), vol. 3, No. 1 (1980), pp. 87-111.
– "The Implosion of Meaning in the Media and the Implosion of the Social in the Masses," trans. Mary Lydon, in *The Myths of Information: Technology and Postindustrial Culture,* ed. Kathleen Woodward (London: Routledge and Kegan Paul, 1980), pp. 137-148. (Orig., in Italian, in *aut aut,* No. 169, Jan. – Feb.., 1979, pp. 105-116; a shortened version was published in French in *SS,* pp. 121-131).
– "Beyond the Unconscious: The Symbolic" (orig. 1974; revised for *L'Échange,* ch. 6), *Discourse* (Berkeley, CA), 1, No. 3 (Spring, 1981), pp. 60-87.
– "Fatality or Reversible Imminence: Beyond the Uncertainty Principle," trans. Pamela Park, *Social Research,* Vol. 49, No. 2 (Summer, 1982), pp. 272-293.
– "What Are You Doing After the Orgy?," trans. Lisa Liebmann, *Artforum* (Nov. 1983), pp. 42-46; an extremely innacurate version of the French original (same title) in *Traverses,* No. 29 (October, 1983), pp. 2-15.

French author Dominique Douay was born in 1944 in the appropriately named town of Romans, near Lyon, where he subsequently studied Law. Ten novels and story collections followed, including The Chessboard of Creation *(J'ai Lu, 1976),* Life as a Sail-car Race *(Calmann-Lévy, 1978),* Layers *(Denoël, 1978),* Five Solutions to End it All *(Denoël, 1978),* Deadlock Time *(Denoël, 1980), and* The Egg Principle *(Calmann-Lévy, 1980). From June 1981 to July 1983 he was head of cabinet office in the Ministry of Communications under the Socialist government of Mitterand, dealing with the media. Since then he has been magistrate in the Audit Office of the Rhône-Alpes region, though since he likes a varied life he suspects that he will be moving on before too long, and confesses a hankering for the diplomatic service. Mr Douay is a fine, imaginative, committed author who has also had practical experience of Socialist politics.*

The Dream and the Reality

DOMINIQUE DOUAY

By its nature science fiction is a political literature. But we might say that everything is political—therefore every kind of literature is political. Let's say, then, that amongst all the literary genres sf is the one which has the tightest, strongest links with politics; though very often the sole mediating factor is that of metaphor.

This may seem a blunt assertion; but it isn't arbitrary. Every sf story takes place in a world, a civilization, which isn't ours, so in order to remain credible it is compelled—all be it briefly, even just by hints—to describe the mechanisms which operate the society to which the characters belong; that's to say, the political system. Ursula K. Le Guin, Frank Herbert, Norman Spinrad and a lot of other writers have even made such systems the actual protagonists of a good number of their novels. At the opposite pole, how about the short stories of Robert Sheckley where the aim essentially seems to be entertainment? By their behaviour and their dress and their language and the problems they have to solve, his

characters are ironic witnesses (and sometimes victims) of the socio-economic systems we perceive through them.

There's no need to demonstrate this any further by listing a whole catalogue of sf works; which would be tedious. Let's take the political dimension of sf as axiomatic.

But what species of politics? This all depends from what angle you inspect the relevant sf works. The almost invariable role of the hero—and the hero's personality, strongly individualistic and inclined to oppose the constraining social systems which usually lurk behind the administrative and legal apparatus—immediately makes us think of one sort of right-wing ideology, whereby an "enlightened liberalism" opposes the collective hydra. To dwell on this unduly would, to my mind, give rise to a false impression. Firstly, because the sf hero is an archetype rather than a genuine character. Through him, humanity as a whole speaks out, voicing its desire for liberty, dignity and such in the face of structures which humanity itself has established—and which, like all structures, have acquired a life of their own and become an end in themselves. Secondly, since the hero is a rebel—either casually or deliberately—he is far from the ideology of free enterprise. Rebellion is a matter of resisting forces which try to ensure the seizure of the individual; whilst free enterprise aims to establish the power of the individual over objects and other human beings.

The supremacy of the individual, as a means for *all* individuals to reject alienation whilst also refusing to alienate others: sf, characterized thus, seems to be a close relation of anarchist thought.

We can confirm this judgement by analyzing the social, economic and political systems to which the hero finds himself opposed. In all those different systems (the organization of which is generally copied from different régimes currently existing in our world, from totalitarianism on the Chinese model through dictatorship of the Haitian variety to Reagan-style neo-liberalism and self-regulating communism in the Jugoslav manner) we find one constant factor. Whether these systems arise from a democratic decision or only due to the will of certain people in society, whether they express a desire for equality or else establish the hegemony of a single social caste or class, all of them lay down rules which shackle the fulfillment of the individual.

In this area all generalizations are misleading; and I'm well aware of the great number of counter-arguments and exceptions which could be opposed to my punched-out thesis. But these would only apply to one work or author taken in isolation. For instance, when we consider Soviet sf, which is theoretically written in the fiefdom of communist ideology, we find that a notable proportion of works—even when published through the most official of channels—bear the stamp of a critical attitude to state control.

In the majority of its products sf seems like a privileged area where anarchist desires can find expression. But anarchist thought by definition is a network of many streams, from anarchism proper to utopian socialism (that's to say, verging on the scientific socialism founded by Marx and Hegel). Can we go any further in our analysis? Doubtless we would have to summon up the catalogue we spoke of earlier; and locate Ursula Le Guin, for example, close to anarchist theory, and Norman Spinrad within certain utopian socialist trends . . . whereupon we would finally discover that the whole spectrum of anarchist thought turns up in sf.

But let's look at this the other way round. Rather than searching for which streams of political philosophy we can associate with sf, let's take the whole mass of doctrines

labelled socialism and scan those characteristics which align them with this particular literary genre. Right away we can find that, like sf, socialism speaks at once of the present and of the future. It starts from a critique of the present system to conclude with the building of a future society. Now what does sf do, but criticize the pattern of the present through the expedient of metaphor?

At this stage we should distinguish afresh between utopian socialism and scientific socialism. The evolution described by the latter is inevitable; the only thing that's uncertain is the speed at which such evolution will occur. By contrast the edifices of utopian socialism seem like so many literary monuments based at once upon a critique of the present, as we said earlier, and upon the hypothesis: "What would happen if . . .?"

At this point I should explain that I'm only using the term "utopian socialism" for convenience—since this expression, in France at least, is used to define any socialist thought prior to Marx. Thus the adjective "utopian" mustn't be taken to mean "that which will never happen" but simply to indicate the way in which theorists grouped in that school of thought (Saint-Simon, Proudhon, Fourrier and so forth) were often the spiritual offspring of the great utopians such as Plato and Thomas More. And let's note in passing that the literary genre dubbed utopian is one of the ancestors of sf.

However there's a difference, and a big one, between socialism and sf. A literary genre cannot pretend to anything more than speculation. A political trend is in the business of making its ideas come true. Now when Utopia gains the means of becoming a reality, the utopian dream risks being shattered and rubbed to pieces against reality. Not that reality is by its nature opposed to a socialist utopia, but the distance between the two is too great to be abolished in a few months, a few years, or even a few decades. Socialists in government are forced to pull the strings of a society which has been built and moulded by others beforehand and which isn't very often designed for socialist views and benefits. Proceeding one stroke at a time towards reforms which they consider necessary, such socialists risk forgetting their grand visions of the future.

Sf writers don't run this risk. They use reality, but reality doesn't intrude on them. Their dreams won't snuff out just because the world pursues that dream without ever being able to attain it.

Perhaps this brings us to another link between sf and politics. What if the job of novelists is also to breathe new life, through their work, into the visions of political thinkers?

Translated by Françoise Hudowicz and Ian Watson

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Feminism and Science Fiction

STEF LEWICKI

It must have become apparent over the last decade or so to readers of serious and sociologically-oriented science fiction that women were increasingly gaining a presence and reputation in the field: it is this phenomenon that I set out to research and this article is an attempt to convey some of what I discovered and some of the conclusions I reached. In summarizing a lengthy thesis I will be reducing my arguments to bare outlines, one hopes without being over-simplistic, and since I am addressing readers of sf, I will make certain assumptions as to your familiarity with certain works. Throughout my research I was struck by the widespread and enduring nature of feminist politics and commitment, and the continuing development of the theory and practice. Its point of intersection with science fiction came through the well-known desire of political and social revolutionaries to create visions of their ideal society—utopias if you like—and this coincides with developments in sf, including the experimentation of the 1960s new-wave and the breaking of the taboo on the serious treatment of sex in sf. Science fiction was finally developing a long-needed maturity and earning critical acclaim for its careful treatment of topics which connected closely with the everyday life of the reader—the "what if?" that sf can be so good at. It thus became involved in the debate over didacticism in literature; to put it crudely, how far can fiction be politically committed before it becomes propaganda?

I propose to present my argument in the same sequence as I originally developed it, first outlining the different areas of the feminist critique of contemporary society, then looking at the state of sf in the late 1960s and how its path crossed with that of feminist writers, before considering specific novels and stories which reflect, explore and expand on the theory in fictional settings.

Feminism in all its manifestations is a largely socialist ideology as will become clear through the development of my argument; it is, however, important for us to be clear about the differences between what has been labelled "radical" feminism and "socialist" feminism. Radical feminism tends to see men, and their power, as women's ememy, to back off from any contact with men and become politically and sexually separatist, thereby revealing severe limitations: it may work well as a solution to the problems and needs of individual women but it is not, nor can it ever be, a practical solution to the problem of inequality between the sexes. Basically the 49% of the race which is male will not go away or allow separatism on a grand scale—several authors explore this possibility in fiction—nor is separatism the answer for all women; there are those who like men and want relationships with them, albeit on a different level, and many others do not have this

choice, but are dependent socially and economically on men, and thus compelled to be involved with them.

Socialist feminism has a more complex analysis of women's oppression and sees both men *and* the system as together creating that oppression and seeks solutions in a contemporaneous transformation in social organization and male consciousness, recognizing that the feminist transformation of women alone will not win them the society that they yearn for. Men too have to change, and this, at least superficially, is more problematic in that men seem to have a good deal to lose in the achievement of equality between the sexes, and cannot easily appreciate what they might gain. Motivating men to take up the struggle for a new and different future is more difficult and yet vitally important; for this reason there are areas in which socialist feminists seek to collaborate with men, as well as areas where the separate development of the sexes is necessary.

Although the women's movement of the last century achieved property rights, improved working conditions and eventually won the vote, the fact that none of these changes seemed to have done anything to eliminate glaring sexual inequalities led the new feminist movement of the 1960s to an awareness of the need for a thorough-going analysis and revaluation of women's condition on all levels, to clarify and understand how in various interdependent spheres—the social, economic, psychological, sexual and political —their oppression was brought about and perpetuated. Their major contribution to revolutionary politics can be summed up in the phrase "the personal is political," implying that every individual act has its own sexual-political significance in the state of male-female relationships, and coming to the logical conclusion that personal change can, and indeed has to take place on the mundane, individual level to work towards the transformation of society. The old idea that somehow the inevitable, future, all-embracing "revolution" would magically put everything, including sexual inequality, to rights, was seen to have been discredited after the Russian Revolution[1] and also perpetuated a sense of present individual powerlessness in the face of the system. Furthermore, what was regarded as sacrosanct revolutionary theory handed down on stone tablets by Marx and others was taken to be no longer universally valid and needed to be updated and reinterpreted in the light of changed social conditions: none of the old male revolutionary theorists had regarded women's issues as more than a diversion or a sideline.

Feminists criticized male patriarchal society for oppressing women, through the nuclear family which tied them economically to men and saw them as natural child-rearers; this was reinforced through cultural stereotyping in the media. Sexuality itself was defined and dominated by males; women were supposed to be passive, their sexual needs and feelings often unacknowledged. Women's sexuality was distorted through having been seen exclusively in terms of its complementarity to that of men, whereas recent research has underlined clear differences in the nature of male and female sexual needs and responses: feminists demanded autonomy, the right to control their own bodies and their fertility, and have their own sexual pleasure too. They attacked the ages-old sexual exploitation and harassment of women at the hands of men, who saw them as sexual objects. They took issue with the sinful connotations of sexuality which had been inculcated for generations by religious morality and contributed to the perceived inferiority of women. Feminists also criticized the inequalities in the language and how women are diminished and have less opportunity for making themselves heard in a language which is basically constructed by and for men.[2]

The feminist social and political critique is directed at patriarchy, or male power in all its aspects and the inequality it perpetuates. Socialist feminists recognize that among men, power is unequally distributed: not all men enjoy the same power; furthermore it is difficult to trace the historical origins of patriarchal society—though efforts have been made—because of the paucity of evidence to have survived perhaps five or ten thousand years. There is speculation and controversy as to whether a matriarchal society existed before the advent of patriarchy, whether there was a real equality between women and men, and if society was more communally organized, and of course, when and how patriarchy came to replace such a society.

In the present, this critique takes issue with the nuclear family as a central concept in the perpetuation of the oppression of women. The family is seen as directly serving male interests: the husband has a home kept for him, meals prepared and children raised as well as having sexual services provided; indirectly the needs of the state are served too, as the male is kept contented and able to function within the system, thus perpetuating it. The authoritarian male role is also preserved through the man as "head" of the household, and because the family is a separate unit with a basic loyalty to itself, the idea of the necessity of competing to survive is reinforced. The relationship of the family and capitalism is very complex, and feminists disagree over which came first, class or sexual division of functions in society. However their mutual interdependence is underlined by the fact that right-wing ideology has always tended to see the family as a last bastion and refuge against the chaos which would inevitably result from attempts to reform or abolish it.

Feminists know that it is impossible merely to legislate and reform to achieve sexual equality and thereby expect a radical transformation in individual and collective attitudes —the experience of women after the Russian Revolution, which had exactly that naïve expectation, proves that those who want change in society have at the same time to be working to effect the necessary changes in individual attitudes which will aid reforming legislation to succeed. It has been alleged that feminism is a bourgeois Western luxury which only the women of advanced societies such as our own have the time or the opportunity to indulge in, and this is in contrast to the more basic needs of women in the Third World whose inequality and oppression is far more glaring. Can feminism as it exists at present ever hope to reach out to and convince the majority of women, without which it becomes just another minor revolutionary ideology? Finally, its success or failure as a philosophy capable of building a more equal and caring society depends on men also taking up the challenge of changing themselves and their world.

Though the foregoing account of feminist theory is very brief—and there is plenty of material available for anyone who wants to go into the subject in more depth—nevertheless we should expect to find all the themes mentioned in the previous section in feminist science fiction, and, more important, the exploration of potential alternatives.

The specific area of the vast field of literature loosely known as science fiction with which we are concerned here, has been named "speculative" fiction, or "extrapolation" by various critics,[3] and both terms explain clearly what this sort of writing does—speculate about the possible social and individual effects of future changes which are indicated by present trends, with varying levels of probability. Characters, societies and situations are imagined and there is an attempt to visualize the quality of life as a result of the

changes. Speculative fiction has developed and come into its own after a long period of rejection by the canons and critics of "serious" mainstream literature, largely due to the pulp origins of sf in general, and the way this image was perpetuated for several decades; the well-written great sf novels were "subsumed" into mainstream literature without reference to the field of sf with which they are obviously connected—novels such as *We, Brave New World* and *Nineteen Eighty-Four*. The sf New Wave of the 1960s began to win the genre some literary recognition and accliam, as well as bringing sexuality into a genre that had long ignored it or refused to treat it seriously. The generally radical nature of that decade in Western society, and particularly the counter-culture, brought libertarian and ecological influences to bear; radicalism and political commitment flourished in speculative fiction. Joanna Russ has written a number of important articles[4] examining the development and importance of commitment and didacticism in sf.

At times of social fragmentation and crisis the literature of ideas comes into its own as popular consciousness of the fact that society isn't necessarily fixed in its present form forever grows, and it is realized that popular will and determination can transform society. As a result of the tensions in society becoming more apparent and increasingly problematic, literature cannot remain politically neutral, and our perception of it as a construct with apparent and concealed ideological and political significance is sharpened.

The hitherto largely male preserve of sf—we know how little sf by women was written and published, and how often women writers used male pseudonyms—was one of many that feminists challenged, and with success: feminist sf is a significant part of the large literary output generated by the influence of feminism since the mid-sixties. Feminist literature in general, and sf too, has reflected women's concerns with individual self-discovery and personal development, together with radical analyses of society and proposals for alternatives: they imagine worlds they would like to live in and often provide "blueprints" which demand serious consideration as to whether they might be practically realized.

A great asset of sf and one enjoyed by no other literary genre is that it is not circumscribed by the limitations of realism: the critic Robert Scholes dismisses realism as an unattainable fallacy of decreasing relevance in our society[5] and feels that sf gains from being the only genre that accepts that we are shaping the future now and ought to be more aware than we are both of the choices available and the implications of those choices in terms of their effects on the quality of life. The obvious speed of scientific and technological progress emphasizes the need to consider the effect of this on the future. Speculative fiction uses invention, by making a plausible extrapolation of current trends and events, thereby illuminating potential futures: because it is often concerned with the effect of progress on our society we will be aware of an emphasis on groups and societies, i.e. "collective" characters; there is less importance attached to individual characters except insofar as they can be representative "types" of a future society.

Such literature is revolutionary because it demands that things as they are should be questioned; it is political fiction in that it heightens the reader's awareness that humanity has the possibility of constructing a future of its own choosing. Such literature in the past has been, and still is attacked for didacticism and called propaganda by social groups that stand to lose their power through the social transformations advocated:

> Sf as a genre is more useful than "mainstream" fiction for exploring possibilities for social change precisely because it allows idea to become flesh, abstraction to become concrete, imaginative extrapolation to become aesthetic reality . . .[6]

Finally, speculative fiction has a potentially larger audience than much mainstream literature because the broader field of sf to which it belongs is basically a popular literary form:

> The stuff in science fiction that most of its readers find most attractive is . . . the message, which is simply an invitation to think about something along with the author.[7]

Because of its content, the readers of sf are potentially more open to the consideration of different societies and speculations about life in different futures.

Studies of the place of women in sf have shown three distinct phases through which the presentation of women has moved. At first they were mostly weak and helpless creatures often rescued from perilous situations by strong masculine heroes; later they were granted more intelligence and capability, and often appeared as different from male heroes only in gender; there was however, very little or no consideration of emotional and sexual relationships between male and female characters in such novels and stories. More recently and largely due to the changes and influences we have noted above, writers have imagined strong female characters relating to each other and to men as equals whose emotions and sexuality have a rightful place in their lives. It is encouraging that some male writers have written novels and stories from a feminist or egalitarian point of view—writers such as John Varley, Thomas Disch and Samuel Delany, for example.

Feminist writers have concentrated on people and the "soft" or human sciences, the appropriate use of technology, and the importance of communication, rather than the "hard" technological fiction of many male writers, for whom the rational and intellectual logic of progress for its own sake often totally excludes the emotional life of the characters. Thus male-written sf is often criticized—not only by feminists—as immature, peopled by cardboard characters and dashing, unreal heroes. Feminist writers, by attempting to create fuller, more human characters, and exploring their interaction in groups and societies, have undoubtedly contributed to the great improvement in the literary quality of science fiction.

Sf allows feminist writers to take issue with the biological inequality which comes from woman being the bearer of children, and is often automatically seen as implying that woman should raise the children too—and various solutions have been considered, by writers such as Marge Piercy, Suzy McKee Charnas, Thomas Disch among others.

