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HARD READING

Learning from Science Fiction

TOM SHIPPEY

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For Peter Weston True fan, true friend

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Note on References

These pieces were written over a period of more than thirty years, in many different house-styles. I have tried to make them consistent, and have also aimed at not burdening the reader with pseudo-scholarship. There is rarely any point in giving page references for quotations from works of fiction which have been repeatedly republished and repaginated (except to show repetition, as at pages 238, 245-6, 253-4). Where I think it is useful I have indicated chapter or section numbers, so that quotes from works of fiction can be located. There is also little point in giving publication details of first editions which most readers never see. Accordingly, works of fiction do not appear in the 'List of References' at the end. The first time any work of fiction is mentioned in a piece, I give its author, title, and date of first publication. References to all magazine publications are given by year and month to the first, usually the American, edition: several magazines issued US/UK editions, dated a few months apart. (Note that Astounding Science Fiction changed its name to Analog: Science Fact/Science Fiction in August 1960: the abbreviation ASF refers to either title.) All authors' names are furthermore indexed.

References to critical works, however, are indicated in text by author, date and page, and keyed to the composite 'List of References' at the end. Footnotes are used for the most part only to add information or make a point which is (I hope) interesting, but to one side of the main argument.

A Personal Preface

Science fiction has been the most characteristic literary mode of the twentieth century. It has of course had forerunners and 'anticipations' (for which see Seed 1995). But whether one looks back to the early nineteenth century and Mary Shelley's Frankenstein, and after that the mostly British tradition of 'scientific romances' (see Stableford 1985), or the many moon-voyages and fantastic journeys of much earlier times, there was a sea change in the Wellsian 1890s, and an even greater one in the 'pulp fiction' era beginning in the 1920s. It came, obviously, as a natural reaction to the accelerating pace of scientific discovery, which affected people's everyday lives on the technological level, with internal-combustion engines, powered flight and the whole apparatus of military matters right up to the atom and hydrogen bombs and the intercontinental ballistic missiles (ICBMs) which could deliver them. Not very far in the background, on the intellectual level, were the impacts of Darwinism, social anthropology, challenges to faith and even (much underrated) Grimmian comparative philology. Many authors, even more readers, responded to these changes in every conceivable way.

This development caught the literary world by surprise and was too often unwelcome. Later in this book I note some of the hostile reactions which have often been reported to me, but the one which sticks in my mind is the extraordinarily grudging blurb which Penguin Books used to put on the back of their editions of John Wyndham's books in the 1950s and 1960s: they summarised his career, saying he wrote 'stories of various kinds' and 'detective novels'. But then, the blurb proclaimed, 'he decided to try a modified form of what is unhappily known as "science fiction". Only a 'modified form', and don't let the term for it put you off, the Penguin editors defensively insisted. Later blurbs only noted that Penguin had sold half-a-million copies of Wyndham's works, but the attitude remained and has not entirely vanished: see, for instance, Ursula Le Guin's tart reaction, now, in 2015, to Kazuo Ishiguro's nervousness

lest his novel *The Buried Giant* might be taken as 'fantasy' (and so not serious, not literary).¹

It may be as a result of this estrangement between the literarycritical world and the new mass audience that Samuel Delany said, in his address on receiving the 1985 Pilgrim Award, that 'we must learn to read science fiction as science fiction'. It is an enigmatic remark, though corroborated by others (see n. 11 on p. 34, p. 39), and one hopes that after thirty more years of ever-increasing critical attention, it is not as true as it once was. Yet there is a sense in which it contains an obvious truth, at least as regards literary critics. Most critics, even of science fiction and fantasy, learned their trade and acquired their critical techniques and vocabulary in colleges and graduate schools where the focus was on 'the great classical texts', to quote Professor Howard Felperin (see p. 28, below). Adapting such techniques to a new mode is not a self-evident process, and one often feels that new words are needed for new concepts. I use some of them in the essays presented here, including Darko Suvin's novum, John Huntington's application of habitus, and James Bradley's genuine neologism 'fabril'. Speaking of the last, it is, to say the least, surprising that we have a well-established term for the literary mode of 'pastoral' (rural, nostalgic, focused on the image of the shepherd), but none for its opposite (urban, futuristic, and focused on the image of the faber, the blacksmith, the creator of artefacts). What kind of prejudice does that disclose? One might note that Classical education found such industrial images disturbing, threatening. Mythical blacksmiths like Hephaestus, Vulcan, Wayland Smith, are cripples, to be punished for their presumption like Prometheus and Icarus. The attitude, the unconscious prejudice, the condescension towards mere 'engineers', has not entirely vanished. (Years ago one of my Leeds colleagues, a professor and also a very famous poet, realising that I could work out students' average marks

What happened was that Ishiguro, in an interview with Alexandra Alter in the Books Section of the *New York Times* (19 Feb. 2015), said that he was worried: 'will [readers] be prejudiced against the surface elements? Are they going to say this is fantasy?' Le Guin responded, 'It appears the author takes the word for an insult. To me that is so insulting, it reflects such thoughtless prejudice, that I had to write this piece in response'. See Ursula K. Le Guin, 'Are they going to say this is fantasy?' bookviewcafe. com/blog/2015/03/02/are-they-going-to-say-this-is-fantasy/. I once heard Le Guin deliver a similarly crushing put-down to a Tolkien-dismissing literary critic in a radio interview I shared with her. Asked if she wanted to reply to his demonstrably foolish claim that Tolkien simply 'couldn't write, couldn't write *sentences*', she said, 'Oh no. You can't argue with *incapacity*'.

at our interminable marks meetings much quicker in my head than the secretary could with a calculator, said, 'Tom, you should have been an engineer'. This was not meant as a compliment.)

Turning further to the personal aspect of this 'Personal Preface', I think I was lucky enough to be inoculated against that whole area of prejudice. I recall the day it happened. It was early in 1958, I was at home recovering from some minor illness, I had read everything in the house (there wasn't very much), and my mother went to the unimpressive local newsagent and came back with the only form of narrative she could find there. It was the British edition of *Astounding Science Fiction* for January 1958 (September 1957 in the American edition). It contained the first part of a four-part serial, Robert Heinlein's juvenile *Citizen of the Galaxy*, a comic novella by David Gordon, three short stories (one of them by Eric Frank Russell), and the usual *Astounding* apparatus of a science fact article, on fusion power, an editorial, readers' letters, etc. I was hooked immediately, and have remained on the hook ever since.

Quite why that should be, I cannot say. The odd thing was that it triggered a till-then dormant interest in the classic literary texts I had been ignoring at school. Not very long afterward I wrote a 25,000-word prize essay on Shakespeare's history plays. The burden of it was that, far from being patriotic accounts of the national pageant - which was the way they were being presented at just that time in a BBC drama series on television - they portrayed, if you read more closely, a sequence of Machiavellian politicians, ending up with the most successful 'Machiavel' of them all, Henry V. I was especially struck by the scene in Henry V Act 2 scene 2, where Henry talks the Earl of Cambridge into arguing against mercy for traitors and then has him executed for treason. Poetic justice? No, I argued, political murder. For the Earl was in one view (and a view which Shakespeare had clearly presented in an earlier play) the rightful King of England, son of a man whom Henry's father Henry IV had similarly disposed of: 'Was not he proclaimed / By Richard that dead is, the next of blood?'

I was in fact presenting a view taken many years before by William Hazlitt. But I had never heard of Hazlitt. On the other hand, I had read and noted the scene in Poul Anderson's *The Man Who Counts* (serialised in *Astounding*, British edition May–July 1958, right after the Heinlein serial), in which the wily and cynical Nicolas van Rijn works up a host of winged aliens to go to war, for his own purposes, with adaptations of speeches from Shakespeare's *King John* and *Henry V*. So, there was a subtext to van Rijn's quotations, and maybe one in their originals too! At last, great literature became interesting. The result was that from then on I had at least a tendency to read the classics through science

fiction, not the other way round. As I note elsewhere in these essays, I could not accept the consensus view of the end of Gulliver's Travels ('we must remember that in his misanthropy, Gulliver is mad'). I had already read the very similar ending of The Island of Dr Moreau, and I knew that Wells's Prendick was not mad: he had seen the animal in humanity and his insight was 'in a sense' (see p. 32 for discussion of that phrase) correct, perceptive, scientifically based. In the same way I did not accept the excuses normally made for the ending of Twain's Connecticut Yankee ('it is bitterly ironic'): I had already read de Camp's Lest Darkness Fall, and other works (see item 4, below), with their variable and nuanced approaches to 'change-the-past' stories. I appreciated Brave New World and Nineteen Eighty-Four, but I saw at once that they were 'enclosed universe' stories, like Wells's 'Country of the Blind', Heinlein's Orphans of the Sky and several later variants, and felt that Huxley and Orwell had quailed before the logic of the plot: which is that someone in an enclosed universe cannot break out of it just on the basis of some ancestral memory (Winston Smith) or instinctive distaste (Bernard Marx; see, further, n. 10 on p. 254).2 And so on.

In a similar way, as I read works of sociology or anthropology, like Thomas Kuhn's *The Structure of Scientific Revolutions* (1962), or Margaret Mead's *Coming of Age in Samoa* (1928), or B.L. Whorf's much more dubious theories about the nature of language (Carroll 1956), I read them not with surprise but with recognition, having picked up the ideas already from science fiction. There is an obvious Margaret Mead figure in *Citizen of the Galaxy*, though I did not recognise her till years later, and Jack Vance had fictionalised Whorf in his *The Languages of Pao* (1957). As for Kuhn, he was part of a whole science fictional debate about 'steamengine time'. (See, for all these, items 6, 11, below.)

In short, I had a science fictional education. People often wonder whether there is a correlation between interest in sf and fantasy, on the one hand, and becoming a professional medievalist, as I did, and there certainly seems to be one such. It happens too often to be coincidence. The critic Leonard Jackson, whom I quote several times with approval in what follows, thought that it was the result of a kind of marginalisation, would-be critics shuffling to the edge of their profession because of what he saw as the stultifying effects of the kind of literary education he and I and others all underwent in the Cambridge University English Department, and its many offshoots – for Cambridge was then dominant in the UK literary field. He could well be right in many cases, but not

² Wells too succumbed to the lure of the 'cop-out' ending, rewriting his story with a happy ending in 1939: see Parrinder 1990.

in mine. I was not marginalised into science fiction, I was there already, and the interest in medieval studies was probably set off by the many quasi-medieval settings of science fiction stories, as well as the field's continuing fascination with the idea of different cultures. (I see I spent my prize money for the Shakespeare essay on the expanded 1959 edition of R.W. Chambers's *Beowulf: An Introduction*.)

There are indeed similarities between the problems of criticising science fiction and medieval literature, notably a lack of fit between them and our Classically derived critical vocabulary. Is *Beowulf* an 'epic'? Tolkien did not think so. Are Anglo-Saxon poems like *The Wanderer* and *The Seafarer* 'elegies', as they are usually termed? Not really. Anglo-Saxon poets loved the device of playing on word-pairs like 'life / leaf', 'blade / blood', 'knell / knolled' (all taken from *Macbeth*, the one Shakespeare play set in Anglo-Saxon times), but we have no word for the device. Some say 'pararhyme', which reminds one of 'paratext', the word used by Michael Saler (2012: chap. 2) to refer to the common science fictional device of framing a narrative with (among other things) made-up quotations, like Asimov's *Encyclopaedia Galactica* or Vance's '*Life*, by Unspiek, Baron Boddissey'. Both fields have a buried rhetoric one has to exhume.

In any case, and for whatever reason, I had no difficulty, many years later, and this time much more consciously, in integrating science fiction and fantasy with the then critically neglected field of 'medievalism', the study of modern fictional, artistic and political responses to the Middle Ages. Behind all such connections, I suspect that I had evolved some kind of meta-statement within science fiction, to the effect that cultures vary in every conceivable way: but they are all conditioned by the limits of available technology, and the awareness and the social structures created by those limits. That was what led me on to exploring both the medieval and science fictional fields.

Autodidacts, however, notoriously have blind spots and gaps in their knowledge, of which I only slowly became aware. One was a profound lack of interest in contemporary politics (see the introduction to item 11, below). I took politics to be an epiphenomenon, as did many science fiction authors, probably with bad results, as the sad history of NASA has shown.³ The space programme was stimulated by science fiction, as has often been pointed out, but we thought that was enough. We should have paid more attention to Heinlein's 'The Man who Sold the Moon'.

³ Ken MacLeod's article 'Politics and Science Fiction' (2003) deals ably with the way politics is presented in science fiction. On the whole, though, and with exceptions, real-world politics seems to be of minor interest to most writers, and fans.

Another gap was lack of interest in critical developments. I recall my Oxford colleague, the anthropologist Edwin Ardener, saying to me, very gently, sometime in the 1970s when I was telling him about 'structuralism', which I thought I understood, 'But we are now surely in a post-structuralist phase'. I did not understand him, and should have followed up till I did. I was, however, largely insulated from post-structuralism by being a medievalist. My basically reactionary view of Tolkien, seen in the context of 'the post-Grimm revolution' of the nineteenth century, was correct as regards Tolkien and has found many responses outside the academic world, but remained critically and academically on the margins, from which science fiction and fantasy are slowly making their way (see especially item 2, below).

The introductions with which I have prefaced the chapters below accordingly deliberately disclose both the effects of a 'double life' inside academia and inside science fiction, and a slow trajectory from detachment to rapprochement.

Nevertheless, and for all its failings or disadvantages, I remain deeply grateful to my science fictional education. No academic conference I ever attended (scores of them) ever had the same sense of community, or the same intellectual stimulus, as WorldCons in the USA and the UK, NovaCons in the UK, the conventions organised by the *Journal for the Fantastic in the Arts*, or the 'Boskones' of the New England Science Fiction Association. It was a rare privilege to talk to the likes of Brian Aldiss, Kingsley Amis, Greg Benford, Robert Conquest, Steve Donaldson and (most of all, and without running through the rest of the alphabet) my much-regretted former collaborator the late Harry Harrison, whose memoir, edited by his daughter Moira, has just appeared as *Harry Harrison! Harry Harrison!*, with a play on the title of one of his most famous books. I hope the essays below may be seen as an act of homage, and of gratitude, to a literary genre and to its practitioners. I would not have had my life since January 1958 any other way.

What SF Is

1 Introduction

Coming Out of the Science Fiction Closet

One of the sub-themes in this collection is the way I slowly 'outed' myself as a science fiction reader within the academic profession. When I was an undergraduate at Cambridge, one thing I was quite sure about was that the merest whisper of an interest in science fiction was going to destroy any prospects I might have as an English professor: science fiction, it was well known, was suitable only for adolescents, and indicated a lack of the serious moral qualities thought requisite (in Cambridge, in the early 1960s) for literary criticism. My Moral Tutor indeed once noticed a copy of *Astounding* carelessly left lying around in my room, and not long afterwards told me that he would not support any application of mine for graduate study. This may have been a coincidence – I had other black marks on my record – but it certainly didn't help.

My first tiptoe into sf criticism came in 1969 (see item 5, below). This was only slightly brave. I was then a very junior lecturer at the University of Birmingham, but I had just got what Americans call 'tenure'. I didn't think it was going to do me any good in any application I made for promotion or a different job, but it came out in a journal with minimal circulation, so probably no one would notice. In 1972, I got a substantial promotion to an Official Fellowship, at St John's College, Oxford, teaching Old and Middle English – not, of course, science fiction! - and felt secure enough to write for Foundation (see items 4 and 9, below), both write-ups of talks given at Novacons in Birmingham. This was probably acceptable in Oxford as an amiable eccentricity, though still a bit suspicious: but then no one from Oxford was going to show up at Novacon, apart from the odd naughty student, and they were on my side. By 1982, I was Professor of English Language and Medieval Literature at Leeds, and bold enough to write a book on Tolkien. This was just about OK in that, however much his fiction was scorned and despised by the critics (he still is Public Enemy Number One to many), he was a famous philologist, and, since I then held the Chair he had held at Leeds in the 1920s, writing about him could be seen as an act of respectful piety towards the ancestors.

However, I think the real moment of 'outing' on my part, as also of growing sf acceptability from sections of the academic community, came in 1988, when I returned to Leeds from a year at the University of Texas, pretty well set on making a permanent shift to the USA, and was asked by the English Association to edit their annual volume of *Essays and Studies* for 1990 on the theme of science fiction. The piece that follows was the 'Preface' to this. One of the jobs of the 'Preface' was to introduce all the other essays and show how they fitted together: I have cut out a good deal of this in the version here. What remains makes one of several strongly contrarian points, which have become more and more obvious to me over the years. I should add that much of it was reprised, along with parts of items 2 and 7, below, with the agreement of the editor, in my article in David Seed's *Companion to Science Fiction* (2005).

One of the things people continually said, and say, about Tolkien and fantasy, is that it is 'escapist'. I have argued elsewhere (2000: vii-ix, 306-18) that the great fantasies of the twentieth century are all about the major problem of the early twentieth century, which was industrialised warfare controlled by a resurgent barbarism: the escapists were the E.M. Forsters, Henry Jameses and Virginia Woolfs whom Cambridge rated so highly, slowly and luxuriously dissecting the emotional problems of a small sheltered class of people who were much less important and interesting than they thought they were. Similarly, the accusation about science fiction was often that it was just simple-minded. I argue in this essay - and again in the next one, and with detailed backup in the piece on the many reviews of Kingsley Amis, item 8, below - that, on the contrary, a lot of it is just too hard for many readers, even educated readers. Reading it takes extra work. It demands a layer of 'informationprocessing' above and beyond what is needed to read any work of fiction. And it is, using the word technically, both intrinsically and demonstrably a 'high-information' genre, which relies not on the mot juste, like Flaubert, but on the mot imprévisible, the word you cannot predict.

Finally – and I take this up also in the next essay – it is incipiently threatening to those critics who regard themselves as the arbiters and dictators of good taste, the people who decide what is and what is not 'literature'. My former St John's colleague John Carey has charted very well the reactions of the Anglo-American *haute bourgeoisie* to the challenge of a new lower-middle-class reading public and an authorship which wrote for them – people like H.G. Wells – in his 1992 book *The Intellectuals and the Masses*, which is much more aggressive than anything

I have ever managed to write. Something we both agree on is that many critics are still refusing even to look at the evidence. Popular literature, genre fiction – these just are not 'literature', see above, and do not need to be considered unless they can be shoehorned into what is usually a political agenda. But, as Darko Suvin has very rightly said (1979: vii), people who ignore 90 per cent of the subject they are supposed to be studying – literature, fiction, whatever you want to call it – will be wrong about even the 10 per cent they agree to study.

Sf and fantasy have crept into the critical world during my working life, but still marginally and on sufferance. This is a pity, because I think it would have aerated the subject, improved both critical practice and critical theory, and done something to prevent what has become in the USA a major undergraduate withdrawal from the humanities. On the other hand, critical scorn hasn't done sf any harm ... And that's what I really care about. The critic Leonard Jackson, who must have been at Cambridge just before my time, has said that the need to disguise one's real feelings about books in order to get the critically OK answer was what drove many into marginal fields, like science fiction, just because they were unregulated; and that this was a cultural disaster (1994: 16–17). If there was such a cultural impoverishment as Jackson says, it seems to me it was felt within the mainstream, and especially within – to borrow the title of a work by another former colleague, this time the novelist David Lodge – the 'small world' of academe.

Learning to Read Science Fiction¹

There are many definitions of science fiction, but most of them are variations on Kingsley Amis's sensible, if laborious, 'Science Fiction is that class of prose narrative treating of a situation that could not arise in the world we know, but which is hypothesised on the basis of some innovation in science or technology, or pseudo-science or pseudo-technology', from New Maps of Hell. Some of those which aren't are clearly counterpunching, like Theodore Sturgeon's claim (repeated by James Blish), that 'A science fiction story is a story built around human beings, with a human problem and a human solution, which would not have happened at all without its scientific content'. This is responding to the familiar accusation that sf 'lacks characters', or 'is about things not people', but is ducking an obvious question: are human beings the only really interesting things in the universe, without which no story has a point? More thought-provoking are remarks which fall short of a definition, or go beyond it, like Brian Aldiss's 'Science fiction is the search for a definition of [humanity] and [its] status in the universe which will stand in our advanced but confused state of knowledge', Northrop Frye's 'a mode of romance with a strong tendency to myth', Fred Pohl's 'it is the very literature of change', or my own argument – see further the essay following this one – that it is part of a literary mode, not normally recognised by scholars, which ought to be called 'fabril'.2

- ¹ The article that follows has been translated twice: into Danish by Niels Dalgaard as 'At laere for at laese science fiction', *Proxima*, 57 (1992): 18–33 and into Swedish by Jerry Määttä, in *Brott, kärlek, främmande världar: Texter om populärlitteratur* [Crime, Love, and Strange Worlds: Texts on Popular Fiction], ed. Jerry Määttä and Dag Hedman (Lund: Studentlitteratur, 2014).
- ² For these definitions, see respectively: Amis 1965: 14; 'Atheling' 1964: 14; Aldiss 1973: 25; Frye 1971: 49; Pohl 1996: 35; Shippey 1992: ix. Eight definitions are given by Suerbaum *et al.* 1981: 9–10. Many more have been collected, and are readily available online.

Most arguments about definitions, however, are in the end arguments about a form of words. More productive, and more in tune with the ethos of science fiction itself, would be an argument not about what it is but about how it works, or in many cases doesn't work. And here we have some data to go on. Many times in the past decades the present writer has been told, usually by academic colleagues of some sophistication, that they 'never read science fiction, just can't read science fiction, don't see how anyone gets anything out of science fiction'. The experience is too common for the statements not to be true. There are many people who simultaneously cannot bear science fiction and never read it; but though they cannot bear it they recognise it immediately. Nor is the repulsion they feel built up cumulatively over pages and chapters, or based selectively on dislike of particular plots, authors, styles, etc. It is instant and universal. It is, in fact, a generic reaction, and there is accordingly at least a chance of defining the field of science fiction, so to speak, by ricochet; its detractors may not know much about the genre, but they do know what they don't like. What triggers this reaction?

The inner nature of science fiction may be exposed by comparing two passages, very similar in content and style, but one inside the field and one outside it. The 'outsider' is the start of George Orwell's novel *Coming up for Air* (1939):

The idea really came to me the day I got my new false teeth.

I remember the morning well. At about a quarter to eight I'd nipped out of bed and got into the bathroom just in time to shut the kids out. It was a beastly January morning, with a dirty yellowish-grey sky. Down below, out of the little square of bathroom window, I could see the ten yards by five of grass, with a privet hedge round it and a bare patch in the middle, that we call the back garden. There's the same back garden, same privets, and same grass, behind every house in Ellesmere Road. Only difference – where there are no kids there's no bare patch in the middle.

I was trying to shave with a bluntish razor-blade while the water ran into the bath. My face looked back at me out of the mirror, and underneath, in a tumbler of water on the little shelf over the washbasin, the teeth that belonged in the face. It was the temporary set that Warner, my dentist, had given me to wear while the new ones were being made. I haven't such a bad face, really. It's one of those bricky-red faces that go with butter-coloured hair and pale-blue eyes. I've never gone grey or bald, thank God, and

when I've got my teeth in I probably don't look my age, which is forty-five.

Ouite how many things Orwell is trying to say in this passage is arguable. But probably from the 250 words cited one could easily make a list of some 20 to 25 data - a datum being a discrete fact stated or implied in the passage, such as: 'the narrator's house has a bathroom', or 'the narrator's house has a garden', or 'the narrator's house has only one bathroom', or 'the narrator has children' (with whom, inferentially, he has to share the bathroom), etc. In addition to these, we could easily generate a string of more debatable conclusions, such as 'the narrator tries to economise on razor-blades, even though these are/were cheap', or 'the inhabitants of Ellesmere Road include retired or unmarried people, who have no children'. A fuzz of such speculation must in some way surround the reading experiences of this passage; but sensible readers will not take it too far, for they may know, e.g., that Orwell was particularly irritated by blunt razorblades, or may suspect that the demographic make-up of Ellesmere Road does not need to be imagined too precisely for the purpose of the fiction.

Yet what most readers work out from their 20 to 25 data must be something like this:

- (1) The narrator (to use Northrop Frye's 'theory of literary modes') is 'low mimetic', and on the verge of becoming ironic. He has false teeth, a sign of age, but also in 1930s England a strong sign of non-upper social class;³ he is middle-aged, his appearance is undistinguished, we will learn in the next paragraph that he is fat.
- (2) The narrator is clearly 'middle class', or what would now be categorised as 'C1': his house has only one bathroom, the WC is in it, there are at least four people to share it (counting the children's inferential mother). Mornings are accordingly competitive occasions when it comes to using the bathroom. But this major inconvenience is dictated by economy, as is the size of the garden, and the bare patch in it which tells us that children play in their gardens (sc. because they have nowhere else to go). Orwell is particularly clear about these class-marking details: the narrator is a house-owner, and the house has a garden (so it is not a 'back-to-back', a working-class house). But it is a small garden directly under the bathroom

³ See, for instance, the remark of the lower-class speaker in T.S. Eliot's famous but thoroughly snobbish poem *The Waste Land*, ll. 219–21.

window, and the window itself is a 'little' one. On the information already given, most English readers, in 1939 or 1989, could and would make accurate guesses about the narrator's income and life-style. That is what Orwell wants them to do.

(3) The narrator's life-style is a drab one. Whether this fact should be related to his class status, whether drabness is a necessary part of 'low mimesis', these are precisely the themes of the novel (which says in short that they are all related but, very passionately, ought not to be). Just the same, the fact is there, in the 'beastly' morning, the 'dirty' sky, the 'little' square of window, the 'bare' patch of garden, the 'bluntish' razor-blade, and so on: of the 25 adjectives in the passage, nine are clearly derogatory, others ('same' and 'only') inferentially so, yet others ('bad', 'grey', 'bald') suggestive above all of the narrator trying to cheer himself up. Stylistically, the main qualities one might identify in the passage are its directness and single-mindedness. Orwell, it seems, has only a few things to say; while he will substantiate these with many details, all the details will point in one direction.

It is this which makes *Coming Up for Air* such a satisfactory if elementary example of how a non-science fiction novel works. There is no doubt about its data; very little about what the data mean; and though there are some details of whose meaning a non-native or non-contemporary reader might be doubtful, like the privet hedge or the 'quarter to eight' rising,⁴ they cause no serious trouble because they confirm or are confirmed by all the others. In the whole passage there is no jarring or inconsistent note.

Compare a matching passage from science fiction, again the opening of a novel, again a man shaving: this time from Frederik Pohl and C.M. Kornbluth's novel *The Space Merchants* (1953):

As I dressed that morning I ran over in my mind the long list of statistics, evasions, and exaggerations that they would expect in my report. My section – Production – had been plagued with a long series of illnesses and resignations, and you can't get work done without people to do it. But the Board wasn't likely to take that as an excuse.

⁴ In my youth there was a brand of (cheap) razor blades on sale called 'Seven O'Clock, Cock'. Seven was the time for the working class to get up, to walk or cycle to work for eight. The nine o'clock-starting middle class got up later, to catch their trains or buses.