Many of the future societies created in the fiction we will be examining can be seen as utopias, reminding us of the present awareness of human ability to realize utopia or dystopia by its actions and decisions. It is a reflection of the widespread tensions and crises of present times that dystopian possibilities of our own making are increasingly contemplated. The feminist utopias are mainly anarchist or libertarian societies, with more developed relationships between individuals through extended families or some form of co-operative organization, and a strong emphasis on ecological good-living rather than abuse of a planet and its resources; the tendency is towards an arcadian rather than a mechanistic future. There is also a keen awareness among the writers of the ideal society as a work in progress, something to be continually affirmed and remade: stasis leads to complacency and is therefore dangerous. Such a society is often seen as tenuous and dependent on the continual vigilance and commitment of its members—as in Mattapoisett, in *Woman On The Edge Of Time*, or on the planet Whileaway, in Joanna Russ' story "When It Changed." Our appreciation, and the influence on us, of a utopian society is

increased by the plausibility of its link with our present world, and this problem of how the transition to a better society is achieved, is not tackled by all writers.

To bring some order to a consideration of a large number of novels and stories I divided them up into three sections. "Heterosexuality" deals with the articulation of women's dissatisfaction with the present state of affairs and the limitations it imposes on them; "Separatism", the antithesis of this, sees solutions in rejecting all contact with men as the instruments of oppression; and "Androgyny", which visualizes the transformation of women and men and co-existence on a basis of real equality at all levels of contact and interaction. These three categories can be seen as the thesis, antithesis and synthesis of a dialectical progression or argument.

HETEROSEXUALITY

Feminism's premise is women's dissatisfaction with their current lot, and in theory and fiction women are concerned to articulate and analyze the factors that contribute to this feeling. There are difficulties in developing personal commitment to change at the individual level, a frequently painful process; we see this in the development of woman-centred consciousness in the characters of *The Shattered Chain* by Marion Zimmer Bradley, and in Zoe Fairbairn's *Benefits:* it is difficult for women with different needs and aspirations to communicate with each other—for example working-class and middle-class women, Western women and Third World women, women who want some form of relationship with men and women who are separatists:

> . . . the state realized what we in the movement didn't, or didn't care to admit, that most women didn't want to give up entirely. Most wanted to have families and give them a lot of love and time. They didn't want to be taken for granted, despised, impoverished, discounted for doing it, but they had feelings of love for their kids and they saw family links could be good and strong and cohesive and they didn't see those feelings or those links as a male conspiracy . . . which was how many of us in the movement saw them, mistaking the way they've been exploited for the thing itself.[8]

Kit Reed's novella "Songs Of War" portrays the painful realization of ordinary small-town middle-American women that they want society to change: they do not make big demands; many still want to live with men. There is, however, a powerful shared feeling that they want life to be different and better for them, not just to be housewives, mothers or providers of sexual release for men. Nevertheless these women are rejected by hard-line separatists who seek confrontation with men and despise women with attachments to men as traitors to their sex. Divided, the women are eventually defeated by the men.

Perception of the strongly ingrained duality of male and female also helps perpetuate inequality between the sexes; because of this duality, men and women are seen as complementary to each other and therefore certain roles and tasks fall "naturally" to one particular gender. That the two genders have a real biological function is not denied: the cultural constructs of several millennia loaded onto gender *are*. At the beginning of the 1950s Philip Wylie, in *The Disappearance,* first considered what might become of men in a world without women, and women in a world without men. The men can run their world—it has been their "natural" role—but are seen to have been dependent on women for many services, are obsessed by the need for sex, and their competitiveness degenerates into what would today be termed excessively "macho" behaviour; they come to operate by the laws of the jungle. The women, on the other hand, are unable to keep their world functioning, obviously because all such tasks have hitherto been male preserves, and they

lack the knowledge and experience. However they live peaceably and reasonably co-operatively, surviving by cannibalizing the remains of male society, its machinery and resources. Of course, they have the possibility of continuing their society by discovering a way of inducing parthenogenesis, whereas the men are doomed to extinction at the end of their generation. Fortunately the same "deus ex machina" which wrought the original disappearances is reversed and the men and women are reunited, perhaps to learn from their separate experiences.

Theodore Sturgeon, in *Venus Plus X,* written a decade later, several times acknowledges his debt to this important novel by Wylie, as he explores the same theme of duality, its negative influences on humanity, and what it might portend for the future:

> You cannot be objective about it (duality) because you have been indoctrinated, sermonized, drenched, inculcated and policed on the matter since you first wore blue booties. You came from a time and place in which the maleness of the male and the femaleness of the female, and the importance of their difference were matters of almost total preoccupation.[9]

Both writers equally condemn the role of organized religion, and particularly Christianity, for perpetuating the concept of "sin" and sexual guilt, thereby hindering communication between the sexes.

Ursula Le Guin, in *The Left Hand of Darkness* (1969), which many critics see as the first feminist sf novel, presents Genly Ai, a male from Earth, ambassador to the planet Gethen, which is inhabited by an androgynous race whose members are capable of assuming the physical characteristics of either male or female at random during the period of sexual activity: the novel becomes in part a vehicle for comparing the cultural restrictions imposed on the humans of Earth by reason of biological gender with the lives and relationships of very similar creatures for whom such restrictions are impossible.

Feminism encourages women to reclaim their autonomy, and emphasizes the need for separate space and development in a world whose parameters are largely male-defined, and we see the difficult choices this can present, in novels such as Joanna Russ' *The Two Of Them* (1978), in the lives of the Free Amazons, a separatist tribe on the planet Darkover in *The Shattered Chain* (1976) by Marion Zimmer Bradley, and, in a more accessible manner, in the tower block Collingdeane squatted by feminists in *Benefits* (1979) by Zoe Fairbairns. This building becomes female territory and a centre of operations for fighting back when women are threatened by the policies of FAMILY, a government agency which wants to return women to their traditional roles. In a similar fashion we find Amanda, in Joan D. Vinge's short story "Phoenix In The Ashes" (1978), asserting her autonomy and the right to make and live by her own personal choice, setting herself apart from the rigid patriarchal mores of an isolated post-holocaust society. In Alexei Panshin's *Rite Of Passage* (1968) we see the success of the heroine Mia Havero's determination to achieve the transition to adulthood for herself, without dependence on men's help, and how she is impeded in this by her feminine cultural conditioning.

Finally, writers take issue with the larger structures of oppression, such as patriarchy, the amorphous and yet ultimately self-defeating enemy in *Benefits,* or the deadly boring, mundane routine life of the average housewife so brilliantly married to the theory of entropy in Pamela Zoline's story "The Heat Death Of The Universe" (1967). More recently feminist theorists—especially Dale Spender—have analyzed the masculinity of the very language and process of communication and the consequent limitations of the potential for women's self-expression. Grammarians and linguistic purists may squirm at

the attempts made to introduce new words or forms of expression into the English language, but Ursula Le Guin has the inhabitants of Anarres in *The Dispossessed* (1974) develop an entire new language to eliminate concepts of sexual inequality and possessiveness. The people of Mattapoisett, in *Woman On The Edge Of Time* (1976) speak a 22nd-century egalitarian and non-sexist evolved form of English, of which the reader may well approve, conceptually at least, although finding some of the terms rather awkward or silly. The issue of language has been raised and is not likely to fade away.

Some feminists have analyzed in depth what they perceive to be a male fear of the "other," i.e. woman, as something ultimately unknowable and unfathomable, because he is unable to understand her physical and emotional experience: the male needs, therefore, to feel superior or in control of what he cannot rationally analyze and so "proves" women's inferiority to himself. The implications of this as a very old and deep-seated male attitude have been explored in three stories by James Tiptree Jr.—ironically a writer many critics and readers thought was a man, but who has since owned up to being a woman, and who has also published stories under her own name. In "Houston, Houston, Do You Read?" (1976) three male astronauts return from a mission after they have been lost in space for two centuries to find that in the meantime men have died out on Earth, where a thriving women-only society exists and they are very much 'other'. There is no place for their old, macho, sexist values or tendency to violence: the women cannot understand them, and at the end of the story, after one man has been killed whilst trying to attack women, another has gone mad and the third has dimly begun to perceive that there is no place for him, it becomes clear that the survivors will have to be painlessly put down. In "The Women Men Don't See" (1973) we are shown a multitude of small ways in which men are ignorant of women and many aspects of their lives and feelings, and how this contributes to a feeling that there is no place for them in male society to be complete, autonomous and respected individuals: two women make the deliberate choice to leave the planet with some aliens, to go no-one knows where, in preference to remaining on Earth. The even more pessimistic "Screwfly Solution" (1977) supposes an alien plot to take over the Earth by making use of the male fear of women as "other" and tipping the delicate hormonal balance in the male between sexual feeling and the urge to violence, with the result that men wreak violence on creatures for which they experience sexual feelings—and women are rapidly wiped out. Such stories are particularly provocative and hard-hitting because they acknowledge the very real differences between women and men and the tenuousness of contact between them in those areas where neither sex can really "know" the other; they emphasize the ultimately dire result of the failure to at the same time perceive the large areas of community of interest between the sexes, and give due, rather than excessive, consideration to those areas of difference and difficult communication.

SEPARATISM

Separatism can be seen both as reaction and over-reaction to overwhelming male power in society. Ultimately, as we have stated, it fails as a potential solution on the level of realism and practicality, as it does not adequately address the problems, needs and aspirations of all women; indeed, as *Benefits* and "Songs Of War" pointed out, it often dismisses women as traitors. It would seem eventually to lead to some form of confrontation with men if it ever became a widespread choice, and ignores the fact that male attitudes may indeed have been formed by social and cultural forces to which many indivi-

dual men would not necessarily subscribe; thus many men are also "victims" of patriarchal attitudes.

The importance of separatist sf lies in the space—physical and metaphorical—that it gives to women. The issues that concern them can be explored more clearly and directly in worlds in which they are unrestricted by men. The genesis of such utopian worlds, for that is what they are, is either accidental—as in *Herland* (1915) by Charlotte Perkins Gilman, where a combination of war and natural disaster which isolates that country, leads to the elimination of the male of the species, and on the planet Whileaway in Joanna Russ' *The Female Man* (1975) and "When It Changed" (1972)—or by deliberate choice, as in the society of the Riding Women in Suzy McKee Charnas' *Motherlines* (1978), and among the Hill Women of *The Wanderground* (1979) by Sally Miller Gearheart.

In *The Disappearance* by Philip Wylie, which we considered above, we see the women struggle to maintain civilization and a reasonably caring society from a position of distinct disadvantage since it quickly becomes evident just how many of the skills and abilities needed to run a complex society were concentrated in the hands and minds of men: nevertheless they do not degenerate into the competitiveness of the law of the jungle, and the violence and brutality which besets the men's world. The women seem more capable of operating on their own than the men.

The problem of how the species is to continue is central to a separatist utopia: there is a general unwillingness to rely on men as sperm donors (in John Varley's *Titan,* 1979, a vindictive man who is in charge of a sperm bank has deliberately selected sperm of short men to be sent to an all-women space colony, with the effect of producing a race of small women over a number of generations) and so reproduction is usually through some form of cloning, though in the much earlier *Herland,* spontaneous parthenogenesis occurs after all the men have died out. This novel is a women-only utopia from the first wave of feminism and differs in several ways from more recent works. After twelve centuries the women want the return of men, to learn from them and develop their society further—they are aware of the danger of stasis in any utopia—and there is deliberate irony on Gilman's part as the three visiting males condemn their world in comparison with Herland by their own descriptions of it and their eagerness to vaunt its superiority; we fear for the women's world and their achievements which are threatened by the return of men. We also feel this at the end of "When It Changed" when the women of Whileaway fear that their way of life is at risk if men decide to return to the planet, and some of the women feel that the male visitors should have been killed to preserve the security of their world. Apart from *Herland*, then, the separatist utopias share the common theme of suspicion and hostility towards the men that remain. The males of the Holdfast threaten the women in *Motherlines* and the men of the cities threaten the women of *The Wanderground.* It is in this last novel that the two genders are at their furthest apart, seeming almost to be two separate species.

Both *Motherlines* and *The Wanderground* present self-sufficient, non-oppressive separatist societies, organized along non-hierarchical lines, with collective decision-making and communal responsibility for child-rearing. Since they are at risk from males outside, in neither society are all women able to enjoy total freedom and autonomy. In common with most feminist future visions, the women of these societies share a deep ecological awareness of their part in the macrocosm and of the need for a peaceful integration of humanity and the planet rather than mastery, exploitation and despoliation

of its resources, which is seen as a masculine trait. This message, spelt out with varying degrees of explicitness, is at its clearest in the descriptions of Whileaway.

Herland differs from the other fictions in this group in its denial of sexual and emotional relationships between women, evidently a taboo subject in the early years of the century; sexual and emotional energy is diverted into the perfection of motherhood and child-rearing. All the other novels explore intimate relationships as a necessary and integral part of the life of every human being, and Suzy McKee Charnas in *Motherlines* is not alone in acknowledging, in her portrayals of such relationships, that women are just as likely to have to deal with problems like jealousy and incompatibility, though they can enjoy emotional closeness and safety because they do not have to pander to the desires of males, nor fear their violence.

Communal responsibility for child-rearing seems to be the norm, in that it relieves individual women who happen to be mothers of round-the-clock work looking after their offspring: all difficult and disagreeable work is usually equally shared out, child-care included. On Whileaway, a child has several mothers as well as belonging to a web of kinship that extends throughout the society, so that wherever a person is, she is never "alone"; the tribes of the Riding Women of *Motherlines* fulfil a similar function, and children have a great deal of autonomy too, in a tribe of their own, which facilitates the development of self-reliance and learning through direct experience.

ANDROGYNY

Many of the structures of separatist societies are also common to what I have called androgynous societies, which make up the third group of fictions. Androgyny is used loosely here, in a non-physical sense, to describe a new form of relationship between women and men where equality at all levels is either largely a matter of fact or else is being actively striven for by the mass of a particular society. I regard it as a synthesis of the two previously-considered forms of human relations, in that collectively and individually it offers the most optimistic potential. There is a commitment to transcending the limitations of the dualism that divides humanity at present, and an understanding of the necessity for the simultaneous development of new social structures which contribute to the equalization of power between individuals, and new modes of personal relationships which in turn cause new structures to be devised and adopted.

Some novels do present physical androgynes—I'm thinking particularly of Theodore Sturgeon's *Venus Plus X* and *The Left Hand Of Darkness* by Ursula Le Guin. In the former we see the world teetering on the brink of self-destruction because of people's inability to perceive the basic unity of humanity. The implication of the metaphorical use of physical androgynes, which we have no likelihood of ever becoming, is that we must be constantly aware of the possible results of continually reinforcing duality in each new generation. On the planet Gethen, in Le Guin's novel, the sexually stereotyped roles and behaviours of Earth cannot exist; through the potential of any human of that planet becoming male or female during the "kemmer" phase of the sexual cycle, the inescapable unity and equality of all humans is emphasized.

However, it is in imagining societies that I call non-physically androgynous that writers of feminist sf offer the most interesting and accessible ideas and considerations of the future, and present readers most clearly with the choices that face them. A movement towards equality of the sexes on some levels can be detected at present, for example on the

superficial level of appearance, and more seriously in a commitment to honesty in emotional relationships, in a more equal sharing of child-care: in some countries the state has facilitated this by offering parents both maternity and paternity leave from employment.

The social structures of feminist utopias are radically different from those obtaining at present. There is a keen awareness that utopia must be constantly created and renewed, that it is something to be struggled for and consequently demands the commitment of all its members. We see this in the society of Mattapoisett, in *Woman On The Edge Of Time,* where all citizens fight in the probability war which ensures their survival; in the hardships the people of Anarres face together in *The Dispossessed;* and in the willingness of the citizens of *Ecotopia* to defend their way of life against the desire of the rest of the United States to reconquer their country. Violence against individuals or groups is the ultimate crime, and so a commitment to peace and living by ecological principles, and to improving communication between everyone, are hallmarks of such societies. The power of passive resistance to tyranny is often underlined, as in Ursula Le Guin's novella *The Eye Of The Heron,* for example. There is always some form of socialized economic production with careful attention to satisfying real needs of a society's members, and a concern that whatever work individuals do, they will not find that work alienating or soul-destroying, and feel exploited by others. Co-operation between equals is paramount, and people reclaim real power over the direction of their lives by participation on an equal basis in decision-making: there is a concern to avoid what might be called the tyranny of the majority and reach a consensus in important decisions—that is, everyone affected by a particular matter gives their assent. This is facilitated by the fact that ideally communities are much smaller than the cities we are accustomed to:

> . . . she suggested that the natural limit to the size of a community lay in its dependence on its own immediate region for essential food and power, she intended that all communities be connected by communication and transportation networks, so that goods, and ideas could get where they were wanted . . . But the network was not to be run from the top down. There was to be no controlling centre, no capital, no establishment . . .[10]

The power of social conscience tends to be greater than we are used to and sometimes feels oppressive to the Western reader living in a highly individualistic society. However, as Ursula Le Guin describes in some detail in *The Dispossessed,* there is a real danger of the tyranny of conformity and the consequent danger of stasis in such a society; this problem can only be resolved by the participation of everyone, otherwise elites will tend to form in various spheres and power imbalances will develop—this is visible in an extreme form in contemporary society where enormous power is wielded by so-called experts and specialists in particular fields. The philosophies and attitudes which underpin these societies are elaborated at length in chapters of the kind familiar to readers of utopian novels, where the organisation of a society is described to visitors from outside: it is not possible to quote descriptions here.

Writers also need to show us individuals who lead full and happy lives in such societies, and by this to convince the reader of a qualitative gain in human experience. In worlds free of violence, oppression and scarcity, individuals reflect more on the purpose of life and the sort of fulfilment they want, and they make conscious value-judgements about how they want to live. This is constantly reiterated by the various inhabitants of Ecotopia that the visiting journalist Weston meets, and who explain the reasons for their choices and

why they reject the way people like him live in contemporary Western society: along with Weston, we realize that we have never had options so clearly presented to us, nor been asked to make the choices that really matter. The life such characters are shown to enjoy highlights the feeling the reader may have about the limitations of the contemporary idea that human happiness and satisfaction will be brought about through scientific and technological progress and material plenty.

Feminists have rejected the so-called sexual revolution of the 1960s as exploitative of women rather than liberating: along with the control of their bodies that they were given through easier contraception there was a tacit implication that there was no longer any reason for saying "no" to a man. Sexuality has to be free, open and honest, and the choice of any individual demands respect: this is central to personal autonomy; sexual arrangements between individuals are a personal matter rather than in need of any official sanction, although monogamy is one of the choices available to those who desire it. The difference between the supposedly liberated attitudes of the present and real equality in relationships is portrayed most clearly through the development of the character Weston, in *Ecotopia* (1978) by Ernest Callenbach. He is sent from the United States to Ecotopia as the first visitor to the new state which has seceded twenty years previously. We see the inner emptiness and deadness of his emotional life at home, although he has both a wife and a mistress; he discovers his masculine values and behaviour are inappropriate in Ecotopia: the women refuse to flirt, and challenge his values and assumptions, much to his discomfort. The development of a relationship with Marissa, an Ecotopian forestry worker, is a journey of self-discovery and evaluation for Weston as he finds a depth and quality to personal relationships he had never suspected.