I rubbed depilatory soap over my face and rinsed it with the trickle from the fresh-water tap. Wasteful, of course, but I pay taxes and salt water always leaves my face itchy. Before the last of the greasy stubble was quite washed away the trickle stopped and didn't start again. I swore a little and finished rinsing with salt. It had been happening lately; some people blamed Consie saboteurs. Loyalty raids were being held throughout the New York Water Supply Corporation; so far they hadn't done any good.

The morning newscast above the shaving mirror caught me for a moment ... the President's speech of last night, a brief glimpse of the Venus rocket squat and silvery on the Arizona sand, rioting in Panama ... I switched it off when the quarter-hour time signal chimed over the audio band.

It looked as though I was going to be late again. Which certainly would not help mollify the Board.

I saved five minutes by wearing yesterday's shirt instead of studding a clean one and by leaving my breakfast juice to grow warm and sticky on the table. But I lost the five minutes again by trying to call Kathy. She didn't answer the phone and I was late getting into the office.

How long is it, one might ask, before a reader who does not already know realises that this is science fiction? And how does such a reader realise? The answer must be (a) on reading 'depilatory soap' and (b) on realising in rapid succession that depilatory soap does not exist, that for it to exist some sort of chemical breakthrough would be necessary, that such a breakthrough nevertheless would be exploited, just like freeze-dried coffee. The reader of this phrase is in fact - if male and middle-aged - likely to remember a string of shaving-technology innovations, from the aerosol can of shaving cream to the coated blade to the double, treble, quadruple blade, with the concomitant development of electric, cordless and rechargeablebattery razors; and at once to note the fact of a progression, to set 'depilatory soap' in that progression, to realise it is as yet an imaginary stage, but also that the existence of such stages (all at one time imaginary) is by no means imaginary. 'Depilatory soap' is not-real; but it is not-unlike-real. That, in miniature, is the experience of reading science fiction. As well as recognising data, you recognise non-data; but since these are data within the story, they are well labelled nova data, 'new things given'. The basic building-block of science fiction, well identified by Darko Suvin, is accordingly the novum (see Suvin 1979: 63–84) – a discrete piece of information recognisable as not-true,

but also as not-unlike-true, not-flatly-(and in the current state of knowledge)-impossible.

How many novums, in the sense given, are there in the passage quoted? Probably, around fifteen. Some are easily identifiable: there is no more doubt about the depilatory soap than about Orwell's 'bare patch'. At the other extreme – as with Orwell's 'quarter to eight' – there are cases where a non-American or non-contemporary may be unsure whether he or she is confronting a novum or a datum. The 'quarter-hour time signal ... over the audio band' sounds futuristic, but then time signals on radio and television are now common enough. And what is meant by 'wearing yesterday's shirt instead of studding a clean one'? All my shirts have buttons on. Are the authors talking about collar-studs (old technology), or maybe some future novelty, like paper disposable shirts, of which the only non-recycled bits are the studs that replace buttons? In both cases there may be uncertainty, in both cases (again as with Orwell) suspended till more information comes in.

There is after all a great deal of information in this passage, though the experienced science fiction reader is unlikely to hesitate over it. Water, for instance: salt water comes out of the tap (one novum); so does fresh, but it trickles; using fresh water for washing is 'wasteful, of course'; fresh water is supplied by the government to which the narrator pays taxes. There is a string of novums here, but no reader can register them without making some attempt to put them together. In this world, we realise, natural resources are unexpectedly scarce; so scarce that only government can be allowed to control them; this narrator is not entirely loyal to his government. There is a similar string of novums and inferences at the end of the second paragraph. 'It had been happening lately' implies (a) change, (b) recent change, (c) frequent occurrence, so, potentially irreversible change. 'So far they hadn't done any good' backs up the notion of irreversibility.

More inferences come, however, from the five words 'some people blamed Consie saboteurs'. 'Some people' implies 'not everyone' and in particular not the narrator. 'Consie' even now – and even more in 1953 – sets up the parallel with 'Commie'. If 'Commie' < 'Communist', what is the missing term in the sequence 'Consie' < ... ? An astute reader might guess the answer 'Conservationist' (by inference from the interest in fresh water). But any 1953 reader was likely to note:

- (1) in this world, Communists are no longer a threat. But,
- (2) McCarthyite attitudes are still present. So,
- (3) if 'Commies' were just a scapegoat, maybe 'Consies' are too. This

is backed up by the failure of the 'loyalty raids', as (2) is by their existence.

But this last inference, when contrasted with those stemming from the fresh water/salt water opposition, raises a further query more basic to the structure of the whole novel. If 'Consies' cannot be blamed for the potentially irreversible change coming over the narrator's horizon, what can? Something, clearly, which neither the government nor the sceptical narrator would like to think about: it is, to be brief, the ghost of Thomas Malthus in horrible alliance with the descendants of the Coca-Cola Company. Limited resources are bad enough. When they co-exist with an ethic which demands continuous increases in consumption (and does not scruple to use physical and emotional addiction to get these increases), then you have the ground rules for the Pohl and Kornbluth 'dystopia'.

But it does not start with ground rules. It starts with novums. To read The Space Merchants - to read any science fiction - one has first to recognise its novums, and then to evaluate them. There is a discernible and distinguishable pleasure at each stage, as you realise how things are different, how they are similar, and go on to wonder, and to discover, what causes could have produced the changes, as also to speculate what causes have produced the effects of the real world, the effects with which we are so familiar that in most cases they are never given a thought. It is true that readers are unlikely to stop and chew over the implications of 'depilatory soap' or 'Consie saboteurs' in the way that this discussion has done, but then readers of Orwell do not stop to boggle over the implications of 'bare patch in the middle' or 'get into the bathroom just in time' either. Yet the latter group certainly understands at some level that Orwell is writing about class. The reader of The Space Merchants likewise soon has a clear idea that its authors are attacking the American way of life, or consumer-culture.

But it is not that message (I suspect) which would have made *The Space Merchants* literally unreadable to the many literate and liberal colleagues who have voiced distaste for science fiction over the years. It is the existence in science fiction of the novum, and of the pattern of intellectual inference to be drawn from it. Darko Suvin's definition of science fiction, indeed, is that it is:

a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alternative to the author's empirical environment. (Suvin 1979: 7–8)

'Estrangement', with reference to the examples given, means recognising the novum; 'cognition' means evaluating it, trying to make sense of it. You need both to read science fiction. Some people are willing to do neither.

What causes this reluctance may well be beyond the scope of literary criticism; it could be, for instance, that those deeply and personally attached to the status quo will refuse even the notion that reality is an accident, the result of the interaction of a host of social and technical variables, any of which might have been different and all of which are still varying. One might note here the remarks of John Huntington about class feeling and habitus - the latter being, in non-professional language, something like the reader's 'comfort zone'. Huntington suggests that the truly revolutionary element of Wells's Time Machine in 1895 was not the 'scientific gesture' of the time machine itself, but the 'significant shifts in class allegiances' signalled by the Eloi and the Morlocks, a shift perhaps repeated in the 'hacker vs. corporation' world of William Gibson's Neuromancer nearly ninety years later. Huntington feels that these suggestions rather qualify Suvin's thesis of 'cognitive estrangement', which he thinks gives too much dignity to 'conscious rationality' as opposed tacitly to class (or other) prejudice. But, as has been said above, this depends on what one means by 'cognition'. The reader of The Space Merchants may not brood over Consies/Commies and may very well not detect Pohl and Kornbluth's real-life and by American standards distinctly left-wing political stance. (Pohl's autobiography, The Way the Future Was (1978), records that he was a member of the Young Communist League in the 1930s.) Nevertheless one cannot read science fiction at all without some recognitions and some evaluations: quite how 'cognitive' these low-level cognitions or recognitions may be does not seem too vital.

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There is a further conclusion one can come to by considering the basic actions of reading science fiction. It is that science fiction must

⁵ In the volume to which this piece originally acted as 'Preface' (Huntington 1991: 62–5). I would now add that the shifts in class allegiance had started rather earlier, and had provoked a defensive reaction from the traditional upper-middle-class arbiters of literary taste, British and American, for which, see Carey 1992, Part 1, throughout. Modern literary distaste for science fiction, and fantasy, and 'popular literature' generally, is just another aspect of that continuing defensive reaction.

intrinsically be a 'high-information' literature. 'Information', as the *Oxford English Dictionary* tells us, has in recent years become a technical as well as a colloquial term. It now means:

As a mathematically defined quantity ... now esp. one which represents the degree of choice exercised in the selection or formation of one particular symbol, sequence, message, etc., out of a number of possible ones, and which is defined logarithmically in terms of the statistical probabilities of occurrence of the symbol or the elements of the message. (*Oxford English Dictionary*, 2nd edn (1989), vii. 944: all subsequent citations of the OED are from this edition)

This sense seems to have become common only after the Second World War, and to be associated with 'information theory' and cybernetics. There is a literary point to be drawn from it, though, and it is this. In English, as in other languages, there is a high degree of 'redundancy'. Some words can be readily predicted from their context, especially 'grammatical' as opposed to 'lexical' items. If, for instance, the fifth or the seventh word of the Orwell passage were to be blanked out, and the rest of the sentence left, few readers would have much trouble filling them in. The same is true of the 'lexical' words 'came' or 'false' in that sentence. But, by contrast, if 'nipped' in sentence three were to be blanked out, most readers would probably fill in, as first guess, 'got' or 'jumped' or 'climbed'. 'Nipped' is a higher-information word than 'came', or than 'the' in sentence one; it is less predictable, and there are more choices available to fill its slot. Just the same, few if any words in the Orwell passage are entirely unpredictable, or particularly surprising, distinctive though Orwell's style may be. The whole book is (no doubt deliberately) towards the low end of the English novel's generally 'medium-information' span.

Science fiction, however, to repeat the point, is intrinsically a 'high-information' genre. Novums, just because they are novums, are very hard to predict. Some of the words in the Pohl and Kornbluth passage would take many guesses to arrive at if they had been blanked out: one might guess 'fresh-water' from the antithesis with 'salt water', and 'depilatory' (as opposed to 'perfumed' or 'carbolic' or 'coal-tar') if one worked out from context that the passage was about shaving – this is not so obvious once 'depilatory' and 'stubble' are removed – but 'studding', 'Consie', and both elements of 'loyalty raids' seem to be inherently unpredictable. Yet Pohl and Kornbluth here, like Orwell within the English novel as a whole, are towards the low end of their

genre's information-range. A glance at the first 250 words of, say, Gibson's *Neuromancer* will show just how high a 'high-information' style can go while remaining readable: I would suggest that it contains at least a dozen words, not counting names, which could never be accurately recovered by any hypothetical editor of the future, working as it might be from a single surviving damaged or rat-gnawed exemplar.

The science fiction reader, of course, likes this feeling of unpredictability. It creates intense curiosity, as well as the pleasure of working out, in the long run, the logic underlying the author's decisions, vocabulary and invented world. It is a powerful stimulus to the exercise of 'cognition', of putting unknown data into some sort of mental holding tank, to see if and when they start to fit together, and what happens when they do. Yet this experience is in a sense a deeply 'anxious' one: Huntington again remarks on this with particular reference to *Neuromancer*, and says well that any reader of that book is likely to feel all the time that he or she has missed something, failed to grasp 'more than an edge of the whole reality' (1991: 70), is in fact a poor or inattentive reader. But that particular case is only an extreme example of one of the characteristic marks of science fiction: unease, a feeling that rules may be altered, a required readiness to accept the novum, the sudden jolt of 'high information'.

Perhaps the most concentrated form in which such jolts may be delivered is the neologism (see Prucher 2007). Paragraph three of Neuromancer contains the word 'joeboys', a word which as far as I can see (but then like everyone else I am not a perfect reader) is nowhere explained. More significant in Gibson's world are the words 'cyberspace' and 'ice', the former a neologism meaning the world one enters/will enter on plugging the brain into the world-wide computer network of the future, the 'electronic consensus-hallucination that facilitates the handling and exchange of massive quantities of data', the latter a concealed acronym for Intrusion Countermeasures Electronics, the constant warfare inside cyberspace of 'watchdog programs', 'military black ice' and 'icebreakers'. Strikingly, both words have passed since 1984 into general science-fictional use: they express concepts too good not to use. The same is true of Ursula Le Guin's 'ansible', a word for an as yet uninvented gadget. More suggestively, the whole of Le Guin's 1969 novel The Left Hand of Darkness may be taken as a meditation on the word 'shifgrethor', which means at once 'shadow' and 'an alien sense of honour': why 'shadow' and 'honour' should be related concepts is one challenge to cognition, perhaps resolved in the novel's quasi-allegorical chapter 18, 'On the Ice'. 'Shifgrethor', however, is a neologism so closely tied to the world of its book that it has not been borrowed. Words which have been borrowed from science fiction novels into everyday reality include, from Le Guin's *The Dispossessed* (1974), 'kleggitch' (boring work, as opposed to exciting work, work which has to be done, like housework), or, from Philip K. Dick's *Do Androids Dream of Electric Sheep?* (1968) 'kipple':

Kipple is useless objects, like junk mail or match folders after you use the last match or gum wrappers or yesterday's homeopape. When nobody's around, kipple reproduces itself. For instance, if you go to bed leaving any kipple around your apartment, when you wake up the next morning there's twice as much of it. It always gets more and more.

Another likely candidate for future lexicographers is Kim Robinson's self-explanatory 'mallsprawl', from *The Gold Coast* (1988).

Words like these hang as it were on the edge of everyday experience, recognised instantly as filling a gap, but also betraying the existence of the gap. Sometimes they make one wonder why such a gap should exist. Why, for instance, is there in English no neutral-sex third-person singular pronoun – all our other personal pronouns are neutral-sex – equivalent to 'one' but not including the speaker, not being impersonal? Its absence has already led this essay into more than one clumsy 'he or she', and drives other writers into other expedients. Yet the gap usually goes unnoticed, or is accepted as natural. In the last section of his The Years of the City (1984), however, Frederik Pohl rounds off his picture of a developing American Utopia with a world in which such a pronoun is regularly used: instead of 'he/him/his' or 'she/her/ hers', one says consistently 'e/um/uz'. Just to rub the point in, among the characters' casual words of abuse are the neutral-sex neologisms 'prunt' and 'fugger'. If these words were blanked out of the text, they would not be guessed; indeed, in the case of 'e/um/uz', one imagines that strict control had to be exerted over sub-editors to ensure they stayed in at all, and were not automatically replaced by their 'obvious' equivalents. So they are 'high-information' items in terms of unpredictability. But once introduced they also point a powerful if silent finger at the terms one has come to expect. They make us aware of the latent presuppositions, the unconsidered information about our own habits concealed within casual and normal speech. In this way Pohl's coinages perhaps exemplify the 'tri-valency', the multiple relations between real and fictional worlds, seen in science fiction by Samuel Delany (see Spark 1991). And in addition they do one other thing: they serve as a warning that science fiction has a rhetoric of its own, a hierarchy of figures of which the neologism is only the lowest term. The distinctive feature of this unconsidered rhetoric is its ability to exploit contrast, between the real world and the fictional, the novum and the datum, the real gap and the science-fictional filling of it. The tropes, images and modes of this rhetoric, however, have still not been codified; in a sense, critics have not yet learnt to read them.⁶

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There would be quite enough material for the beginning of a Rhetorica Nova in the last section of Pohl's novel – which is actually a sequence of linked novelettes - The Years of the City. The section is called 'Gwenanda and the Supremes', which sounds like a pop group. But in this case 'Supremes' is an ellipsis for 'Supreme Court Justices': the first postulate of Pohl's fiction is that in this future world judges are chosen by lot (like modern jury members), trained, given computer guidance, and then allowed to settle matters not by the arcane and deliberately professionalised structures of modern Anglo-American law, but by common sense alone - common sense being, says Gwenanda, 'what the Second American Revolution was all about, right?'. This means that from the start Gwenanda and her colleagues can behave, and talk, like an unruly pop group, in a Supreme Court setting of considerable gravity. The contrast sets up a sequence of assaults on the modern reader's unconsidered assumptions about legal and stylistic decorum. Faced with a client who has murdered her husband ('uz marry' in their English), the Chief Justice allows twenty minutes for a plea in mitigation, cuts the defendant off dead on time, and says:

'Right ... I'd call this a case for summary judgement if we ever saw one, and I'll start the ball rolling. Guilty. How say you, gang?'

'How say you?' is formal legal English; 'gang' is intimate/colloquial. The contrast feels disrespectful, and even more so are the notions of a judge dispensing 'summary judgement', and attempting without concealment to lead his colleagues. Shocks of this nature keep on being delivered. Later on, a defendant is betrayed when his lawyer approaches the bench and says:

6 As becomes obvious from almost all the many reviews cited and discussed in item 8, below: 'Kingsley Amis's Science Fiction and the Problems of Genre'. 'Well, what e said, when we were talking about uz case, was e said it cost um plenty to fugger up the records at the freezatorium.'

'I protest the unethical behavior of this attorney!' cries the defendant. 'I want him disbarred.' But 'fuggering up the records' has led to a plague in the future, from the germs of the past carried by a frozen-then-thawed invalid; and the only reason the defendant is surprised by what the lawyer has done is that he too is from the past, is indeed a corrupt judge from the legal system of the present. One obvious point is that to him 'unethical' does not mean 'morally wrong', it means – and to our shame, this is a standard modern meaning – 'against the customs of a profession'. The speech of the future ('gang', 'fugger', 'what e said ... was e said') is marked for us as careless, lax, or ugly. But in this story the speech of the characters from our time, while careful, precise and formal, is presented also as deeply dishonest, 'professionalised' in the worst sense, full of genuinely evil or 'unethical' presumptions. Who is in the right? Which is more important, offended decorum or neglected justice?

The rhetorical questions above are mirrored by one in the text, again spoken by an unsympathetic revivee from modern times, 'What kind of a world would it be if you let people do whatever they wanted?' And the answer obviously generated by the text is 'quite a nice one', remembering always the Thirty-first Amendment to the Constitution of the United States, 'Nobody has any right to dump on anybody else. This takes precedence over everything else.' But change of register, semantic shift, and rhetorical questioning are only three of the devices continually used, and used with great variety by Pohl, to set up the repeated contrast between future and present, to rouse the reader's alarm over the unknown future (the 'e/uz' level), and then demand why such alarm should not be better felt about the present (the 'he/ she' level). Neologisms used in 'Gwenanda', besides those already cited, include 'an' (a person, neither (m)an nor (wom)an), 'muddy' (a parent, a mummy/daddy), 'hemale' and 'shemale', and 'congressun': at least they all follow a clear logic. By contrast, words from the present used and greeted with incomprehension or derision by the future include 'feet' (as a unit of measurement), 'attorney', 'testify', 'witness', 'bench', 'statement', 'prejudicial', 'competent authority': all are tagged by Pohl with the same legalistic narrow-mindedness as 'unethical', or the ethnocentrism of 'feet'.

Pohl also makes considerable play with the way in which speech is presented. Early on, the reader's sympathies are led at least two ways by a passage which shifts unexpectedly between authorial narration and what one might recognise as 'coloured' interior monologue.⁷ Samelweiss, the Chief Justice, has just left in the middle of the defendant's speech to go to the toilet – wearing, it should be said, his 'walk-around headphones', a characteristic technological novum combined with sociological provocation. But:

In fairness to Samelweiss, it was true that nothing was being said that any sensible person would want to hear. The brute of a defendant had begged for twenty minutes to make a statement, and Samelweiss, the old fool, had let her have it. Probably just wanted time to go to the can. So the statement had gone on for six or seven minutes already. Bor-ing. All she did was complain about the myriad ways in which society had so warped and brutalized her that whatever she did wasn't really her fault. Now she was only up to the tyrannical first-grade teacher who had hung the label of thief on her —

A loud beep interrupted her – one of the Tin Twins. 'Hold on there a minute, sweet-meats. You did swipe the teacher's wallet, didn't you?'

The defendant paused, annoyed at the interruption. 'What? Well, sure. But I was only a child, your Honor.'

'And then you did, the way it says here in the charge, you did stab your marry to death, right?'

'Only because society made me an outlaw, Your Honor.'

'Right', said the Twin, losing interest.

Any experienced reader of fiction, not just science fiction, will realise straight away that 'sensible' here is tendentious. The language at the start is Gwenanda's: 'old fool', 'go to the can', 'brute of a defendant', all are part of her sceptical, aggressive, overstating personality, and they establish Gwenanda as a familiar 'unreliable narrator'. Her judgements accordingly should be unreliable, and we expect to be against her because of her bias. But not all that paragraph sounds like her interior monologue. 'Bor-ing' no doubt is, but what about 'society', 'warped and brutalized', 'tyrannical', 'hung the label on'? These do not sound like Gwenanda, but like the defendant filtered through Gwenanda. But if they are the defendant's words, she sounds unreliable too. As for the self-exculpatory whine of 'wasn't really her fault' it is hard to tell whether this is the defendant speaking (as in 'because society made me

⁷ I take the term 'coloured' from the discussion of medial stages between direct and indirect speech in Page 1973: 24–50.

an outlaw' in direct speech just below), or Gwenanda mocking ('fault' is like 'Bor-ing' just above). In practice, the reader is likely to take the defendant as a 'stooge', a dummy set up to voice attitudes respectable enough in our time, with Gwenanda as the new voice, the voice of the fiction challenging us. Yet, with one unreliable narrator reporting another, it is hard to say which way sympathy would go. There is more than one irony in the paragraph. As the passage moves on to ordinary authorial narration plus unmediated direct speech, matters become clearer, but even so there is a sequence of shocks. 'Sweet-meats' and 'swipe' are highly unjudicial language, and there is again an indecorous anacoluthon in 'you did, the way it says here in the charge, you did ...'. Perhaps even more surprising is the fact that it is not only a judge speaking, but a robot. After dozens of post-Asimovian tales about self-sacrificing, human-worshipping robots, it is a shock especially for a science fiction reader to come upon "Right", said the Twin, losing interest'. The remark itself is familiar to anyone who speaks English; 'Right' does not mean 'I agree', but 'I heard what you said'. Just the same, the casual nature of this continues the presentation of Pohl's future world as, in our terms, careless, harsh and biased. Yet this must co-exist with the vision of our world and our language as, in the terms of the fiction, evasive, irresponsible and dishonest.

Pohl's story in fact depends heavily on the presence of 'corpsicles';8 twentieth-century people who have been frozen and then revived, to find themselves as centres of anachronism in the future, their familiar phrases and beliefs becoming, as it were, novums to the whole greater imagined novum. The device allows Pohl to exploit amazement both ways. Gwenanda's whole world is full of amazement to us. But when our world is put to her and her colleagues, they react with giggles, gasps, 'incredulous snickers', or even - when the 'adversary system' of Anglo-American justice is explained in brutal paraphrase – 'silence, broken by a beep'. The assertion is always that fictional and factual worlds have parity, that 'uz marry' is really no stranger than 'a thousand feet', 'swipe' or 'gang' no more indecorous than 'plaintiff' or 'testify'. At the end of the process even common words are tinged with uncertainty. Like other writers, Pohl uses adverbs to indicate tone of voice - 'indignantly', 'reasonably' - or mental attitude. Yet what is one to make of the last words of the first scene, as Gwenanda sentences the marry-stabber to indefinite freezing:

⁸ This is another clear case of word-borrowing within science fiction. 'Corpsicles' is an invention of Larry Niven's, prominently used for instance in his *A World Out of Time* (1976).

'You can take um away, Sam. And get um a nice dinner', she added kindly, 'because it'll have to last um a long time.'

In normal fiction, 'kindly' would be bitterly ironic; it would show Gwenanda as a latter-day Judge Jeffries, exulting in her own power and her victim's helplessness. In this story it could, possibly, be literally true. When Samelweiss looks round at his colleagues after their chorus of agreement to his 'Guilty', he does so 'affectionately'. There is no reason to disbelieve the adverb there. When he refuses to let the 'corpsicle' judge introduce modern rules to his court, he does so 'reasonably'. There is something to balk at there, for he is refusing to let someone make a case. Still, he has reason to do so. The adverb sounds ironic to the modern reader, but under the special rules of the story it cannot be so. 'Kindly' is only one further extension of the process. Gwenanda is being kind in that closing speech. It is only prejudice that makes us take it in the opposite sense.

Pohl has one final device of great power throughout the story, and that is the use of 'contextless' phrases, quotations from thinkers in our own past – Hobbes, Lincoln, Disraeli, Marcus Aurelius – which continually circle the Supreme Court dome in glow-light. Would the philosophers disagree with Gwenanda and her colleagues? If they would, the remarks could be directed ironically against them, and once or twice – 'The skill of making, and maintaining commonwealths, consisteth in certain rules ... not as tennis-play, on practice only', Thomas Hobbes – this seems to be the case. More often the irony is against us. Just after the first demonstration of 'summary judgement' by Samelweiss the sign lights up with:

'Why should there not be a patient confidence in the ultimate justice of the people? Is there any better or equal hope in the world?' – Abraham Lincoln.

Lincoln is normally taken as a sponsor of the present American state. But many will feel that the professional legislature of today has little to do with 'the ultimate justice of the people'. The quotation, then, can be taken as ratifying the arbitrary, amateurish, fair and democratic Samelweiss, putting past and future in substantial alliance against the present: a process akin to some of the narrative 'disfigurements' of national myth discussed in the piece on 'The Fall of America in Science Fiction', below.

To repeat a point made earlier: though Pohl's fiction is overtly hostile to rhetoric, it still has a rhetoric of its own. The critical feature

of that rhetoric, perhaps, is that while it exploits the resources of the high-informational science fiction genre, it is also very alive – witness the use of quotations, anachronisms and voices-within-voices – to the rhetorical possibilities of 'degraded information'. It may be only an accident that the most recurrent science-fictional image found in the collection which this essay originally prefaced was that of the unreadable library and the inscrutable text,⁹ but there is a kind of appropriateness about it just the same. It would after all be wrong to think that degraded information becomes unusable, or that the existence of such degradation implies lack of faith in human power to communicate. In a way, biased narrative and altered texts tell us not only what they intend to, but also what has shaped them or formed their bias. As H.G. Wells said, à propos of his famous quarrel with Henry James, 'the Novel' consists of a frame as well as a picture. It seems particularly appropriate that the effective Father of English science fiction should have been able to claim:

I suppose for a time I was the outstanding instance among writers of fiction in English of the frame getting into the picture. (Wells 1934: i. 495)

Science fiction authors and literary readers have been in a sense re-enacting the Wells/James quarrel ever since.

*

The thought prompts a final question? Is science fiction really about modern times and modern problems, intrinsically 'referential', and potentially serious, or has it a kind of playful or fictional autonomy? The examples given here tend to support the former view, showing clearly that in 1953 Pohl and Kornbluth were writing (with admirable foresight) about consumerism and world resources, while in 1984 Pohl had turned to questioning American law and politics, with an underlying belief that new technology could restore antique forms of elementary democracy. Some of the essays cited here confirm that view, with their demonstrations of how science fiction has coped as an exploratory mode in 'taboo' areas such as class-feeling or Vietnam or – one could add, though this one is much less of a taboo area than it was when this piece was first published – gender (see, for instance, Lefanu 1988)

⁹ For which, see Crossley 1991 and Christie 1991, as well as item 13, below: 'The Fall of America'.

or mortality.¹⁰ Yet it is worth noting the rather dissentient view of Alan Elms, whose study of 'Cordwainer Smith' (again in the volume to which this piece originally belonged) shows (a) that that author was not concerned with the major issues to which his 'underpeople' were connected by critics, but (b) that nevertheless his fiction did arise out of social and religious concerns of an unexpected kind, but (c) that its origins had almost nothing to do with the success of the fiction itself. Does that make *Norstrilia* (1975) or 'The Ballad of Lost C'mell' (1962) pure 'futuristic play'? The matter remains open. One can only suggest that the answer may lie not only in analyses of plot and theme, but in further painstaking probing of the special problems, in science fiction, of authorial rhetoric and readerly response: an exercise from which we have too often been distracted by the immediate, often alienating, always attention-grabbing influence of the novum.