There is a similar openness among the characters of *Dreamsnake* (1978) by Vonda McIntyre: they express their sexual feelings and desires directly and accept the response, whatever it is. These writers strive to create characters with human, as well as specifically male or female needs: the need to communicate, for closeness and contact with other people which is inwardly satisfying, accepting and appreciating others for themselves, contact which dissipates feelings of existential aloneness. These writers condemn culturally conditioned duality and seek rather a recognition of the community of interests between male and female.

Since freedom of sexual preference and expression is essential in a feminist society, with the autonomy of the individual being sacrosanct, one might expect the full range of such possibilities to be explored in fiction: this is not always the case. For example, it is not surprising that some critics, notably Samuel Delany, have taken Ursula Le Guin to task for the relationships portrayed in *The Dispossessed,* which is in many ways an important novel in this field. Whilst there is freedom of sexual expression on Anarres, the central characters Shevek and Takver opt for monogamy and a life-long commitment to each other, hardly a fitting central relationship for a novel which offers much more radical alternatives in other aspects of society. Furthermore, Delany feels we have the right to expect more than the token nod to homosexual relationships than what comes across merely as a "youthful fling" between Shevek and his friend Bedap; lesbian relationships are not even mentioned. It is, however, an interesting exercise to compare the overall emotional response we have to life on Anarres with life on Triton, where Delany sites his ideal society in which he attempts to portray more diverse sexuality.

John Varley, in *Titan* (1979) and *Wizard* (1980), has succeeded in bringing consider-

able openness and sensitivity to the presentation of characters committed to equality in sexual relationships, and in a way which presents feminist sexual ethics as internalized in the characters: the effect on the reader of this is to make the sexual diversity not only seen acceptable but also a great improvement on contemporary mores.

Joanna Russ has called the issue of responsibility for childcare a touchstone one for feminists, that shows the depth of a writer's commitment to genuine equality between the sexes. Women's personal control of their own fertility is central in that there must be a free choice as to whether to have children or not. The feeling that the socially and culturally conditioned roles of mother and father within the nuclear family are central to the perpetuation of inequality and social competitiveness, has led writers to imagine ways of randomizing parenthood and to consider *in vitro* fertilization and gestation: Shulamith Firestone, in *The Dialectic Of Sex,* feels that this would liberate women from biological tyranny, but the gut reaction of many people conjures up the baby factories of *Brave New World;* nevertheless the people of Marge Piercy's utopia Mattapoisett have accepted this:

> It was all part of women's long revolution. When we were breaking up all the old hierarchies. Finally there was one thing we had to give up too, the only power we ever had, in return for no more power for anyone. The original production: the power to give birth. Cause as long as we were biologically enchained, we'd never be equal . . .[12]

Responsibilities are shared after birth—in *Woman On The Edge Of Time* there are several "comothers" for each child; there are people who devote themselves to child-raising in *Herland,* and Yefremov's *Andromeda,* following the logic that tasks should be done if possible by those who want to do them and are best at them. We have already mentioned the tribal arrangements of the separatist utopia *Motherlines,* and the planet Whileaway.

The question of whether women "naturally" have maternal feelings continues to perplex feminists, and attitudes vary widely: some realize the importance of not denying this caring or protective instinct—the state anti-feminist organization FAMILY in *Benefits* gets much support because it recognizes these feelings—and ask whether men too might not have such feelings. This idea is sensitively explored in "Emancipation" (1971) an excellent story by Thomas Disch, in which Boz's desire to experience "motherhood" can be realized; his wife Milly has no interest in experiencing it herself and nevertheless can support him in his decision. Such writers would seem to be saying that there is a deep-seated feeling in men that women's capacity to conceive and give birth to new life is more real and significant than any male constructive or creative achievement. The contrast between women's closeness to the creation of life and the man as destroyer of it through violence and warfare is implied time and again: the optimism of some feminists is in their belief that social and cultural conditioning has alienated the male from a part of himself, and he may realize this and do something about it.

In the past, when they have deigned to notice its existence, mainstream literary critics have condemned sf for poor characterization and shoddy writing. It is evident from the quality of many novels and stories that feminist science fiction is part of a movement towards maturity in the quality of sf writing, and is succeeding in attracting some critical attention. Marge Piercy is an established feminist novelist with eight books to her credit so far, and she chose the sf mode as a vehicle for her portrait of an ideal society in *Woman On The Edge Of Time.* To this she has brought her confident and accessible style, creating strong and positive future characters in a novel with a complex structure, which weaves together the appalling conditions of a twentieth century mental hospital with a view of a

twenty-second century utopia accessible to one of the patients, the woman Connie. Ursula Le Guin's *The Dispossessed* is often seen as the prototype anarcho-feminist utopian novel: it has received wide critical acclaim and been translated into several languages. In it she combines the carefully thought-out organization of the utopian society of Anarres with a sensitive appreciation and analysis of the difficulties involved in the creation and continuation of such a society, in terms of coping both with physical and economic adversity and human weaknesses which threaten that society. Such often seductive new worlds emphasize the potential for utopia latent in humanity, combined with a necessary faith in people eventually re-discovering their common bonds, and Le Guin certainly illuminates the tensions between individual and collective needs and aspirations more finely than any other writer so far.

Science fiction such as we have considered in this article, more than any other kind of fiction being written at present, gives voice to human hopes and fears about the future and at the same time offers a way forward from the individual feeling of powerlessness in the face of a society which seems impersonal and immutable. The question of whether one should write didactic literature, and whether it is good or not, has no importance; to argue about it is to avoid facing the choices before us. The visionary nature of feminist sf is the same as that of socialist visions of the nineteenth century such as *Looking Backward* and *News From Nowhere:* all such literature demands that the reader takes sides. It is significant that at crucial times in human history, "didacticism" surfaces in literature. Its persuasiveness, through well-conceived and presented argument which makes contact with the reader and suggests the power of personal change, is a welcome relief from the sterility, self-indulgence and desperate search for meaning of much contemporary literature; today feminist literature and science fiction offer something more solid and outreaching.

This drive to transform society is of course tempered by what Erich Fromm has called the "fear of freedom": the desire for change is often latent; people have to be convinced to take back their power and resist the innate conservatism of humanity that has its roots in a past of scarcity and oppression that we now have the capacity to eliminate, and which leads us to prefer the devil we know. Feminist sf, as we have seen, acknowledges the problematic nature of the future.

Notes

1 A clear account of this will be found in Kate Millett's book *Sexual Politics.*
2 Dale Spender's book *Man Made Language* is the best work on this topic.
3 Notably Robert Scholes and Eric Rabkin, in various writings.
4 "Reflections on Science Fiction," an interview, in *Building Feminist Theory* (essays from *Quest*), Longmans, London, 1981.
"What A Heroine Can Do, or Why Women Can't Write," in *Images Of Women In Literature,* ed. S.K. Cornillon, Bowling Green, Ohio 1972.
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"Towards An Aesthetic Of SF," in *SF Studies* Vol 2 No. 2, July 1975.
An article in *Vertex* Vol 1 No.6 Feb. 1974.
5 See his book *Structural Fabulation* (details in bibliography)
6 Pamela J. Annas, "Androgyny in Feminist SF," in *SF Studies* No. 15, July 1978.
7 N. Wilgus, interview with Suzy McKee Charnas, in *Algol,* Winter 1978/9.
8 Zoe Fairbairns, *Benefits,* Virago, London, 1979, p.204.
9 Theodore Sturgeon, *Venus Plus X,* Sphere Books, London, 1978, p. 124.
10 Ursula Le Guin, *The Dispossessed,* Panther/Granada, London, 1978, p. 85.
11 Marge Piercy, *Woman On The Edge Of Time,* Fawcett Crest, New York, 1976, p. 105.

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The Language Of The Night ed. and intro. Susan Wood, G.P. Putnam's Sons, New York, 1975.

This is just a selection: there are many more.

"D. Ronald Suvin" is both this author's nom-de-plume as verse-smith, and his true name. As to the date "2383"—as Brecht said, "I stamp my poems with their date like calves on a ranch."

Eightie-Foure is Icummen in: Lhude Sing Goddam!; or: 1948 – 1984 – 2048

D. RONALD SUVIN

Poor Eric, all eaten up with TB and hate
At the hypocrisies of Airstrip Number One, the skull
Of Oceania grinning underneath the Victorian musty
England, my England, your England of the upper-class
Terror from public school to Burma; poor George,
Paying homage to bluff common-sense England in Catalonia,
Looking at us smelly animals who are all unequal, but some
More than others; poor Orwell/Blair, reaching for the granddad
Of all us satirists, rationally absurd Jonathan, to flesh
Out cool Evgeniy, invert the bounder Bertie Wells; fashioning
Out of his pain, rage and dead despair a finally—we must admit—
Bad book, more important than a score of Jameses on ladies
(Or flower-girls) leaving the shopping mall at five; supplying—
Mediocre fictioneer, insular politician, memorable
Politician of the English language—our century with its
Small change in slogans, alas still with us in these 80s:
War is Peace. Slavery is Freedom. Bigotry is Strength.
Yet in spite of Eric, at the end of George's *1984*
There falls the shadow of the huge Prole woman. Brecht
Would see there the proletarian Mother, Mother of those to come
After Eric, after us, *des Nachgeborenen:* not 1848, not 1948—

Just wait, 2048 is still to be.
But I shall not live to taste the tea-scented sea.

2383

British author Michael Coney has long been resident in British Columbia, where he works for the Forest Service. (Previous careers have included running a pub in the south-west of England, managing a night club in the Caribbean, and—as an adept of Chartered Accountancy—practising as a management consultant.) Recently he has launched into publishing by founding Porthole Press, specialising in the local history of the Canadian west coast. His career as author began in 1969, since when he has produced numerous fine novels including Brontomek! *which won the British Science Fiction Association award in 1976. Some of his most accomplished work is characterized by an elegiac "sense of place"—as* Hello Summer, Goodbye *(1975). Lately he has been receiving highly enthusiastic reviews for his epic-in-progress* The Song of the Earth, *the first volume of which—*The Celestial Steam Locomotive—*appeared in late 1983, from Houghton Mifflin.*

The Profession of Science Fiction, 32: Thank You for the Music

MICHAEL CONEY

"There is nothing quite so terrifying," my mother once said to me, "as a mad sheep."

This was probably the most influential remark she made during my childhood. It gave me a healthy respect for the unknown, a glimpse into the strange private world of the insane, a dislike of paradoxes, a distaste for mutton, and the beginnings of cynicism. But above all it introduced me to the wonders of language. My mother's precise wording still left room for my personal ultimate fear: a nest of lobsters in my bed. A mad sheep was the worst, with a unique terror all of its own, and for years I gave those woolly, deceptive horrors a wide berth; but lobsters were *almost* as bad.

My mother was an extremely clever and able woman and my late father was no slouch either. It is due to their influence, genetic and otherwise, that I can do the things I do, including writing. But I have not been kind to them. As a child I saw them through perceptive and critical eyes, so I saw the worst. As an adult I wrote about them in a thinly-disguised autobiographical novel called *Hello Summer, Goodbye*. This is what I wrote about my mother.

> My mother is short and I am tall for my age, so that it is impossible for us to keep in step as we walk. She trots along beside me, legs going like pistons, and insists that she puts her arm through mine, so the pair of us reel along the street like drunks. Added to which she talks incessantly, looking up at me all the time and smiling fondly, and generally giving the impression that a very peculiar relationship obtains between us. I find myself praying that people think she is an old prostitute I have picked up; and to emphasize this effect I try to assume a shamefaced look—which is not difficult, under the circumstances.

And about my father, with whom I'd had many a bitter quarrel during that period when I was challenging him for leadership of the herd:

Father's intelligence was waning, he was older and set in his ways, he was used to leaning on the dignity of his position; in short, he had lost the power of reasoned argument.

Ten years have passed since *Hello Summer, Goodbye* and it is time to look at the other side of the coin. These two bright and complex people gave me their genes and their ideas, which is a far more important contribution than any learning and travelling I have done since. I am them, and my stories are their doing, and my interests spring from their influence; and if I sometimes opposed this influence instead of accepting it—well, that must be credited to them too, because they taught me to make up my own mind, to resist pressure, and to fight. And even though I didn't believe all their pronouncements, they had the knack of opening interesting avenues of thought.

"French Canadians, as everyone knows," said my mother one day, "are very unreliable people." A bigot would have nodded assent to such a remark, and a knee-jerk liberal would have turned blue with rage. But to me the truth or otherwise of such a remark was immaterial. It was the possibilities that mattered. I like to think that my interest in anthropology and genetics was born from such speculation, and has flowered in practically every story I've written.

And once again, her wording was elegant and persuasive, much more so than my father's somewhat crude "All Welshmen are bloody thieves." All credit to my father, though, for being the more expert at developing his theme, as when he followed this remark with, "All Cornish are bloody thieves too. They come of the same stock." My mother was Cornish, incidentally.

The French Canadian in question was living with a close relative of ours. He got her with child and then left her, demonstrating the depth of my mother's insight. My mother wrote to me, cataloguing the misfortunes of this relative, whose baby was sick, who was having problems at work, who was heavily into debt and God knows what else. "And to cap it all," wrote my mother, "her horse died of a heart attack while undergoing castration." My wife read the letter and wept with laughter, which reassured me that there was nothing wrong with my own sense of humour. It was simply that my mother's rare talents needed harnessing and directing. I wrote about my wife in *Hello Summer, Goodbye* too, and I was very nice about her.

Although, speaking of castration, her insistence on having our tomcat neutered bothered me. "He'll be a much happier cat," was her reasoning. Freed, presumably, from those nightmare visions of lust which plague the rest of us men.

My mother is a talented artist as well as an undiscovered writer, and actually sells her work. My father, on the other hand, was a craftsman. He'd played representative rugby and water-polo, and had trophies for swimming and boxing. He devoured knowledge voraciously, and in his spare time he built model sailboats and aircraft, steam-powered miniature warships, and a magnificent series of miniature steam locomotives. The last of these was the finest: a Royal Scot built from his own drawings, from his own wheel and cylinder castings and endless brass parts which he'd turned on his lathe. I used to drive it up and down the track at Cadbury's in Bourneville, pulling up to twenty people on trucks. I've loved trains ever since.

There was a time in those ancient days of steam when we were all train spotters. We cycled to lonely spots and watched the trains go by, all day, never tiring of the sport, speculating in the way boys do, philosophizing, or just sitting alone awaiting the beauty of

the next locomotive. We loved them all: the hurrying Scots, the stately Kings, the knightly, old-fashioned Bulldogs, even the effete Gresley Pacifics. Best of all we loved the Duchesses with their lines of brutal power, their vast boilers and muscular cylinders.

We enjoyed a simple male bonding: the trains, my friends and myself. The locomotives were undeniably masculine and only a fool would refer to one as "she." Girls didn't like locomotives; the pistons frightened them. And yet technically the steam engine is a female thing; the power resides in the cylinder and the piston is merely the cylinder's tool.

Train watching was a perfect opportunity for introspection and I used to make the most of it; weaving fantastic dreams of power between one train and the next; inventing death rays and perpetual-motion machines, splitting the atom and exploring the Amazon basin, shaking the hand of Winston Churchill ("If there were more young fellows like you around, Coney, I'd feel a little more confident about the future of the Free World . . ."), diving headlong to nod in the winning goal ("Coney sparks the Villa to sensational victory in the last minute . . ."), and accepting the Nobel Prize for my seven-page mystery novel, *The Murder at Tamworth Station.*

Wonderful days which I relived in a story called "Those Good Old Days of Liquid Fuel"; but I had to base the story around spaceships instead of steam engines otherwise *F&SF* wouldn't have understood it. It was fun to recapture the mindless joy: "No doubt we were sublimating our adolescent urges in those days, but in our innocence we thought we were watching the spaceships."

More recently came *The Celestial Steam Locomotive,* which straddled the dimensions of Space and Time known (to the characters at any rate) as the Greataway. "Her fingers traced the brass beading around one curved splasher. The warm metal was vibrant and alive. 'The Locomotive is the most beautiful thing in the world. It's the distillation of everyone's idea of what a machine should look like. It's composed of a million smallwishes, a million dreams of beauty.' " And sustained only by the imagination of its passengers. A pity that Houghton Mifflin's cover shows an American engine with cowcatcher and headlamp, instead of the Great Western "Castle" which I'd envisaged.

The trains influenced *Cat Karina* too. The coastal sailways of Karina's world combined twin obsessions: sailing and railways. Sometimes I wonder how mainstream writers can keep writing, with nothing exciting to invent. Perhaps they're all basically hacks.

Some memories are more vivid than others. I recall a chilly morning at Birmingham (Snow Hill) station, and a slow beat of exhaust from somewhere in the fog. An unseen locomotive was struggling to bring a freight train up the gradient into the north end of the station. Occasionally the beat became muffled thunder as the engine lost its footing and slipped back a few yards. Eventually it broke into view, headlamps staring and boiler bulging with effort, a Class 8 2–8–0 of Stanier design oozing steam at every pore, striving to lift its load over the lip of the hill—and failing. With a baffled roar and sparks spurting from the spinning wheels it slid back into the fog, down to the bottom of the hill to try again.

The GWR had built this locomotive as a wartime standardization measure, but basically it was an LMS engine and out of its element here. Every so often it would reappear, smoke fountaining into the cold morning air, then it would fall back again, beaten. I felt sorry for it. So many tries, so many failures. At last the authorities dispatched the station pilot, *Lady of the Lake,* to assist. Encouraged, the Class 8 made a mighty effort and with quickening exhaust the two of them brought an endless train of

freight wagons into the station. *Lady of the Lake* uncoupled, and in triumph the Class 8 departed on level ground, wagons rattling behind.

I like to think I learned something from all that. I like to think of myself as Robert Bruce but with something more spectacular than a spider to draw inspiration from. The Class 8, in a strange land, with the elements against it and battling intolerable odds, had won through like the true champion its creator, William Stanier, knew it to be. I like to think the incident taught me the value of quality, of persistence, of courage in the face of adversity.

More likely, however, it taught me that if you make a big enough ass of yourself someone will take pity on you, usually a woman. And that, perhaps, is an even more valuable lesson.

I feel sorry for those people who never knew the glory of steam; they missed so much. Once my daughter Sally took the train from Esquimalt to Courtenay, British Columbia. It's not a steam train but it does rattle through mountains among steepling douglas firs, over frightening timber trestle viaducts, and along a coastline renowned for its beauty. It's not really a train either; just a railcar. But it runs on *rails,* and it has that indefinable railway *atmosphere,* and when she returned I asked Sally, then fifteen years old, how she'd enjoyed it.

"Not bad," she said with mild enthusiasm. "Saw a dead horse."

I said I don't like paradoxes, and I don't like this one. As a child, many of the things I was taught as facts later proved to be wrong, but the things I found out for my innocent self were usually right.

They taught me there was one God and I believed them, and despised the ancient Greeks who attached gods like trade-marks to every conceivable object. "God is an old man with a beard, sitting on a horse cloud," Dad Ose told Manuel in *The Celestial Steam Locomotive,* and the events in that book were in some way a revenge on the way Society had taken me for a sucker, when I was a kid.

I also believed that tortoises hibernated, and that mushrooms sucked back into the ground during the heat of a summer's day. The gnomes in my novel-in-progress, *Marazion,* believe that about mushrooms too. As for the tortoise, I put mine in a shoe-box in late autumn, and packed him with straw against the winter cold. He struggled for a while, but soon accepted his lot. I closed the lid and stowed him away in a corner of the disused stable at the bottom of the garden.

In the spring I remembered him, and how the thoughts of food and sunshine would be jostling each other in his slow brain. I visualized him darting across the lawn like a runaway tank, frisking like a lead-footed lamb. I opened the box and took him out, but he showed no sign of emerging from his shell.

In fact he seemed to have deserted his shell altogether. It was empty. I held it up to the light and looked through it. There was a hole at the back for his tail, and there were two holes on either side for his legs. The inside of the shell was spotlessly clean. Of the living, loving part of him, there was nothing. His time had come, and God had spirited him gently from his shell and up to heaven. I buried the shell with proper reverence and returned to the house feeling cleansed.

It was unfortunate that I subsequently overheard an Orwellian remark by my father to my mother.

"The rats got that bloody tortoise of Mike's. Christ, they'll be after the dog next. We'll have to put some poison down. With luck we'll get that bloody cat from next door, too. Kill two birds with one stone."

If the tortoise reaffirmed my childish belief in One God, the dog, whose name was Chips, taught me about madness and death. There was something Poe-like in the manner of Chip's passing. I'd never liked the dog, which had been very old all his life, and which had a habit of standing stock-still with trembling haunches, staring at aliens. And I'll swear that my mother once used his food dish to bake a treacle tart. I refused a slice at dinner and they never knew why; but my suspicions had been aroused by the exact shape and size of the tart. Of course my mother had taken it out of the dish by then; in fact the dish was on the floor filled with some abominable stew which Chips was presently staring at; but I was not to be fooled.

Then one morning there were strange pounding noises coming from the kitchen. My mother and I met at the top of the stairs, exchanged glances of mutual fear, crept downstairs and opened the door.

Chips lay on the floor, foaming at the mouth and banging his head against the table leg. I could tell at a glance that he was certifiably insane. Madness had always terrified me. Whimpering with dread I scurried from the room, leaving my mother alone with that unpredictable monster whose strength and ferocity, I was convinced, could be compared to a choleric crocodile.

I used to read the humorous sea-stories of W.W. Jacobs. I loved them; the bizarre situations, the drunken sailors, the accommodating widows and shrewish wives. But in the middle of one volume was a story called, I think, "The Three Sisters." Those sisters were mad. They scared the hell out of me. I was frightened to pick up that book in case the pages fell open at "The Three Sisters," and my eyes alighted on the fearsome words. Finally, one bright summer day, I picked up book and glue, found the awful place where one sister ran screaming into the night, blanked out that part of my brain which controls reading ability, and stuck the pages together . . .

My father set a large wooden box on the lawn, upside down. Then he carried the thrashing, foaming figure of Chips out, dumped him on the grass and put the box on him to form a dark asylum. Next he brought a stinking potion from his surgery—he was a dentist—and put it under the box with Chips. My father said it would put Chips to sleep, but I knew it was a death gas.

Chips uttered a doleful "Woof!"

"He's better," I said. I wanted this dog I disliked to live and be normal. I wanted everything to be the way it was, and I'd gladly have eaten a slice of treacle tart.

I've always wanted to write a book where nobody dies, but I haven't done it yet. The best I can do is to try to make death *mean* something, and to step right inside my own character's minds when they react to it, so that my reaction is theirs—and sometimes all too obviously, as when poor El Tigre saw the bloody results of his rebellion in *Cat Karina,* and knew he hadn't really won at all. That was a good example of the character taking over the author.

Chips barked for a long time while I wandered around the garden trying not to listen.

Then the canopy moved, and he could see the joints and segments. And his mind snapped into focus, and he realized that Shenshi stood directly beneath a monstrous spider. Fluid was dripping from the creature's jaws as it began to stoop toward him.

> Bawling with horror, he flung himself to the ground. He drew his knees up to his body and covered his head with his arms, and felt another drop of moisture fall onto the back of his hand. It began to eat at his flesh, corrosively. *(Gods of the Greataway)*

When I was a child we didn't have a refrigerator, so the milk would sometimes go bad and clot up inside the neck of the bottle. The lower half would thin out, and the whole would turn greenish. My mother would utter a croak of disgust and take it away.

One day a muslin bag appeared in the cellar of our big old house. It hung from a hook, full of something pulpy to my prodding finger, and soon it began to drip moisture into a jar. This liquid was crystal clear, yet terrifying. I became obsessed with the fear that I would sleepwalk into the cellar one night and drink it. When I write of a corrosive fluid drooling from the jaws of a monster, *that* is the fluid I'm thinking of.

Aeons later my mother took the bag down and carried it into the kitchen. She opened it up on the table and inside was a *brain,* white and slippery. Or was it a brain?

It certainly looked like a brain, although it was too small to be human. I knew that, because there was a human skull in the cellar and the brain cavity was quite large. The skull was the property of some long-gone medical student, so my mother said, although I always suspected it to be the remains of a deformed half-brother of my father.

It could have been a chimp brain, but commonsese told me my mother had no reason to keep a chimp brain in a muslin bag. It looked a little sloppy around the edges; and I knew that, whoever its late owner was, he couldn't have been too bright.

Then suddenly, with appalling certainty, I knew what it was.

It was the brain of Chips!

Just about then my father grunted, leaned forward with a knife, cut a slice from the brain, spread it on a Carr's Water Biscuit and began to eat it.

I went down to the bottom of the garden where the old stable was, and looked at the mound under the crab apple tree. The soil was undisturbed. The vision of Chips' skull, empty as a tortoise shell, faded. The child is a resilient life-form.

The sun came out and I climbed the tree and surveyed my world; the roofs and the railway and the neighbour's cat on the compost heap asleep, or maybe poisoned; and everything was wonderful again.

The world is still wonderful, and often I sit between that world and my typewriter, trying to build a straight and perfect road from one to the other. Unfortunately that road must pass through my brain on the way, and on too many days my brain resembles one of my mother's creations: having the appearance of intelligence—the convoluted cellular structure, the pale wetness—yet inert, and possessed of an inner rot.

Those are the days when I work hard at writing, pounding sentences together as though with rivets. On those days I wonder if it is worth the effort; but I persevere, and after a page or so the words begin to flow a little more easily. Whether the sentences combine to make a useful contribution to science fiction is another matter.

And then on the brighter side, there was the music. My parents both played the piano; my mother's head nodded from side to side and my father's long fingers rustled over the keys like dead leaves so that sometimes I'd find myself listing to the fingers instead of the music. They favoured the classics, and were critical of my liking for Richard Rodgers, Cole Porter, Gershwin. "There's never been a good musical written since the days of Gilbert and Sullivan," said my father.

"What about *Oklahoma*?" I would ask.

"Bloody American junk."

However, my mother once said to me in private, "Your father only ever went to one Gilbert and Sullivan thing—I forget what it was called. He walked out half way through. He said he couldn't take another minute of this tumty tumty music."

It was a cerebral thing, my liking for American music. I admired the craftsmanship of a good song, but it didn't often touch the heart. Those were barren days before Bill Haley, days of mass-production melodies to an AABA formula.

Except for three minutes every Saturday night. Ten o'clock would find me home and in bed, headphones clamped on, fiddling with a temperamental radio which a stranger might have mistaken for an orange box (built by my father, of course), tuning in to Edmundo Ros.

For an hour I would listen to catchy sambas, hard-driving mambos which presaged the early rock, and, once in each programme, a magical, lilting beguine. Now *this* touched my heart. The unison of melody and rhythm possessed me in a way no other music did. For three minutes every week, I was a boy fulfilled.

"You know he's actually an Englishman," my mother told me. "His name's Edmund Ross with two esses. The photographs are of a different man altogether." This was before TV, so I had no way of disproving her. Years later I met Edmundo's brother, Hugo Ross, at a party in Antigua, and found him satisfyingly black. Through all those years my love affair with Latin music continued, and was consummated with the coming of the bossa nova. With its complex rhythm, jazz improvisations, and haunting minor key melodies by such as Luiz Bonfa and Antonio Carlos Jobim, it provided the perfect counterpoint to writing science fiction.

I can't say why. I don't know why it helps to build a scene in a novel around a piece of music. Music, being totally abstract, certainly helps to clear the mind. Maybe it also creates the mood, putting the writer in the appropriate frame of mind, so that he doesn't have to start cold. Sometimes it helps with the background, fleshing it out, humming away like a tangible part of the book—as happened with *Cat Karina, The Celestial Steam Locomotive* and its sequel, which may be called *Gods of the Greataway,* unfortunately. Sometimes it intrudes right into the storyline.

"And the girl was tanned and straight with hair the colour of a fair sunset, and she stepped delicately over the pebbles although her feet were now becoming accustomed to the rough ground . . . She didn't glance at him yet." So walks a Girl from Ipanema, in *Gods of the Greataway.*

Sometimes the connection is not unconscious. Jobim wrote a strange song called "The Waters of March," and I was listening to it one day. The disconnected words and rolling melody held a million possibilities, and I was in a plotting mood. I was also stuck for a good strong human interest theme for *Locomotive,* which so far was all ideas and no heart.

What were the Waters of March? What was the meaning of the line: "And the riverbank talks of the waters of March?" As I pondered this, the gentle rhythm flowed, and the words began to come.

". . . The river flowed brown for most of the year, having picked up silt and broken vegetation during its journey through the rain forest. But once a year it flowed clear and green, and carried to the delta—"

What did it carry to the delta? This is Brazil of the future; a lot of things have changed in 91,000 years. So what's the most unlikely thing? Think of something; go on, *think* . . .

"—and carried to the delta a flotilla of tiny boats carved from balsa: model galleons, frigates and dhows . . ."

And? Listen to the music . . .

". . . and in each boat lay a human baby, crying and waving tiny fists at the sky."

That's the inspiration. That's the basic idea, caught in a time span of three minutes and fifty-five seconds, according to the album *Jobim*. Not much to build on, but intriguing. Next came the work; the hows and the whys, the plotting, the explanations and the denouement. That's the fun of science fiction. You don't get it in the mainstream. I'm lucky to be writing it. I think it was an accident of birth.

Gary K. Wolfe, besides authoring fiction short and long since his first appearance in Worlds of Tomorrow *in 1970, has also produced much fine criticism—though till now no feature essay for* Foundation. *We are delighted to remedy this with the following fascinating and alarming account of nuclear politics in the fiction of Lester del Rey. Currently with the College of Continuing Education of Roosevelt University, Chicago, Mr Wolfe first presented this study at a meeting of the Midwest Modern Language Association in Autumn 1983.*

Nuclear Rhetoric in Del Rey's Nerves

GARY K. WOLFE

Discussions of nuclear energy in science fiction, and in the criticism of science fiction, have understandably focused on the potential effects and aftermath of the use of nuclear weapons. Literally within months of the bombing of Hiroshima and Nagasaki, atomic power was declared one of the major themes of sf in Groff Conklin's *The Best of Science Fiction* (1946), the first major anthology of magazine sf to appear in hard covers (appearing some months before the more famous Healy and McComas anthology, *Adventures in Time and Space*). Conklin devoted the first fifth of his nearly eight hundred pages to stories presented under the heading "The Atom." Needless to say, each of these tales antedated the official start of the "atomic age," and considerable pride was apparent in the way Conklin, like many other sf advocates of the period, reminded readers of this.

In fact, despite the dramatic appearance of prescience which hindsight lends to such tales, atomic power and weaponry were almost inevitable themes in science fiction from the moment the suspected relationship of matter and energy was first made public in the opening decade of this century. Atomic-powered spaceships and weapons were

introduced in tales published as early as 1911, and the phrase "atomic bomb" itself appeared in H.G. Wells's *The World Set Free* in 1914.[1] One can of course question whether the mere appropriation of the term "atomic" constitutes meaningful speculation, but by the thirties enough research was being made public to enable authors to begin serious consideration of the potential of this new energy source. Not surprisingly, one of these authors was John W. Campbell, Jr., whose 1934 *Astounding* story "Atomic Power" marks a kind of transition between earlier "worlds within worlds" tales, made popular by Ray Cummings and probably inspired by Rutherford's solar system analogy in describing atomic structure, and later more "realistic" considerations of the problems of nuclear energy (Campbell's story has our own solar system as the "atom" being split by a higher order of beings). Campbell's fascination with atomic power continued to grow, and after he took over the editorship of *Astounding* in 1937, he begun to devote editorials to the subject and eventually to encourage his authors to develop stories exploring this theme.

One of the first such stories was Robert A. Heinlein's "Blowups Happen" (September 1940), which described the tension inherent in working in a nuclear generating plant with the ever-present danger of uncontrolled reactions resulting in an atomic explosion. Such an explosion, wrote Heinlein, would "dwarf the eruption of Krakatoa to popgun size; an explosion so far beyond all human experience as to be as completely incomprehensible as the idea of personal death. It could be feared, but not understood."[2] Heinlein followed this in May of 1941 with "Solution Unsatisfactory," which dealt with the use of radioactive dust as a military weapon (the story's original title, "Foreign Policy," suggests the political themes which Heinlein was already associating with nuclear energy). In 1944 came the story which generated what is probably still the most famous anecdote in sf history, Cleve Cartmill's "Deadline," which described an atomic bomb using uranium 235 and which supposedly precipitated a visit to Campbell's office by military intelligence agents who were convinced the story was evidence of a breach of security. Clearly, by the time of the 1945 bombings, nuclear energy came as no surprise to regular readers of *Astounding*.

Of all the stories to appear in *Astounding* during this period, the one which has survived the longest and most clearly achieved the status of a science fiction classic is Lester Del Rey's "Nerves," which appeared in September of 1942. Campbell had suggested to Del Rey the basic idea of an accident in a nuclear plant told from the point of view of the company doctor, and viewed in the context of other *Astounding* stories of this period, the story seems a logical outgrowth of various pressures and influences on a dutiful contributor. Del Rey had already achieved a reputation as something of a sentimentalist, and may have wanted to overcome this in a tale that more closely approximated Campbell's preferred style of hardboiled realism. The idea of setting the story in a nuclear plant was also Campbell's, but the exact function of the plant was another problem. A nuclear power plant would make the story too much like a repeat of Heinlein's "Blowups Happen," while a plant devoted to the production of nuclear weapons might result in the kind of security problems that Cartmill's "Deadline" later precipitated.[3] Del Rey's compromise was to set the story in a plant devoted to the production of "superheavy" isotopes for medicine and industry, with electrical power and weapons research reduced to passing references (the plant provides power for the surrounding community, and a Japanese scientist working at the plant has hopes of

finding an isotope which will permit the construction of a nuclear bomb; the latter becomes a nuclear rocket fuel in the 1956 novel version).

"Nerves" was unanimously voted the favourite story in that issue by readers of *Astounding,* and was among the longest stories included in Raymond J. Healy and J. Francis McComas's landmark 1946 anthology *Adventures in Time and Space.* In 1956, Del Rey expanded the story into a full-length novel for Ballantine Books, which eventually went through five printings, and in 1973 the original novella was voted into the *Science Fiction Hall of Fame* anthology by members of the Science Fiction Writers of America. In 1976, Del Rey again returned to the story, and revised the novel for its sixth printing. In terms of longevity and popularity, then, there is much to suggest that this story is among science fiction's most significant treatments of the theme of nuclear research—and there is much in the story itself to reveal the chronic ambivalence the genre has displayed toward that theme. In its three major incarnations—as a 1942 *Astounding* story, as a 1950s novel, and as a 1976 revision—"Nerves" is a fascinating case study in how a particular sf author, over a period of nearly forty years, has addressed issues of nuclear energy and research as these issues grew into serious questions of public policy. And while it must be said at the outset that Del Rey made no attempt to rewrite the story for a new generation each time he returned to it (for the most part, the 1956 and 1976 alterations consist of clarifying motivations and updating scientific ideas), it is nevertheless worth studying these revisions to note what basic assumptions survive.

In all of its versions, "Nerves" conforms to one of the curious paradoxes that seemed to characterize much Campbellian science fiction. On the one hand, it describes in some detail an industry that is, in current terms, decidedly "high tech"; on the other, it conceives this industry almost entirely as an extension of the heavy mining and manufacturing industries of the past. There are no robots in Del Rey's isotope factory, and very little automation of any kind. The workers are burly "atomjacks" who speak in pulp fiction's indelible idea of working-class dialect, and the working conditions seem more like those of a foundry than those of sophisticated new technology, with such hazards as superheated magma leaking from burst pipes and uncontrolled reactions "spitting" bits of radioactive matter into the men's clothing and skin. Even medical science does not seem to have made great advances in Del Rey's unspecified future, with treatments which include curare, morphine, and "neo-heroin" (although the latter was changed to "paramorphine" in the 1976 revision). In fact, virtually the only scientific extrapolation in the story is the hypothesis that the instability of transuranic elements extends only through a limited range of atomic numbers, after which the "superheavy" isotopes—those with atomic weights exceeding 350—again become stable, and therefore useful in medicine and industry.

While this deliberate restraint from excessive gadgetry helps Del Rey achieve a realistic tone unusual even for *Astounding,* it also tends to shift focus away from the story's technological ideas and toward the theme of industrial management—which in fact was one of the great hidden themes of many stories of this period, including Heinlein's "Blowups Happen." The nuclear industry as presented in this story is one that might have sprung full-blown in 1940s America, and the problems are those faced by almost any heavy industry of that period: occupational safety, worker satisfaction, community relations, federal regulations, etc. And the responses to these problems of the plant managers (represented in the story by the character Palmer, who like many such managers in sf

worked his way up through the ranks) are brusquely pragmatic. A nearby swamp makes "as good a dumping ground as anything else" for the plant's waste products, and when landowners object the company is "forced to take over all adjacent land and quiet the owners' fears of the atomic activity in cold cash."[4] When Palmer needs volunteers to enter a contaminated converter housing to rescue the one engineer, Jorgenson, who can save the day, he gets them by offering " 'a thousand dollars a minute to every man that gets a stick in there, double to his family if the stuff gets him, and ten times that—fifty thousand—if he locates Jorgenson!' " (p. 134). Perhaps most remarkable is the impatient attitude, shared by the narrator, toward growing public sentiment to isolate nuclear plants from centers of population. When the crisis is finally resolved with seventeen men dead and more than three hundred unconscious (out of a labour force that seems to approach two thousand), the successful prevention of a nuclear explosion is for Palmer "proof that atomic plants were safe where they were" (p. 178)!

While these attitudes clearly seem to be endorsed by Del Rey, it would be unfair to accuse him of shortsightedness or insensitivity to issues that arose years or decades after he wrote the story. The reality of nuclear devastation was still three years away in 1942, and the public consciousness raised by the cases of Karen Silkwood and Three Mile Island was more than thirty years in the future. In fact, the description of growing public fears of nuclear plants, and the concomitant political involvement of plant managers, was a remarkably apt social extrapolation, and the portrayal of one of the key scientists as a sympathetic Japanese was unusual and even courageous for 1942. But the focus on tough-minded management stonewalling its way through all potential problems, and the model of the engineer/manager as hero, are common to much sf of the time. *Astounding* may have appeared critical of science and technology in much of its fiction, but a careful examination of the ways in which it was critical will almost inevitably reveal that problems lay with the manner in which technology is managed, and never with the technology itself—"operator error," in current computerese. Once a technology has been established with a sufficient economic base, in the mythology of golden age sf, the fiction takes an extraordinarily conservative turn. Problems arising from the technology can be solved through sufficient ingenuity, or the technology itself replaced with a new and higher one, but seldom will we find a story in which the technology needs to be fundamentally restructured.