Not much has been written on this extremely delicate taboo area, but see item 3, below, 'Semiotic Ghosts and Ghostlinesses in the Work of Bruce Sterling'. Sterling is one author who does not seem convinced that people have to be mortal.

2

Introduction

Rejecting Gesture Politics

This piece follows on so closely from the last one that I have been able to cut out some of the opening few paragraphs. It was produced under rather different circumstances, starting off as the 1994 keynote address for the Lloyd C. Eaton conference at the University of California-Riverside: by this time I had moved to America and taken the Walter J. Ong Chair of Humanities at Saint Louis University. The venue meant that the audience, all concerned with science fiction but not all of them academics, were definitely on my side, which accounts for a certain rah-rah element, especially towards the end.

The theme of the conference was 'Contests for Authority', and I stuck to the theme fairly closely. Still asking myself why there was so much critical hostility to and ignorance of science fiction, I answered that you could see from *The Island of Dr Moreau* (1896) that sf was likely to reject the authority of literary tradition. Moreau was like *The Odyssey* on the surface, but had turned the story round 180 degrees. Furthermore, Wells meant it. It was not that he thought writers like Homer were stupid, but knowledge is cumulative, science is based on knowledge – *scientia* is the Latin word for knowledge – and pre-modern authors like Homer or Milton or Swift just didn't know as much as Wells. No special credit to him, but a fact all the same.

So sf authors did not respect traditional authority, but they did respect rational authority, and both halves of this were likely to cause alarm in the literary world: the former for obvious reasons, the latter because the literary world, and especially practitioners of what by then was being called 'literary theory', had also got into the habit of continually challenging authority. But this was mostly 'gesture politics'. Unlike sf authors, they didn't mean it. The authorities they were prepared to challenge were the outdated, defeated or unpopular ones, like hereditary class structures, belief in racial superiority, imperialism, or compulsory courses on *Beowulf*. Literary theory was not prepared to tangle with

science, much less interact with it, and had developed an elaborate system for denying the existence of objectivity and the possibility of defining meaning. Of course this too wasn't entirely seriously meant, not on an everyday level. But it had become a faith, and faiths don't like serious challenge. This was another reason, along with sf's commitment to change and its threat to literary caste-authority, for the genre's poor reception by academics in the humanities.

I drew into all this the argument, from my 1992 anthology *The Oxford Book of Science Fiction Stories* (where I credit a former student, James Bradley, for the word and the idea) that we were short of a useful term which needed to be invented. While there was a literary mode called 'pastoral', there was and always had been another mode which I call 'fabril', there but never named because, again, threatening, unpopular, regarded (until Wells again put the contrarian view) as not really fully human. 'Fabril' has not caught on as a critical term, but that may be part of the continuing 'two cultures' problem. Literary critics do not mix with engineers.

There was one area in the argument that follows where I would have liked to do more, and that is my suggestion that sf was highly 'intertextual'. I meant that the authors were very aware of each other, especially when the genre was defined by a small number of magazines (see further item 5, below), and they still argue with each other through their fiction all the time. If one author does one thing with a scenario, another will come along and say, 'no, what would really happen is this'. There's also a sense that there are a number of 'paradigm stories', capable of constant rewriting, and often first written by Wells: the alien invasion story, the post-holocaust story, the mutant story, the clone story, the enclosed universe story, the world-changing invention story, etc. I have delivered several talks at sf conventions along these lines, and the authors I was discussing were often there and often interested, and they only sometimes told me I was dead wrong (though see the introduction to item 3, below). I still think that a 'structural' approach to sf would tell us something about sf. about narrative, and about the sf 'metastatement' which I think is in there somewhere. But - as I realised too late, see again the 'Personal Preface', above - we have been in a 'post-structuralist' phase since 1969, and the project has never really taken off. It works in some areas of medieval and folktale studies, but there one is dealing with a much smaller and now permanently closed corpus: easier to deal with but less productive. It is something to keep thinking about ...

Literary Gatekeepers and the Fabril Tradition

All of us who work with science fiction, I am sure, have a store of insults to record from those in authority. Perhaps the award for the crassest example recorded at this conference should go to Sheila Finch's senior colleague, who said to her after she had published her first science fiction work, 'I hope your next book is a real novel'. But though that was remarkable both for its brevity and its dismissiveness, it also remains in a sense typical. I repeat that I am sure that all of us past a certain age have not only heard but have got used to hearing similar statements. In spite of their frequency, I would suggest that, if they were mere random and individual examples of thoughtlessness, or rudeness, the right tactic would be to tolerate and as far as possible ignore them. However, I do not think that is the case. It seems to me that the open hostility to science fiction so often seen within academic departments of literature has a common and even a compulsive root. By facing this, I think we put ourselves in a position to learn something about 'contests for authority', both within our field and over our field.

I have already suggested (see the previous essay) that these negative literary reactions can be used diagnostically. My starting-point there (again taken from personal experience) was that I had so often been told by literary colleagues, seemingly without awareness of self-contradiction, that (a) they hated science fiction, and (b) they never read it. I suggested that, regardless of the contradiction, these two statements were probably often true, and that they offered us a kind of generic indicator. I went on to propose, following Darko Suvin (1979), that science fiction depends on the *novum*, which (this time expanding on Suvin) I oppose to the *datum*: the latter is definable as one piece of that shared body of information which all readers need to read any text at all; the former the bit of new information which you must find within a text in order to read it as a science fiction text – a bit which is by definition initially not shared, which the reader has to be told. This view of the *novum* is not exactly

that of Suvin, but is meanwhile by no means hostile or contradictory to the view of John Huntington, who has argued that science fiction (he cites Wells and William Gibson) is marked by a new *habitus*, a new class-awareness, 'the introduction of new class or group values into the hegemonic canon' (Huntington 1991: 63). My suggestion was, in brief, that it is possible to reconcile the contradiction of hating without reading by assuming that it is the presence of the *novum* that marks a work as science fiction; but that as soon as some readers recognise a *novum*, they immediately stop reading – recognising in the very existence of a *novum* an implicit challenge to the old *habitus*, as to 'the hegemonic canon'.² Both Huntington and I were saying in effect that science fiction depends on novelty, and that this novelty is seen as a threat (rightly, for it *is* a threat) by conservative groups including academic groups.

A further way of putting this is to say that during my science fiction 'lifetime' (1958 to now) being a science fiction reader in academia has been rather like being gay. In both cases, one could say, drawing out the similarities:

- there was definite pressure, especially in the 1950s and 1960s, not to admit the fact;
- there were social penalties if you did;
- you got used to hiding the fact;
- but there were places where you could meet others of the same persuasion;
- there was very strong 'networking' among the concealed in-group, whether these were science fiction readers or homosexuals:
- ¹ Suvin uses the term in a more abstract way, as a genre-indicator, not as a 'bit' or 'piece' of information. It is part of my argument that nearly all science fiction works have not one but many *nova* (or *novums*), just as any paragraph of any non-science fiction work will contain much *data* (or many *datums*). See Suvin 1979: 63–84.
- I cannot forbear from recording here the comment made by the chairman of a session at which I read a paper at a University of London conference on East European literature, in December 1992. At the end of the session, on science fiction, the chair said, as nearly as I can recall his exact words: 'What I want to know is when is any of this stuff going to make it into the actual accepted canon?' He was, it is true, severely attacked for saying this, 'canon' having become a rude word in academic criticism (see the introduction to the next item, here); but the stuff/canon antithesis in his mind was no doubt identical with the science fiction/real novel antithesis recorded by Sheila Finch.

- in both cases, too, discrimination was illegal, was frowned on theoretically, and people would deny they were doing it. But they did it just the same;
- and, finally, it was possible to 'come out' and get away with it, but only once you had reached a certain level of seniority.

Nevertheless, we have to recognise in both cases that the social climate has changed since the late 1950s. We now have 'Gay Studies' in colleges, as we do 'Science Fiction Studies'. Furthermore, I said above that science fiction depends on a shocking or threatening novelty. However, one has to admit that modern academic circles are fascinated by novelty. It has become part of the collective myth or self-image of academic critics, especially practitioners of 'literary theory'. Almost all fields, including some of the staidest, have felt the need to develop at least a rhetoric of novelty, so that we have, for instance, 'the New Medievalism', 'the New Historicism', 'the New Philology'. 3 'Boring old' is regularly opposed as a trope to 'brilliant young' or 'exciting new'. So why should we, as science fiction critics, not put the past behind us? Trade on the inherent novelty of our field? Assume that the revulsion from the novum will in future be professionally unacceptable instead of just personally rude? And make a bid for power, or at least authority, within the power-structures of our profession - such as the Modern Language Association (MLA)?

The brief answer is that for all the talk about widening canonicity, I suspect that while a place might well be made for science fiction within the MLA, it would be a subordinate or ancillary place. Major theorists are not theorising about science fiction (with the exception, incidentally, of Fredric Jameson, who gave the Eaton conference keynote address in 1992: see further both Jameson 2005 and Roberts 2000). More normal is the point of view expressed within Howard Felperin's interesting critique of literary theory, *Beyond Deconstruction*, which closes with the words:

the virtual focus of our changing critical discourse will be the great classic texts, which continue to repay so richly each historical construction and deconstruction they attract. (Felperin 1985: 223)

The discourse may change, but, you notice, the classical texts will not.

³ See Marina S. Brownlee *et al.* (eds), *The New Medievalism* (Baltimore, Md.: Johns Hopkins University Press, 1991); H. Aram Veeser (ed.), *The New Historicism* (New York: Routledge, 1988). In 1991, the journal *Speculum* devoted an issue to 'the New Philology'.

One can hardly avoid remarking, plus ça change, plus c'est - plus ça sera - la même chose. Science fiction may have 'come out of the closet', to return to my analogy, but it has not got into the cocktail party. The image I have of our field within literary studies is that of the outsider on the edge of the group, allowed to listen, not excluded, but still not part of the conversation.

Is there a reason for the continuing exclusion, to explain why there is no 'new science fiction-ism' to go with the other 'new-isms'; why we don't say postrealist along with postmodernist, poststructuralist, postfeminist, postcolonialist (etc.)? I think there is indeed one, which I find I can sum up best by Edmund Spenser's lines about the Garden of Adonis in *The Faerie Queene* (Book III, canto vi, stanza 36):

For in the wide wombe of the world there lyes, In hatefull darkenesse and in deepe horrore, An huge eternall *Chaos*, which supplyes The substances of natures fruitfull progenyes.

In my figure here, the 'deep horror' is that with which science fiction is so often regarded, a horror stemming from subliminal awareness of the 'eternal chaos' created by unlimited changes of *novum* and *habitus*. But this horror sadly fails to observe the 'fruitful supply of substance' which springs from that chaos.

*

I would now like to illustrate what I have been saying so far by examining what I suggest is a critical moment in the origins of science fiction. I am aware that various people offer various moments for 'the birth of science fiction', and I do not mean to reject all the others. I am aware also that the one I propose to examine is not even chronologically the first, while it even refers within itself (in a way) to one of the other candidates, Mary Shelley's *Frankenstein*, so strongly put forward as the originating work of science fiction by Brian Aldiss.⁴ But my candidate, I feel, has paradigmatic power in this context, that is, in the discussion of 'contests for authority'. It is Wells's *The Island of Doctor*

⁴ For Aldiss's argument with regard to *Frankenstein*, see Aldiss and Wingrove 1986: 25–52. For the relevance of this to *The Island of Doctor Moreau*, see following note. For extended accounts of early science fiction, or protoscience fiction, see Stableford 1985; Alkon 1987; Alkon 1994.

Moreau (1896). Read this, and I think it is possible to see why the MLA, and the academic community in general, remain wary of science fiction.

The scenario of Moreau, far from being new, is of course taken from what may be the oldest text in Western literature, Homer's Odyssev, specifically Book X, the adventure of the Island of Circe: Circe, the witch who turns men into beasts, in particular into swine. Wells's Prendick is a doublet of Homer's Odysseus, Wells's Moreau is the transforming Circe, the Beast-Folk are Odysseus's crew. The parallel is quite consciously present within Wells's text itself. After he has been rescued from shipwreck by the *Ipecacuanha*, and from the *Ipecacuanha* by Moreau, Prendick finds himself on Moreau's island with nothing to do and little to read. There is nothing in his hut except 'surgical works and editions of the Latin and Greek classics - languages I cannot read with any comfort'. The 'surgical works' make sense here as a reminder, or warning, of Moreau's profession, but the classics seem both inexplicable and redundant: Robert Philmus, in his excellent variorum edition of Wells's work, suggests that they can be regarded as 'a piece of [Wellsian] autobiography', while later on he sees the 'crib of Horace' that Prendick throws aside as symbolising 'the epitome of Civilized Restraint' (Philmus 1993: 92). Yet Prendick throws aside more than Horace, and more than civilised restraint. At the start of chapter 11, he refers directly to an English classical text which repeats the Circe myth. Thinking that Moreau is operating on men and turning them into beasts, Prendick sees it as a fate worse than death to be sent off, 'a lost soul, a beast, to the rest of their Comus rout'. Comus is the villainous magician of Milton's masque of 1637, introduced there as the son of Homer's Circe, and following the same bestialising practices: Circe, Comus, these are the classical images, the classical scenario, that give the background setting, the 'horizon of expectation' for Moreau.

But of course the classical images, in *Moreau*, turn out to be dead wrong. Prendick is entirely mistaken. Moreau is not changing men into beasts, he is changing beasts into men. The vital question is, which is worse? A critical scene is chapter 13, 'A Parley'. Prendick, who has run away, has been hunted down by Moreau and Montgomery, and is standing on the shore, ready to throw himself to the sharks rather than surrender to be transformed as he expects. And the Beast-Folk, the products of Moreau's experiments, are standing behind Moreau and Montgomery, listening. Moreau has to reassure Prendick without them learning the truth – which he does in the language of the classics:

He coughed, thought, then started: 'Latin, Prendick! Bad Latin! Schoolboy Latin! But try and understand. *Hi non sunt homines, sunt*

animalia qui nos habemus ... vivisected. A humanising process. I will explain. Come ashore'.

Prendick at first rejects this, but then is reassured, and comes ashore. There are, however, two points to make about this scene.

One is that there is something terribly degraded about Moreau's Latin, 'qui nos habemus ... vivisected'. In the first place, qui is intended as a relative pronoun. But animal is neuter, and the relative pronoun must here be accusative plural, object of 'habemus ... vivisected': quae, therefore, not qui. 'Habemus ... vivisected', meanwhile, must be an attempt at translating the English perfect 'have vivisected' into Latin. But Latin does not make a perfect with an auxiliary verb. One might expect, then, from the English form of 'vivisect', some such verb as vivisectavimus. However, the English infinitive is derived in this case from the past participle, and the Latin verb's 'principal parts' in fact go seco – secare – secui – sectum. Since Latin also conveys person and number by verb ending, the pronoun nos is furthermore redundant. What Moreau should have said is 'Sunt animalia quae vivisecuimus'.

To make these points is of course in one way an act of utter pedantry (reminiscent of John Cleese as the Roman centurion in the film *Life of Brian*). However, and more seriously, I would lay stress on the shocking and even insulting character of Moreau's errors. In my time, and in Wells's, saying something like that in a real school would have been a beating offence. Because Latin, in 1890s Britain, in Europe, and to a large extent also in America, was:

- (a) a mark of the literary and the ruling caste
- (b) still at least 90 per cent gender-related
- (c) and taught entirely sub virga, under the rod.

What Moreau speaks, however, is a 'pidgin', a variant of Latin resembling the debased forms of European languages spread around the world largely by the slave-trade. It hardly makes sense for Moreau to speak this pidgin. Presumably the Latin classics which Prendick cannot read belonged to Moreau, in which case he ought to be well above this stage, even if he is perhaps 'condescending' to Prendick's level in the critical 'parley'. But I would suggest that we do not need here to work out complex explanations to do with Wells's autobiography or Moreau's linguistic awareness.⁵ What the scene does with great

⁵ It is clear from Philmus's presentation of Wells's first draft of Moreau in

force is to express powerful contempt for a whole classical tradition of both language and literature. Prendick is, I repeat, just plain wrong in recalling his images of Circe and Comus: his literary knowledge is here useless and dangerous to him. Since that whole classical tradition is wrong, it is only appropriate that the major European vehicle of it, the Latin language, should be scornfully debased here into a mere utilitarian pidgin. The horror any classically educated person would have been educated to feel about Moreau's grammatical mistakes is in Wells's story simply overridden. The important thing in what Moreau says is content, not grammar or style.

The second and more important point about the scene is that this contempt is seriously meant. It is not just the classical images that are wrong, not just Prendick who is wrong. The classical texts are wrong too, and their authors and most of all their readers. They thought the worst thing that could happen was to turn men into beasts. That would certainly be bad for the men, like Odysseus's crew, who are so turned. But what if you turn beasts into men? What are the implications of that? What would that say about people as a whole – including the ones who don't get turned? Such a transformation, never imagined in any classical text, would say there is no essential difference between beasts and people at all: people in fact are beasts, mere human animals, the dividing line accepted by all from Homer's time to Wells's becoming simply irrelevant.

As I am sure we all realise, Wells in a sense means exactly that. And my phrase 'in a sense' contains much of the definition, and the alienation, of science fiction. *The Island of Doctor Moreau* is quite clearly a post-Darwinian story,⁶ and one of the major implications of *On the Origin of Species* is indeed that there is no uncrossable boundary between species in their origins. Beasts (as humans call them) evolved into people in reality: all Moreau is doing, then, is accelerating that process.

The Island of Doctor Moreau: A Variorum Text (Philmus 1993), that Wells was trying to give a lead to interpretation by mentioning books. He mentions at one point Robert Louis Stevenson's Dr Jekyll and Mr Hyde (115), and twelve pages later Burton's Anatomy of Melancholy. Interestingly, this book replaces Mary Shelley's Frankenstein, even in the first draft. All this makes Wells's final concentration on Latin and the classics less likely to be merely casual.

⁶ The connection is again explicitly made in the text. Moreau takes little notice of Prendick until Prendick reveals that he has 'done some research in biology under Huxley', that is, Professor Thomas Huxley, widely known as 'Darwin's bulldog' for his public defences of Darwin's theories. Like Prendick, Wells had at least attended Huxley's lectures in 1884–5, a fact of which he remained inordinately proud.

Furthermore, the process Wells imagined in the story was not in his view impossible. In a prolonged correspondence after the book came out,⁷ Wells defended the scientific aspects of his story as accurate and plausible within the knowledge of his time. What he was saying was that his readers had been reading science, but not, in a sense, fiction. That is a continuing claim of science fiction.

The contrast with all previous literature deserves to be stressed. Wells is implying that previous literature, like Homer or Milton, was indeed fiction, if not mere folk-tale. Its premises were false, its readers misinformed, by authors who wrote as they did because they knew no better. The deliberately contemptuous and contradictory nature of Wells's attacks on literary tradition comes out elsewhere in the many ironies of the Time Traveller's visit to the 'dead library' in South Kensington, which he eventually leaves to search for more 'useful discoveries'; and in *Moreau*, Wells's aggression towards the past is seen also in its frequent and deliberate religious blasphemies: the Beast-Folk with their parodistic 'saying of the Law', the ritual prohibitions imposed on them, Moreau's unexplained urge to make beasts in his own image, Prendick's invention of supernatural religion once Moreau is dead, in chapter 18:

'Children of the Law', I said, 'he is *not* dead ... He has changed his shape – he has changed his body ... For a time you will not see him. He is – there' – I pointed upward – 'where he can watch you. You cannot see him. But he can see you. Fear the Law'.

I looked at them squarely. They flinched. 'He is great, he is good', said the Ape Man, peering fearfully upward among the dense trees.

This blasphemous element indeed caused far more indignation at the time of first publication than any mere reworking of Homer. But in order to keep attention on the literary caste, not the religious caste, I will indicate just one more assault on literary tradition, or literary blasphemy, which occurs at the end of the book. The ending of *Moreau* is clearly calqued on the very end of Book IV of *Gulliver's Travels*, where Gulliver, returned from the land of the Houyhnhnms sees the whole human race as Yahoos, and ends up 'not altogether out of hopes in some time to suffer a neighbour Yahoo in my company, without the apprehensions I am yet under of his teeth or his claws'. Similarly, Prendick in London sees the Beast-Folk everywhere:

⁷ See Philmus 1993: App. 6, 'Wells in Defense of Moreau', 197–210.

⁸ See on this point Crossley 1991: 76–103, especially 86–90.

I would go out into the streets to fight with my delusion, and prowling women would mew after me ... Then I would turn aside into some chapel, and even there, such was my disturbance, it seemed that the preacher gibbered Big Thinks even as the Ape Man had done; or into some library, and there the intent faces over the books seemed but patient creatures waiting for prey.

Now, the absolute staple of Swift studies for decades has been to remind us that Gulliver, at the end of Book IV, is mad; so we do not need to take his disturbing vision seriously; we can 'de-literalise' it (= literarise it) by muttering the magic words 'dramatic irony'. I have to confess that I was always doubtful about this literary strategy, even in my youth (though having the 'gay' habits of a science fiction reader I knew better than to say so). But the reason I was doubtful about Swift was that I had already read *Moreau*: and I knew that Wells, or Prendick, whichever one prefers – in the science fiction tradition there is no disgrace in characters serving as authorial mouthpiece – meant his final vision seriously. People were, in a sense, beasts, and, once Prendick stopped saying that (which might have been ironic), Wells went on with his postscripts and arguments about *Moreau*, which definitely were not ironic.

To sum up, my argument so far has been a double one. On the one hand, I suggest that there is a deliberate attack on linguistic and literary tradition in *The Island of Doctor Moreau*, which forms in fact the novel's hinge. Classical literary tradition is condemned as not only untrue, but the actual reverse of the truth, while classical linguistic knowledge is even more contemptuously dismissed as being of mere marginal utility. Meanwhile, the authority of these traditions is replaced by a deliberate argumentative appeal to scientific truth, an appeal which science fiction still continues to make, though we have not as yet been able to frame a convincing literary way of discussing it. 11

⁹ See, for instance, Foster 1961. In this work (which by intention represents generally accepted opinion) we find Gulliver guilty of pride (p. 279), 'sick and morbid pride' (p. 244), etc.

¹⁰ A point made also by Huntington (1982: 63).

This point comes up more than once in the contributions of Greg Benford (a practising scientist as well as science fiction author) to Eaton Conference volumes; see especially Benford 1986: 82–98 and Benford 1992: 223–9.

*

I turn now to the more general question of 'contests for authority' within *Moreau*, and note that these exist on three levels. They are what prevent *Moreau* from becoming a 'great classic text', to use Felperin's phrase above. I will list them in ascending order of current theoretical unacceptability.

One, already discussed, is the text's dismissive attitude towards previous authors. The text keeps saying, in effect: 'these authors – Homer, Milton, Swift – they have no authority. They were wrong. As for the "anxiety of influence" – what's that? I will take these classic texts, as I take the components of their classic language, and reform them without concern for their ruling structures. I will make a literary "pidgin" out of them'. Aggressive indeed! But I think our current literary caste, the contemporary 'gatekeepers' of interpretative tradition, might be able to cope with that. As I have said above, they have a rhetoric of 'challenge' and 'disturbance', 'novelty' and 'parricide'. While it is not always practised as wholeheartedly as it is preached, the rhetoric is at least there to be appealed to.

Much more seriously unacceptable is a 'contest for authority' in Moreau on a second level. I would like to record here as a piece of evidence that I never noticed this particular 'contest' till my very last reading of the text, while it has also as far as I can tell escaped any comment from others. The reason for my blindness is overfamiliarity: this aspect of Moreau is written, to use Huntington's term, from my ancestral habitus. The reason for American critics' silence, I suspect, lies conversely in reluctance or alienation. But the fact is that Moreau follows a once-familiar imperialist paradigm, the story about gaining power through prowess and losing it by human weakness. Like the Circe story, this is an 'island' tradition, but its definitive works include The Tempest, Robinson Crusoe, Lord of the Flies, and a host of other 'boys' books' now forgotten. However, the model for this aspect of Moreau is probably Kipling's story 'The Man Who Would Be King' (1888). Wells's admiration for this is on record, expressed with odd gratuitousness (like his disregard for Moreau's Greek and Latin classics) near the start of chapter 7 of The Sleeper Awakes (1899). Here the Sleeper comes upon some puzzling cylinders in the future world he has woken into. After a while he realises that they are labelled in phonetic script, and puzzles out the title of one of them, 'The Man Who Would Be King', a story he recalls vividly as 'one of the best stories in the world'. Kipling's story tells the tale of two Europeans who decide to conquer a country of their own with rifles, discipline and Freemasonry. They succeed in this,

but fail in the end when one of them is bitten by a girl, and bleeds, showing the natives of the country that they are only men, not gods. The tale is closely followed in *Moreau*, with Moreau and Montgomery obviously posing as gods to the Beast-Folk, and anxious above all not to let them taste blood. Both stories are parables of imperialism: Moreau may wish to break down the separation between man and beast, but he has every intention of maintaining the separation between rulers and ruled.

This imperial tradition has become increasingly unacceptable during the twentieth century. Nevertheless, one cannot deny that it was a tradition which knew a great deal about contests for authority. Prendick figures within this tradition simply as a failure. Once Moreau and Montgomery are dead, and only he is left, he tries to take up the imperialist role. He sees the Hyena-Swine, and knows 'His continued life was ... a threat against mine'. Under the imperialist code, it is essential for him to act at once ('Any decision is better than no decision'), and Prendick knows that much at least:

I was perhaps a dozen seconds collecting myself. Then I cried, 'Salute! Bow down!'

His teeth flashed upon me in a snarl. 'Who are you, that I should \dots '

And Prendick shoots, but misses. Prendick is a poor imperialist. He knows some of the rules – all of them carefully taught in the literature, or sub-literature, of Wells's time and my own: never show fear; never hesitate; never give an order you know will not be obeyed; if you give an order and it is not obeyed, instantly punish disobedience; a wrong decision is better than indecision (and so on). But he fails to put them into practice. His boast near the end of the story, in chapter 21, 'that I held something like a pre-eminence among them', is only an indication of his failure. A true imperialist is not supposed to be *primus inter pares*, pre-eminent among equals; he is supposed to impose himself as completely different in kind.