Such attitudes seem especially worth exploring when we are dealing with a technology such as nuclear energy, which is one of the few areas in which science fiction's extrapolation of social attitudes can be tested against the attitudes that have actually evolved. Some of these attitudes had begun to take shape already when Del Rey turned "Nerves" into a novel in 1956. The first nuclear power plant was still more than a year away, but public consciousness about nuclear energy was certainly more acute since the end of the war and the Bikini tests. Numerous popular books and articles had appeared extolling the potential benefits of the coming atomic age—"From Atomic Bombs . . . to Atomic Industries!" was the title of one enthusiastic article in *Astounding* in October of 1946—and Del Rey himself had published a nonfiction volume titled *It's Your Atomic Age* in 1951. One chapter in this book, "The Workers in the Piles," addresses some of the same issues as *Nerves* as it speculates on what life in a commercial atomic plant might be like:

> You'll still hear someone yell, "Hey, Joe—come over here a minute, will ya? This damned thing's all bolluxed up." But Joe will tend to be Dr. Joseph Neutrino, graduate magna cum

laude from M.I.T., and specializing in the transuranium isotopes . . . in the more routine rooms, Joe might be the guy driving the light pick-up tractor . . .[5]

In the 1956 novel, Del Rey chose to leave the fundamental 1942 story intact, while more fully developing some minor characters and the social and political background. "Cold cash" is still used to buy off objections to waste disposal in a nearby stream, but the offer of money to rescue Jorgenson is tempered to, " 'I need damned fools who are crazy enough to risk themselves five minutes apiece in here. Family men or single, I don't care!' "[6] More than seventeen men still die, but the observation that this somehow proves atomic plants are safe where they are is dropped from the end. (The even more unintentionally ominous closing line, stating that the doctor who is the protagonist feels ready for "twenty years and fifty accidents more (p. 153), is retained.)

Of particular interest in terms of the novel's rhetoric, however, are the interpolations that deal with the political and social backgrounds and those that turn the character of the engineer Jorgenson from a relatively minor figure into an archetype of the engineer as superman. In the original story, all the action was set at the plant itself; in the novel, new scenes are introduced to provide a clearer picture of the community's attitudes toward the plant and the crisis that develops. The opening scene, for example, introduces Doc Ferrel at home, being summoned by Palmer, the plant manager, because of an impending congressional committee investigation that afternoon. We learn that public fear of atomic plants has been revived in part because of an accident at another plant—"only a minor mishap" which "had resulted in a mild dose of radiation contamination over a hundred square miles or more" and which "seemed to be nobody's fault" (p. 3)—and that this fear is being fueled by an influential chain of newspapers whose owner once received a small accidental contamination. Over breakfast, Doc reads an editorial in one of these newspapers concerning the proposed legislation to remove nuclear plants from centers of population:

> Superficially, the editorial was an unbiased study of the bill, but it equated such things as the wealth the industry had built on one side against the health of children, menaced by accidental release of radioactives on the other. Intellectually, it proved the plants must stay; emotionally, it said the exact opposite; and most of the readers here would think with their emotions first (p. 4).

Doc's son, Dick, a struggling medical student home from school, expresses concern about the antinuclear movement because "medicine has to have some of the isotopes National makes" (p. 5). He drives his father to work, and on the way they hear insults shouted at plant workers and find houses near the plant abandoned as people have chosen to move away.

Del Rey may have suspected that his own original story might someday be accused also of intellectually proving one thing while emotionally saying the exact opposite, and his next major interpolation on this theme is a dialogue between Ferrel and Palmer, in which Ferrel objects that atomic plants simply aren't dangerous enough to warrant such drastic legislation and Palmer responds, " 'Unfortunately, they could be' " (p. 11; in the 1976 revision this line is strengthened to " 'some of them may well be' ", p. 13). Palmer points out that some early plants may have deteriorated and that nuclear energy has become so commonplace that engineers and workers may be "getting careless." " 'They need policing' " he says of these older plants (p. 11; in 1976, this becomes " 'They *all* need a *lot* of policing' " (p. 13; italics mine)). The dialogue continues with a discussion of the

problem of phony contamination lawsuits which have plagued the industry since its early days, and Palmer's suspicions of such a "ringer" in their midst. Doc assures him that the woman probably does not have radiation poisoning, but rather leukemia. In *It's Your Atomic Age,* Del Rey wrote:

> If you read an account in a paper about Susie Pflookht, who is suing for a million dollars because she was exposed to radiation at some atomic plant and didn't know the danger until she started breaking out with all sorts of symptoms, you can bet that Susie has simply decided this is an easy way to make that million dollars for herself and her lawyer. Maybe her teeth are dropping out, but she might have pyorrhea (p. 76).

Doc returns to the infirmary, suspecting that the tension brought on by a congressional inspection might well increase the likelihood of accidents, and indeed a minor accident occurs, "setting the stage for the later disaster," as Del Rey later wrote[7] but also creating additional problems for his rhetorical position by implying that such accidents are in fact commonplace. Palmer, meanwhile, makes a deal with the chairman of the congressional investigating committee to try to produce an experimental isotope which can be used to control weevils in the congressman's home district in exchange for the chairman's attempting to bottle up the bill in committee (in the original story, political reasons for the production of the isotope that leads to the disaster are not mentioned). Despite the warnings of Ferrel's young assistant, Jenkins, an amateur atomic chemist, Palmer decides upon a crash program to produce this isotope after consulting with his star engineer, Jorgenson.

The manner in which the character of Jorgenson is introduced and developed is one of the most curious additions to the story. In the original Jorgenson is little more than a plot device—an engineer who must be rescued from the contaminated housing when the scientist who might be able to solve the crisis comes down with appendicitis. Jorgenson, it is hoped, might know enough about the process to be able to direct the men in controlling it. In the novel, however, Jorgenson becomes an amazing amalgam of the engineer-hero, the mad scientist, and Conan the Barbarian. It is he who designs the process in the first place, promising to deliver the new isotope on an accelerated schedule despite his overworked men, and when the production goes haywire it is he who sacrifices his own safety to get the workers into a safety chamber. He is both physically and mentally a giant, capable of moving freely in a four-hundred-pound insulated suit and of instantly balancing equations in his head that will enable him to predict the outcome of the uncontrolled chain of reactions. His attitude toward the rest of humanity has been uncompromisingly contemptuous, and his one great insight as he faces almost certain death under a river of radioactive magma is that "he'd been insane for years" (p. 50) in his quest for perfection, and that after all he is "only a man, rather than an angry, crippled god in chains" (p. 51).

This extraordinary portrait of an imperfect superman whose mastery of technology fails him at a crucial moment is a powerful image of ambivalence not present in the original story. What had been an industrial accident of uncertain origin becomes a heroic failure on the part of a remarkable individual guilty of *hubris,* a kind of epic confrontation with a literally elemental nature. The nuclear accident is thus made to transcend the mundane concerns of safety legislation and newspaper editorials; it is removed into a different arena of action altogether. As Donald L. Lawler writes in his essay on the book, "the immediate focus of the reader's anxiety is on nature," and the story "affirms

eventual human mastery of nature through personal courage and mental resourcefulness"[8]. In fact, Jorgenson is almost a parody of the Campbellian hero, and could serve as a warning against permitting the kind of intellectual swashbuckling so common in "Golden Age" sf to become a model for real atomic industry management—although it is far from clear that this is what Del Rey intended.

In the end, it is not Jorgenson, but Jenkins, the "amateur" who turns out to be the stepson of a legendary atomic scientist, who devises a process by which the dangerous isotope can be isolated and dispersed (the process involves dumping it all in the nearby swamp, incidentally). The idea is suggested to him by some apparently random remarks from the semi-conscious Jorgenson, who has been resurrected from a river of magma and who presumably has come to terms with his own humanity in the process. Jenkins, it seems, is the new generation of atomic scientist, more humane, more aware of the fallibility of the workers, trained in both medicine and nuclear science (although his formal nuclear training is yet to take place; one of the most overlooked but remarkable prophecies in the book is the idea that corporations involved in technical areas are able to grant their own college degrees). But despite this apparent modification of the image of the scientist in the novel, Palmer remains the same plant manager as in the original, and the industry is the same kind of industry. While no mention is made in the novel that Palmer now has "proof" of the safety of the plants, no mention is made either of any improved controls or safety modifications at this particular plant. The ideal of *laissez-faire* engineering is preserved; as long as there are enough bright thinkers around to ingeniously resolve any crisis, outside regulation has no place in the science fiction factory.

Del Rey's 1976 revision does little to add to the political debate within the novel; in fact, Del Rey has argued that in both the 1956 and 1976 versions he sought first to maintain the essential quality of the story as a suspense narrative, and not as a political novel. In an "Historical Note" to the 1976 edition, he wrote:

> If I were to write the novel today, rather than at the dawn of the atomic age, it would probably be quite different. I would fill it with the very real dangers of misused or stolen plutonium, the unsolved problem of atomic waste disposal—all the problems that developed over the years. Or, since there are enough books on such subjects, I might not write it at all (p. 180)

Thus, the 1976 changes are minor. The swamp is now used to dump only "non-radioactive wastes," "neo-heroin" is replaced by "paramorphine", a reference is made to the problem of fission reactor wastes (and the concomitant need for a good, cheap fusion reactor), and some more details are added about the theory behind stable superheavies and possible treatments of radiation victims. But the novel remains essentially a tale of industrial crisis management, heightened by political tension and the prospect of blowing away half of the continent (one rather subtle change occurs when Jenkins is asked to describe the effect of the potential explosion; in the 1956 novel he compares it to three tons of the Army's "new explosive"; in 1976 this becomes three *million* tons). And the essential ambience of the novel, even in 1976, is that of a 1940s *Astounding* story.

But this in itself is what is most fascinating about the novel *Nerves* as we now have it—that it has remained so largely unchanged even decades after much of what it describes has become reality. Why does the reference to a probable leukemia case as a "nuisance" lawsuit remain intact even after Del Rey must have known about the connections between radiation exposure and this form of cancer? Why add a half-hearted nod (in the dialogue

between Ferrel and Palmer) to current issues such as waste disposal and faulty reactor maintenance, when these issues are ignored in the context of the novel's larger pro-nuclear rhetoric? Why make minor corrections in medical techniques (such as correcting a false assumption in the 1956 novel that chelating agents could be used to flush inert elements from the human body), when the more severe effects of radiation contamination are ignored in both novel versions? And this despite the fact that the case of physicist Louis Slotin, much publicized in the late forties after he sacrificed himself to save fellow workers by manually separating two spheres of plutonium that threatened to form a critical mass—a situation remarkably parallel to that of Jorgenson in *Nerves*—was known to Del Rey and described by him (without names) in his 1951 book?

I suspect there are two reasons, neither especially venal. The first is simply that Del Rey was sufficiently proud of his original suspense story—perhaps his best—that he continually tried to rework and perfect it on its own terms, and not to update it or try to make it more "relevant." Del Rey had been studying the elements of suspense when he wrote the story, and his revisions were directed at maintaining and developing the original suspense-story structure. This is essentially his own account, and to a large extent the nature of the revisions support it. The changes made in regard to characterization are another story, however; with the exception of expanding the role of Ferrel's wife Emma and introducing an element of ambivalence into the character of Palmer, the major change is in the rather bizarre character of Jorgenson—a character who even in his expanded role is clearly derived from some 1940s sf types.

I think Jorgenson is a clue to something else as well, something that helps lend the story a greater significance than it might have had it originally been written in the 50s or the 70s. This, simply, is that despite what Del Rey might have known about nuclear energy during these later revisions, he chose to retain the essential style and value structure of the old *Astounding* in the face of changes in both fiction and science. To some extent, *Nerves* remains alive as a testimony to pulp romantic ideas about science and engineering. Even the 1976 version carries with it an odd feeling of nostalgia, a sense that this is the way we imagined it would be, and perhaps the way it ought to be. At some level, then, the book is almost a denial of history, a proclamation that managers, engineers, and scientists like these must somehow survive in our imaginations, that problems like those described must remain soluble through ingenuity and force of will, and that even an industry as volatile as nuclear energy might somehow still bend to our imaginative conceptions of heroic engineering and barnstorming science. If the industry has not quite turned out that way, we might well ask ourselves to what extent those in charge of it yet subscribe to these hopes.

Notes

1 An atomic-powered spaceship appeared in Garrett P. Serviss's *A Columbus of Space* and atomic weapons were mentioned in George Griffith's *The Lord of Labour*, both 1911.
2 In Groff Conklin, ed. *The Best of Science Fiction* (New York: Crown, 1946), p. 105.
3 Lester Del Rey, "Historical Note," *Nerves* (New York: Ballantine, 1976), p. 177.
4 "Nerves," in *The Science Fiction Hall of Fame*, ed. Ben Bova (New York: Avon, 1974), p. 169.
5 *It's Your Atomic Age* (New York: Abelard, 1951), pp. 80-81.
6 *Nerves* (New York: Ballantine, 1956), p. 84.
7 "Historical Note," p. 179.
8 "Nerves," *Survey of Science Fiction Literature*, ed. Frank N. Magill (Englewood Cliffs: Salem Press, 1979), III, 1514.

Letters

Dear *Foundation* May 1984

Franz Rottensteiner writes (*F.* 30) that it is quite possible to write excellent fiction without characters, and points out J.L. Borges, who certainly does this well; and then he uses this as a justification for the absence of characters in *The Invincible.* Well, there isn't any similarity between Borges and this novel: to make the most obvious point, Borges never wrote any novels. There is no similarity in structure between Borges' *ficciones* and Lem's novel. Most of Borges' best *ficciones* describe an artifact (such as "The Library of Babel"), and there are no characters at all in these "stories" (or plot), but Lem certainly makes an attempt at characterization (and the last chapter is very eloquent): however he doesn't succeed. Later on in his article, Rottensteiner says of Brian Aldiss: "he is a writer of fiction about fiction." Using Rottensteiner's logic, one should be able to defend Aldiss by saying "Borges makes a point of writing fiction about fiction." But no similarity exists here between the two writers either.

I'm also afraid that I can't accept his characterization of Aldiss as having "no firm philosophical basis for his writings, but is an aesthete who wants to try his hand at many things" as particularly condemning. I do have to agree that I don't thinking fiction or art is particularly nationalistic in character, and tend to be uneasy when writers become patriotic or nationalistic, even in such mild ways as saying, "American sf is best." Nationalism is one of the greatest evils in the world; why drag it in to the most individualistic of endeavours, art? I do see the necessity for a certain amount of this in the publishing industry: British writers should not be so dependent upon American publishers that new writers can only be published overseas, or not at all. New writers should be encouraged, even if all cannot become masters: it is not so terrible that a young writer is bad.

Cy Chauvin *Detroit, Michigan*

Dear *Foundation:* July 1984

In his article, "Decoding *The Time Machine,*" (Issue 31, page 31), Brian J. Burden wonders whether the date that H.G. Wells has his Time Traveler reach "has some special significance, probably biographical, mathematical or numerological." The date is given as 802701.

It does have significance according to Numerology. Add the digits up and you get 18; now add 1 + 8, and you reach the Numerological reduction of 9. The number "9" in Numerology refers to conclusions and endings—particularly the endings of cycles. And we find that the Time Traveler is visiting the final cycle of humanity on Earth.

Whether Wells had studied Numerology, or whether he cared about the Numerological significance of "9", is another question; I pass.

Three comments on David Ketterer's excellent "Wagnerian Space Opera: *Cities in Flight,* by James Blish."

1. Page 46: Perhaps some copy is missing, but what we read here is that the Avon edition of *Earthman Come Home,* was retitled, *Year 2018!.* No, no—it was *They Shall*

Have Stars that was retitled *Year 2018!*, and I agree that the retitling is a horror, although it does have some relevance to the story.

2. Page 67, Footnote # 15: Again, we may have a misprint, but what we read is that Jim's article, "The Astronomical Story" (from his series, "Science in Science Fiction") appeared in *Science Fiction Quarterly,* 1 (November 1951).

I am baffled by that figure "1". If it was meant to be 1/3, meaning volume 1 number 3, that would be clear; if it was meant to refer to issue # 1, then the date should be May, 1951. (I do not have a file or index to the magazine on hand, so could not check.)

3. Pages 61/62: No error; we read that Jim originally set the date for the end of the universe at 4004, AD, and Ketterer suggests that he chose that date for its symbolic significance. "The parallel numbers suggest a double enclosure, an image of one circle within another." I can suggest a further reason.

In the 17th century, Bishop Ussher calculated from a study of dates (or implications of dates) in the Pentateuch, that the Lord God had said "Let there be light," in the year 4004 BC. Jim had a pawky sense of humor, as Mr Ketterer discloses in his article, and while I have no certain knowledge about it, I strongly suspect that that was also a reason for the first choice.

To clean up inconsistencies, Jim later changed that date to 4104—which also reduces to a Numerological 9! Again I must pass on the question of whether Jim knew or cared about that.

Robert A. W. Lowndes *Hoboken, New Jersey*

Dear *Foundation:* August 1984

I would like to congratulate Brian Burden for his excellent article on *The Time Machine*— and to add a few remarks to David Ketterer's analysis of *Cities in Flight* (*Foundation* 31).

Much of Mr Ketterer's essay is concerned with the cyclical aspects of *Cities in Flight,* particular emphasis being placed on certain recurring images. One such image is the "bubble" motif in *Earthman, Come Home.* Mr Ketterer does not, however, mention a much earlier occurrence of bubbles in *They Shall Have Stars:* as Paige Russell and Anne Abbott are being driven to a restaurant, the privacy of their taxi is breached by Believers, who pump bubbles through the back door; the bubbles burst, releasing a perfume, and a mini-sermon (p. 33 of the Arrow edition). This sequence ties in with the later *Earthman* quotation, ". . . the last living man . . . who still had occasional bubbles blown into his stream of consciousness by old Earthbound habits of thinking."

Mr Ketterer is somewhat vague about the end of the universe: "Blish chose this number (4004) for its symbolic significance." That may be true, but Mr Ketterer firstly omits to say where he learned the reasons for Blish's decision, and secondly himself misses the probable significance of 4004. Archbishop James Ussher, of course, once calculated that the world began in the year 4004 BC. What, then, could more naturally round off a symmetrical and cyclical history of the universe than to have it end in the year AD 4004?

Finally, I have long been intrigued by an almost casual statement by Blish in the preface to *Star Trek 12* that he, "had also written television and film scripts" (p. ix in the Corgi edition). Now Mr Ketterer makes a passing reference to Blish's unfilmed *Cities in Flight* screenplays. I have never seen Blish's name in the credits of a television show or film; neither have I ever seen his name in any film reference book. So, how many film and

television scripts did Blish write? How many of these were filmed? Did he, perhaps, write scripts pseudonymously? It would be fascinating to know the answers to these questions.

Philip Nichols *Portsmouth*

Dear *Foundation:* September 1984

With regard to John Sladek's review of *Comic Tones in Science Fiction* (*F.* 31), I am glad that reviews do not kill one—though I would not look forward to playing Partridge to Sladek's Swift. Nevertheless, I am too dead serious about the role of the comic and the importance of the Enlightenment not to attempt one Bickerstafflike defence of my book. Sladek's opening *tour de force* of wit surely cannot mean that nothing new in tonal complexity evolved with the 18th-century Enlightenment and with modern hard science fiction. Also, my book deals with hard science fiction, which usually isn't seen as absurdist writing just as the writers of the Enlightenment mainly thought they were doing straight enlightening. I think I stake out the limits early in the book that New Wave writing, which is more obviously comic in intent, is another topic. But most important, my book does embrace (even in style) comic disorientation and attempts fertile links so that I must protest that the report by Sladek of the deadliness of my own sense of humour is greatly exaggerated. If the sad fact is true, however, I can think of no humourist I would rather be pronounced dead by than the author of the "Roderick" books.

Donald M. Hassler *Kent, Ohio*

Reviews

Against Infinity
by Gregory Benford *(Victor Gollancz, 1983, 215 pp, £7.95)*

reviewed by Barrington J. Bayley

Some millions of years ago when I was a young layabout in Chelsea, sharing a flat with similar types and trying to write but not really knowing how, a visiting flibbertigibbert picked up a manuscript I had been wrestling with and put it down again after reading about a page and a half.

"Your adjectives are awfully good, Barry," she said, "but there are so many of them!"

Her illuminating remark comes to mind when I face books like the present one, whose chief narrative tool is *description,* following a recipe of one gallon of description to every half pint of real incident. The description itself might be all right, but being asked to digest so much of it soon has me flipping the pages to see when the story next advances. It's as if the author is afraid to let the plot rip in case he runs out of it with half a novel still to go. What makes such a welter of words even harder to take is that writers of this ilk frequently, striving perhaps for a sense of realism, neglect to describe much that *needs*

describing, or to signal the meanings of neologisms employed. Sure, the characters in the story know what they're talking about, but us dumb 20th century readers *don't*.

The setting is Ganymede, halfway through a terraforming process being applied to all the major Jovian moons, icy mantle already part stripped off to reveal the higher mountains, an atmosphere beginning to thicken though still not with the right gases. The colonists are traditional taming-a-wilderness types, rugged and individualistic (does it seem rash to put domed settlements on a world undergoing tectonic upheaval? Skip to p. 111 and be confirmed). Ganymede has been seeded with a range of genetically engineered animals who devour the local ammoniated compounds and shit steady streams of oxygenizing compounds more suitable for Earth biology—we won't ask why using micro-organisms wouldn't have been easier and faster—but their bodged genes are plastic and under the impact of solar protons they mutate at a rate of knots, for instance into varieties that gobble up the shit and turn it into ammoniated compounds again. So the Ganymedeans organize hunting parties to shoot the muties—much as the early Southern Rhodesians shot all the big game to keep the tsetse fly out—though comparing the small population with the size of Ganymede I would have thought that a hopeless enterprise.

Also on Ganymede is the billion-plus year old Aleph: yes, this is another alien-artefact-left-in-the-solar-system-before-the-evolution-of-man story. But this artefact is eternally active, a polymorphous machine burrowing throughout the satellite and emerging to plough through lithospheres, ice and mountains like a knife through butter, in a fair metaphor, one might think, of the irresistible force the reader must have to plough through the sludgy mountains of Benford's prose. If he persists it is because he has a grip on the one big question the novel poses, as well as on its central motive: the Aleph, what is it and what is it doing? Can it be stopped in its tracks so as to find out what makes it tick? (Among the book's omissions, on the other hand, is that we are told nothing about the non-mobile artefacts littering the Jovian system.)

Hard-core sf is what the book jacket promises us. Hard-core sf is what we would get, if Benford had not opted to give the novel a third leg to stand on: not just Ganymede, not just the Aleph, but "human interest" too, portrayed doggedly and amateurishly. Our hero is Manuel, thirteen years old and native to Ganymede, who at every turn of the page, or so it seems, "loses a bit of his boyhood." I don't know about you, but this "losing one's childhood" stuff gives me a vaguely puzzled feeling, and the thought that maybe I'm in need of puberty rites. (Girl characters, I've noticed, "cry for their lost childhood" like girls were once supposed to cry for their lost virginity.) So, the hunt for the Aleph somehow is also a plucky kid's growth into a man—a clumsy conjunction considering the stature and mystery of the artefact.

Future society has some interesting features. The Catholic religion of the time lays stress on preserving life at all cost. People who have been too badly smashed up to be reconstructed have what's left of them cyborgated so they can continue to live and perform some sort of role. Manuel's team acquires one such, and Manuel is sternly rebuked by his parents for referring to it/him as a "deffie," exactly as present-day white children are rebuked for the term "n-----" and all it implies. Klansmen and National Fronters would be delighted with the comparison: the newcomer turns out to be a bestial "thingy" with only half a brain and a manic desire to kill every decent person in sight. But, treated firmly but kindly, he becomes tractable, hunting with the animals (genetically souped up to IQ 40) and eventually sacrifices himself in the climax when the Aleph is

stopped dead, using a new gimmick nobody had thought of before.

There is then an unexpected hiatus, upon which the pace thankfully quickens. It is six years later. Manuel, thrown out by his father for unwittingly assisting a suicide, has been living in another settlement where we are treated to a cynical comment on communism, which has triumphed over the whole of Earth. Returning home, he meets up with a team sent from Earth to study the Aleph. At last, we think, we are going to be let in on the big secret.

What we are afraid of, of course, is that it will turn out to be a variant of God-in-a-box. Please, anything but that! It is both a disappointment and a relief, therefore, when we get little more than hints that the Aleph lives up to its name with a cabbalistic, Cantorian interpretation highly reminiscent of the Jorge Luis Borges story, also called "The Aleph." In place of a proper resolution, Benford simply jams his three themes together and leaves the novel leaning on its weakest leg. Ganymede's ice mantle starts shifting, in the turmoil the Aleph starts up again (with the suggestion that it had played a benign role in relieving ice stresses), and the finale turns into a rhapsody where Manuel muses on his personal destiny as well as that of Ganymede, of mankind, and on the Aleph as a *different* kind of entity from man. This ending actually works better than it has any right to, perhaps because it's better written than the rest of the book.

You'll see from the above that *Against Infinity* has hard content and some nice technical detail. I particularly like the monolayer that is put round entire atmospheres to cork them in. Just the same, Benford should take the flibbertigibbert's advice: write more sparely and abandon "literature" for lucidity. Incidentally one other mystery is left unresolved: what the hell does the title refer to?

The Anubis Gates
by Tim Powers *(Ace, 1983, 387pp, $2.95)*

reviewed by John Dean

I am not pleased with *The Anubis Gates,* although I must admit that I took great pleasure in reading it. The book is built for comfort and speed. Most of its tale unravels in a deliciously pre-Dickensian London underworld where "beggars raffle the banknotes . . . and Jill goes down on her back." The narrative moves along with voracious dispatch. The novel is colourful and entertaining, clearly the product of a highly competent intelligence.

But there is so much and so little in *The Anubis Gates* at the same time.

To wit: the novel relates the adventures of Mr Brendan Doyle, an early middle-aged, slightly balding professor of English Literature from Cal State, Fullerton. Doyle is jockeyed back from London in 1983 to London in 1810 by occult means. He meets many famous people of the early nineteenth century. He travels briefly to 1684, returns to 1810, lives out his life well into 1846. He does not travel alone in and through time.

Virtually any plot summary of *The Anubis Gates* must condense the events of a time travel/historical adventure novel with a cast of thousands. Powers's story has a keenly worked, almost gongoristic plot. There are wheels turning within wheels. Historical intricacy is the deeper subject matter of *The Anubis Gates,* the interplay between the observed, illuminated, factual nature of events and the hidden substratum of intrigues, impostures, and—who knows?—preternatural enchantments. Its immediate sf and

fantasy kith and kin would be the likes of Pratt's and DeCamp's *Incomplete Enchanter,* Poul Anderson's *Three Hearts and Three Lions,* DeCamp's *Lest Darkness Fall.* The good old grand-daddy here would of course be Twain's *Connecticut Yankee.*

As with its distinguished predecessors, *The Anubis Gates* is essentially comic in tone. The gist of my complaint concerns what Powers promises to do and does not quite achieve. He seriously attempts to enrichen and deepen the comic time-travel novel. He injects a large dose of occult mythology into the veins of his narrative. Especially impressive here are the various manifestations of the god Anubis, the Egyptian god of the dead, the jackal god. He enters among mankind as a werewolf figure—how the mighty have fallen!—who can switch bodies at will. Half childlike in his innocence, half like a cockroach in his imaginative predaciousness, Anubis stalks London as "Dog-Faced Joe" —a genuine thing of mystery. In addition Powers builds into *The Anubis Gates* a superb, highly effective layer of *Grand Guignol.* At times Powers's use of the grotesque achieves the articulate intensity of Russell Hoban's fulgent horrors in *Riddley Walker.* Full many a marvellous monster doth lurk in the depths of London in 1810.

But the marvellous characters and intricate historical possibilities which are put forth onto the stage of events in *The Anubis Gates* do, for the most part, go begging. Powers carefully avoids authorial speculations on the meaning of events. Too much just *happens.* At its low points the book had me wondering if it wasn't an occult space opera. It certainly seemed to be like a circus with its menagerie of gamboling clowns, magicians, people in masquerade, and freak show of beasties in Horrabin's Hospital.

Doyle, the main character, is a weakness. He is a mediocre man with a mediocre mind who, due to his transformation in time and body, finds it increasingly pleasant to simply act. As Powers notes of Doyle: "He pushed the vertigionous concept away." Precisely. And the result is that *The Anubis Gates* is a novel remarkable for its strong story values—without (to quote Mike Bishop on recent sf trends) "requiring a degree of intellectual as well as emotional commitment in the reading."

There's too much fun, kids. And, as a result, the novel short changes the reader. The depictions of Byron and Coleridge are competent but not insightful. Coleridge is a bibliophilic wimp, Byron is one of the lads. That's all. Comic license and comfy laughs win out over the enlargening, earnest, liberating comic tendencies which the novel showed signs of exploiting in its darker recesses—as with the Punch-like Horrabin, his deformed father Dungy, the Egyptian Master, Anubis, and the sublime degeneration of the magician Romany. (And if you're still wondering what I'm talking about when I mean the seriousness of comedy in sf and fantasy, recall *Riddley Walker, Cat's Cradle,* or marginal, speculative fiction like William Goldman's *Magic.* They get the laughs and pierce to the quick of life simultaneously.)

Was Powers in a rush to finish *The Anubis Gates?* If so, it shows. Towards the book's ending there is a glut of action which is tedious and slip-shod. The Mamelukes which appear look like pale shadows from Moorhead's *Blue Nile.* Earlier on the narrative was marked by some very fine writing, some excellent use of dialect and period speech. But then toward the end his sentences dissolve into first draft throwaways such as: "It was certainly pleasant to be back in England again, free at last of all that hellish magic, and able to look forward to meeting, as he knew he would, Byron, Coleridge, Shelley, Keats, Wordsworth and the rest of the gang—" Huh? Why? For an author who had attempted a genuine match of language, atmosphere, setting and individual flair (in a word: style), this

kind of language is self-betrayal.

Finally, if you cannot judge a story until you get to the end of it—and then all the rest must be modified to fit the ending—then *The Anubis Gates* concludes as the all-too-perfect adventure. It is a novel which conforms to formula and does not dare break that formula for the sake of achieving an individual statement. Maybe I am being pernickety, and maybe not. I would highly recommend *The Anubis Gates* to anyone interested in the romance of history, the time travel novel, occult fantasy, the pre-Dickensian underworld of London. But as literature—the study of the human heart in conflict with itself—it has a ways to go. It lacks one thing: more.

Startide Rising
by David Brin *(Bantam, 1983, 461 pp)*

reviewed by Ken Brown

This trashy but enjoyable Nebula-winner is the story of the starship "Streaker," which comes across some relics of religious significance to just about every race in the galaxy. Fleeing from a massed alien fleet, they splash down on the water-world of Kithrup to repair the ship. Vast space battles rage as divers ETs fight for the privilege of capturing our heroes, who meanwhile get involved in dozens of incidental subplots that drag the whole thing out for nearly 500 pages.

The background is slightly more interesting. The nub of galactic politics and religion is the process of "uplift" whereby a spacefaring species (designated the patron) adopts a less developed race and undertakes to make it a full member of the galactic community by education, genetic engineering and technology transfer. In payment for this the clients have to serve the patrons for 100,000 years. After this period is over they may find their own clients if they wish. So Galactic society is held together by the "chain of uplift": everybody can trace their culture back through patron after patron to the mystical progenitors who initiated the process billions of years ago. Earth, of course, was not part of this. Humanity has achieved space travel without help and is an orphan culture. We have clients though; chimpanzees, dolphins and dogs are all being uplifted, and the "Streaker" is the first deep-space vessel to be commanded by dolphins—genetically altered to be able to speak human languages and equipped with prosthetic tools controlled from plugs in the tops of their heads.

It has been said, however, that there are only two ways left to get life out of a space-opera. One is to attempt parody, the other is to concentrate on the sense of scale. Brin fails at both.

Large chunks of the novel are obviously meant to be taken as parody. The American ship's black engineer speaks with a fake Scottish accent. Just as "man," plural "men," refers to male and female, so (it is carefully explained) "fin" and "fen" are the colloquial terms for dolphins. The cetacean crew are "neofen" throughout. The writing frequently falls into a sub-Lensman style:

> He had bossed work gangs under the smog oceans of Titan. He had helped herd adenine comets through the Soup Nebula. But never had a job taught him the laws of perversity as this one had! Almost all the materials they'd had to work with were of alien manufacture, with weird ductility and even stranger quantum conductivities. He'd had to check the psionic impedance of almost every connection himself, and still their masked marvel would probably leak telekinetic static all over the sky when it took off!

Even if the rest of the book didn't show that Brin is capable of much better than that, I'd not believe that a working scientist could have written it without his tongue well inside his cheek.

If it was all like that, we'd have yet another Lensman rip-off. But it's not. Mixed up with the heavy metal we have what is apparently a serious attempt to invent a whale-speak, using blank verse, haiku, "Seafarer"-like alliteration and no end of typographical tricks, to evoke the "Whale Dream," the supposed spiritual and mental state of the pre-uplift cetaceans. The poor reader never knows what to think. You have to keep looking over your shoulder to ask if the author really means what he's saying. The mixture of innovation and parody devalues both.

As for scale—the guy's a non-starter. The blurb quotes Poul Anderson: "Not since Stapledon has a writer succeeded so well in conveying a sense of the strangeness of the Universe and the infinite possibilities which time and space must hold." Nonsense. The book fails to transmit to this reader the idea that anything is much bigger than a reasonably spacious public lavatory. The space battle that starts before page one and is still in progress at the end is never realized in words. It might as well be taking place on an ice rink—ships just chase each other round in circles, occasionally "dodging behind the gas giant." Apart from that, everything takes place on the planet Kithrup. The characters travel for hundreds of miles in all sorts of directions, the reader is never quite sure which. Each spot is much like every other. Volcanoes erupt, spaceships crash, there is at least one tidal wave (survived by holding on to a floating log), but none of these things are described or evoked in any serious way whatever. Brin seems to have no visual imagination at all, nothing gives the slightest impression of magnificence, or even mere distance.

This lack of visual appreciation lets him down badly in his description of non-human beings. The more than sixteen (I lost count) alien races are the result of playing consequences with earthly creatures and bad dreams. We have birds, things like bats with tentacles, things not unlike spiders. None are fully described, and not only are the readers left ignorant of their appearance but I strongly suspect the author is too. One has a "shaggy amorphous shape"—and that's all. The "brothers of the Night" have gills; we're told nothing else. Most of them have a quaint or queasy mannerism—a curly upper lip, the habit of biting elbows when nervous. The Tandu order unsatisfactory subordinates to bite off their own heads and "with your last volition put it on my trophy rack." An overwrought Jophur high priest "erupted in a geyser of hot, multi-hued sap." One lot even drink coffee: the "Paha sub-officer poked its head out of detection sector . . . (to) . . . snatch a steaming mug of amolkah and hurry back to its post." But that's *all* the aliens have, one mannerism per species. There seems to be nothing in the author's mind beyond what's on the page.

The female aliens are examples of gross sexual stereotypes. The only two of any significance in the story are Beie the spy, caring, compassionate and totally ineffectual; and Krat the Soro queen—a scaly hive-creature who thinks up disgusting fates for her daughters, threatens underlings with a "pulsating mating claw" and is liable to be overcome by the "ancient instincts of motherhood" in the midst of important business and absent-mindedly lay an egg. By contrast, the human and dolphin characters seem to have been allocated to one sex or the other after the book was completed.

In his effort to make his chamber-orchestra world seem big the author has piled together a huge heap of incident and detail—countless species, about six different space-

drives, three religions, maybe thirty Earth characters (there is no protagonist). The very first thing in the book is a glossary. I had consulted it by the time I got to page 17. But all this stage business is never realized, most of it does not come alive; the end result is a lump, a conglomerate, not a structure against which the action can take place.

In conclusion, *Startide Rising* suffers from all the defects we expect in novels of its kind. The only material of real imaginative interest—the treatment of cetacean language and thought—is completely misplaced in a badly-written cowboys-and-Indians space opera. There's bound to be a sequel as the book doesn't finish, it just stops.

The Businessman: A Tale of Terror
by Thomas M. Disch *(Jonathan Cape, 1984, £8.95, 292 pp)*

reviewed by Roz Kaveney

It hardly needs more than asserting that one of the constant themes of Thomas M. Disch's work in recent years has been the somewhat Pelagian one that you can achieve grace by will, that, through artifice and impersonation, you can create a more perfect or happier or more believing persona that will, in due course, by osmosis, become a more perfect etc. self. This was the point of all those quasi-Ellisonian bits of "self"-baring between the stories in *The Man Who Had No Idea,* the point of building pyramids in Minnesota, the point of the evangelist in *On Wings of Song* and declaring for the Easter Bunny as a step to declaring for Christ; more ambiguously, it may be the key to that novel's much-debated ending. (The thesis' contrary also applies—vide "Showing the Flag" and, in the work to hand, "Every businessman at some point in his life must have come to this same decision-to *become* a businessman and leave his youth behind.") It also seems to have become a way of declaring himself, or at least the poet and novelist, to be more balanced and going more along with the American grain: "Quite simply, I'm happier these days." It is responsible too perhaps for the avuncular complacent Audenesque reactionary editorializing of some of the poems in *Here I Am, There You Are, Where Were We* (Hutchinson, £4.95, 54 pp) as well as for its genteel Horatian peace and prosodical elegance: the Disch who wrote so forgivingly of New York in *334* can now write an ode on leaving it and say of its criminals, coldly:

> I don't say "Kill them" but I do
> Think they ought to be allowed
> To kill themselves without our making too much fuss.

What was all very well as a fiction or an idea, becomes a trifle more worrying as a constant pose. One of the delights of *The Businessman* for a late reviewer has been the way it has sheerly upset people again—Anthony Thwaite of the *Observer* and English orthodoxy thinks it in bad taste, the *Kirkus Review* believes it an attack on heterosexuality and *Time Out* worries that it might prompt another Yorkshire Ripper. No longer is he content with admirable, well-mannered and well-behaved exercises; here we have a major work that derives strength and formal perfection from the sudden freedom of behaving badly again.

The Businessman—A Tale of Terror is a story of supernatural retribution. Piggy Glandier is left by his wife Giselle, tracks her to Las Vegas, and, with impunity, strangles her. Released from her grave by the sudden death there of her mother Joy-Ann, Giselle is trapped by her original sin in being attracted to him and obliged to haunt and seduce him.