The point is that in this particular 'contest for authority' the Wells text asks its readers insistently to take the side of the imperialists, and to note Prendick's failure to live up to that role as simply a failure. This

Symptomatic are some of the apologetic comments made by Philmus – for instance, the condemnation of Wells for 'bigotry and sexism' (p. xxii), the readiness on the next page to see *The War of the Worlds* as a 'satire of imperialism'.

is now totally unacceptable to modern literary culture, and perhaps to political culture also. Is it possible to say that these are merely contemporary stereotypes from 1896, having nothing at all to do with modern science fiction? It may be so. Yet one may also reflect on the American-imperialist, or American-colonialist, rhetoric of Heinlein (discussed in the essay below on 'the critique of America'); on the space empires of Niven and Pournelle; on the sympathy with failing empires in Poul Anderson's 'Flandry' series; and a dozen other prominent examples, and conclude that there may indeed be something in the ideology or mindset of traditional science fiction that is not as out of touch with the Kipling/Wells tradition as is most of modern literary culture (see Kerslake 2007). If that were to be the case, it would explain a great deal of subliminal critical hostility.

However, it is the third and least easily defined level of 'contest for authority' which has done most to keep texts like *Moreau* out of the 'hegemonic canon'. This may be approached by reference to Stephen Greenblatt's book – it is a landmark of 'the New Historicism' – *Renaissance Self-Fashioning* (1980). In the first chapter of this he asserts a number of propositions about his classic Renaissance texts and authors:

- (a) they are all middle-class rather than aristocratic;
- (b) for such figures self-fashioning 'involves submission to an absolute power or authority situated at least partially outside the self' God, Bible, court, colonial or military administration;
- (c) 'self-fashioning is achieved in relation to something perceived as alien, strange, or hostile';
- (d) the alien is chaotic or demonic, it always resurges, violence used against it turns against the self, etc.

My immediate reaction to this was to think how easily these remarks, *mutatis mutandis*, apply to Wells: lower-class rather than middle-class, self-defining in relation to such aliens as Beast-Folk or Martians, well aware of the rebounding effect of violence (as, for instance, in the fight of the *Thunder Child* against the Martian war machines in *The War of the Worlds* chapter 17, and so on. But the problem, the real problem for science fiction in its contests with literary authority, lies in item (b) above. It is perfectly clear that Greenblatt feels he can rise superior to the authority images of his Renaissance texts because they are no longer authorities. God, the Bible, the court, colonial or military administration: these authorities are in modern literary culture either deposed, objects of ridicule, or in doubt. Wells's 'absolute power or authority', however,

is science: as exemplified in particular by Charles Darwin and Thomas Huxley, Wells's tutor, and Prendick's, and Moreau's. These authority-figures, and even more the source of their authority, have not been deposed. It is impossible for literary critics to apply their rhetoric of control and condescension to them with any conviction.

I return to the thought of 'deepe horrore' and 'huge eternall *Chaos*'. If there is one thing which characterises all schools of modern literary theory, it is their denial of objectivity, and their insistence on chaos. We have: self-referentiality, the text as a purely linguistic construct, the failure of linguistics as a model, human beings as cultural artefacts, literary discourse resting on historical discourse which rests on mythic discourse ('turtles all the way down', as has been said), the *aporia*, the scandal, the *mise-en-abîme*, the whole deconstruction movement, and all the rest of it. To quote the *Johns Hopkins Guide to Literary Theory and Criticism* (1994), not for its pre-eminence but for its deliberate centrality:

If language, metaphor, and consciousness really are structured by difference, then there can be no solid foundation, no fixed point of reference, no authority or certainty, either ontological or interpretive. (Kneale 1994: 187)

Such views have become entirely characteristic of the authority structure of the critical profession, which we may label for short as the MLA. They are impossible to reconcile with the claims for truth-to-fact of much science fiction, and all serious science. This is the last and I feel the most insuperable of the obstacles preventing *Moreau*, and science fiction with it, from being accepted into the central and authoritative core of literary culture. The deepest horror which such works now create, deeper than that coming from rejection of tradition or acceptance of authority-by-power, stems from their perceived obedience to an authority outside 'the text'.

It may be that this does not matter. We can easily recognise (even if we are reluctant to admit) that the views of the MLA cut absolutely no ice outside the MLA. Literary discourse has become sharply different from scientific discourse, which is still overwhelmingly characterised by:

- a denotative linguistic system (parodied of course in Swift's Laputa, but now in practice). It includes but is not confined to mathematics;
- rigorous training in that system, which is now world-wide;
- built-in 'upgrade capacity' for the system, so that change is

- a permanent contingency, but does not affect the hegemonic structure;
- a uniquely coherent and international interpretive community.

This does not of course mean that there are no disagreements in science, as one can remember by thinking of 'cold fusion', the controversy about the HIV theory of AIDS, the struggles of the DNA discoverers to get a hearing, and so on. I am, however, saying that those disagreements take place within a frame accepted by all disputants as objective. The reaction of those literary critics who notice this at all is often mere denial. Felperin's work cited above declares for instance in a note on pp. 87–8 that:

it is difficult to argue that alchemy, for example, does not have exactly the same epistemological status as chemistry, however surprising such a view might be to a professional chemist engaged in research.

Doesn't chemistry, unlike alchemy, 'work', one might naively enquire? No, Felperin replies, for:

Alchemists and chemists desire and expect different kinds of results from their activity, and would thus mutually deny the effectiveness of each other's practice.

The decision as to whether something 'works' or not is in short 'culturally relative'. This is not the impression I get of medieval alchemists from the alchemist in Chaucer's 'Canon's Yeoman's Tale', who seems passionately to want his science to work in precisely a modern way. But the denial of objectivity, even in science, seems to me now to be compulsive within the literary field, within the belief-structure of the MLA. Among the gatekeepers.¹³

After reading an early version of this article, Dr Joseph Miller, of the Department of Biological Sciences at Stanford, wrote an interesting comment to the effect that doubt and uncertainty have indeed had an effect on the authority of scientific knowledge. 'The "Men who would be King"' (he wrote) 'have seen their own blood' and 'reject the imperial certainty of Newton'. I accept these comments, but feel that doubts about objectivity are still a long way from day-to-day science. Scientific method furthermore strives conscientiously for self-correction, and has institutionalized doubt and challenge from its inception.

*

If I am correct in what I have said, then the gap between the 'two cultures' of humanities and sciences is here total.¹⁴ One might look at the elaborate apparatus for non-commitment of modern critical writing - the inverted commas, the parentheses, the slash marks, the spelling changes, the placing of items sous râture, 'under erasure', so they can be read/not-read at the same time. Against that a paradigmatic image is that of the dving Richard Feynman putting the piece of space shuttle gasket in his glass of ice water before the television cameras and saving, 'nature is not fooled'. 15 He meant that observers, human opinions, bureaucratic procedures, all had no value. If you ignored the nature of the material, it would fail, the shuttle would crash, and its crew would die. When he said that, Feynman was repeating an old theme of science fiction. 16 But I would add that while it was of course tragic that scientific administrators had so readily gone over to the alternative, non-scientific habits of 'public relations' and 'relative values', it has perhaps this century been even more tragic that politicians and scientific administrators have had to cope with ethical questions without the assistance of any powerful literary or ethical tradition, that tradition having disqualified itself in their eyes by its outdatedness and lack of realism. One may well think of Harry Truman having to cope with the Bomb with habits of mind derived, as H. Bruce Franklin has shown, not from literature or philosophy but from early science fiction and the Saturday Evening Post (Franklin 1988: 149–54). The urgent question is not whether the literary profession can somehow succeed in putting science and science fiction back in its (subordinate) place but whether the literary profession can,

¹⁴ I should say that in writing this article I reviewed the old debate over 'the two cultures' from C.P. Snow's 1959 lecture onwards, and was once again struck by the petty critical manoeuvres of the literary spokesmen in it. For a balanced view, see Green 1965. Martin Green, like John Carey (mentioned on p. 4, above), is another former colleague, this time from old days in Birmingham; and, like Carey, is another determined academic contrarian, expressing similarly hostile views of early twentieth-century literary culture in his book *Children of the Sun* (1976).

¹⁵ For a full account of this incident, see Gleick 1992: 414–28. Feynman actually wrote in his final report: 'For a successful technology, reality must take precedence over public relations, for nature cannot be fooled'.

Seen classically in the Tom Godwin story 'The Cold Equations' (ASF Aug. 1954). A controversy about this can be seen in *The New York Review of Science Fiction*, nos. 54, 60, 64 and 66. One might remember also the extensive series of science fiction satires on scientific bureaucracy, a feature of *Astounding/Analog* from at least the early 1960s.

perhaps with a lead from science fiction, succeed in regaining any of the authority which it has, in the wider world outside its own authority structures, very largely lost.

The omens are not good. I note among other things Greg Benford's uncompromising remark that 'the most penetrating way to view science fiction [let alone the wider issues that I have raised] has not yet been evolved' (Benford 1992: 228). Yet a review of the history of criticism may offer one way forward. There was a time when literary studies had an ambition to become strictly scientific. The great hope was to apply the quasi-anthropological methods devised to work on pre-literate cultures, and to adapt them for cultures of full literacy: to move, one might say, from Propp's Morphology of the Folk-Tale (trans. 1975) to Todorov's Grammaire du Décaméron (1969) and on to a syntaxe littéraire. Roland Barthes looks back on this period as le rêve euphorique de la scientificité (see Felperin 1985: 86), and it is of course guite a common theme in science fiction too: to have a hard social science which can look at a culture, transcribe the culture into some universally agreed mathematics, and then say what is going to happen! You may remember the scene at the start of Foundation, when Hari Seldon, founder of 'sociohistory', passes the slide-rule (!) to his acolyte and tells him to work out the equations for himself. Well, slide-rules have gone. But we still have no sociohistory; likewise no syntaxe littéraire; and as for le rêve euphorique de la scientificité, how are we to translate it: 'the euphoric dream of ... what, Scientology'? It could be said that if you try and turn science fiction into social reality, you end up with L. Ron Hubbard. Not an encouraging image.

Nevertheless, I think we can find a more positive self-image; some points of encouragement; and a more positive critical strategy, which I will outline briefly. For a better self-image, I think we need some new terms. One I am happy with is 'fabril literature'.¹⁷ Fabril is easily defined. It is the dark, alien, Other of pastoral.

- Pastoral has been with us as a literary mode since at least the time of Theocritus. So has fabril, I believe, but it has not been named or recognised.
- Pastoral is about people, in a state of nature, with animals and plants. Fabril is largely about made things, artefacts.

¹⁷ I discuss the term 'fabril' in the 'Introduction' to *The Oxford Book of Science Fiction Stories* (1992). As I say there, the term is not my coinage, but that of Dr James Bradley of the University of British Columbia, to whose unpublished writings I also owe the fabril/pastoral opposition, and the remarks on Joseph's trade.

Pastoral is of course based on the pastor, the 'good shepherd', fabril
on the *faber*, the maker: often the blacksmith, the metal-beater,
but also the Moreau, the manipulator of biology and even of
society.

It is remarkable how homo faber has been written out of history, even literary history. What was Jesus's father's trade? By well-established tradition we believe he was a carpenter; old iconic irony shows him in his workshop carpentering a cross. Nevertheless, in the Latin Bible he is described as a faber, and in the Greek as a teknon. The common meaning of the Latin word at least is 'blacksmith', while the Old English New Testament (written by men remote from the Mediterranean world of literary culture) quite correctly translated the word as wyrhta, that is to say, a 'wright'. Woodwright, cartwright, shipwright, wainwright - even playwright. A wright is someone who works things: there is a strange suitability in the fact that the pioneers of flight were called Wright, as if technophilia lurked in their genes. One could even translate wyrhta. like faber, as 'engineer'. How striking that this has been totally censored out of our official cultural myth, so that Joseph has to be a carpenter! The underlying opposition seems to be: wood / natural / pastoral = good: metal / artificial / fabril = bad. The prejudice which Joseph's carpentry embodies extends also to a systematic downrating of many aspects of science fiction, not least its continued and collective attempt to raise the status of the wright, the engineer, or the faber.

As so often, H.G. Wells seems to have written the 'paradigm story' for 'fabril man', in this case his 1903 tale 'The Land Ironclads', which for that reason alone I selected as the lead story in my 1992 anthology. Wells here opposes two nations at war: one a hardy and pastoral breed, the other a race of townsmen. At the start of the story the former group seem to be well in command of the trench-warfare that has (prophetically) begun: they are tougher, more cunning, better shots, full of imperial virtues. The war correspondent on whom the story centres notes the ugly, cunning, arrogant, masculine face of one of them and thinks it typical. Then the 'land ironclads' appear, a prophetic vision (details apart) of the coming of the tank thirteen years later. With a predictable irony, the war correspondent, the nearest we get in the story to a 'literary man', immediately changes sympathies as he sees the hardy pastoralists brushed aside by the dispassionate urban tankers, and contemplates a piece to be entitled 'Manhood versus Machinery'. What he fails to notice, but what Wells leaves as his final word and focus, is that:

the half-dozen comparatively slender young men in blue pyjamas, who were standing about their victorious land ironclad, drinking coffee and eating biscuits, had also in their eyes and carriage something not altogether degraded below the level of a man.

Wells's young tank commanders, in brief, provide an image of 'fabril man', which one should note is deliberately unheroic, even unmilitary: the urbanists have been forced into war, but decline to take up its traditions, like wearing smart uniforms and drinking strong liquor, preferring to see it merely as another job to be done. It is striking that Wells should have realised as early as 1903 not only the technical possibilities of trench-warfare and armoured vehicles, but also the immediate sentimental reaction against 'fabrilism' of the traditional writer, so marked ever since.

The story which I chose to set against Wells's as the last item in the Oxford collection was David Brin's 'Piecework', from Interzone (1992). This has in most obvious ways no resemblance to Wells's at all. It is female-oriented rather than male. It contains no elements of war, or metalwork, or smithcraft. It has a strong mythic strand. Yet it seems to me in a deeper way to help to define the idea of the 'fabril'. In Brin's story, two women, Io and Perseph, are in the business of renting out their wombs to produce - if they are unskilful, like Perseph - organic industrial materials, or if they are skilful, like Io, creatures not unlike the Beast-Folk, but sentient, with human genes and superhuman powers, capable even of citizenship. The activity of womb-renting of course seems deeply inhuman, and Brin suggests at the start of his story that the two women are in a way in a kind of Hell: Persephone is of course in some myths the queen of Hades. Io, however, is in Greek myth one of the loves of Jupiter, turned into a heifer by his jealous wife Juno: among Io's animal womb-competitors are the 'fabricows'. The point about the Io myth, however, is that in it she regained her true shape; while in Brin's story the heroine Io, evading the plots of her jealous friend, eventually gains the final admission of human status in her world – permission to bear a human child.

What this story shares with Wells's is the assertion that true humanity resides not in following traditional patterns but in having the skill and character to dominate a new technology: a physical one in Wells, a biological one in Brin, in each case rejected by one side or character, embraced and used by the other. Both authors also feint cunningly at the reader's expectations, making it seem as if sympathy should go to the traditional side and playing up the horrific aspects of the new technology, before insisting finally that all technologies remain in the

hands of their creators, if the creators (unlike Dr Frankenstein)¹⁸ have the will to use them.

Both authors seem to know, in fact, that readers will not like their central characters, for one reason or another! This trait is taken to a further extreme in a story included near the middle of the Oxford anthology, Larry Niven's 'Cloak of Anarchy', from *Analog* 1972. The story here need not concern us. It is enough to say that its image of *homo faber*, an especially clear and detailed one, is also a very clear description of what is now called a 'nerd'. Ron Cole is 'an artist and an inventor'. He cannot, however, remember anyone's name:

Ron Cole had better things to think about than what name belonged with whom. A name was only a tag and a conversational gambit ... A signal. Ron had developed a substitute.

Into a momentary gap in the conversation he would say, 'Look at this', and hold out – miracles.

He works, in fact, with things rather than people. The story shows him to be irresponsible, stubborn, poor at understanding people, a bad politician – not, however, necessarily wrong. He offers yet another thoughtful image of 'fabril man', in which as usual the reader is offered the chance of rejecting him in favour of more normal images of humanity, but also invited to consider whether, as with Wells's 'slender young men' or Brin's Io, he does not have something in him that ought also to be part of a balanced human whole.

My main point here, however, is not to suggest that science fiction should be seen just as a branch of 'fabril literature' and interpreted solely in that light. I do mean to suggest that the literary terminology we have inherited from antiquity is inadequate, and that we should not hesitate to create our own, perhaps especially if that terminology can be seen not just as un- but as anti-traditional. I mean to suggest also that science fiction is often engaged in the process of creating new human images of authority, which often seem profoundly anti-authoritative, engineers, host-mothers, or nerds. However, my main point is this: in spite of my careful selections of first and last stories, I suspect that much the same points as those I have made here could have been made from

¹⁸ It is just possible that some such thought as this may have led Wells to delete the reference to Mary Shelley's *Frankenstein* from his first draft of *Moreau*, see n. 5, above. Despite Brian Aldiss's claims for it as a progenitor of science fiction, *Frankenstein* is more convinced of the dangers than the potentials of a new technology.

any collection of thirty or so science fiction stories chosen by anyone. Certainly I could have reached much the same conclusions by discussing, for instance, not the Wells – Niven – Brin sequence from my collection but the stories by Schmitz, Clarke, Sheldon and McAuley. Nor were the stories selected to make such points, the points emerge seemingly inevitably from the stories. It is this belief which leads me to my final suggestion, which is about developing a more positive critical strategy for the special case of science fiction.

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I begin with the thought that science fiction is, to a degree unparalleled in modern literature, an intertextual mode. It has often seemed to me as I have read it over the years to be more like a classic folk-tale collection than a great literary tradition. The texts borrow from each other with astonishing speed, vitality, competitiveness and freedom. Yet they are all written by individual authors, nearly all of them perfectly self-conscious and articulate, well able to ridicule fashionable critical attempts to see them as mere clusters of social forces. In spite of its 'intertextuality', in no field is the author less dead as *faber*, as producer; or less important as 'authority', as rule-giver.

In this field, if nowhere else, I think there is a chance of reviving the dead project of scientificité littéraire, literary scientificity, or, to de-etymologise it, literary knowledge-making. This would be a search for knowledge, note, not based on analysis alone of 'the great classic texts', but on setting individual texts within their paradigms, paradigms which would be formed (just like the morphological paradigms of dead languages) by looking at a lot of individually non-significant examples, as I have done in an extremely sketchy way above: to see what was shared and what was not. Could the conclusions then drawn be turned outwards on texts which are not science fiction? I would like to think they could, but even if they could not I think the aspiration would be valuable. Near the start of this chapter I suggested that the science fiction field was (in academic circles) like the outsider on the fringe of the cocktail party. Another model might be that of the children's playground. Anthropologists of childhood report that in most areas of fashion - say, popular music - one function of fashion is to exclude those junior. Suppose that, at a certain time, for seventeen-year-olds, the in-group is U2. Eventually the fifteen-year-olds find out about this and take up the fashion. Fifteen-year-old approaches seventeen-year-old and says 'I like U2 too'. But the seventeen-year-old says: 'Really? We're all into Nirvana now'. The word passes down. The thirteen-year-olds find out about U2. The fifteen-year-olds find out about Nirvana. But already the seventeen-year-olds have gone over to some other group. This model has a certain similarity to critical fashion: the worst thing to be is a 'Me-Too-er'. By the time you've found out what to say 'Me Too' to, it's passé. Better to find what suits your own genius. My own feeling is that science fiction is the field for structural, paradigmatic, intertextual studies, based on a coherent belief structure, and tolerant of a 'fabril' tradition resolutely and deliberately excluded by the literary and rhetorical interpretive community – often a Latin-based interpretive community – since at least late Classical times.

What I have said accounts, I think, for some questions often raised in discussions of science fiction. Why are some science fiction authors acceptable in literary circles and some not? The acceptable ones are so because they do not pose the challenge of truth-to-nature to our literary authorities. Why are some authors – E.M. Forster, C.S. Lewis, Huxley, Orwell, Doris Lessing – given disproportionate space in syllabuses and textbooks? Because they are easily assimilable (sometimes against their own will) to established 'gatekeeper' paradigms. Why are there continuing debates within the field about 'hard science fiction' and 'Cold Equations'? Because these bring in the issue of objective truth too aggressively.

What we have to face, meanwhile, are 'strategies of neutralisation', or, to use Howard Hendrix's term, 'cultural sanctioning mechanisms' (Hendrix 2002: 143), backed by the full force of office and faculty politics. We are increasingly offered tolerance, as long as we 'know our place'. This is an offer I find easy to reject. It would also be open to us to pursue the strategy of claiming that science fiction falls into the Foucaultian category of 'subjugated knowledge', as indeed I have hinted. But one should say in a more robust way that science fiction is only subjugated in literary academia; and literary academia is subjugated in every other respect: in popular esteem, in its effect on the national or international culture, increasingly in student enrolments and in pay scales. By contrast, science fiction continues to flourish like a hardy weed, and to move out from its literary in-group into the mass media. It is open to us to regard ourselves as on the margins of a marginal group (literary academia, or, if one prefers, the MLA) or near the centre of a much more central group, our fellow-citizens as a whole. Our own personal 'contest for authority', then, is eminently still there to be won.

3

Introduction

Getting Away from the Facilior Lectio

This essay, like the last, arose from an Eaton science fiction conference, but the circumstances were very different. In 1992, the conference took place in Leeds, and I was the organiser as Johnny-on-the-spot, with (the late) George Slusser, of University of California-Riverside, handling the American end, providing some funds, and arranging later publication. The theme was 'cyberpunk and the future of narrative'. Organising the conference at Leeds was a misery. There was a university Conference Officer, who was supposed to 'facilitate' conferences, but his real concern was to cover his own salary, and if possible make a profit for the university, by screwing as much money out of the conference as possible. So the university overcharged for everything on its premises, and forbade anything off its premises, which led to all sorts of trouble, ruffled feathers, etc. This paper accordingly arose out of a disaster, and a contretemps.

The disaster - only a disaster in academic terms, it is true - was this. It was my first encounter with the American conference format of three 20-minute papers in a 90-minute session. I now realise, as I had not then, that this is so set in stone as to have become a ritual. I had, however, twigged that Americans expect you actually to read a paper, not just talk from notes like the British do, and think anything else is bad form. (This, by the way, is a mistake: most papers at US academic conferences are read at machine-gun speed to fit the time-scale, in convoluted written syntax, which the ear cannot take in, and frequently delivered in a monotone to the reader's top shirt-button. The important thing is that the paper shall have been read, not that anyone should understand it.) Just the same, I duly typed out a paper, got to my session in a thoroughly frazzled state, hauled the paper out of my briefcase – and discovered it was just blank sheets, as I had picked up the wrong pile of paper. I delivered it anyway, since I knew what I meant to say, and it was called something like 'Echoes of Ancient Epic in Contemporary

SF'. Much of it drew out a comparison between Greg Benford's *Great Sky River* (1987) and Virgil's *Aeneid*, and very clever it all was. But then Greg, who was in the audience, said he'd never read the *Aeneid*. Under pressure, he admitted he thought he'd skimmed through a graphic-novel version of it, in Japanese, when stuck in an airport somewhere. But clearly that wasn't enough, which just goes to show that there's such a thing as coincidence, a valuable thing to remember. Still, my paper as delivered was a disaster.

As for the contretemps, the topic was 'cyberpunk', and at the opening plenary session, knowing that I hadn't read as much as I should, I suggested that we might valuably decide on what was the cyberpunk 'canon'. I was really asking for a booklist of suggested reading, but it was very much the wrong thing to say.1 'Canon' is a dirty word in academic studies, for it suggests control, authority, fixity, whereas the 'gesture politics' of the trade demands diversity, freedom, and letting a thousand flowers bloom. So I got a good telling-off for being a control-freak. After which, and rather reinforcing the point made in the introduction to the last item about academic 'gesture politics', not only did almost all contributors talk about the same author (William Gibson), almost all the papers were about the same book, Neuromancer!² Edward James another person with a double life, as professor of medieval history and editor of Foundation – remarked on the irony of this at the final plenary session, and added that he had spent the 1980s rejecting articles on The Left Hand of Darkness, and it looked as if he would spend the 1990s rejecting articles on Neuromancer. Anyway, no one during the conference said anything about Bruce Sterling, surely the other major founder of cyberpunk, and I decided for the published volume to replace my failed paper with this one.

It does pick up some themes mentioned already, one of them being that Qualified Reality, as I call it, demands a lot of awareness of its readers, a lot of literary and philosophical background, and a lot of putting-things-together, as well as being deeply and deliberately unsettling. I would add that my comment in the introduction to item 1 about sf preferring the unpredictable word to the *mot juste*, the one-that-doesn't-fit to one-that-fits, was borne out by the fact that the word in

¹ The overview I was asking for has since been provided by Mark Bould, 'Cyberpunk' (Bould 2005).

² In the volume of published articles, *Fiction 2000* (Slusser and Shippey 1992), George and I managed to rebalance matters somewhat, so that 'William Gibson' appeared in only four article titles, with *Neuromancer* in one more. One author and one book still dominated its pages.

the title, 'ghostlinesses', was emended from plural to singular by the copy-editors of the published volume of papers, and nothing I could do could get it back. Copy-editors always prefer what is called in Latin the *facilior lectio*, the easier reading: sf often goes for the hard one instead. There are of course dumb sf stories, but on the whole it is not a dumb genre, and it is often a very challenging one.

Finally, one of the problems with live authors, apart from them appearing in the flesh to contradict you, is that they will keep on writing. It would be presumptuous to pick over Bruce Sterling's very distinguished post-1992 list of publications to see how much they fitted my analysis of him here, but I have thought it only decent to write a brief update on his subsequent work. Suggestions for further reading should always be welcome, the point I tried to make at the start of the 1992 conference.

Semiotic Ghosts and Ghostlinesses in the Work of Bruce Sterling

In chapter 3 of Bruce Sterling's second novel, *The Artificial Kid* (1980), the Kid himself attends the carnival of Harlequinade, set in his world's Decriminalized Zone. The participants are in costume: historical costumes from the future's extended past, fish or animal costumes, with also:

the advocates of pure bizarrerie ... people with no faces, or four arms, or eight legs; people in chains, in webs, in masses of bubbling froth; people dressed as the dead, the living, the not-yet-to-be, and the never-could-be.

The scene is not a highly stressed one, and it may seem perverse to see in it a leitmotiv for Sterling's work. But to quote the author again: 'A symbol has meaning if someone gives it meaning' (*Schismatrix* (1985), chap. 2). It is possible to argue that Sterling, even more than other science fiction authors, deliberately sets out to explore and to expand that area which we might label as 'Qualified Reality': the linguistic area of 'to be + qualifiers', already existent in common speech as 'has-beens' and 'might-have-beens', extended here to 'not-yet-to-bes' and 'never-could-bes', but taken elsewhere in Sterling to states which even the highly flexible English verb can barely accommodate.