Aided by Heaven's local administrator, the C19 litterateuse and bareback-rider Adah Menken, Joy-Ann tries to free Giselle from earthly trammels; aided by the ghost of John Berryman (yes, that one) Giselle warns her gay brother Bing of Glandier's guilt by shuffling Scrabble counters. But she is pregnant with Glandier's demon-child, which, once born, devotes itself to the destruction of all who, living or dead, might threaten its father . . . All this is quite perfunctorily batty of course; but it is not merely a sarcastic comment on the crude morality and blood-letting of the traditional horror story—it is a construct which makes as much sense in its own fertilely silly way as many other constructions through which we try to make sense of the way the world is run.

On the surface, this is a Catholic novel; all the virtuous characters are Catholics, though the more sympathetic ones are not very *good* Catholics. Glandier's deep spiritual corruption is partly a matter of the deadly sins—yelling at secretaries, stuffing with junk food, forging statistics and masturbating to *Analog* and John Norman's *Gor* books—but partly too demonstrated by his atheism and impiety. Much of the moralizing detail of the novel is that of the catechism and the confessional—Giselle's spirit is trapped by Glandier because he is an Occasion of Sin she failed to avoid. Bing, the one major character to survive the novel's bloodbath's is deeply devoted to Holy Mother Church under the rebelliousness induced by his sexuality and under his camp carping: "That's one thing that has to be said for Catholicism; they leave you room to breathe. One can gamble. One can booze. And one can—well, that's about it really but it's something. "But there is a darker tinge to the novel's theology, too Augustinian, almost Calvinist in its insistence on election, to be strictly orthodox. Glandier was always doomed: "But you don't want to go to Hell? You should have thought of that when the twig was bent. Around age three-and-a-half in your case." Emotionally self-indulgent and lazy and tasteless all the Ankers may be, and doomed to suffer a bit as a result, but they are *saved:* "The source of grace has its favourite bloodlines for which there is no accounting." But there is an undercurrent deeper still at which theologians of any stripe might cavil. God is an artist, rather like Thomas M. Disch; and His characters are supposed to be worshipful, grateful and lost in aesthetic admiration of the fine lines of the predicaments in which He has placed them.

Disch has been striving for balance, but what is balanced here is extremes. It is a hymn of hate to the pushy commercial values and demented masculinity of the Mid-West; it is gently forgiving of the foibles and ill-educated vulgarity of mid-western suburban women because acknowledging their good hearts and quiet coping. The tale balances gothic nightmare—Berryman is blinded by the demon-child he has just released by amateur Caesarean, Glandier is summoned painfully to punishment precisely when he thinks himself most safe—with scenes of gentle if painful comedy—Joy-Ann is told by her favourite nun to smoke dope to stop the nausea of chemotherapy—and quiet wistfulness —Berryman, now a frog, tries to stop Giselle drifting into the quiet slumber of being a willow. The reason this book upsets is because one or other of its swings is bound to catch what raw points any reader possesses; but the pain inflicted is often the healthy subversive sting of satire and the swings culminate in points of rest charming, comic and ecstatic. Joy-Ann competently administers the afterlife; Berryman and Menken ascend to higher levels of the afterlife in Christ's balloon; Glandier is trapped eternally in Bing's bathroom with only long division to console him, Giselle, disembodied, unconscious of self, unnamable, floats free in pleasure through a passage of prose as elegant as the best of the verse: "Without a name, without an aim, with no idea of before or after, no tears, no

laughter, no clothes to wear, no forms to fill, what could be said of her soul now? That sometimes it moved, sometimes it stood still."

This is a novel, an edifice of ironies and uncertainties; even that most beautiful of endings is qualified by artificiality. We know from its internal rhymes and cross-rhythms that it is a construct and thus possibly only a breath away from the sarcasm of the 'prize story' "Feathers from the Wings of an Angel." A moral scheme is proposed which fits its contents neatly, too neatly—"The good end happily, the bad unhappily. That is why we call it fiction." Aphorisms and auctorial moralizings abound —"Hell is a tape loop that keeps playing the same stupid tune over and over and over forever and ever and ever." The majority of chapters begin, as all writing schools tell us they should, with a hook line. Where some of the recent work has been over-dominated by the grin of Uncle Thomas, here, in the end, apply as we will to the real world lessons which may be only illusions, jokes or doodles, the back of the author is turned from us to his writing desk. *The Businessman—A Tale of Terror* is filled with well-oiled moving figures which might resonate with metaphysical truths: but the word to underline in the title is *tale.*

The Sentinel
by Arthur C. Clarke *(Berkley, 1983, 303 pp, $6.95 US, $7.95 Canada)*

reviewed by Barrington J. Bayley

This is a lovely book; I'm glad to have been given a free review copy. A large-sized trade paperback on nice paper, with clear type, an embossed title, and thirteen pages of interior illustrations by Lebbeus Woods, it announces itself as one of the Masterworks of Science Fiction and Fantasy "crafted" by Byron Preiss Visual Publications. To an extent it comes over as part of that paradoxical contemporary phenomenon, the literature of the future getting nostalgic about its own past. Eight stories are arranged in the order of first appearance, and are finished off with an unmade film outline. Clarke supplies background material to each story and also an autobiographical introduction which is like a breath of fresh air to me, for he remains an unalloyed, unapologetic, unreformed sf fan. Yet one cannot escape nostalgia: Clarke boasts that his generation of sf fans was the last one able to read *all* the sf there was.

The stories appear to have been selected as some kind of representative or historical sample, which is a pity because the majority of them are not masterpieces. Included are "The Sentinel," of course, which metamorphosed into *2001: A Space Odyssey,* and "Guardian Angel", one of the duller examples of Clarke's work but possibly included because it metamorphosed into the much better novel *Childhood's End.* I can recall more atmospheric, more Stapledonesque (Clarke acknowledges his debt to Stapledon) stories from the heyday of the pulps that I would rather have seen here.

Six stories are from the forties and fifties; one, "The Wind From The Sun," I remember admiring as "Sunjammer" when it appeared in *New Worlds* in 1965, and one, "A Meeting With Medusa," was written in 1971. The collection starts off with "Rescue Party," which Clarke says he now does not dare read. Maybe he should—it carries the crude fire and energy of those days. Clarke is pleased, however, to quote a political comment by Gregory Benford regarding this story. It is, in fact, a story that has been written over and over again (van Vogt's "The Monster" and Lester Del Rey's "Natural

Advantage" are two other versions, written in closely similar terms), based on a theme probably embedded in the Anglo-Saxon self-confidence that seems to have influenced the development of genre sf: the "we humans are the smartest race in the whole damned galaxy" syndrome.

Who knows? Perhaps we are. Especially when you reflect how often these stories, written only decades ago, contain quaint anachronisms that show up what an age of dazzling technical progress we live in. "Rescue Party," for instance, written in 1945 and set a century and a half hence, describes a big hall full of Hollerith analyzers for collating data on Earth's citizens. Hollerith analyzers? We had a Hollerith section on the station when I was in the RAF in the fifties. I imagine you would have to go to a museum to find such a machine today.

Even the beautifully constructed "The Wind From The Sun" ("Sunjammer") from two decades later now has a rather old-fashioned feel about it. The story describes an Earth-Moon race between sunlight-driven sail yachts. The hero's advantage over his competitors is that he has worked out a way for the rigging to be manipulated by a computer so he can dispense with a second crewman and still get some sleep. The computer is *no bigger than a matchbox.* Also, the story ends with him abandoning his flimsy craft so it can continue out of the solar system by itself: ". . . his would be first of all man's ships to set sail on the long journey to the stars." It will have to catch up with *Voyager,* if so!

Clarke himself wryly notes how conservative his and everyone else's predictions turn out to be. It is something we have to come to terms with when dipping into the sf of the past, even of the recent past. But so what? Apparently Charles L. Harness was persuaded to update the latest edition of *The Paradox Men;* to me that sounds like self-vandalism. Science fiction is *not* prediction, after all; it is an exploration of possibilities that, however remotely and fantastically they turn out, necessarily start from the scientific knowledge of the present—it's largely from that that they draw their character. I rarely find a story any less enjoyable or uplifting because it is projected from a scientific or technological platform that is out of date; on the contrary, it might be fascinating to write a space-travel story based on the deductive astronomy and physics of ancient Greece . . .

The 1971 story "A Meeting With Medusa," without obvious anachronisms, is Clarke at his best, detailing a descent by manned balloon into the atmosphere of Jupiter. It has the curious quality of transforming an environment I had always assumed impossibly foreign and savage into one within human grasp, even to the extent of comparing the Jovian cloudscapes with those seen on Earth, without sacrificing anything of Jovian majesty or gigantism. Clarke's message to us is, as usual, "we can do it."

The Mechanical God: Machines in Science Fiction
edited by Thomas P. Dunn and Richard D. Erlich *(Greenwood Press, 1982, 284 pp, £26.75)*

Clockwork Worlds: Mechanized Environments in SF
edited by Thomas P. Dunn and Richard D. Erlich *(Greenwood Press, 1983, 384 pp, £29.95)*

reviewed by George Hay

These two massive items are complementary, the first dealing mainly with robots and the

second with the larger aspects of man-machine interaction. The first is introduced by Brian Aldiss, the second by Arthur O. Lewis.

Nothing is irreplacable in the contingent world, but it can safely be said that it will be a long time indeed before these works are superseded by any others on the shelf of the scholar seriously interested in the areas under discussion. In both books, the appended "List of Works Useful for Study" is exceptionally thorough. While I would have liked—as so often in such cases—to see greater reference to short stories as well as novels, this is a counsel of perfection: there are limits to what publishers and scholars can be expected to do.

The Mechanical God has, as headings: Authors; Children's Science Fiction; Attributes and Cyborgs. *Clockwork Worlds* deals with Archetype and Prototype; Later Developments; and Special Topics. This gives us eighteen sections in the first book and fifteen in the second.

Useless to pretend objectivity: I comment simply on those passages which to me evoke particular insights. Others would surely make different choices, and, given the length of these works, I must emphasize that omission is not intended as a slight: the concerned scholar must simply read the works through, page by page.

Let us start with *The Mechanical God*. Christian W. Thomsen's "Robot Ethics and Robot Parody," though brief, deals very constructively with the opposition between Lem and Asimov. This really is important, because, whichever of the underlying philosophies one supports, attention does need to be drawn to the constructive role played by Lem in insisting on the need for an open-ended and multi-dimensional approach to the robotics issue. "Lem's work generally," says Thomsen, "is distinguished by compassion and recognition of the ethical obligations man owes to his creatures . . ." True, and if his attack on what he considers the crude Western approach seems at times overdone, let us remember that somebody has to redress the balance.

Thomas Wymer and Terri Paul review the relevant works of Vonnegut and Fred Pohl respectively, and do it extremely well. Leonard Heldreth performs the same task for Joe Haldeman, Heinlein, Saberhagen and Laumer. In "Mechanisms of Morality," William Schuyler discusses Herbert and Wolfe in terms of—God bless my soul!—Confucius, G.E. Moore and Kant. Well, welcome to the club, gentlemen. My response to Donald Palumbo's "Sexual Mechanisms and Metaphors in Films" is ambivalent. When I read that "the climax of *Close Encounters* is another moment of genesis" that corresponds to "the unimaginable flood of pure light that was the essence of the universe in its moment of genesis," my response is to make a rude gesture. Yet Mr Palumbo has got something here. The example I've just quoted is perhaps unfortunate: others of his parallels are much closer to the bone, and, I'd suggest, accurate. Certainly, this area could do with more attention.

Over to *Clockwork Worlds*. Merritt Abrash's vision of Dante's Hell as an automated cosmos is breathtaking:

> In other words, Minos receives data, processes it, and provides output in accordance with his programming. The data is complete ("Minos, who apprehends everyone"), the programming flawless ("Minos, to whom it is not granted to err"), and the output appears as a form of "display," the number of turns in the tail indicating the circle to which the soul is condemned. The analogy between Minos and a computer is obvious in the 1980s, but only pure intuition could have led Dante to such a concept in the early fourteenth century.

I could quote more, but I hope this gives you the flavour.

The dehumanization of man is extremely well-treated in Reimer Jehmlich's, "Cog-

Work: The Organization of Labor in Edward Bellamy's *Looking Backward* and later utopian fiction". Gorman Beauchamp looks further, and very closely, at this theme in his "Man as Robot: The Taylor System in *WE,*" reminding us—as we need to be reminded—how keen Lenin was on Taylorism. William Hardesty III in "The Programmed Utopia of R.A. Lafferty's *Past Master*" gives one of the best expositions I have ever read of that allegedly "difficult" sf master—and, indeed, of More's original work. Thomas Hoffman and Lawrence Broer both deal with Kurt Vonnegut's handling of man/mechanization. They are of course not the first to do so, but I think readers will find here aspects that may have perhaps been under-emphasized, especially Broer's analysis of the individual—as distinct from social and mass-link between schizophrenia and the machine ethos. Phyllis Days' "Love and the Technocracy: Dehumanization in Social Welfare" mounts a long-needed attack on our attempts to "cancel out man" in the name of "efficiency," though her references to sf are on the sketchy side.

Is structural analysis simply a bluff? If not, what am I supposed to make of statements such as, "The dual syntagmatic structure does not easily allow this linear, forward, historical movement, since it includes no principle such as meditation or negation to link its opposites together"? I refer to Daniel Ingersoll's "Machines are Good to Think: a Structural Analysis of Myth and Mechanisation." Please, I am not sneering: I have—with some difficulty—extracted useful insights from this essay. And, to be sure, every specialist discipline must have its own jargon, one necessary to it. But is it too much to ask specialists, especially in a generalized collection of this kind, to remember that the reader, as far as his discipline is concerned, is a layman?

In conclusion, I would like to draw attention to Alexandra Aldridge's "Origins of Dystopia: *When The Sleeper Wakes* and *We,*" in which she excellently examines those points which both link and differentiate Wells' and Zamiatin's treatment of the mechanistic society. "For Zamiatin, unlike Wells, revolt and an apocalyptic theory of history are directly related to the emergence of a dark *inner* life. The heretical personality, once developed, attempts to smash the inflexible system inhibiting his *psychic* system." Think about it. I believe the lady has put her finger on the Achilles heel of the entire Wellsian-humanistic ethos.

These two books cover a lot of territory. I hope that what I have set down, even with omissions, gives some idea of just how much they do cover, and how well.

No Place Else: Exploration in Utopian and Dystopian Fiction
ed. Rabkin, Greenberg & Olander *(Southern Illinois University Press, 1983, 278 pp, no price given)*

reviewed by Stef Lewicki

This is a mixed collection of essays on the utopian and dystopian theme, each centred around a particular novel; the worlds of science fiction and mainstream literature are occasionally bridged in the consideration of writers such as Huxley, Orwell and Golding. The chronological arrangement of the essays—in terms of the dates of publication of the various novels—illuminates the changing concerns reflected in utopian and dystopian writings, as well as highlighting the tendency to the dystopian which has grown this century. Several of the essayists also illuminate the relationship between writers of sf and

mainstream fiction, and how they use the utopian form.

This book is part of the recent growth in utopian studies, which seems to reflect the immediacy and urgency of the global social, political and economic crisis, in the sense of the awareness that finally humanity is in the position (in terms of knowledge and scientific and technical ability) physically to realize either the utopia of our dreams or the dystopia that hitherto was only nightmare. Increasingly such novels highlight the choices available to humanity at the moment of their writing, and in books such as *The Dispossessed* and *Ecotopia* there is a link between the seductive desirability of the utopia presented as a solution to the widespread needs, aspirations and fears of contemporary humanity and the practicality—in terms of a "Blueprint For Survival"—of the structure of the utopian society outlined by the author: not only is it an ideal society, the suggestion is that we have the power to realize it, and this is where current utopias differ from those of previous centuries.

Eric Rabkin begins the collection with a general introductory essay, "Atavism and Utopia," exploring various themes common to the genre: the myth of the Fall from an original Eden/Utopia, the perception of the destructiveness of sex, love and the emotions in many utopian and dystopian societies and also the way many ideal societies can be seen as retreats into a pastoral, Edenic pre-lapsarian past, often coupled with a Luddite approach to scientific and technological progress (as in Butler's *Erewhon* for example). His analysis is useful in delineating the origins of many novels of the genre but I find that his categorization of the utopia as atavistic, thereby diminishing it, detracts from those elements of utopian literature which present practical and achievable suggestions for improving the world. I feel rather that it is significant that sections of humanity hanker after a Golden Age of the past, recognizing that in an age of relatively unbridled devotion to Progress, there are some aspects of the past that should not be rejected—a re-evaluation and restatement, if you like; conservatism with a small "c."

The main contribution of B.G. Knepper's essay on Bulwer-Lytton's *The Coming Race* is that the late nineteenth-century excitement about science reshaping the world marks the time when writers began to be aware that people now had the possibility of realizing an ideal society rather than just dreaming about one. Still in the nineteenth century, Thomas J. Remington provides a detailed analysis of the social criticism and satire of Butler's *Erewhon*.

As well as a detailed analysis of Zamyatin's *We,* Gorman Beauchamp clearly highlights themes in what has been a seminal twentieth-century novel, both utopian and dystopian, and indeed this in itself is new, the society that from within imagines itself a utopia but from without is obviously dystopian. There is the benevolent dictatorship, hallmark of many authoritarian utopias, and sex as guilty party—it's through transgressing sexual codes that D503's fall begins; the utopia/dystopia as mental and physical prison in which all must conform, and the world outside—in this case beyond the Wall—as symbol of hope. Despite the seductiveness of many a utopian vision we are reminded of the ever-present question "Can humanity cope with freedom?" Beauchamp analyzes the aptness of the sterile and mechanistic language of *We* as appropriate for its radically different social conditions: in the fact that a closed society can only tolerate the language of assent we see what Orwell was to learn from Zamyatin, and brilliantly conceived of as "Newspeak."

The essay on Olaf Stapledon's vast and gripping feat of the imagination, *Last and First*

Men, rightly points out its major flaw, the writer's pedestrian prose, which fails to give the novel fictional authority. William Matter makes a short reference to *Island* in his essay on Huxley's *Brave New World* and it would have been a much better one if he had explored the contrasts and parallels between the two novels in some detail, in particular the point he makes about the tension between the myth and reality of utopia which is constantly present in *Brave New World.* The essay on Wells' *The Shape of Things To Come* is largely descriptive and unremarkable.

Kenneth M. Roemer's essay on Skinner's *Walden Two* is one of the best in the collection, a detailed critique and deconstruction of a novel that has enraged many readers. Skinner apparently regards his novel as a blueprint for actual change, and in this it can be linked with the nineteenth-century experimental communities that flourished in the US—according to Roemer there are several Skinner-inspired communities at this moment. He makes some useful remarks on the general theory of how a writer makes a utopia acceptable to the reader and shows in particular how Skinner used the conventions of the genre to articulate his ideas in the best possible light. Because of the "small is beautiful" setting of *Walden Two,* Roemer notes that the novel dates less rapidly than other, larger-scale utopias. However, the cardboard characters that are merely vehicles for ideas, and the fact that Skinner's skilful manipulation of characters, emotions and ideas are designed to modify the reader's behaviour and response to the novel—which is why so many violently dislike it—do not escape the perceptive analysis of the essayist.

The most useful and interesting contribution of William Steinhoff to our understanding of *Nineteen Eighty-Four* is the detailed tracing of the fictional influences and antecedents to Orwell and how his thinking developed towards the writing of that novel. Jack Zipes sets Ray Bradbury's *Fahrenheit 451* firmly in its context, delineating for us how closely bound it is to the witchhunts and censorship, the rising influence of television, and the frustration of youth in the US of the nineteen-fifties. His is a complex analysis of a book that is over-simplistic and élitist in its ending, as well as a-political in blaming the totalitarianism and technlogical determinism of the imagined society on "man's nature." Serious science fiction or utopian literature should not be allowed to get away with formulating what Zipes calls "romantic anti-capitalist notions from an élitist point of view." But then Bradbury has always been more fantasist than serious sf writer. In the next essay, on William Golding's *Lord of The Flies,* a novel I was initially surprised to find included, Kathleen Woodward also takes the author to task for the reactionary and simplistic line of blaming catastrophe on inherently weak and evil human nature. In a detailed and carefully argued critique she makes the point that Golding's view of humanity is one-sided and that the assumptions on which the plausibility of the novel are based must be questioned. Aggression may be innate in people but not its pathological expression—and thus the validity of what Golding wants to say is severely limited. A timely cutting down to size of an over-rated novel.

Merritt Abrash sees Robert Silverberg bridging the utopian and sf genres in *The World Inside:* the difference between them is science fiction's priority being action and a story rather than the stress on ideas and reflection prevalent in utopian fiction—an illuminating point, from which the writer proceeds to analyze the structure of the novel and how it addresses the scope of utopia, finding that ultimately the flaws strain the limits of utopian possibility and our credulity, in Silverberg's vagueness about the political and economic functioning of a hive society in the twenty-fourth century, together with many features that do not necessarily follow from the ideological foundations of that society, and worst

of all, the lack of any attempt to explain the transition from the present to the twenty-fourth century.

I looked forward to a good essay on Le Guin's *The Dispossessed,* which is one of my favourite novels, and instead read one of those essays that veer between being unreadable and pure gibberish. The writer delves into cabbalistic number-crunching and palindromes, esoteric Taoism and goodness knows what else, falling into the trap of being futile and boring as well as obfuscating the vividness and essence of a novel by trying to dissect too much. The trouble with this sort of deconstructive analysis is that whilst occasionally we are treated to small insights the overall effect leaves us with the impression that Ms Le Guin must have constructed *The Dispossessed* like a geometrical exercise, and something is taken away from the life and spontaneity of literary composition, which cannot be quite so calculating: the strong emotional appeal of the novel is denied.

Overall, a worthwhile collection of essays, though as I have indicated, there is a fair amount to be skimmed over, or ignored. I felt that some of the novels examined lent themselves well to the treatment the editors of the collection adopted, of allotting a separate chapter to each book, because of the complexity of theme and characterization, but that others would have gained from a more thematic approach in which they were discussed and compared with several other similar novels, since on their own their tenuousness is perhaps unfairly emphasized.

The Science Fiction of Kris Neville
edited by Barry N. Malzberg and Martin H. Greenberg *(Southern Illinois University Press, 1984, no price shown)*

Robots, Androids and Mechanical Oddities: The Science Fiction of Philip K. Dick
edited by Patricia S. Warrick and Martin H. Greenberg *(Southern Illinois University Press, 1984, no price shown)*

reviewed by John Clute

This may seem churlish. At first glance we should be nothing but grateful. Kris Neville has been ignored by all those critics and readers for whom paperback publication is no publication at all; and it should also seem a good thing to see a large batch of Philip K. Dick's stories put into hardback and become teachable. At first glance, Southern Illinois University Press does a fine job of textbook production; both volumes under review are strongly bound, clearly printed within ample margins, sturdy; both of them are real permanent books that cry out to be taught. But.

We should concentrate on the Neville collection, edited by Barry Malzberg in his true-terrible-history-of-science-fiction mode and Martin H. Greenberg, everybody's favourite doubles partner; the Dick volume, made up almost entirely of stories to which his readership will have had access for years, meritoriously reassures Assistant Professors that the man did actually exist, but accomplishes little more for the experienced student.

It is a different story with Kris Neville. Most of the work for which he is remembered at all—though not his best work—was done for magazines like *Galaxy* and *Fantasy and Science Fiction* from about 1950 to 1955. He then left the field, perhaps in the despair at his inability to publish the kind of fiction he needed to write that Malzberg adduces,

Science-Fiction Studies

#33 = Volume 11, Part 2 = July 1984 • Can. $7.50

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perhaps for other reasons as well. It is, after all, not that uncommon for science fiction writers to burn out after a decade of over-production; perhaps it is a form of growing up. In any case, the stories Neville contributed as the adult man Malzberg records having spoken to on the telephone several times and having received 200,000 words of correspondence from, these stories have a subterranean bear-trap bottom-line ironical steeliness that indeed, very much, makes one regret his relative silence after 1955, his early death.

He died in late 1980. The verso of the title page of the Southern Illinois textbook collection gives, as usual in American books, certain Library of Congress Cataloging in Publication Data. The following line is part of that information: "Neville, Kris, 1925– ." To any librarian or student, that line imparts the information that Kris Neville was alive in 1984 at the time the book went to press. Let us move to the introduction, by Barry Malzberg. It is a direct reprint, without any acknowledgement whatsoever of its source, of the obituary notice of Neville which Malzberg published in the January 1981 issue (no. 240) of *Locus,* in a deeply moved vein, just after the death of his correspondent and collaborator on several stories. It flows over—understandably in context—with emotion, dense parabolas of elegy; ends with the statement that "he was the best of us."

Maybe he was. But Noblest Roman oratory has its place, which is not here. Undated and unacknowledged—indeed Southern Illinois University Press seem to have been unaware that the dead man being mourned was the author of the book they were publishing—it strikes a note of skewiff hyperbole that not at all subtly damages the reader's apprehension of Neville's work, because he feels—in a sense wrongly—that he's being hyped. Misplacing the obituary in this fashion may seem a minor sin, but it does echo; it was stupid to do it, and it was a disservice to Neville, in the only "respectable" hardback publication he is likely to be honoured with.

NB: The bibliography is slovenly, and should not have appeared from a scholarly house. All items, whether stories or books, are listed in CAPS. Neville's most important single book, *Bettyann* (1970), a fix-up of "Bettyann" (1951) and "Overture" (1954), is not listed at all. The two component stories are published in the volume under review, separately, without any sign that they are related, and certainly without any description on the part of the obituarist of their intriguingly complex recasting into the form of *Bettyann*. Of course in 1980 Malzberg didn't know nothing about the book he was to "introduce" in 1984, did he. Just another irony in the true terrible history of science fiction, one supposes. Tough luck, Kris.

Of the Dick volume, it is perhaps enough to say that there are fifteen stories included, from "The Little Movement" (1952) down to "The Exit Door Leads In" (1979) and "Frozen Journey" (1980). The story "Impostor" (1953), which is included, is spelled "Imposter" throughout. The Introduction tells us that "As a teenager during World War II, Dick watched with fascinated horror the widespread destruction and the German atrocities." It is very difficult to describe the impact of a sentence like that, the dead-head reification it manifests. The story-notes are composed in the worst theme-searching vein: "His theme is still the same: moral responsibility exceeds legal responsibility. The law is a system, morality is individual." And so forth. To winkle out the appalling banality of theme criticism, all you have to do is reverse the "theme" being promulgated. When reversed, the "theme" will be an absurdity. When paraphrased, the theme will be a

bromide. " 'War Game' presents one of Dick's deepest convictions: He who plays and wins the game of greed and violence is really the loser." Reverse it. Paraphrase it.

But Dick, being a stronger writer than Neville, needs less protection from his friends. His work burns through the subliterary timeserving of Professors Warrick and Greenberg, who sound like State Senators opening a new laundromat. "We in the great State of Letters have always been on the side of clean socks, and it is the theme of this laundromat that washed socks are cleaner than the socks of greed and violence. He who wears the socks of greed and violence is really the dirtier." *Robots, Androids, and Mechanical Oddities* should be bought for the permanent binding and for the stories inside the binding. But not for the Senators.

Neuromancer by William Gibson *(Gollancz, 1984, 252 pp, £8.95)*

reviewed by David Pringle

"The sky above the port was the colour of television, tuned to a dead channel." The first sentence of Gibson's novel sets the tone for this ultra-modern tale of people moving in an electronic landscape. Taking his cues from Alfred Bester, William Burroughs and (perhaps) Samuel R. Delany, but his inspiration from the dreams of Silicon Valley, the author has produced a sour-romantic thriller which is as up-to-date as video-game arcades, organ transplantation, and research into artificial intelligence (all of which feature in the narrative). It is fast-moving, densely written, ingeniously inventive, occasionally funny, continuously "poetic," sometimes baffling, and as tightly packed as the circuitry on a microchip.

William Gibson is a new American sf writer, the author of a number of highly promising short stories which have appeared in *Omni* and elsewhere. *Neuromancer* is his first novel, and it has some of the flaws that one might expect in a debut book: a certain straining for effect, and an over-complexity which now and again clots the story line. But these are the flaws of genuine ambition and of an exuberant talent.

The hero, Case, is a streetwise "computer cowboy." Using the sophisticated electronic equipment of his 21st-Century world, he has the ability to enter "cyberspace," an area where the massed information of the planet's computer networks takes on an apparent three-dimensional reality. Moving through cyberspace, he can alter computer programmes and penetrate commercial memory banks in order to steal valuable data. Thus he makes his living. The story opens in Japan, in a sleazy underworld of hustlers and drug-pushers where Case has been exiled as the result of some complicated transgression. There he encounters Molly, a professional bodyguard-cum-assassin equipped with artificial eyes and razors implanted under her fingernails, who is working for a mysterious agency that wishes to hire Case and use his talents to breach the defences of an Artificial Intelligence. Case is compelled to go along with the plan, and the action moves to North America and then to a huge habitat in outer space (a kind of Las Vegas in the sky). Molly and Case fall in with an anarchic colony of Rastafarians who live in earth orbit; they have a brush with the "Turing police" (whose duty it is to ensure that artificial intelligence is kept within bounds); and they eventually penetrate the exotic home of a dangerously eccentric multi-millionaire. There they find the intelligent electronic entity which has been using them in a bid to free itself of all human restraints . . .

It could be argued that under its bravura surface *Neuromancer* is a rather conventional piece of popular fiction. It has a strong plot, elements of mystery, and plenty of tough-guy violence. Yet, as I have said, it also has more than a touch of poetry. The imagery, of decaying cityscapes littered with an electronic gadgetry run mad, is extraordinarily vivid and relevant. All too many of the contemporary American sf writers deal in the "sub-creation" of never-never worlds—lands, akin to L. Frank Baum's Oz or Tolkien's Middle-Earth, which it would be pleasant to escape to. William Gibson has the courage to attempt something completely different: his fictional scene is our world of the mid-1980s raised to the Nth power. Like all the best science fiction, *Neuromancer* deals with reality, not fantasy, and if some of the technological gimmickry in the novel may seem far-fetched it also serves, as would a set of distorting mirrors, to reflect ourselves and what is around us.

Plan(e)t Engineering
by Gene Wolfe *(NESFA Press, 1984, $13)*

reviewed by Colin Greenland

This tricksy title is because Gene Wolfe used to edit *Plant Engineering* magazine, and the book is because Gene Wolfe was Guest of Honour at Boskone XXI. The New England Science Fiction Association continues to produce these beautiful little celebratory limited editions, and should be proud of them. As the author says in his gracious introduction, this really is his fourth collection, no novelty item (his third, *The Wolfe Archipelago,* was that). Seven stories are accompanied by three rather slight poems, including the Rhysling Award winner "The Computer Iterates the Greater Trumps"; a technical article, "The Anatomy of a Robot" (from *Plant Engineering)*; and a new essay called "The Books in *The Book of the New Sun,"* which is candidly informative on many topics, none of them *The Book of the New Sun.* Wolfe deals justly with some of the questions its readers ask him, about the social system of the Commonwealth and its religion, clarifying what is apparent in the text and arguing for its appropriateness to life on the dying Urth. He also wanders, as if absent-mindedly, straight up to some of the things which are *not* apparent in *The Book of the New Sun.* We hold our breath. Wolfe then executes some perfectly charming piece of folderol, turns smartly and walks off in the opposite direction. The library is in the book and the book is in the library. There are no guided tours.

There are no maps in *New Sun* either, so Suford Lewis of NESFA has made the enticing mistake of drawing one for *Plan(e)t Engineering* from Wolfe's notes. It tells us nothing—or rather, to be more accurate, since accuracy is the issue here, it tells us that Thrax is 150 leagues north-north-east of Nessus, and Lake Diuturna is 26 leagues long—"all of which, sir, though I most powerfully and potently believe, yet I hold it not honesty to have it thus set down." *New Sun* is not a guidebook. I am instantly suspicious to see the House Absolute and the Stone Town located, as if they had definable dimensions. However.

"In Looking-Glass Castle" was Wolfe's contribution to the sf special issue of *TriQuarterly,* of an America with—officially—no men. The story has the usual quality of being slightly creepy, yet warm. It is sad; and hopeful. Will someone please give us a feminist response to "In Looking-Glass Castle"?

"The Rubber Bend" is a clockwork banana, which ticks its logical way right round the most bizarre temporal paradox at the behest of two detectives (one human, one robot) and a robot Dr Watson. Fun to watch, but if you try to work it out you go cross-eyed.

"The Marvelous Brass Chessplaying Automaton" is a still and touching story of people making fools of themselves and others out of greed and desperation, saving face and observing the formalities while something stifles and dies. If the story were unsigned, I would ask why it is set in the future, at the twilight of cybernetic systems rather than at their mechanical, fairground birth; but since it is by Gene Wolfe I rather suspect there is some utterly crucial reason which he certainly wouldn't tell anyone who asked.

"When I Was Ming the Merciless" is the third story here from a Terry Carr anthology, a bitter little account of human aggression and its self-justifications. From Harry Harrison's *Nova,* "The HORARS of War" opens out the question through poignant, quicksilver uncertainty about a man whose job leads him to impersonate an android soldier—an elegant study for the design of Jonas in *New Sun.*

"A Criminal Proceeding" seemed almost facile in the Le Guin and Kidd anthology *Interfaces,* but now seems both funnier and more barbed: an unblinking extravaganza of America gripped by the unreason of its own media.

The denouement of "The Detective of Dreams" (first published in Kirby McCauley's *Dark Forces*) leaves an unpleasant taste in my impious mouth which would surely be transubstantiated if I were, like Wolfe, a believer. The more unpleasant because "The Detective of Dreams" had been just as much M. John Harrison as "A Criminal Proceeding" was J.G. Ballard. The trouble with such revelations as narrative resolutions is that they work only if you assent to them. If not, you remain in the outer darkness, troubled but untouched.

Damiano *(Bantam, 1984, 243 pp, $2.75)*

Damiano's Lute *(Bantam, 1984, 254 pp, $2.75)*

Raphael *(Bantam, 1984, 230 pp, $2.75)*
by R.A. MacAvoy

reviewed by Mike Christie

In *Tea With The Black Dragon,* her first novel, Roberta MacAvoy blended science and sophistication with a powerful and well-realized fantasy element in the character of Mayland Long, and she showed herself to be capable of telling an interesting story. A combination like that is sufficiently rare to inspire high expectations of the author, but seeds of disappointment are to be found in *Tea With The Black Dragon,* although they are largely concealed by MacAvoy's energy; in the *Damiano* books they have sprouted alarmingly.

The trilogy is set in Renaissance Italy, and the first book opens in the town of Partestrada, where young Damiano Delstrego lives. He is a talented witch and a brilliant lutenist, having been trained in the lute by the archangel Raphael, who is still his friend and spiritual advisor. War disrupts Partestrada, and Damiano's subsequent adventures bring him to his full power as a great witch. In the process he meets the two other main

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characters in the books, Saara, a Finnish witch, and Gaspare, a street urchin who falls in with Damiano. There are also several encounters with Lucifer, the Father of Lies, including at one point a descent into hell. These ingredients have enough originality to have contributed to a book at least as good as *Tea With The Black Dragon,* but MacAvoy fails at the most important hurdle—the characters. There were hints in the earlier book of a cloying niceness in the character of Martha Macnamara, but Mayland Long and Liz Macnamara more than made up for that. In the *Damiano* books, however, all the characters suffer from what is essentially the same disease—Gaspare, in particular, acts like a caricature of himself, and Damiano is, like Martha, much too nice a person for the reader to care about. Saara has more pretensions to believability, but after a promising start she fades into Damiano's shadow as he dominates both her and the plot. Raphael has the best chance of interesting the reader, but in the event MacAvoy ducks the difficult challenge she sets herself in the third book, and lapses into tweeness.

That challenge is the second of the two major themes of the trilogy, the first being the spiritual and sorcerous growth of Damiano from youth to manhood. It consists of an attempt to imagine the plight of an angel who has fallen from grace, who has become mortal, carnal, and who is now capable of sin. She sets up the problem with writing of some power, and follows Raphael from the slaveblock through servitude to eventual freedom, but the strength of the premise does not finally prevent MacAvoy from dissipating the opportunity it gives her to show that she can create a character like Mayland Long more than once. The tweeness mentioned above takes over Raphael's character, and as with Gaspare, the result is that he acts like a cartoon of himself. This is a method of characterization long ago perfected by Anne McCaffrey, and adopted by several other writers, mostly of fantasy. That it is unnecessary is amply demonstrated by Barbra Hambly, whose career almost exactly parallels that of MacAvoy but whose characters are totally dissimilar: real, in other words. If you have read her works, recall Ingold Inglorion; if not, bring Ged from Le Guin's Earthsea trilogy to mind. In neither case will the result resemble MacAvoy's witches in any way.

There is another respect in which the books are irritating; the inclusion of pointless inventions for their own sake. This is perhaps best exemplified by the scenes set in hell in *Raphael,* where Lucifer is adequately described, but where MacAvoy places only one other demon, a ludicrous being called Kadjebeen, whose sole purpose seems comic relief. He may be intended to indicate by a form of concrete synecdoche the existence of the remainder of the legions of hell, but if so he fails dismally. The entire trilogy, in fact, suggests a plenitude of invention coupled with a dearth of authorial control. Contributory to this impression of a weak hand on the helm is the admitted difficulty of credibly describing God or Satan without trivializing the action. James Blish deliberately used this effect to climax *Black Easter;* MacAvoy here has gone too far in the other direction, and the Devil becomes just another baddie.

And yet, despite all this, MacAvoy is a skilled writer. There are passages in the books which make you temporarily forget the inanities of the leading characters, and some of the descriptions of the magical scenes are just that—magical. Several of the minor characters are drawn with a sure, swift touch and a light hand that MacAvoy sadly eschews elsewhere. The background, Italy and Spain in the Renaissance, would be interesting in the hands of a far lesser writer than MacAvoy, and is in fact brought vividly to life with the aid of what is evidently a deep knowledge and sincere love of the period. The plague

makes an appearance, and is occasionally evocatively described, and the books as a whole flow smoothly and professionally from one scene to another, with no jerkiness or uncertainty. The array of her undoubted skills is, however, sadly undermined by her inability to control her creation. If she can regain her narrative authority, her next book should be what *Damiano* was touted as but was not—a "treasurable read."

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Foundation *is published three times a year—in March, July and November—by North East London Polytechnic on behalf of the Science Fiction Foundation. It is typeset and printed by Allanwood Press Ltd., Stanningley, Pudsey, West Yorkshire.*

ISSN 0306-4964