Take, for instance, a short story by Sterling in Fantasy & Science Fiction for September 1984 (reprinted in his 1989 collection Crystal Express). It is called 'Telliamed', and can be described with almost indecent brevity. In it an old philosopher of the period of the Enlightenment, c.1737, sits on the seashore and unwarily inhales a gift of something like coca powder sent him by a correspondent, believing that it is snuff. Not surprisingly, he then sees a vision in the sea of a 'Dark Girl', whom he equates with ignorance, and who complains that her reign is over and that the new philosophy of science will eclipse her. Summarised like that, the story

becomes an icon of modern orthodoxy, a 'Whig Interpretation of History' applied in more-than-textbook style to the history of science (that home of 'Whig interpretations'); it is a 'must-be-so' story. Yet, though nothing said above is false, and nothing major has been omitted, no reader is likely to take the story just as sketched. For one thing, there is the 'coca'; de Maillet's vision could be/is a drug-induced hallucination, predictably enough supporting his life's work on the one hand, on the other expressing his secret fears. More penetratingly, even an ignorant modern reader cannot help noticing a series of clashes between reality as perceived in 1737 and as it is perceived now. De Maillet's field of study is fossils, a major evidential area for the development of the modern scientific world view; and he has seen things which we too have seen, are prepared to believe in, have a theory to account for - for instance, seashells high on cliffs and in mountains. How did they get there? By geological change, we believe/know. By the steady shrinking of the sea, argues de Maillet. Our belief, a product of the eighteenth and nineteenth centuries, has vastly extended the timescale of the Earth, caused at the very least major problems for Bible-centred theorists, and also provided the required time space for Darwin's theory of evolution to work in. (For an interesting account of the importance of geology in the pre-Darwinian period, see Gould 1987.) De Maillet's belief is like ours in that it leads to conflict with Revelation: the letter he is reading at the beginning (and which has the 'coca'-powder with it) is from a Jesuit friend, rebuking him for his 'System of Geology' and insisting that it cannot triumph against Dogma. But his belief is unlike ours in that it assumes that the seeds of all life must have come from the sea, which must once - the seashells prove it! – have covered the globe. Even people must once have been mermen; the orang-utans of the Dutch East Indies must surely have only recently emerged from the ocean; de Maillet is watching the sea in patient hope that he too will see an 'emergence'.

De Maillet's view, in our belief system, is irritating or comic in its mixture of approximation to and deviation from what is now accepted. To put it crudely, we − most *Fantasy & Science Fiction* readers, most readers of science fiction - are for him against literalist churchmen and against bourgeois insecurity, against him in his 'one-way' vision of the past, against him over evolution, orang-utans, giants' bones and fossilised ships down iron-mines. He says things, without the 'coca', which we are not prepared to believe in. And what he sees under the influence of the 'coca', we may well believe, is a rejection of himself as well as of his opponents. To the question he keeps asking, 'What of my System? ... Will it be revealed as truth? ... Will my work persist?', the acolytes of ignorance only reply evasively; but one of the ironies of the story is that it will not persist. The Enlightenment that this philosopher has fathered will reject him and send his System into oblivion.

What, then, are de Maillet and his System in terms of Qualified Reality? They are not history ('was'), nor utter fantasy ('never-couldbe'). Rather, they represent a blind alley, by modern standards, which nevertheless at least raises the doubt whether the modern consensus is not an improved but essentially similar blind alley; the philosopher and his System are a 'was-would-be', or a 'could-have-been-would-be'. They inhabit, however one puts it, a philosophic space somehow intermediate between standard conceptions. Creating that space is the point of the story.

It could be said that this is common enough in science fiction, whose job it is to examine possibilities. Yet there is a great gap between 'Telliamed' and, say, the lead story of that issue of Fantasy & Science Fiction, Frederik Pohl's 'The Blister', or Bruce Sterling's own Fantasy & Science Fiction story from four years later (June 1988), 'Our Neural Chernobyl' (this one reprinted in the 1992 collection Globalhead). In 'Neural Chernobyl', Sterling playfully imagines a catastrophe like Chernobyl in the field of recombinant DNA research, which leads to an AIDS-type virus spreading intelligence among the animals. In 'The Blister', Manhattan is about to be covered with an artificial dome, part of the progress towards a new Utopia chronicled in Pohl's The Years of the City (1984). Both stories, in short, are set in the future, but suggest that the future has roots / analogs in the present, and is (Sterling) possible / dangerous or (Pohl) possible / desirable. But 'Telliamed' is set in the past; offers competing visions of the future from the past; and suggests that the present was once only a vision in the past, and not a natural or inevitable one at that. As for whether our reality or de Maillet's is preferable, one can only say that the story throws up its hands, leaving us with a highly ambiguous image of a pebble from the shore, clutched by de Maillet as irrefutable evidence, giggled at by children as a sign of insanity. This story by Sterling occupies a much more uncertain space within Qualified Reality than the great bulk of science fiction.

Conscious awareness of such possibilities is a major feature of Sterling's work, as of other authors within the field of 'cyberpunk'. The notion of past visions of the future, or 'yesterday's tomorrows', is the centre of William Gibson's first published story from 1981, 'The Gernsback Continuum', reprinted in Sterling's field-defining anthology *Mirrorshades* (1986). In this the central character is first reminded of some of the images of the future current in the 1930s: pulp-fiction covers, 'futuristic' architecture, sketches of twelve-propeller 'flying wing' airliners with ballrooms and squash courts, designed to drone across the

Atlantic in less than two days. Slowly recognising the persisting reality of these visions, the narrator finds himself one day 'over the Edge': he sees the ziggurat-city, the personal gyroscopes, the giant wing-liner, even the blond, smug, healthy future citizens of the 1930s, with their immortal line: 'John, we've forgotten our food-pills'. Amphetamine psychosis? The explanation is offered, as is the 'coca' in Sterling's story. But a friend suggests a 'classier explanation' to the narrator via the notion of a 'mass unconscious'.

'I'd say you saw a semiotic ghost ... They're semiotic phantoms, bits of deep cultural imagery that have split off and taken on a life of their own.'

The notion of the 'semiotic ghost' is discussed no further, but, as with 'Telliamed' and its intermediate philosophic space, 'The Gernsback Continuum' has no function other than to create that notion. One might note that Gibson's story in a sense goes further than Sterling's in making the point that science fiction – old science fiction, 'could-be' science fiction' – dies quickly and is at the mercy of changing opinions (see, further, Westfahl 1992). Conversely, Sterling's story goes further than Gibson's in providing no secure point, no accepted here-and-now reality to set the false vision against. In Sterling's story, the 'Dark Girl' is a 'semiotic phantom' from de Maillet's mind; his correspondent's Dogma can also be seen as a 'ghost' of dead belief; but de Maillet's System is a ghost too, even weaker than Dogma. The whole story is a conflict of tenuities.

Other stories by Sterling take such tenuities even further. Another good brief example is the story 'Dinner in Audoghast', from Isaac Asimov's Science Fiction Magazine (May 1985) (also now in Crystal Express). This is set in what one might call a ghost city - its name, of course, suggests 'ghost' as well as 'ghastly', and perhaps 'Gormenghast' – a city allegedly existent in sub-Saharan Africa sometime in the eleventh century. To the people chatting there over dinner, the Christian world of Europe is a fable, of cannibalism and savages; its inhabitants are juxtaposed with gorillas, these latter real but disappointing. 'My grandfather owned a gorilla once', observes a diner. 'Even after ten years, it could barely speak Arabic'. The disorienting effect of this remark is reminiscent of the merfolk/orang-utans of Sterling's earlier story, but it also helps to move Audoghast out of readily identifiable space. Are we in a little-known but real frame of history (a 'was')? Or are we in an alternate1 world

¹ For 'alternate' and 'alternative', see item 7, below.

(a 'might-have-been')? Whatever the answer, the connection with our own reality is achieved by bringing on a repulsive and leprous prophet who, Cassandra-like, foretells a string of things we recognise as truth, including the destruction of Audoghast, only to be laughed to scorn by his auditors. They are wrong, we are right, and one of the diners, a poet, senses as much, in a passage reminiscent of Shelley's 'Ozymandias' sonnet, which is also a scene of 'disfigurement' like those I discuss in the 'Fall of America' essay at the end of this volume. But the rest of the diners console him, laughing at the vision of civilised Europeans, pointing out that there must always be a place to control the ivory trade, for 'elephants are thick as fleas', while, in the last resort:

'Well, surely there are always slaves', said Manimenesh, and smiled, and winked. The others laughed with him, and there was joy again.

This ending, of course, is fiercely ironic. It presents as true what we know to be false; it presents fact as prophesy, and fantasy as fact. Yet, oddly, it has no moral point to make (not even about slavery). If the story 'says' anything, it is only that people's expectations are often wrong. It is an exercise again in Qualified Reality. And, to cut the matter short, one need say only that several Sterling stories are similarly analysable: for instance, his collaboration with Lewis Shiner, 'Mozart in Mirrorshades' (a switch on the 'alternate world' sub-genre of science fiction), or his collaboration with Gibson, 'Red Star, Winter Orbit' (in which present visions of space exploration have become 'a dream that failed', a modern version of Gernsback).² But the point can perhaps be taken as established. Bruce Sterling, like other 'cyberpunk' authors, but more consistently and centrally, has set out to explore the domains of Qualified Reality, always perhaps implied by the creation of science fiction, but never previously as thoroughly or consciously exploited.

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Having said that, one may consider Gibson's coinage of the phrase 'semiotic ghost'. How appropriate to Sterling is it? Remembering, of course, that, in general and popular belief, to be a ghost it is a necessary precondition to be dead. 'The Gernsback Continuum' deals with dead

² Both these stories are in Bruce Sterling's Mirrorshades: The Cyberpunk Anthology (1986), but were first published in respectively Omni (Sept. 1985) and Omni (July 1983).

futures. But surely that must be a limiting case. If science fiction admits that all its futures are dead or stillborn, it removes most of its raison d'être. How can the 'semiotic ghost' co-exist with the classic science fiction mode?

Here Sterling's most suggestive story is 'Green Days in Brunei', a 20,000 word novella from Asimov's (October 1985) (once again reprinted in Crystal Express). This exemplifies several of the 'cyberpunk' features celebrated in Sterling's Mirrorshades editorial: internationalism (the story is set in Brunei, with a Canadian hero of Chinese parentage and other characters by birth Australian, Malay or British); the notion of the computer net (it has lovers who communicate by bulletin board); the personalisation of technology (following Sterling's editorial claim that 'Eighties tech sticks to the skin ... Not for us the giant steam-snorting wonders of the past'). This last point is in fact the science fictional centre of the story. Its hero, Turner Choi, is in Brunei to revive an old robot assembly line and put it to work making sailboats: not much of a job, in his view, 'a kind of industrial archaeology'. But as the story unfolds we come to see that opinion as a relic of Western thinking, present-view-ofthe-future thinking, created by a set of cultural prejudices. Perhaps the main point about Brunei – the reason for placing the story there – is that in such places cultural expectations, Eastern/Western dichotomies, are least powerful; Brunei is a cultural Free Zone. In one scene Turner is taken to an old ruin where the Bruneians have set up their satellite dishes. As they walk through the ruins:

Turner saw a tattooed face, framed in headphones, at a shattered second-story window. 'The local Murut tribe', Brooke said, glancing up. 'They're a bit shy'.

The contrast is repeated in Sterling's novel *Islands in the Net* (1988), where again a Westerner sees, on a Caribbean island, an icon of alienness 'plugged in' to the electronic community:

At a sea-level floating dock, a dreadlocked longshoreman looked them over coolly, his face framed in headphones.

The Murut and the Grenadian will not interact face-to-face with Westerners; they remain aloof or alien, 'shy' or 'cool', marked off by tattoos or dreadlocks. Yet on a cultural or technological level, they do interact. They want the headphones, the screens, the Net. At the centre of 'Green Days', Turner Choi comes to understand what can and what cannot be culturally transmitted. The job he thought was 'industrial archaeology' turns out to be a chance to export and propagandise a new, 'green' way of life, in Ocean Arks that trade, haul freight and grow food on their greenhouse decks, all using renewable energy alone. The ideal might be defined as the 'electronic kampong': new technology, free access to information, old cultural patterns, non-exploitative use of resources.

One of the words Sterling uses to define this new understanding is bricolage, a term borrowed from the French anthropologist Claude Lévi-Strauss's The Savage Mind (English trans. 1966: 16-36), who is mentioned overtly in the story. Turner Choi is a bricoleur, one who can make do with the leftover junk from the twentieth century. 'That's what bricolage is', says the Englishman Brooke, 'using the clutter and rubble to make something worth having'. The difficult thing is that it means using things for one purpose when (like the sailboat technology) they were originally designed for something else. Sterling's other word for the process is the verb 'retrofit' - looking at things retrospectively and making them fit a new system. There is, so the story insists, an ingrained resistance to this, and in the readers as well as in the characters. The force which opposes 'retrofitting' or bricolage is the awareness which immediately sees something improper/unexpected/unnatural in tattoos and headphones, or dreadlocks and headphones, or Malay girls reading New Musical Express, or any of the dozens of other fleeting, unstressed, cumulatively significant culture clashes built into 'Green Days'. If one were to reduce the story to maxims, Sterling would be telling us here:

- (1) things have immediate uses;
- (2) immediate uses are more important than cultural preconceptions;
- (3) cultural preconceptions are dead; but
- (4) dead things are there to be used, in line with Gibson's famous tag, cited by Sterling in his *Mirrorshades* editorial, 'the street finds its own uses for things'.

One could in fact say that bricolage could also be called 'Frankensteining'. When Turner Choi builds his Ocean Arks he is using leftovers, spare parts from dead constructions. Where, then, are the 'semiotic ghosts' in 'Green Days'? Surely the answer is that they are in the readers' expectations. 'Green Days' is a 'could-be' story, like most science fiction. But, unlike most science fiction, it trades on an implicit feeling that in science fiction certain expectations will be fulfilled. Tech will be high, progress will be technological, the Western World may not be superior but Western attitudes will, the Third World – as long as it keeps to Third World

culture – will be left behind. That is the 1970s version, one might say, of the 'Gernsback Continuum'. At the start of 'Green Days', Turner is still in that continuum. At the end he realises it is dead, has been dead for some time already. He had been living with a 'semiotic ghost'; but that ghost is still in control of the minds of those readers (in practice, all of them, this critic included) not yet familiarised to bricolage, still jumping nervously at each of the culture clash pinpricks Sterling has scattered through his text.

The method pioneered in 'Green Days' dominates Sterling's awardwinning novel, Islands in the Net (1988). The most consistent thing about this book is the way it consigns to 'ghost' status virtually every cultural piety left to Western readers. To give only one example, we are introduced near the end of the book to a white South African Boer called Katje Selous – a name deliberately ill-omened: F.C. Selous (1851–1917) helped bring Rhodesia (i.e., Zimbabwe) under British rule, and the Selous Scouts, named after him, established a formidable anti-guerrilla reputation as a 'Special Forces' unit fighting for continued white rule in Rhodesia in the 1970s. However, the story's Selous (we eventually realise) has abandoned apartheid and admitted blacks to full citizenship: one's moral prejudices readjust. But then again we learn that the South Africa to which she is loyal is based on the premises that 'Azanian black people are the finest black people in the world!', because of their Zulu warrior blood, and that the Zulus and the Boers between them have a genetic right to oversee the affairs of Africa. Is Selous a good or a bad character? The question is naive, but also unanswerable. To answer it one would have to have a secure moral base. And after being led through the maze of data pirates (bad or good?); the murder of data pirates (justified or not?) by the Free Army of Counter-Terrorism (a stooge organisation?) acting for Mali (or is it Singapore, two emergent nations of quite different cultural 'feel'), with or without the connivance of Vienna (world peacekeepers or corrupt cartel?): well, it is reasonable to agree that the variables have become literally irresolvable by any reader, no matter how skilled or careful.

The effect of the book lies in its sudden new angles, its destruction of icons. Few issues in the 1980s could unite an American public more than dislike of Iran: near the end of *Islands*, one of its most sympathetic characters remarks as if everyone knew it already that the 'Iranian revolt of 1979' was a 'brave effort' but 'too late ... They were already fighting for imperialism'. In exactly the opposite mode, Sterling exposes to casual denigration, at different moments: career feminists; health standards enforcement; emergent nations' aspirations; the ideology of Space Invaders; the notion of world government. When Singapore is

successfully invaded, the agency that carries it out is the Red Cross; the nuclear submarine that re-bombs Hiroshima (an iconic act in itself) is marked by icons of de Gaulle and Jaruzelski (what have they in common?), with, to add to the list later, Galtieri, Macarthur and Oliver North; near the end, the Tuareg of the Sahara are presented singing a traditional song that expresses their awareness that in prizing camels and goats for so long they destroyed their ecology, which they must now repair by butchering their herds and growing grass:

For a thousand years we must praise the grass.

We will eat the *tisma* food to live,

We will buy Iron Camels from Go Motion Unlimited in Santa Clara California.

'It's an old song,' says the Iranian sympathiser. 'Retro-fitted'.

The retrofitting in *Islands in the Net* virtually defies comprehension. Its heroine feels at one point that 'Some pattern-seeking side of her brain had gone into overdrive', and most readers will feel with her. Yet the point of the story is, in a sweeping way, clear. It says:

Stop. Abandon. Disassemble. Do not seek patterns. Do not think dreadlocks do not go with headphones. Forget Jaruzelski was a Communist and Macarthur an American. Assemble these data a new way, like a bricoleur. Above all, assume everything you know already, from politics to table manners, is part of a semiotic system and accordingly unreliable insofar as it has a place within that system.

Islands in the Net, one might say, is a semiotic vision, indeed a vision of a new semiotics. But where 'The Gernsback Continuum' or 'Telliamed' centred on 'semiotic ghosts' and dead systems, Sterling's novel locates those ghosts within its readers' minds. It is a tour de force, and a deeply unsettling one, to present a whole near-future world in which virtually no carry-over at all from the present can be relied on.

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Lack of carry-over may give a clue, finally, to answering an odd question about Sterling's work so far: why is he interested in themes of 'ghostliness' other than the metaphorical or semiotic ones already discussed? *Islands* has zombies, one Stephen King-style death on screen,

and Optimal Personas, who appear for all the world like spirit-guides. But the themes of age, survival, and what one might call 'negotiated death' have been with Sterling all through his career, and raise a question as to how they fit in with Qualified Reality or bricolage. Take, for instance, Sterling's second novel, The Artificial Kid. An irreverent mind might say that this has been constructed for the purpose of provoking Freudian interpretation. The lead character, the 'Artificial Kid', is so called for various reasons, but 'kid' is a true description of him: he is facially hairless, shrill-voiced, pre-pubescent and kept so by drug treatment. His real age is 28. Or is it 98 - the number of years he has been practising with his 'nunchuck'? Actually, he is in another sense nearly 300, for the Kid is 'artificial' too; he has been produced by memory transfer from a much older man, Rominuald Tanglin, alias R.T., or, of course, 'Arti'. What is the relationship between R.T. and the Kid? In the tapes he has concealed in the Kid's computer, he addresses the Kid always as 'kid' or 'son'. Is this merely affectionate, literally true, or a wild understatement, the Kid not being R.T.'s son but his identity? No wonder, a Freudian would say, that the Kid stays pre-pubescent. In his case, achieving independence from his father/

namesake/alter ego is practically impossible! As the Kid says, 'It's like

having a ghost at your elbow'.

The Kid is, however, surrounded by ghosts. The founder of his world is one Moses (it would be a poor Freudian who could see no meaning in that), known to have been frozen centuries before, but then killed in his 'cryocoffin' by assassins. During the Kid's adventures, though, it becomes clear that one of his companions is the resurrected Moses Moses, an evident 'father figure'. Another is Professor Crossbow, the Kid's old tutor - a sexual neuter, so a neuter-tutor - long vanished 'under the surface of the Gulf of Memory'. A third is Anne Twiceborn (again, a name of aggressive significance), a young woman infatuated with the Kid's 'father' R.T. A totally dominating father; a dead-alive father figure; a neuter father figure; an aspiring stepmother: one need go no further to suggest that The Artificial Kid is an almost parodic version of the genre known as 'family drama' (see Brewer 1980), its underlying drive, of course, being to allow the Kid to break free of paternal domination, reach pubescence, achieve sexual union (with Anne Twiceborn), and so supplant his father and achieve independent existence. 'Supplant', however, may be the wrong verb. In view of his special relationship with R.T., 'exorcise' might be more accurate, or even (with full consciousness of its double meaning) 'lay'. The Kid has to 'lay' his stepmother to 'lay [to rest]' his father's ghost. Meanwhile, in the background, Professor Crossbow and Moses Moses are fusing, to become two examples of the same joint personality; and in yet another twist Crossbow Moses (though not Moses Crossbow) fuses with 'the Mass', a kind of planetary gene pool that promises its members a form of immortality. My cells will be dismantled. Crossbow Moses remarks:

'But that does not constitute death. My genetic content would be preserved. In all likelihood I would eventually be recreated. Whether I would be re-born in the full sense of the word depends on your definition of identity. I would be a clone. But all neuters are clones, of course.'

He is promised, then, a kind of continuing survival, purely physical. R.T. arranged for himself a kind of survival, purely mental. Moses Moses in his 'cryocoffin' tried to combine the two, and both the Kid and Anne Twiceborn have their own ideas about survival as well, whether religious, electronic or genetic. Yet, however the cards are shuffled, it is clear that Sterling is interested in the notion of 'carry-over'; he does not accept life/death as the simple, traditional dichotomy.

Similar points could be made about Sterling's third novel Schismatrix (1985), and the other stories from the 'Mechanist/Shaper' universe in which that is set. Schismatrix shows strong interest in 'negotiated death', its characters frequently disappearing (but reappearing), replacing death by 'fading' (a process in which one cannot be sure whether a friend has died or not), transforming themselves into electronic impulses or mindless flesh (the sentence 'The room was full of flesh' in Schismatrix, chapter 6, is not metaphorical), or dropping in and out of oblivion like visitors to Elfland in a traditional fairy-tale. In both Schismatrix and its associated stories, too, Sterling's interest in DNA as a literal fact of which the word 'soul' is an image, is almost obsessively strong.³ His fiction often seems to oscillate thematically between the notions of termination and survival, betraving on the one hand fascination with / horror at the persistent hanging on of the very old, but on the other deep reluctance to see anything or anyone cut off or terminated without passing on something (individual DNA or cultural legacy) to the future.

What have these themes of 'ghostliness' got to do with 'semiotic ghosts', Qualified Reality, or bricolage? One suggestion would be this:

³ The Elder Culture's 'soul sculptures' appear in Sterling's first novel, *Involution Ocean* (1977) and reappear in *The Artificial Kid* (1980) chap. 10, where they look like DNA models. In Sterling's collaboration with John Shirley, 'The Unfolding', *Interzone*, 11 (spring 1985): 27–32, apocalypse is triggered by a 'ghost image' of a DNA model.

Sterling is actively opposed to the idea of system, still worse System (as in 'Talliamed'). He is very strongly aware of the 'pattern-seeking' quality of human minds, and does his best to disrupt it in every way, including stylistically. Yet he knows that systems have a strong tendency to perpetuate and propagate themselves, whether genetically like DNA or intellectually like human cultures. What he likes to show is systems breaking down ('Talliamed',) about to break down ('Audoghast'), or broken down (Islands). His ideal is the person who picks up the pieces and starts again, the bricoleur. What he fears is the successful imposition of dead systems on the future, as with 'semiotic ghosts'. The themes of 'ghostliness', generation conflict, or 'negotiated death', are all, as it were, mediations between these two extremes. The person living on may be a despot, like R.T., or a sage, like the hero of Schismatrix. Probably the difference lies in the readiness or otherwise to abandon an intellectual system while preserving continuity of personality. 'People outlive nations', says Lindsay serenely in Schismatrix, faced with failure and ruin. His reward for readiness to start again is to become, at the very end, a ghost, observing his own skull and bones being looted by an alien bricoleur. To Sterling this is a consummation.

Other facets of Sterling's fiction could be drawn into his argument, notably his liking for parody of or satire against the general assumptions of science fiction itself, viewed as a series of 'Gernsback Continua': Schismatrix begins with the motif of an ultralight aircraft wheeling in the sky of a low-gravity hollowed-out asteroid, familiar from earlier science fiction such as Arthur C. Clarke's Rendezvous with Rama (1973); but, of course, with Sterling the ultralight crashes, just as his spaceships have roaches, his 'hydroponics' all go sour, and his aging space people are clogged with dirt. Such jabs are all aimed at making readers drop their ballast of (science fictional) cultural assumptions, to float free (balloon images recur in Sterling) into the larger space of Qualified Reality. Nevertheless, the final point here should come from an interview with Sterling recorded in *Interzone* 15 (spring 1986): 12–14. 'Don't you think', the interviewer asked, 'that sf, far from being a vision of the future, is a reflection of the present?' Sterling realised at once that this question conceals the assertion that science fiction is metaphorical, a mode for discussing the discontents or pressures of the present day in suitably veiled form: that it is, in short, a skewed version of what is, a 'will-be' or a 'might-be'. He reacted to the question with strong disapproval.

'I resent it when my ideas, which I have gone to some pains to develop and explore, are dismissed as unconscious yearnings or a funhouse-mirror reflection of the contemporary milieu. My writings about the future are not "about the future" in a strict sense, but they are about my ideas of the future. They are not allegories.'

The question, Sterling continued, 'is part of an ongoing critical attempt to reduce sf to a sub-branch of mainstream literature'.

It may seem idle to add comment to these very clear statements, but the last remark shows the strong desire, already identified above, for science fiction as a whole to preserve its distinctive fictional space. As for the longer quotation, one might underline the phrases 'unconscious yearnings' and 'funhouse-mirror'. The former reminds us that even Freudian analysis (as of *The Artificial Kid*) could in Sterling's view be radically altered by technology: not even fathers, families or primal scenes are immune to change. Meanwhile, the rejection of 'funhouse-mirrors' might take us back to bricolage. The future will not be the same shape as the present, just bulged or lengthened or distorted, it will be a whole new assembly: the mirror will be shattered first. Yet no image easily catches the distinctive novelty of Sterling's work. In it, both this present world and the worlds of classic science fiction are 'ghost worlds'. Qualified Reality is elsewhere.

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One of the problems with writing about live authors is (see introduction to this item) they may turn up to contradict you. Another is that they carry on writing, with a similar potential for exposing the critic's wrong guesses. Since 1992 Sterling has published six further novels, Heavy Weather (1994), Holy Fire (1996), Distraction (1998, which won the British Arthur C. Clarke Award for 2000), Zeitgeist (2000), The Zenith Angle (2004) and The Caryatids (2009), with three collections of short stories, A Good Old-Fashioned Future (1999), Visionary in Residence (2006), and Gothic High-Tech (2012), in addition to Ascendancies (2007), a 'Best of' anthology. His science-fact book, The Hacker Crackdown: Law and Disorder on the Electronic Frontier (1992) has also been highly influential, and Sterling has made a further career as a futurologist with works including Tomorrow Now (2002) and Shaping Things (2005).

Every work is deeply considered and highly original. It would be presumptuous to try to sum them all up in a brief coda like this one, and excessively so to go through this impressive corpus 'marking' it for similarity to/deviation from the kind of creative trajectory outlined above. Nevertheless a few things may be said, with decent awareness of their selectivity. One is that while the 1990 collaboration with William

Gibson, The Difference Engine, was not the start of 'steampunk' - the word had been coined a few year earlier - it did establish some of the sub-genre's conventions; and steampunk is a clear case of the 'mighthave-been' version of what is above called 'Qualified Reality'. Another critical guess which has been corroborated is Sterling's habit of contradicting generic sf expectations, whether of the 1970s or the 1990s, or later. He repeatedly shows a crumbling USA. Distraction opens with the US Air Force manning roadblocks to shake down passing motorists, because they haven't been paid, and both that novel and Heavy Weather portray a country overrun by nomadic tribes.

More surprising, even, in terms of sf expectations, are repeated statements that science is over. There is 'no such thing as pure science' (Distraction, ch. 8). In sf terms that could just mean that science is always impure, affected by political requirements, but Sterling means something more. Science needs to de-centre, cease being official, become street-science instead of being the preserve of – from the story 'Our Neural Chernobyl' in Globalhead - 'white-coated sociopath[s]'. Low-tech and high-tech must/will also come together, as they do in the 1997 Hugo-winning story 'Bicycle Repairman' in (satiric title) A Good Old-Fashioned Future. That story also at least floats the idea that big science is not the only thing that needs to go, for even in the postmodern era 'We're now in the grip of a government with severe schizoid multiplepersonality disorder'. In the story this has a technological confirmation, but seems to be meant to ring true without it.

The truly remarkable vision of Qualified Reality is, however, Zeitgeist. The frame for this is another fixer, like the hero of *Distraction*, running an international girl-band modelled on the Spice Girls. The band, G7, has 'absolutely no talent, soul, inspiration, or musical sincerity whatsoever' (ch. 7). It is, in a word, completely 'phony'. But this is good. 'Basic modern trend of the industry.' A support character enthuses, 'We are manufacturing reality' (ch. 1). But this is not just the usual PR hype. It turns out that Starlitz and his daughter Zeta really are manufacturing reality, in so far as 'reality' any longer has any meaning. Zeta has poltergeist abilities, but even beyond that, 'impossible' events happen repeatedly. The way Starlitz puts it is to say that reality is all a matter of narrative: assembling 'a cogent narrative' (ch. 2), rejecting the 'consensus narrative' (ch. 5), living in a narrative 'increasingly polyvalent and decentered ... rhizomatic' (ch. 3). Starlitz insists that 'the deeper reality is made out of language' (ch. 5), for which view among contemporary theorists see item 2 above, pp. 133-4. Part of this, and reinforcing the rejection of 'big science', is getting rid of 'mechanical objectivity, proper observation, the scientific method,

reproducible results, and all of that scary crap' (ch. 5). Sf heresy, and not just in the Gernsback Continuum!

The book ends with the appearance of a self-labelled *deus ex machina* (though he does have a kind of technological explanation), and what seems to be a case of death-reversal, which as far as I can see does not. For the latter see remark made on p. 60 above. And *Zeitgeist*, more than any other book I have read, posits existence in an 'intermediate philosophic space', see also p. 52 above. There is no doubt, at least, that Sterling continues to push the boundaries of science fiction. I think now, in 2015, even more than I did in 1992, that he is (despite very stiff competition) the genre's most innovative and original author currently writing. Though not a comfortable one.

SF and Change

4

Introduction

Getting Serious with the Fans

This piece started off as a 45-minute talk at the 1972 Novacon in Birmingham. In later years I became a regular performer on the Tolkien circuit in the USA, paid at rates far higher than anything in the UK academic world, can claim always to have given satisfaction, and also picked up awards for lecturing – another thing that was never forthcoming in the UK, no matter how good you were. Still, I don't think I have ever enjoyed myself more or reached the same level of form as I did back at successive Novacons. I was really into the material, it was the first chance I had ever had to talk about it publicly, the audiences were both supportive and argumentative ... I wish I'd been able to keep it up. There were no doubt many reasons this was not possible, like being too busy myself, but I think one reason was a sort of underlying dichotomy within fandom. There were some fans who wanted to talk about science fiction (as I did), but there were others who really wanted to talk about being fans, or to set up 'fanac' (i.e., 'fannish activities'), which would give them something to talk about in the future. I think the latter group became dominant: long talks about the roots of sf in intellectual guarrels in the nineteenth century - dull, drop them off the programme. It didn't always work like that, and I can remember still doing the same sort of thing, for instance, at the 1979 WorldCon in Brighton (another occasion where I was telling authors like Bob Shaw and Poul Anderson what they were really thinking, which for once went quite well), and again at the 1984 Eastercon in Leeds. But those talks were pre-computer, and the scripts have long since been lost.

This essay, however, was written up for *Foundation*, and then formed the basis of the entry on 'History in SF' in the first Clute and Nicholls *Encyclopedia of Science Fiction* (1979), still surviving, though much expanded and updated (twice) (1993 and 1999). The article has also been translated into French, as 'L'Histoire dans la science-fiction', in Gérard Klein and Daniel Riche (eds), *Change: science-fiction et histoire* (Paris, 1981).

The strong point about it, I think, is the little diagram on p. 82. This argues that the reason why 'change-the-past' stories have turned into a genre with continuing possibilities for variation is that there is a tension inside them, or maybe several tensions: between what I call 'Malthusian' and what are generally called 'Whig' versions of history; between the idea that history is a product of great impersonal forces and the idea that it is the result of decisive action by great individuals; between the idea that history has an irresistible logic, and the idea (which is the basis of the 'alternate history' mode discussed in items 7 and 8 below) that its major effects are created by tiny chance variations. Along with this goes a running contrast between two human types, the one created by his/her environment and never able or willing to escape from Huxley's 'glass bottles' of social conditioning, the other taking an anthropological view of his/her own society, as well as other people's, and ready to use that knowledge to achieve their goals. This last contrast is frequently a theme in sf; see Vance's extended presentations of it as discussed in item 6, or Poul Anderson's 'van Rijn' stories, notably the significantly entitled The Man who Counts (1957), which, as noted in the 'Personal Preface', was one of my first readings in the field. My point, anyway, is that these tensions, these questions to which we do not know the answer, are what provide the energy of the plots, beneath the surface of human dilemmas and individual successes and failures.

One tension I did not take up in the piece is the question so important to sf, what is the role of technological advance? Is this the real determiner of history? An argument to that effect is put very straightforwardly by the Christopher Anvil story in ASF (Oct. 1962), 'Gadget versus Trend'. The story says, in effect, that one gadget invented by an engineer will outweigh any amount of sociological trends, no matter how inevitable these are said to be. There is a view the other way, which says – usually looking at the contrast between Chinese and European civilisations - that gadgets will only be accepted if they can be incorporated into existing sociological structures, or, of course, exploited by rebels against those structures. Robert Heinlein's 'Let There be Light' (1940) shows an inventor pushing his 'sun-trap' device through socio-economic barriers, Ursula Le Guin's 'The New Atlantis' (1975) shows just such a device being suppressed (see, this time, item 14, below). And then there is the view which says that when it is 'steam-engine time' or 'steamboat time', steam-engines and steamboats will be invented. In other words, major technological advances rest on an often unrecognised build-up of minor advances, but, once the parts are available, someone will combine them. Again, the brilliant individual is not indispensable. If Thomas Edison hadn't invented all the gadgets he did, surely someone else, before long,

would have done so instead. As I say, we don't know the answer to these questions, and it is hard to imagine how anyone could set up an experiment to test them. Competing cultures create something like an experimental situation, but hardly under laboratory conditions.

Still, what all this goes to show, I hope, is once again that sf is serious, even when it is being playful. These are all major issues, and it may be only the long prosperous afternoon of Western society post-1950 that has prevented them from becoming more contentious. The six essays after this one all in their different ways are connected to the same subject. The next two are on the issue of cultural contest, the two after that deal with 'alternate history', and the last two look at a particular type of 'alternate history', the 'world where magic works', considering also the relationship between magic, religion and science.

Science Fiction and the Idea of History

Just over half-way through his juvenile novel, *Citizen of the Galaxy*, Robert Heinlein gets his hero Thorby involved in a play. The play is a historical one, dramatising the origins of the queer, nomadic, matriarchal, spaceship-society of Free Traders among whom Thorby now finds himself, and is to be produced publicly at their great Gathering. But it is introduced irreverently, like this:

Aunt Athena Krausa-Fogarth ... had the literary disease in its acute form; she had written a play. It was the life of the first Captain Krausa, showing the sterling nobility of the Krausa line. The first Krausa had been a saint with heart of steel. Disgusted with the evil ways of fraki, he had built Sisu – single handed – staffed it with his wife – named Fogarth in draft, changed to Grandmother's maiden name before the script got to her – and with their remarkable children. As the play ends they jump off into space, to spread culture and wealth through the galaxy.

Within the plot of *Citizen of the Galaxy* itself, this play has a very obvious function: it is an attempt by the dictatorial 'Grandmother', who runs the ship, to involve Thorby in her society's mythology and make it impossible for him to get away. (Significantly, he is helped to escape just before the play opens.) But the description of the play quoted above is enough to show the true weaknesses, or rather falsities, of 'Grandmother's' position. For one thing, it is the essence of the nomads' philosophy to believe themselves different from fraki, i.e., the planet-bound; yet clearly their ship must have been built somewhere and its crew must have had a planetary origin. Indeed, they must have been fraki, and their motives for going into space can hardly have been those of people established in nomadism for generations. Aunt Athena's interpretation of the decision as a purely moral one is thus improbable and anachronistic, while her

motive for seeing it that way is indicated by the insertion of her own name in the script, and by the alteration of it to 'Grandmother's'. The play projects the self-image of a society, exclusive (the word 'fraki'), arrogant ('their remarkable children'), materialistic ('culture and wealth') – but not, one must add, without its virtues.

Heinlein is aware of all these falsities, and indeed uses the play to make them ironically clear. He is aware also of the tendency of most human societies to rewrite history in conformity with their current self-images; Thorby's difficulty all through the book is that of breaking through the basic, unquestioned assumptions of the various societies he comes into contact with, in order to find out what is true. It would be possible to write about Citizen of the Galaxy on its own as exemplifying the struggle between these two attitudes: the introspective, self-regarding, moralistic one of people certain of their own position in the universe, and the functionalist, quasi-anthropological one of those who move from one role to another. But it is more useful to suggest that in science fiction as a whole one can see something like such a contest; also that its existence is a feature of modern times alone. In history as in the physical sciences, science fiction relies on a view of the world, which, if not exactly created in the 1920s, does not go back so very much further, and in many people's minds has not been accepted even yet.

The origins of this 'world view' are no doubt endlessly debatable. There is no event in historical studies comparable with the appearance of *On the Origin of Species* (1859) for biology or Lyell's *Principles of Geology* (1830–3) for geology. One book, however, which at least exemplifies the way in which views of history and of society were forced to change is Thomas Malthus's *An Essay on the Principle of Population* (1798; rev. edn 1803). This, of course, is not primarily historical at all; Malthus's main concern is with his own present and with the future, and his central thesis is a socio-economic one: that the population is always rising up to and beyond the level of food supply, and as regularly being cut down again by famine and its attendants: war and disease. Malthus goes on from this thesis to suggest that the only way of stopping the permanent and dreadful oscillation (apart from 'vice and misery') is through 'moral restraint' – a theory which has a history of its own. Nevertheless, Malthus's importance for this present article is that although his main

¹ Quotations in this article are from the two-volume Everyman edition, a reprint of the 7th edition. I have been encouraged to choose Malthus as an example rather than, say, Ricardo or Marx, because he crops up frequently enough in science fiction to show that he has made some impression on a few authors, especially (I would think) Frederik Pohl.

interests were not historical, he did suggest, both directly and indirectly, new attitudes to history and to society. The direct influence can be seen, for example, in his complaints that, though population pressure and its oscillations have been a force throughout human history, earlier historians have taken little account of it. When writing about the Germanic invasions of the Roman Empire, for instance, he notes (I. 61) that it is of less interest to consider the motives of the leaders, the Alarics and Theoderics, than to wonder why they were provided with so many 'willing followers' - a fact he would explain simply by the permanent threat of starvation. Since his time there is no doubt that historians have been more willing to consider economic and impersonal matters of this kind. But Malthus's indirect influence is more pervasive. Though he does not in fact offer opinions about historical matters, if his thesis is accepted, then clearly a different view of people's motivations in history must be taken. He seems to suggest, for instance, that individuals are less important than, and may even be created by, general social conditions. To put it crudely, one might think it less a case of Alaric leading the Goths than of the starving Goths pushing Alaric, with the further corollary that if Alaric had not existed the role would have been thrust on someone else. Whether this particular instance is true or not hardly matters, for one might conclude also, from the Essay on the Principle of Population, that these 'general social conditions' could be powerful in ways less obvious than simple starvation. Malthus noted, for example, that the Dutch mortality rates bore a close resemblance to the marriage statistics. One cannot imagine that many people actually said, or thought, 'Hurrah! Granny's dead, now there's room for our children'. Yet in a statistical mass something like this motivation seemed to be present. What the Essay on the Principle of Population suggested to many readers was that the whole of society was bound by invisible but powerful forces, hardly detectable through the experience of any one person (which was why earlier historians had said nothing about it), but nevertheless there. To some this was an exciting prospect: it meant that one could hope to change society for the better by using these forces (e.g., to promote 'moral restraint'). To others it was profoundly depressing. In Crime and Punishment (1866), Dostovevsky has one of his characters remark that 'in our age even pity has been outlawed by science and ... in England, where they seem to be very keen on political economy, people are already acting accordingly'.2 It is easy to trace the origins of this back to Malthus's argument (II. 39) that it is impossible to 'raise the condition of a poor man' by giving him money 'without proportionably

² David Magarshack's translation (Penguin, 1951), 31.

depressing others in the same class'; and the argument (difficult though it might be for poor men to grasp) was no doubt believed and acted on by many not naturally uncharitable Victorians. Malthus and his peers,³ then, forced on their contemporaries a different and rather darker view of human society, one in which the individual will seemed less powerful and the statistical mass more so.

One casualty of this general change was that style of history exemplified by Heinlein's 'Aunt Athena' and often called nowadays, following Herbert Butterfield's famous book of 1931, 'the Whig interpretation of history'. It has not been a total casualty. In my own schooldays I was subjected to bits of the English version of this history, basically a nineteenth-century 'self-image' seeing in the past a gradual climb towards constitutional democracy and parliamentary government, and dwelling therefore on Anglo-Saxon institutions, on Magna Carta, on the Battle of Crécy (where English yeomen, it was stressed, defeated French knights), on the Spanish Armada, the Civil War, the revolution of 1688, the two-party system, and so on. The gaps in this history are obvious, and it is no doubt more rarely found than it was. But other national versions of it still flourish. Heinlein himself, in Citizen of the Galaxy, shows a quite un-ironic loyalty to the American branch of the 'Whig interpretation', which runs from the Pilgrim Fathers to 1776, the Alamo and Abraham Lincoln, all centred on the themes of external independence and internal definition⁴ – one wonders whether Thorby could be made, in 1973, still less in 2016, to accept so readily that Lincoln had 'freed the slaves'. But nevertheless, people are on the whole nowadays quicker to see the defects of history of this type - namely, that it ascribes too high a role to individual heroes, and tends to assume that those heroes (gifted with implausible foresight) did what they did because they knew their actions would lead to something like the present situation.

Science fiction authors – to return to the main subject – are in general extremely sensitive to such defects. They do their best to avoid 'Whig interpretations' and not to project current self-images and ideals into either the past or the future. But, as with Heinlein, this does not mean that they are not aware of such ideals and images. Indeed, as it is the main purpose of this article to suggest, many science fiction stories depend for their success on a strong tension between those two

³ A good account of them collectively is R.E. Heilbroner's *The Worldly Philosophers*, rev. edn (1967).

⁴ Another science fiction author who shows a weakness for it is Asimov. At the end of his *The Stars Like Dust* (1952) a fairly implausible importance is attached to the Constitution of the long-extinct USA.

views of history, and of society, which one may label, for the moment, 'Malthusian' and 'Whig'. The former is impersonal, technical, economic; it depends on the assumption that societies are bound together by very powerful forces, invisible but not unreal, which can in some circumstances be used positively but which may all too easily betray the careless or ignorant reformer. The latter is mythopoeic, hero-making; it assumes that history is purposive, leading strongly or inevitably towards the superior institutions of the present (or of an imagined future). It is perhaps predictable that the former should be the stronger. Nevertheless, it is not quite a foregone conclusion. The interaction between the two views has provided many fine stories. It allows one also to see how strongly science fiction has developed, and how authors seem to have affected each other in developing a consistent world picture.

The tension between the two views can be seen most obviously in the many stories about time travellers who return to change the past. Of these the most famous must be L. Sprague de Camp's *Lest Darkness Fall* (1941). But, before considering that, it is useful to have for comparison a lesser-known story by the same author, 'Aristotle and the Gun' (*ASF* (Feb. 1958)).

The hero (or perhaps the villain) of this story is an American scientist named Sherman Weaver. He is working on a project to build a time machine when Washington cuts off his appropriation. He resents this bitterly, the more – as he confesses – because it is done by non-scientists, and he is himself an awkward and misanthropic person with little ability to succeed socially in any way except through science. He therefore decides that before closing down entirely he will try to go back in time and put the world on a line where science, that unqualified good (as it seems to him), will be advanced earlier and more quickly. The key personality whom he decides to try and affect is Aristotle, during that period when he was tutor to Alexander the Great in Macedon.

Briefly, Weaver does go back; he represents himself as a travelling Native American philosopher; he shows Aristotle a telescope, teaches him geography, astronomy, physics, etc. and tries always to stress to him that the key to all these advances is scientific method, 'the need for experiment and invention and for checking each theory back against the facts'. This, he feels, is in the long run more important than any single invention or piece of information. Aristotle absorbs all this most thoroughly. But, unfortunately, he lives in a military court, and Weaver, partly through his own naivety, runs into trouble with Macedonian 'security'. In the end, he has to draw and use a gun, but is overpowered and on the point of execution when catapulted back into his own time. He looks around eagerly for signs of the 'super-science' he meant to

create, but finds himself in a wilderness. He has, indeed, altered the course of history, but away from science rather than towards it. America has only been contacted and not conquered by a relatively barbarous Europe, the Native Americans advancing towards a kind of feudalism. Weaver is enslaved, works his way up at last to being a librarian, and finds the mistake he made, in a résumé of the Aristotelian treatise (clearly based on the events of his own visit), 'On the Folly of Natural Science'. In this Aristotle explains that there are three reasons why 'no good Hellene should trouble his mind with such matters':

One is that the number of facts which must be mastered before sound theories are possible is so great that if all the Hellenes did nothing else for centuries, they would still not gather the amount of data required. The task is therefore futile. Secondly, experiments and mechanical inventions are necessary to progress in science, and such work, though all very well for slavish Asiatics, who have a natural bent for it, is beneath the dignity of a Hellenic gentleman. And lastly, some of the barbarians have already surpassed the Hellenes in this activity, wherefore it ill becomes the Hellenes to compete with their inferiors in skills at which the latter have an inborn advantage. They should rather cultivate personal rectitude, patriotic valor, political rationality, and aesthetic sensitivity.

Weaver has inculcated scientific method – but forgotten to make it attractive. His final motto is 'Leave Well Enough Alone'.

Now (as may be obvious even from this summary) this is a good story on its own; and it has a point to make about scientific method: that however attractive it may seem to us, this is largely a result of the fact that it works! Yet scientists who lived before this was obvious must still have had some motivation. However, the true point of the story, I would suggest, is about history. Weaver's hobby is the history of science – he even writes for *Isis*. But 'no history is more whiggish than the history of science'.⁵ And, as a 'Whig historian', Weaver is regrettably convinced that the ideals of his own time are immutable and eternally applicable. He is as misled as Heinlein's 'Aunt Athena' and (such being the respect still paid to science and to its mythology/history) more dangerously so. 'Aristotle and the Gun' is thus a pointed parable of the downfall of one misguided interpretation of history.

⁵ The remark comes from J.D.Y. Peel's *Herbert Spencer: The Evolution of a Sociologist* (1971). However, the point is made more familiarly and at greater length in Arthur Koestler's book *The Sleepwalkers* (1959).

The comparison with de Camp's earlier work, Lest Darkness Fall, is obvious. In this also, a modern man, Martin Padway, finds himself thrown back in time (though in this case accidentally) to a sixth-century Rome under Gothic occupation, at the start of the Dark Ages. He too exerts himself to change history, in what is basically a twentieth-century direction. But unlike Weaver he seems to succeed. For this there are several reasons. One is that he is not himself a scientist, but an archaeologist (as he puts it himself, 'a historical philosopher'). As a result, he has no particular wish to urge people towards twentieth-century solutions to their problems, whether these might be scientific method, or democracy, or a secularised society. It is, for instance, obvious to him that the orthodox Church is hopelessly corrupt, while even more than the corrupt clerics he fears the honest and dedicated ones with their attendant enthusiasts, 'no doubt because their mental processes were so utterly alien to his own'. Yet when threatened by these forces he wastes no time on indignation, using instead a kind of blackmail; and though his actions may be morally dubious, they do at least show him recognising that his enemies have a kind of sense and consistency which is not to be dispersed, as Weaver might have thought, by a short explanation of the virtues of religious tolerance.

In the same way, Padway does not boggle at the customary high interest rates, at the inability of the rich to understand investment or of the Goths to understand tactics; he sees all too clearly that people are moulded by their environment and that his superiority over the others (while not to be denied – cf. item 5, below) comes only from his different background. He cannot, then, simply tell people things which contradict all their previous experience. Indeed, another reason for his success is that he tells very little to anyone. At no point does he try to teach theory or scientific method. Instead, the list of things he introduces very largely consists of items that work straight away without much need for explanation: Arabic numerals, double-entry bookkeeping, distilling, horse-collars, telescopes, military staff co-ordination, political propaganda, etc.⁶ Of course, they are intended to have just as disruptive an effect as Weaver's theorising in 'Aristotle and the Gun'; but the challenge they present is not immediate, while

⁶ Some of these have taken their place in science fiction folklore. One finds very similar lists in M.W. Wellman's *Twice in Time* (1951), or in H. Beam Piper's 'Gunpowder God', *ASF* (Nov. 1964). Poul Anderson's much more original story in *ASF* (Oct. 1963), 'The Three-Cornered Wheel' (see again, item 5, below), still turns on a very similar point – the introduction of calculus to a static alien civilisation.

the rewards are. One notes that items which do not fit this pattern (like Copernican astronomy) are introduced in a much more roundabout way, while printing, the major invention introduced, is used at first only for the attractive but undignified purpose of a gossip and scandal sheet. All in all, Padway has a much lower opinion of himself and his world than Weaver – he even has expensive failures, like his inability to produce either a decent clock or fireable gunpowder. The last reason for his success is a strong awareness that he is 'living in a political and cultural as well as in an economic world'. But even when he remembers that, one should note that he still thinks of the political and cultural rulers as products of forces outside themselves; it is this that preserves him from simple horror at the bloodthirsty habits even of his associates and people he likes.

Padway, in short, is more tolerant than Weaver. I should stress that this tolerance does not go very far. Padway is not prepared to like the sixth-century world or to behave in a sixth-century manner, and his determination to make changes is as strong as Weaver's. But he is prepared to accept that the people and their habits have a kind of logic. He behaves as an anthropologist rather than a missionary.

This may nowadays seem a very natural, indeed inescapable response, and it is significant that de Camp has to work harder at creating Weaver as a character than at Padway. But proof of the distance science fiction has travelled comes from a comparison of Lest Darkness Fall with a very similar book written 52 years earlier, Mark Twain's A Connecticut Yankee in King Arthur's Court (1889). The two books are, in many respects, astonishingly close, so much so that it is hard to believe that de Camp had not some idea of rewriting Twain in his mind.⁷ In Twain's book, as in de Camp's, a 'modern' man is catapulted back to the sixth century, though in this case to Arthurian Britain rather than Gothic Italy, while in Twain's book also the 'Yankee' does his best to change matters by the introduction of printing, advertising, gunpowder and pragmatic engineering. Some devices overlap. Both Hank Morgan and Martin Padway, for example, gain a reputation for wit by translating, literally, the clichés of their own century, and both have troubles with sub-editors. But such similarities are far outweighed by one enormous difference: both Hank Morgan and his creator hate and despise practically

⁷ After this piece came out I got a letter from de Camp, which, unfortunately, I have not kept. In it he said he was not reacting against Twain, but against a much dumber imitation of Twain, which had come out as a serial in *Astounding* a few months before. I have never been able to trace this. Either de Camp's memory or mine is at fault.

everything they meet in the past, from the institutions of feudalism to the widespread drunkenness, from the unrealistic art to the indecent conversation, and, above all, both project hatred and fear of established religion and especially of the Roman Catholic Church.

This may seem a hard saying, and (Twain being an accepted 'classic') critics have on the whole preferred not to say it. There are two arguments that might be used in defence of A Connecticut Yankee: one, that Hank Morgan is an 'unreliable' narrator whose opinions are to be distinguished from his author's; two, that the book is, after all, a comic one and not meant to be taken seriously. There is a grain of truth in both arguments, but no more. For the first one, it is true that in places Hank's Philistinism is meant to reflect on himself – for example, when he criticises the art of the Arthurian court and goes on in a general way to compare Raphael unfavourably with nineteenth-century insurance 'chromos', or 'threecolour God-Bless-Our-Homes', Nevertheless, even there the final criticism of Raphael's 'Miraculous Draught of Fishes' – that it is unrealistic – is, I feel, meant seriously; and in other places Twain seems to drop the 'Hank Morgan' personality altogether in order to lecture the reader directly, even going so far, on occasion, as to add genuine historical references to assure the reader that what he says is true. Furthermore, though Twain exploits the 'culture gap' between the sixth century and the nineteenth for comedy, that comedy always has a touch of anger in it. We are given, for instance, the comic picture of knights riding around with advertisements on their shields, or of a sewing-machine being rigged up to an ascetic pillar-squatter to turn out shirts. But the purpose of the former (as Hank admits) is to make 'this nonsense of knight-errantry' ridiculous, while the latter simply treats the unfortunate saint as a mad machine. Twain is also quite clear that both are intimately bound up with sobriety, modesty, capitalism and religious nonconformity.

A Connecticut Yankee is 'Whig history': it presents a flattering self-image of Twain's own (adopted) society, the winners in the American Civil War. If nothing else proves this, it stands out from the Yankee's crusade against slavery, an institution of negligible importance in any Arthurian story from the Gododdin to Malory, and clearly imported with all its trappings from the cotton plantations of the southern states of America, not to mention Twain's own native Missouri. As such, the novel is of extreme historical interest, but open to criticism in a way (or so I imagine) that would be impossible with de Camp's more cautious cultural relativism. In a curious way Twain parallels de Camp's character Sherman Weaver seventy years later; both (at least on the evidence of this book by Twain) are 'mono-culturalists' – they see the logic of history as pointing only to themselves.

Twain has had a good deal of influence over the years, if not on de Camp, then certainly on the similar, but feebler, 'Leonardo da Vinci' story, Manley Wade Wellman's Twice in Time (1951), and I suspect on several other 'alternate universe' stories as well. But, on the whole, authors have seen its weak points. There are, for instance, two very strong attacks on his point of view by relatively 'mainstream' authors, both of them deserving some analysis. The first is Rudyard Kipling's short story 'The Eye of Allah', reprinted in his collection Debits and Credits (1926). Unlike anything discussed previously, this is not a 'time travel' story. But it is one about anachronism - specifically, about the microscope which one of the four central characters, the artist-monk John of Burgos. has brought back to his monastery from Arab Spain. He wants it only to provide inspiration for the devils he draws on his manuscripts; but two of the other characters present, the doctor Roger from Salerno and the friar Roger Bacon, see immediately its wide importance - the one medical, the other optical. But, at the end of the story, after hearing all the others out, the abbot Stephen takes the microscope and destroys it. From this extremely bald summary one might think that the story confirms Twain's picture of the medieval Church as an obscurantist organisation, or that it fits the rather common science fiction pattern of the 'Galileo' or 'persecuted innovator' story (see, e.g., 'The Thing in the Attic' in James Blish's Seedling Stars (1957)). But neither of these is true. Abbot Stephen is neither stupid nor bigoted. At the start of the crucial conversation he takes off his official ring, to show that he listens as an individual; only when he puts it back on does he speak from authority, with the threat of force behind him. Nor, indeed, is he personally unaffected by the decision, having at the time a mistress, desperately ill, whose only function in the story is to make it obvious that he realises the misery to which loss of the microscope (and the theory of germs) must condemn the world. Since Kipling goes to such lengths to excuse the abbot, one wonders why he is made to decide the way he does. The reason is given, with typical indirection, as the party walk out on the monastery roof after dinner and see:

three English counties laid out in evening sunshine around them; church upon church, monastery upon monastery, cell after cell, and the bulk of a vast cathedral moored on the edge of the banked shoals of sunset.

The scene is one of utter social stability, guaranteed by the Church. What the abbot fears is any premature disruption of this; and his awareness that science is connected with belief-systems and so with politics is clearly meant to be taken as correct. At the end he confesses that he has seen microscopes before, while a prisoner of the Saracens, and seen also:

what doctrine they drew from it ... this birth, my sons, is untimely. It will be the mother of more death, more torture, more division, and greater darkness in this dark age. Therefore I, who know both my world and the Church, take this Choice on my conscience. Go! It is finished. He thrust the wooden part of the compasses deep among the beech logs till all was burned.

'It is finished', of course, translates the 'Consummatum est' of Christ on the Cross. The words show that Stephen realises that what he has done is also in some sense a crucifixion.⁸

Kipling's story, then, takes the point common to both Twain and de Camp – that science cannot be dissociated from cultural change – but defies both of them by suggesting that sudden cultural change, however great the potential benefits, may not be desirable. In a short story written some thirty years later, William Golding suggested further that the forces opposed to cultural change are so strong as to make anachronisms like the medieval microscope not only undesirable but next to impossible. His story, 'Envoy Extraordinary' (1956, but reprinted in his 1971 collection, *Scorpion God*), betrays the influence of science fiction relatively clearly.

In it, as in 'The Eye of Allah', there are no 'time travellers'. But the central character is a wildly anachronistic Greek called Phanokles, who appears in a late Roman Empire setting possessed of all the attitudes of the twentieth century. In particular, he has discovered steam-power and proposes to build a paddle-steamer. To this the materialist and sceptical Emperor gives a grudging assent, largely to please his enthusiastic grandson, Mamillius (in love with Phanokles's sister). But the other grandson, the ambitious and soldierly Posthumus, gets to hear of this and thinks it a plot to supplant him. He arrives at the harbour with massive force; and the core of the story lies in the attempts made by the Emperor, by Phanokles, and by the grandson Mamillius, to persuade or overpower him. Phanokles's arguments are frankly useless. He tries to convince Posthumus of his good intentions and of the benefits steam can bring, only to find that even the galley-slaves are against it (fearing redundancy), while the soldiers are terrified of the peaceful, sordid, loot-less existence he seems to promise. More effective is the Emperor's device of inspecting his guard at great length in full

⁸ For a longer but similar account of this story, see the chapter on 'Healing' in Tompkins 1959.

armour in blazing sunshine, so that his long and patriotic harangue is punctuated by the 'Crash' of disciplined soldiers fainting. But, in the end, the situation is saved by deeds not words: the steamship Amphitrite runs amok in the bay and sinks half the invading fleet by accident, and Phanokles's sister, the dumb and beautiful Euphrosyne, removes the arming-vane from Phanokles's artillery-shell, and blows Posthumus to bits. The comedy of the story lies essentially in the success of the Emperor's pragmatic man-management as opposed to Phanokles's naive ideals of progress (with which a modern reader is at first disposed to sympathise). At one point Phanokles proposes the well-known Wellsian truism, that 'Civilization is a matter of communications'.9 'I see', replies the Emperor, thinking of Caesar and Alexander and no doubt of that other would-be world conqueror, Posthumus, 'They should be made as difficult as possible'. Similarly, at the end, when Phanokles has just invented printing, the Emperor at first shows enthusiasm, thinking of public libraries. Then maturer consideration takes over:

Diary of a Provincial Governor. I built Hadrian's Wall. My Life in Society, by a Lady of Quality ... Prolegomena to the Investigation of Residual Trivia ... In the Steps of Thucydides ... I was Nero's Grandmother ...

And then the reports! He sends Phanokles as far away as possible, as 'envoy extraordinary' to China. Of all the inventions, he keeps only one – the pressure cooker, to rejuvenate his own palate. So, in the end Phanokles is rejected, like Kipling's John of Burgos, but (one should note) not simply in the interests of public order. Despite the comic tone of the story there is one moving moment, when the galley-slave who has tried to kill Phanokles gives his reason for fearing him. It is not that he wants to be a galley-slave. But, anticipating the future proposed for him, he quotes the speech of Achilles' ghost in Book 11 of the *Odyssey*;

In chap. 25, sect. II of his *Outline of History*, 6th edn (1931) H.G. Wells asserts that the Roman republic was doomed (a) by its lack of printing and (b) by its cumbersome method of non-representative government. In the next two chapters he goes on to compare the Roman Empire unfavourably with the Chinese. Golding's early works show repeated responses to Wells, and his hostile relationship with the *Outline of History*, which Golding's father venerated, is documented in Carey 2009. I would add that even *Lord of the Flies* arguably owes its frame to the *Outline*. Certainly, Phanokles is very much a 'Wellsian' man, with his technical and democratic bias and his belief in the ease of progress. The *Outline of History* has probably been as influential as any book in spreading a progressive and materialistic (but rather ill-natured) view of history.

'I had rather be slave to a smallholder than rule in hell over all the ghosts of men'. Bad as his life is, the mechanised world of Phanokles seems to him a living death. Though Golding does not quite endorse this, he makes the human resistance to scientific progress evident in a way done by none of the authors discussed earlier.

What these five stories have in common is a tension between our present view of society (as exemplified by the 'time traveller' or the anachronism) and some ancient view (as exemplified by the various resistances put up by Goths, Romans, Macedonians or medievals). Only Twain, of the four authors cited, sees this tension as one between good and evil, leaving the ancient society with nothing to say for itself: he is the only 'Whig' among them. But in spite of the general similarity of theme, it should be obvious that all the authors provide quite different answers to the same kind of question. This similarity-in-difference can best be represented by a graph. One axis grades the stories along the line 'whether it is more, or less, desirable to change the past', the other along the line 'whether it is more, or less, possible' (see Figure 1).

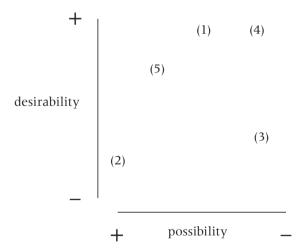


Figure 1 Desirability and possibility

No two stories are very close together. To take the most extreme cases first: Twain, in *A Connecticut Yankee*, sees it as 100 per cent desirable to change the past, but is clearly uncertain about its possibility (for at the end the Yankee, having defeated the nobility, loses to the Church and Merlin in a way that makes him approach despair). That story therefore occupies position (1). Kipling, by contrast, feels that it might

have been easy for history to have taken another turn (indeed, it costs abbot Stephen great pain to prevent it), but finds it undesirable because potentially disruptive. He is therefore at (2); (3) is William Golding. Phanokles's vision of the future has little charm for him, and he sees also a determined resistance to it by rulers and ruled alike. De Camp takes up both (4) and (5), i.e., 'Aristotle and the Gun' and *Lest Darkness Fall* respectively. In both cases he admits the desirability of changing the past, though Weaver's feelings about this are stronger than Padway's; but (through faults of technique perhaps) Weaver in 'Aristotle and the Gun' finds history all too easy to change but impossible to change successfully.

It must be stressed that this graph is not merely a visual aid. The tension between 'desirability' and 'possibility' is what all the stories are really about. If it did not exist, then they would be simply about survival, i.e., what the inventor or time traveller might have to offer. But instead they are about what he has to offer that the world is able to accept! Without some sense of the way in which people are moulded by their social conditions and philosophical assumptions, the last qualification is meaningless, and so are the stories. One may feel (like Twain and to a lesser extent, de Camp) that modern men are wiser and less hidebound than their predecessors, in which case the stories deal with modern men overcoming more or less excusable resistance; or else (with Kipling and Golding) that the ancients had a good deal on their side, in which case the stories involve merely a choice of one set of advantages and disadvantages or another. But either alternative depends in some degree on the analysis of history, and on viewing it moreover not just as a sequence of events but as an interaction of forces. It is this last point which is the novelty of Malthus; this also which is signally lacking in history as dramatised by Heinlein's 'Aunt Athena'.

There are then several remarks which might be made in conclusion. One is that stories of this type seem to be something genuinely modern. One cannot imagine any author or reader from an earlier age having the background of ideas about history, or science, or society, which would enable him to appreciate what is going on in them. Another is that, apart from the many other stories which could simply be placed on the graph without further explanation, ¹⁰ the type lends itself very easily, indeed inevitably, to stories of slightly different but equally familiar types. Consider Martin Padway. He goes back to sixth-century Rome and changes things so that another history ensues. He must then either have

Such as Dean McLaughlin, 'Hawk among the Sparrows', ASF (July 1968) [somewhere between (5) and (1)] or Arthur Porges, 'The Rescuer', ASF (July 1962) [anywhere above (2)].

created a 'parallel universe' or else have destroyed his own. Both these possibilities lend to recognisable story types, the first to the one about the 'parallel universe', where history has taken a slightly different turn (e.g., Philip K. Dick, *The Man in the High Castle* (1962), Harry Harrison, *A Transatlantic Tunnel, Hurrah!* (1972), Ward Moore, *Bring the Jubilee* (1953), Randall Garrett, *Too Many Magicians* (1967), and since then a whole plethora of stories, by Harry Turtledove among many others), the second to the 'Time Patrol'/'Change War' type (e.g., Fritz Leiber, *The Big Time* (1961), Isaac Asimov, *The End of Eternity* (1955), Poul Anderson, *The Guardians / Corridors of Time* (1961/1965), etc.). Intergeneric types are not impossible either (I think of the H. Beam Piper 'Gunpowder God' series). The point is, however, that all these stories also owe their very potentiality to modern conceptions of history, and are attractive to us at least partly because they show us how we too might be different if subjected to a different set of social pressures.

My third and last point is that the consideration of history in science fiction need not stop there. A good deal has already been said in this article about the tension between an individualist view of history and that view which holds that personalities are more or less accidental. To show that this too is important in science fiction I need do no more than mention Asimov's *Foundation* series. This is set very much in the future and contains no time travellers or anachronisms. Still, it must be obvious to everyone that the trilogy (as it was when this piece was first written) could not have been written without some sense of historical analogy, while for much of the time the stories do nothing but dramatise the subordination of the individual will to the 'laws' of sociohistory. Could Asimov have written as he did without the groundbreaking theories of Malthus and his many successors, down to A.J. Toynbee?¹¹

¹¹ It is said that John W. Campbell Jr., Editor of *Astounding/Analog* for many years, had a potted version of 'cyclic history', presumably deriving from Toynbee, which he would lend out to favoured authors like Asimov – and perhaps Poul Anderson and Frank Herbert, both authors from the Campbell stable with a strong reliance on the cyclic history theme.

5 Introduction

Getting to Grips with the Issue of Cultures ...

This is a heavily revised version of the first extended piece I ever wrote about science fiction (I had been writing reviews in Peter Weston's fanzine Speculation for some time). It came out in 1969 in the Birmingham University journal Alta, of which I was at the time assistant editor. Alta was a really good idea: expensively produced (this piece came out with half a dozen book covers as illustrations) and full of interesting material relating to the university. As assistant editor I had to do some 'science writing', i.e., making things like developments in electron microscopy understandable to non-specialists. I remember also republishing two pieces by a strange figure on the fringes of 'literary theory', though it wasn't called that yet. One of the major Russian literary theorists was Mikhail Bakhtin; Mikhail - writing from Communist Russia - had a brother called Nikolai. In 1917, Nikolai was a middle-class soldier in a hussar regiment, and when the Revolution broke out it seems that some of the Bolsheviks were rude to him. He accordingly joined the White Guards, and fought for years in the terrible Russian civil war of which one sees flashes in Dr Zhivago. In the end, he had to flee, joined the French Foreign Legion, rose to be an adjutant or sergeant-major, fought the Rifs in Algeria, got shot and was invalided out with the Croix de Guerre. After which, by a natural career progression (?), he became Professor of Linguistics at Birmingham University. One could hardly find a more striking example than these two brothers of Mikhail's concept of 'dialogism', which becomes a theme in what follows here. Nikolai's accounts of the Revolution and the Foreign Legion had appeared in a little pamphlet, now very rare – there is a Nikolai Bakhtin Archive in the university library at Birmingham – and we republished them in Alta. The university authorities, however, did not like Alta very much, and it was soon closed down as too expensive.

Since this piece was not on disk, and I only had one file copy, I forgot about it for many years. Rereading it many years later, I was struck with

horror and surprise. The horror was at how naive I had been, not to mention plain ignorant. I picked two stories out of *Astounding/Analog* to illustrate a shared theme. What I didn't know was that they were both by the same author, 'Winston P. Sanders' being a pseudonym of Poul Anderson. So it was no wonder they shared a theme. I had been fooled by John W. Campbell – who often let, or made, his authors publish under different names. (It's been said one whole issue was written by Randall Garrett, writing as Randall Garrett, 'Darrell T. Langart', and 'Wally Bupp'.) Campbell fooled me in other ways too. I generalised from a steady diet of *ASF*, and several of the things I said then applied mainly or entirely to that magazine. I also got the timing completely wrong in pointing to the magazines just as the main focus of sf was about to move away from them (though this is a development I still regret).¹

However, and in spite of all that, I was surprised at how semi-prescient bits of the article were - just like science fiction, in fact. The word hadn't been invented yet, but what I was doing was bringing up the issue of 'multiculturalism'. Multiculturalism was just about to become absolute dogma: all cultures are equally valid, all must be respected, all knowledge is grounded in culture. Allan Bloom, in his book The Closing of the American Mind (1987), has remarked (correctly or otherwise) that there is one thing every American student knows for sure on entering university, and that is that 'all truth is relative'. Really? A classic counterstatement of that case is H. Beam Piper's 'Omnilingual', from ASF of February 1957, where an unknown language is deciphered by starting from a table of chemical elements, because that is part of the nature of the universe, not bounded by culture. That truth is not relative. But if there is such a thing as non-relative truth, then cultures can be rated according to how well they correspond with it. Some of them will work, some will not, and there will be different degrees of success and failure. This deep difference of belief has increasingly opened up a gap between science and the humanities, even in our culture, that (see introduction to item 2, above) has contributed to the unease about sf in the latter.

This is not to say that our culture has all the answers: very much not so. Nor that 'science as we know it' is the last word: sf would not work at all if the latter were thought to be true. As I remarked above: when I got around to reading Thomas Kuhn's now-famous book on paradigm shifts, *The Structure of Scientific Revolutions* (1962), it didn't surprise me a bit. The idea that there was a kind of inertia, even within science, working against new paradigms and novel theories, had been

¹ The importance of the magazines is well put by Mike Ashley, 'Science Fiction Magazines: The Crucibles of Change' (2005), 60–76. See also Attebery 2003.

an absolute staple of Campbell's ASF, and I had digested it on many levels from fiction.

So, one theme in sf was 'challenges to culture'. Right, I'd seen that; this explained the interest in 'alternate history', even within hard sf, because science could interact with culture in different ways; it also explained the fascination with anthropology (see next item); and the whole attitude to culture. Yes, they are different, but, yes, they can be evaluated, and, yes, there may be a reason or even a duty to change them – part of what I call in this piece the (hidden) 'iceberg of beliefs' beneath the narrative surface. It is well summed up by (the late) Iain Banks, who in his non-sf book *The Steep Approach to Garbadale* (2007) has a character say, when someone brings up the then-fashionable 'end of history, capitalist democracy has won' idea: 'Bullshit. You ought to read more science fiction. Nobody who reads sf comes out with this crap about the end of history.' Dead right, Iain, and spoken like a trufan.

The serious mistake I made in 1969, however - my excuse must be that of having been educated by science fiction – was tacitly accepting the de haut en bas attitude then normal in sf. The standard image – one sees it, for instance, in Hal Clement's stories, both originally serialised in ASF, Mission of Gravity (1954) and Close to Critical (1958) - was the strange planet with lovingly worked out physical peculiarities, whose pre-scientific natives were being educated in the verities of physics (which applied even on their strange planets) by confident human tutors from their base in orbit. (James Cambias's The Darkling Sea (2014) is, so speak, a 'Hal Clement' scenario, without the attitude.) But what if the natives did not want to be educated in physics (in Clement's works they always did)? Then they would have to be educated until they did, even at the cost of social upheaval. Another way of putting this is to say that the authors were projecting the nineteenth-century image of benevolent imperialism - Westerners in Asia and Africa - into the future. This was not quite as arrogant as it seems, for at least some of them saw the issue, and were prepared to look at it 'dialogistically': duty to help, no right to impose. And authors were also happy to imagine a situation where we were contacted by aliens whose scientific knowledge was greater than ours, leading to total social upheaval for us. But it was tacitly accepted, first, that you can't make an omelette without breaking eggs, and, second, that the ideal omelette was, to quote one of the authors discussed below, 'pure democracy and the highest technological level'.

In this piece, as revised, I have accordingly tried, without concealing all my errors, to focus on the issue of 'cultural engineering', scrapping the original and aggressive title, 'Breaking a Culture'. At the end,

though, I note, with the advantage of hindsight, one more way in which lack of awareness of this issue has led and continues to lead to real-world disasters. Sf is often prescient in ways which its creators did not expect.

Cultural Engineering: A Theme in Science Fiction

As a form, science fiction conceals homogeneity beneath apparent diversity. The diversity can be seen by looking at the range of paperbacks in any bookshop. One finds lumped together 'end of the world' stories, galactic empire stories, stories of the near future and, via time travel, of the very far past, as well as stories that have nothing to do with science at all but depend on magic, or the fantasy type known as 'sword and sorcery'. One might well think that the inclusion of all these under one heading is just a mistake, that the diversity is genuine. There are two reasons for thinking that is not so: that there is something holding all this diversity together. One is temporary and practical; the other is an element that regular readers recognise, something that forms a large part of the genre's appeal.

The temporary and practical reason is simply stated [though it was much more true in 1969 than it would be even a few years later]: that most of the material appearing in paperbacks [in 1969] had appeared first, as a short story or serial, in one of a comparatively small number of magazines; it is their existence that demonstrates, and to some extent causes, the striking homogeneity of most sf. Even the layout of one of these magazines can suggest how close-knit the field really is. Each editor has his stable of writers, whose names appear fairly regularly; he imposes his views also by regular review columns, by editorials – frequently long and argumentative. But his authority is not quite tyrannical, because a fair share of time and space is also given over to readers' letters, while - in one magazine at least - authors' remuneration depends partly on a bonus scheme tied to a published analysis of readers' reactions. Sf has been a very 'interactive' field since the first years of specialist magazines (see Cheng 2012: chap. 2). In any case, the writers are often not professionals, but readers who have gone over to a more extreme form of participation. The triangle of writers, editors and readers is mutually supporting in all directions. Inside the field, the influence of the fans

on the magazines is immense. It is not commonly recognised by those who read a little sf in book form, and who may feel inclined to despise the garish covers and aggressive titles of the magazines – *Astounding, Fantastic, Galaxy, If, Fantasy & Science Fiction* – but it is important. And the magazines bring up the problems of homogeneity and definition most acutely; for, though they specialise a little, it is still clear from any one of them that the same people both write and read all the various subtypes listed above, and that very often the true fans do not read anything else. What similarity is it that they see in this diversity, and that they do not find anywhere else?

Here we come to the second of the reasons for an underlying homogeneity suggested above. It is an interest not just in science – as the term 'science fiction' suggests - but in cultures. Note that the word just used is plural. It used not to be. Its original meanings, in English, are connected with words like 'cult' and 'cultivate', but by about 1800 it had come to mean something like 'the intellectual and artistic side of (Western) civilisation': it was always singular, and it was always civilised. Later on in the century, though, the meaning was extended in a way that must have seemed paradoxical, as in the title of a book by the early anthropologist, E.B. Tylor, Primitive Culture (1871). At about the same time it began to be used in the plural, and was taking on the meaning given to it by the British Journal of Sociology in 1963, 'the whole complex of learned behaviour ... of some body of people' (see OED, iv.121). The main point about 'cultures' used as a plural is that it means cultures (in the sense just given) can be compared, and so critiqued. That applies even to the culture we live in, dominated as it has been for a century by the achievements of science.

Could science too be challenged? By magic, even? One story may illustrate this – the lead novelette of *ASF* (July 1958), Jack Vance's 'The Miracle Workers'. Interesting in itself, it also shows how the features of archaism and pseudo-science, which we find so often in science fiction, are only the tip of a comparative iceberg of beliefs, which the sf fan is likely to acquire as an adolescent, and which is closely connected with the developed meaning of the word 'culture'.

In Vance's story we find ourselves, as often in sf, on a barbarian planet, Pangborn, watching the progress of the feud between two local castellans, Lord Faide and Lord Ballant. But there are several complications to their medieval tactics. One is that these people are clearly the descendants of marooned or exiled space travellers; they preserve heirlooms of ancient days, like the gun on top of each keep, and the ancestral car of Lord Faide. But they have lost all knowledge of science, so that the guns fail to work, and the car is in fact barely

more efficient than a horse, or its local equivalent. Moreover, their ideas of science are replaced by a scheme of magic, so that Lord Faide's most important striking force is the corps of 'jinxmen', headed by Hein Huss and seconded by Izak Comandore, whose respective interpretations of magic take up much of the story. A third complication is the existence of the First Folk, the aborigines of the planet, long since driven into hiding but not entirely spent. These three factors interlock to provide a narrative on more than one level.

Militarily, the pattern is this. Lord Faide marches to attack Ballant Keep and subdues it, thus for the first time becoming effective ruler of the planet. But on his way there and back he meets resistance from the forest-dwelling First Folk, which angers him so much that he determines to subjugate them also. Hein Huss, Izak Comandore and the bumbling apprentice who becomes the real hero, Sam Salazar, attempt to gain information about the First Folk, but do not entirely succeed. A jinxman attack on the natives merely provokes them, and, using specially bred animals, they besiege and almost conquer Faide Keep. The situation is only saved by Sam Salazar, who, in spite of all discouragements from his superiors, has been patiently trying to invent chemistry, and who finds that vinegar is an effective neutralising agent to the natives' foam. Put this way, the story sounds obvious, as it is on plot-level. But the real theme of the story, and the main point of its interest for all readers, is the idea of Belief. It is belief that is the secret of the jinxmen's success. This is hinted at by the importance of simulacra or manikins in casting hoodoos, for they remind one of the (apparently effective) death-spells of Australian and Pacific Island tribesmen, and the author uses the word mana to point out his allusion. Furthermore, one of the more fascinating jinxman discussions concerns the technique of demon-possession, in which it is agreed by those in the secret that the demon itself has no validity, and that the commodity actually traded among jinxmen is public acceptance. And there are other examples of belief – Lorde Faide's quite unfounded belief in his ancestral heirlooms, for example, even though he does not know how they work, and in the end they prove not to.

All these combine to point out the essential irony of the title. Who are the 'miracle workers'? Clearly, we, the readers, must regard the jinxmen as archaic barbarians who nevertheless perform miracles. On the other hand, it is equally clear that the inhabitants of Pangborn regard their ancestors as barbarians, and wonder also about *their* undoubted ability to perform miracles. Several discussions help us to reverse our normal views and see science as irrational and magic as rational. In one scene the hankering after the old days is dismissed ironically as a Security Device, the wish to be a superman: 'There is an aura of romance, a

kind of wild grandeur to the old days – But of course ... mysticism is no substitute for orthodox logic'. In others we see the random nature of scientific experiments, for Sam Salazar forgets to take notes and so cannot repeat his actions, adding to the disgust of his superiors; while the First Folk also develop a concept in their breeding of animals, which they call 'irrationality' and which Hein Huss translates as 'a series of vaguely motivated trials', but which we can recognise as science or experimental method, the root of the miracles of the ancients.

This continuous reversal of logic provides the amusement and much of the action for the story. But it is not a point which is meant to be taken entirely comically. No modern person, who uses every day half-a-dozen devices of whose operation we know nothing beyond a few simplifications, should doubt how much science is supported by popular belief. And one of the favourite themes in ASF's science fact pieces has been for some years the discovery of engineering anachronisms, discoveries made ahead of their time but apparently shelved because they did not fit in with accepted opinion. In March 1965, for example, ASF printed a genuine US patent, dated 1930, which appears to describe a transistor; other finds concern early steam cars and the spread of the nickelcadmium battery. The points may not be important in themselves, but from them John W. Campbell, the editor, has developed a considerable theory of learning, always liable to be expressed fictionally by writers under his influence.1 An example could be his distinction between scientist and engineer, in favour of the latter; in matters of complete novelty, he argues, the scientist can be handicapped by attachment to system, theory and explanation, while the engineer is useful under any circumstances, preserved by careless pragmatism.

So 'The Miracle Workers' presents a theory which is in a way relevant to contemporary readers, even though there is no innovation in technology that we can recognise, the feature normally regarded as definitive for science fiction. Something like this theory lies behind many of the apparently cranky and implausible tales of telepathy and ESP so frequent in modern sf. But there is another common theme present in this story that may cast some light on the genre – that of the 'end of the world', or, one might say more Classically, *translatio imperii*. For the natives of Pangborn this is not a material disaster; it occurs instead at the victory banquet after the capture of Ballant Keep, where the five jinxmen of the two sides meet. Hein Huss reflects, after his demoncombat with Izak Comandore:

Campbell's influence has often been noted, both for good and for ill. See Attebery 2003 and Wolfe 2003.

tonight sees the full amplitude of jinxmanship. I think that never again will such power and skill gather at the same table. We shall die one by one and there shall be none to fill our shoes.

It is in recognition of this that Hein Huss takes over Sam Salazar the apprentice from the troop of Comandore. We are meant to see his perception that for the jinxmen there is no way but down, for the practical bungler no way but up. The scene is a good one, for in it we see the death, not exactly of a world, but of a system of belief, also related obscurely to Lord Faide's political decisions. It is this inevitable failure in victory that causes Lord Faide's hinted regret for his enemy and victim Lord Ballant; we realise that both men were dedicated to the same purpose, that the emergence of the winner ends an era, and that it is for this reason that laughter at the expense of Lord Ballant is discouraged. The whole story, in fact, gives us a pattern of groups united by a belief and seeing nothing outside themselves; only Huss and Salazar have power to change their worlds.

Again, relevance to contemporary life could be asserted. But it is worth noting how abstract the application is; Vance has no satiric targets and makes no particular references. Indeed, 'The Miracle Workers' and its like are in some ways completely opposed to those stories that deal, not with the end of *a* world, but with the end of *our* world – the (sometimes satirical) disaster-novel as pioneered by H.G. Wells in *The War of the Worlds* or *The War in the Air*, and now [in 1969, but even in 2016 not entirely vanished as a sub-genre] produced by many writers, mostly English ones: John Wyndham, John Christopher, Edmund Cooper, Charles Eric Maine, Brian Aldiss, J.G. Ballard, even Nevil Shute, with his highly influential warning *On the Beach*. What is the secret ingredient?

*

What is common to most examples seems to be this. In all cases one ends up with the average Englishman, probably married, trying to make his way in a ruthless and insecure world which is nevertheless still familiar – robbing supermarkets and fighting his way towards Westmoreland (Christopher's *The Death of Grass* (1956)), the West Country (Wyndham's *The Day of the Triffids* (1951)) or Norfolk (Cooper's *All Fools' Day* (1966)). Clearly, there is a strong element of *Robinson Crusoe* in the make-up of these stories, but there are other repeated features that are not so cosy – for example, scenes of rape or sexual humiliation (*All Fools' Day*, Christopher's *The Death of Grass* and *A Wrinkle in the Skin* (1965),

Maine's The Tide Went Out (1958)), and later examples). Rape in a sense is also a motif in The Day of the Triffids and Wyndham's later The Midwich Cuckoos (1957), but in both cases the motive is not sexual desire but desire for species survival. The scenario of The Midwich Cuckoos is that in the centre of England, the safest place on Earth, in a village where nothing has happened for a thousand years, aliens land, render all the inhabitants unconscious, impregnate all nubile females, and then leave. Very slowly it is recognised that the embryos, and then the babies born, and then the children growing up, cannot be human and moreover have dangerous powers. But what to do, in the safest place on Earth, where drastic solutions are no part of the culture, and moreover illegal? The answer is (Wyndham's Latin): si vis Romae vivere, Romano vivito more, 'if you wish to live in Rome, live as the Romans do', but retranslated in the novel to mean, 'if you want to live in the jungle, live by the law of the jungle'. The point being that the deep peace of rural England is, in universal perspective, a temporary illusion. The novel's philosopher-hero, who is also the children's mentor, blows them all up and himself with them. For him, it has become a survival issue and (remember Wells again) a Darwinist one.

In brief, something similar happens in *The Day of the Triffids*. In a world where most of the population has gone blind, such blind females as survive, and can be supported by the very few sighted people left, must breed sighted babies as soon as possible, polygamously. Those who object on moral grounds will learn that their morals are no longer valid: Wyndham's slogan this time is *autres temps, autres mœurs*. The same realisation is forced on the inhabitants of peaceful Surrey in Wells's paradigm-story *The War of the Worlds* (1898). Those who thought things must continue the way they always had, because they always had, do not survive the Martians' Fighting Machines, nor the Martians' pseudo-Darwinist philosophy, which Wells pointedly indicates from the start. English disaster stories, then, like barbarian-planet stories, are in the end about culture clash, cultural alteration, the relativity of cultural values (the last, in Wyndham's words, *mœurs* or *mores*).

This becomes explicit in a further sub-genre, which one might call the 'cultural engineering' story. Two stories which exemplify it are Winston P. Sanders's 'Wherever You Are' (ASF (April 1959)) and Poul Anderson's 'The Three-Cornered Wheel' (ASF (Oct. 1963)). [As noted in the introduction, above, I did not know, in 1969, that 'Sanders' was really a pen name for Anderson. But the points made about the stories stand, and I reinforce them later with authors who are definitely different.]

To take the first just mentioned, one of its interesting features is the magazine cover which illustrates the story, and which shows a large, blue,

taloned, scaled, fanged monster with claws raised. Since the magazine was still then called *Astounding*, one imagines that 99 per cent of those who saw the cover would feel immediately confirmed in their view of sf as childish pseudo-Gothic. Only the odd few who read the story (and were probably fans already) would see the joke. For, on closer inspection, the monster can be seen to be slightly overweight, to be wearing a little hat and, in any case, to be in a position not of menace but of fear – naturally, he is frightened by the horrible Flat-Eyed Monster, the human being. The joke in fact is on the accepted conventions of sf; and the whole of the story is further planned to illustrate this.

In the stock of situation, as commonly understood by outsiders, there ought to be three parties: the girl (A), the man (B) and the monster (C), while their relationship should be that A hopes that B will save her from C. Yet, clearly, other permutations are possible, and this is what 'Wherever You Are' sets out to give us. The immediate situation is that the two humans, man and girl, are stranded on the planet of Epstein by the breakdown of their ferry. There is a human base on the planet, but it is on an island, and they will have to persuade the natives to take them there. Fortunately, the saurian natives have a primitive steamboat; but, unfortunately, they are not themselves at their home, but are on an exploring voyage: it is as if extraterrestrials had contacted a party of Europeans in the 1830s in the China Seas. To add to the complications, the saurians have a strict caste system, and are under the orders of the noble, Feridur. And, while the lower classes are mild, peaceful and interested in technology, Feridur is a lizard with an idée fixe - he collects skulls, and, with his monocle, his ideals of sportsmanship and his genial understatements, clearly parodies the English hunting lord. One problem is to prevent him from insisting on a sporting duel to add a human skull to his collection. The other problem, briefly, a technological one, is that the humans no longer know where they are and so cannot even give a compass bearing on their base. The title refers partly to that, but partly, no doubt, to the odd humanity of the Epsteinians.

The two humans, then, go about solving their problems in separate ways. The man, B, timid, small and bespectacled, is called Didymus Mudge, comes from Boston and teaches high-school physics. During most of the action he appears to be worrying about his watch, put out of exact order by the crash, and trying to hang up a large copper ball full of sand, with the assistance of the lowlier Epsteinians. His attempts to explain are invariably cut off by the wrath of A, an Amazonian lady named Ulrica Ormstadt, major in the military service of New Scythia, who spends her time with the upper-class monsters, trying to learn the language and get into a position where she can give orders. Eventually,

she has no recourse left but to challenge Feridur to a duel, which, if she wins, gives her full control of his property and skull collection. However, as anticipated, she is losing until the two lines of action finally intersect, when Mudge asserts himself and shouts to her to lure Feridur on to a convenient patch of ground, where he is promptly flattened by the mysterious copper ball, suddenly set swinging.

This seems an elementary story on the bottom level of a comic human situation: the man bullied by the girl but turning the tables on her. It gains more interest from the permutations of one character saving another from a third. There are six such permutations possible, but two clearly cannot appear (ACB and CAB), since nothing would ever need to be saved from Didymus Mudge, while the typical case, the man saving the girl from the monster (ABC), is only present for a moment and then in a comically cowardly way (Mudge sets the copper ball swinging from a safe distance). The story moves around the other three, beginning with a lower-class monster running down a path and hoping the man will come to save him from the girl (CBA); moving on to the man cowering with his Epsteinian friends and hoping the girl will save him from Feridur (BAC); and ending with the man shrinking back from the now-amorous Major Ormstadt, and hoping the monster will somehow be able to save him from the girl (BCA). Obviously, the story was planned, like the cover, in exactly this frame.

Still, the real interest comes from another typical pattern. There are two problems to be solved by the humans, and one is technical while the other is cultural. No doubt many readers spent a lot of time trying to work out what Mudge was doing, and solving problem 1, i.e., finding one's latitude and longitude from observations of the sun and a set of tide tables. The explanation, I should point out, takes two pages, but, briefly, Mudge has to carry out one series of experiments to correct his watch, so that he can then identify the longitude, but he needs the massive Foucault sphere to find his latitude, of which the sphere's turning path is a sine function. But this problem is not adequate on its own. It is a mistake to think of sf as a series of technical posers for junior scientists, though it can work like that for short periods. Even Hal Clement, that most relentlessly technical writer, has to show the effect of his imagined environments on the thought systems of other intelligent creatures; and in this story the second problem is to find the weak spot in the Epsteinian culture, clearly the caste system and duel convention. It may be simple enough, but a lot of tiny observations help to build it up - Epsteinian honorifics, for example, their equation of nobility with 'sporting blood', their automatic assumption that Mudge is a slave, and the low-class Epsteinian captain's feeble attempts to get past his owner's obsession with craniology to discussions of science or trade. The parallel with nineteenth-century Europeans is also all but explicitly made, though there are continual reminders of what is out of place – the lack of firearms, the 'barbaric' thatch hut that serves as a cabin.

On top of this, there is the obvious clash between the different human cultures of the man and the girl, with their respective strengths. Mudge and the low-class Epsteinian captain appear in the end to be the winners, a decision often reversed in other stories in favour of anthropologist as hero rather than engineer as hero; but there is no attempt in this story to evaluate the cultures present. They exist only to be understood, to form the rules of the game within which a solution has to be found.

Much sf, indeed, seems to be very much in the spirit of a game with complex rules, a puzzle in logic. (Two common minor themes, for example, are societies based on variations of chess, and stories based on variations of Sherlock Holmes, both exercises in pure reason with unfamiliar rules.) However, the second story chosen here, 'The Three-Cornered Wheel', leads on a little further to more ethical questions. It is again a problem-story; and once more the situation is a barbarian planet with a transport difficulty. A merchant spaceship has come down on the planet, out of fuel, and in need of an atomic generator left in the unmanned repair base 1,000 kilometres from their point of landing. The natives, previously contacted, are quite friendly; but there is an absolute taboo in their culture on any form of the Wheel, a sacred symbol. So there is no prospect of bringing the generator to the ship, while the ship itself is unable to take off. Again, there are two problems, or at least two possible avenues of solution. First, can one find a way to move a heavy generator 1,000 kilometres, assuming a Dark Age technology and no wheels? Second, is there any way to find a weak spot in the natives' culture, exerting no pressure from outside, but mining from within according to the culture's own system of logic? Only one method needs to be solved; but in fact both are.

The action runs like this. At the start, one of the crew members has ridden off to meet the local chief in whose area the repair base lies, in an attempt to get co-operation from him rather than from the ruling central theocracy. The chief, like Feridur, a character with archaic earthly traits, this time those of the medieval English Marcher lord, naturally has to refuse in spite of a certain practical sympathy and dislike of his own priests. And, on his way back, the crew member, Falkayn, is ambushed by priestly attendants wearing the Circle. This is the violent level of the story, though still redeemed from being updated 'cowboys and Indians' by a series of reflections on the motives of all concerned, and by references to the various subcultures of the natives

and indeed of the merchant crew. Even while under fire, Falkayn takes time to consider the effects of the natives' *quicker* learning time on their handling of elementary tactics. It is during this ride that Falkayn works out the solution to problem 1, solving it in proper melodramatic fashion simultaneously with his winning of the skirmish. As usual, the wagon arrangement finally arrived at would take half a page to explain, but suffice it to say that it is based, like the British 50 pence coin [i.e., ten shillings in 1969], on the realisation that a circle is only the limiting case in the class of constant-width polygons, any of which will roll better than, for example, the 12-sided coin now [in 2016] due to replace the British pound. [Will it work in machines? Sf would have told its designers that an 11-sided or 13-sided one would roll better.] Falkayn uses the one nearest to a circle and still theologically permissible, a fact learnt earlier in a discussion of bridges.

But, meanwhile, his captain, Schuster, has been busy with problem 2. His two solutions to the problem of breaking the alien culture's taboo are. first, to introduce differential calculus, and, second, to begin teaching Kabalistic philosophy. The first provides the bait, for the native priests, of a more accurate astronomy, and conceals the hook of Newtonian physics, specifically the law of gravity and the forced abandonment of the theory of cycles and epicycles, so reducing the validity of the Circle as a universal principle. The second more subtly invites both reader and native to see the beauty of unbridled logic acting on false premises, with all its medieval concomitants of angelology, numerology, letter-arrangement and allegory. It is hoped by Schuster that this will produce a situation of conflicting schools and a break-up of the political hold of the theocracy. But it should be noted that he is not in any way trading on the natives' stupidity; we are told several times that they are 'intrinsically more gifted' than humans. In fact, he is trading on their intelligence, the whole argument depending on the point, common in sf, that individual intelligence can be completely subservient to the seemingly accidental development of culture.

What this story, like 'Wherever You Are', asks one to admire is the elegance of solutions to technical and ideological questions; these are seen not in individual terms, but as a fairly abstract manipulation of forces; human beings are seen as data for a problem. Some will find this cold-blooded. If that is a literary criticism, it becomes largely a matter of habit and opinion. If it is raised ethically, rather more can be said. For Schuster's plans have to meet two objections, raised by the crew and by Schuster himself. His machinations may help marooned spacemen in fifty years, but they are of no use straight away. It is Falkayn who has to solve the immediate difficulty. So why should Schuster try to shatter,

or perhaps the right word would be 'poison', the natives' functioning culture? And, since it is a stable one, has he any right to? It is significant here that Schuster, far on in the future, is still a Jew, and so attached to a stable culture of his own with great experience of persecution. Why should he, above all, want to break the aliens' monotheism? No firm answer is given. But the question lies behind a good deal of sf. One could look, for example, at any of the following, all from *ASF*, all later published in book form, to see it treated very clearly – *The Man Who Counts*, by Poul Anderson, yet again (Feb.–May 1958), Harry Harrison's *No Sense of Obligation* (Sept.–Nov. 1961), Lloyd Biggle's *The Still Small Voice of Trumpets* (1968, this time expanded from an *ASF* novella (Apr. 1961), with its sequel *The World Menders* (*ASF* (Feb.–Apr. 1971)). But the classic or paradigm-example may well be two sequences or serials from *ASF*, first, *The Shrouded Planet* (published as three linked novellas (June, Aug. and Dec. 1956)) and then *The Dawning Light* (Mar.–May 1957).

These add some welcome authorial diversity by being the product of a collaboration, Robert Silverberg and Randall Garrett giving themselves the joint pen name of 'Robert Randall'. The titles give a good idea of the narrative. The planet of Nidor orbits a blue-white star, from whose glare it is protected by perpetual cloud. But the 'shroud' of the title also implies the stasis of the planetary civilisation, homogeneous, theocratic, unchanging. When Earthmen appear, they determine to change it, to bring it into 'the light' – which means, to make it a scientific civilisation like their own. Readers are asked to take their motives as benevolent. Seemingly, the Earthmen want to have another race to talk to as equals, which means making them scientific. But this involves steadily eroding their culture, and in particular the authority of the Temple and the Elders. A plague of beetles (probably human-created) is cured by a new pesticide, developed by the Earthmen's pupils. But that puts manufacturers of the old pesticide out of business, and sets off a chain of social change. Other Earthman-pupils are manoeuvred into marrying within their clan, challenging the authority of clan-Elders. A growth-hormone for the planetary staple diet promises prosperity but again upsets a thousand-year balance between producers and consumers. In the end, currency manipulation strikes a final blow.

All for the greater good of Nidor, we are told; but completely opposed to what would become the Prime Directive of *Star Trek*: no interference with 'the normal development of any society'. The Prime Directive was prefigured within the pages of *ASF*, for the motto of the Cultural Survey organisation in the Biggle serials mentioned just above is, 'Democracy imposed from without is the severest form of tyranny'. There is no doubt in the serials that the ideal is 'pure democracy and the highest

technological level' (note the association of politics and science), but there is equally a conviction that neither can be imposed by force: what is needed, once again, is 'cultural engineering', finding a way in which even a horribly oppressive culture can be induced to change, with a minimum of direct action. (Biggle's Cultural Survey organisation allows itself one innovation per society, their 'Rule of One': the Rule sharpens the game- or puzzle-element present in all these stories of culture clash.) The creators of *Star Trek*, meanwhile, first episode on air September 1966, and written, to begin with, by well-established sf writers like James Blish, probably had Silverberg, Garrett and Biggle in mind when the Prime Directive principle was laid down. (Its mass-market evasions are discussed further in the essay which follows this one.) But all such stories raise the question: what gives the Earthmen the right to impose their views? Is it obvious that our culture is so superior that it should be imposed?

There was certainly something thoughtlessly self-confident in such attitudes, but, to be fair, even ASF and its formidable editor John W. Campbell Jr were quite happy to see things the other way around, if it could be turned into a plot.² Though the stories chosen so far show superior humans and inferior aliens, the converse situation can be taken just as seriously. ASF repeatedly printed stories showing the disastrous impact of a superior alien culture on even the self-confident societies of America and the West. Nor was the destruction in those just a matter of force. What was theorised as destructive on humans was the existence of a culture demonstrably more powerful than their own, but not to be reached by human methods. People would then be torn (the situation is analogous to the one in The Day of the Triffids) between their own beliefs and the realisation that other beliefs are stronger, truer, more adaptive. The classic story of this kind is William Tenn's 'Firewater' from ASF (Feb. 1952), where the unavoidable superiority of alien science (or is it magic?) sends people mad (or are they becoming adaptively sane?)3 Though the paradox is noted that no one inside a

Robert Silverberg (half of the 'Robert Randall' collaboration) created another example of sf dialogism with two stories considering the issue, which once more became a live one following the invasion of Iraq, of whether well-intentioned invaders should or should not be subject to the justice systems of the native planet. In one story, 'Earthman's Burden' (New Worlds Feb. 1959) the answer was 'yes', and the 'Devall Precedent' was set. In another, 'Precedent' (ASF Dec. 1957), the precedent was obeyed but made to subvert the alien justice system. One imagines the stories were written in reverse order of publication date.

³ 'Tenn' is another pseudonym for Philip Klass. Wyndham's real name was

working culture is likely to see much of its weaknesses, it is freely if theoretically admitted that contemporary Western society must have just as many such weaknesses as the societies of imaginary aliens. One could generalise fairly that sf writers as a whole have less belief in the *absolute* validity of their own values (or $m \alpha urs$, or mores) than writers of almost any other possible group. They learn that from the genre. At the same time they may well have strong belief in relative validity, a situation of marked 'dialogism'.

And even in 1969 they got some things real-world right. John W. Campbell Jr was as right-wing as you could get, even in America. But his attitude to the Vietnam war, as expressed in his contentious editorials, was from a very early date that the Americans should not be there, and that there would be no harm in letting South Vietnam go Communist. He thought this without the least personal inclination to Communism or even Socialism, or even liberalism. His point was merely that the USA had in this war put itself in the foolish position of a do-gooder who tries to impose his beliefs and solutions on other people, thinking - the big sf mistake - that they must be universally valid. Campbell argued that this was ridiculous: forcing democracy on the East was as absurd as forcing Communism on the West. The real enemy was not any single belief - not even Communism: sf authors like Fred Pohl were Communists in their youth, and sf's record in the McCarthy era was an honourable one - but rigid beliefs not susceptible to change or challenge.

To sum up: the common element in the great body of science fiction is an interest in cultures, in the ways in which intelligent beings could live and think, as dictated by circumstances, their technical ability, their systems of thought. Though it borrows its plots and characters from older and more conventional literature, the form is as a result a curiously modern one. Nothing like it could have existed before the present era and the discoveries of anthropology. It is not very similar to either of those two older forms, the didactic Utopia or the spectacular 'fantastic voyage'. Its modernity lies in outlook as well as in subject; and so it can be recognised even when the apparatus of science is absent, as in the fantasies, the ESP stories, the stories of alternate worlds. On all levels it is a form that assumes change, and unpredictable change,

John Parkes Lucas Beynon Harris, and he used variants of these for other pen names. John Christopher's real name was Christopher Samuel Youd. American authors seem to have used pen names so they could maximise production and sales, but British authors were probably avoiding the social stigma associated with sf.

not just 'extrapolation'. It deserves more consideration than it gets. As does its place of origin [at least from 1926 to about 1969], the ironic, polemical, interactive and once again strongly 'dialogistical' context of the magazines.

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[One final thought, from the perspective of 2016: in this volume I repeatedly lament the fact that politicians do not read sf. Would it not have been an advantage if our politicians, planning the invasion of Iraq and the pot they set boiling in the Middle East, had thought past the military considerations to the issue of how to deal with an alien (but not unknown) culture, and to consider some element of 'cultural engineering'? Alas, they clearly assumed that what seemed natural and admirable back home would have universal appeal. After military victory, the only problem would be sweeping up the rose-petals from the victory parade. See the sad delineation in Rajiv Chandrasekaran's Imperial Life in the Emerald City (2006) of earnest staffers and interns in the 'Green Zone' of Baghdad glibly imposing on a shattered city the traffic regulations of Maryland, fantasising about opening a mini-Wall Street stock market with computers, and – most remarkably – planning to replace food rations with pre-loaded debit cards: this in a city which had no ATMs, no card-processors, and much of the time no working phones and no electricity. 'Democracy imposed from without is the severest form of tyranny'. Well, it is one form of it, at least. And advanced technology which is neither useful nor wanted does not help either. Now, if only some of them had read some science fiction ...]

6

Introduction

... And Not Fudging the Issue!

This essay continues the theme of the one before, with the advantage of some thirty extra years of reading, especially in the area of cultural anthropology. As usual, I had picked up a lot of ideas about this from reading science fiction, and no doubt that was what made me go back and actually read the anthropologists themselves, thus acquiring much-needed intellectual context. But the 'dilemma' of this piece was there in the earlier one. Does 'multiculturalism', or 'cultural relativism', mean that you can make no judgements and should refrain from any kind of interference? Sf stories are prepared to argue the matter either way. Arguments for non-intervention or non-judgementalism are put, for instance, by famous stories like Katharine Maclean's 'Unhuman Sacrifice' (ASF (March 1958)), Harry Harrison's 'Streets of Ashkelon' (New Worlds (Sept. 1962)) and Poul Anderson's 'The Sharing of Flesh' (Galaxy (Dec. 1968)) – though Anderson also put the case for deliberate interference, see item 5. As said above, the view that some forms of intervention may be totally destructive, that cultural beliefs are so deeply ingrained in people's personalities that trying to learn (some forms of) new belief may cause terminal social breakdown or send individuals mad was put in definitive form by William Tenn's 'Firewater' (ASF (Feb. 1952)) - a story whose title incidentally demonstrates one of the underlying traumas of the American anthropological profession, the wipe-out of many of the indigenous American cultures, not so much by the white man's 'firewater' itself as by the whole way-of-life complex associated with it, from agriculture to commercialism and advanced technology. So, the moral seems to be: do not interfere. But if you see something utterly horrible, like mass human sacrifice, or avoidable, like poverty and starvation, what do you do then?

In mass culture, whether literary or political, the question is routinely dodged or the answer fudged, but, as this piece shows, Vance was capable of seeing the arguments both ways, dramatising the dilemma, coming up

with different and often ironic answers, and generally seeing all the way round the subject in a thoroughly admirable and adult way. On Shant, in the 'Faceless Man' series, people can live happy and fulfilled lives under all kinds of strange-to-us social arrangements, and there seem to be no grounds for intervening to impose one rather than another. On the other hand, when a crisis arises, some forms of social arrangement cope much better than others, and sticking to a non-functional one will be fatal. In other words, there is bound to be a cultural 'natural selection' as well as a genetic one - and, one should add, a personal one as well. Going back to the founder of sf, H.G. Wells, no one has better expressed than he did the awful boredom and waste of growing up in the hidebound Victorian society of his youth, but even in that society it was always possible to change, as Mr Polly found out in The History of Mr Polly (1910), and George Ponderevo in Tono-Bungay (1909). As Wells put it via Mr Polly, 'If you don't like things, you can change them.' That's real liberation for you.

Vance's heroes sometimes change themselves, and sometimes change their societies, and they may change other people's societies, or their languages, or their world views, or their genes by selective breeding as in 'The Dragon Masters', but one consistent thing is that attachment to stasis is not admired. Nevertheless, heroes who do not change, or find themselves hopelessly unequipped to do so, like the inept Edwer Thissell of 'The Moon Moth', may succeed just the same by riding loose to the mores and assumptions of their own society. Thissell does not remould the culture of Sirene, as in the stories discussed in the article above, Vance's own 'The Miracle Workers' included; indeed, he leaves it exactly as he found it: but he learns to use its assumptions for his own ends, to co-operate with it rather than either suppressing it or surrendering to it. It is impossible to sum up Vance's overall view on the dilemma discussed here, since like a good author he works by plots rather than by theses. But his plots have serious thought behind them, on what is arguably one of the gravest, most undecided, and under-confronted topics in the world today; and I would add in all seriousness that he has thought about the matter a great deal more than most professional anthropologists, whose commitment to the pieties of their profession was exposed by Derek Freeman's two devastating analyses (1983 and 1999), first of Margaret Mead, and then of the professional response to his analysis of Margaret Mead. Defences of Mead (of which there have been many) strike me as self-interested, or only slightly corrective. Her teenage informants in Samoa misled her, she misled generations of colleagues, and, as Brave New World shows, she misled Aldous Huxley too, in 1932 - and Robert Heinlein (see item 6, below). But she didn't mislead Vance, whose stories often portray strange social adjustments beneath a smiling surface, like the 'mirkdeeds' of Marune: Alastor 933.

In my mind, Vance is also connected with devastating social failure and welcome social success. He torpedoed my relationship with the first girl I ever dated – we were both teenagers, and, I have to say, that girl was a looker. But she came round to my house, picked up the copy of Galaxy I was reading, whose lead novelette was 'The Dragon Masters', lavishly illustrated with drawings of Blue Horrors, Juggers, Heavy Troopers and all the rest, all thoroughly integral to what I protest was a deeply intellectual story. She said, 'Do you read this stuff?', her lovely lip curled with contempt, and that was me written off as hopelessly adolescent, not worth bothering with. Oh well. (What hurts me even more is that now I cannot find that issue of Galaxy. No doubt my mother threw it away, voicing some similar sentiment.) The social success came many years later, after I had arrived at Saint Louis University, which happened to contain the best-read student I have ever encountered, anywhere -Oxford, Cambridge, Harvard, wherever - Miguel Rojas Garcia. Where are you now, Miguel? Soon after we met in class, Miguel, who knew I had written on Tolkien, asked me very cautiously who I had found to be the most personally satisfying modern author of fantasy. I gave this a bit of thought, and then realised it was obvious: Jack Vance, of course. At this Miguel actually leapt in the air with delight, presumably at finding a professor who was a trufan, and didn't just continually recycle 'set books'. Some you lose, then, but some you win. Miguel (I am sure he will forgive me for saying) was nothing like as good-looking as Ann, but he had an incomparably better collection of books and VHS tapes available for borrowing.

"People are Plastic": Jack Vance and the Dilemma of Cultural Relativism

Jack Vance is commonly regarded as one of the most distinctive stylists of science fiction, a reputation which he indeed richly deserves.¹ It is the purpose of this essay, however, to argue that Vance's work should not be treated as merely whimsical or decorative, but should be seen as centrally preoccupied with one of the most acute moral dilemmas and major intellectual developments of our age: a dilemma and a development furthermore which tend to be avoided or left unfocused, to our detriment, in literature of the mainstream. The intellectual development is that of social or cultural anthropology, as presented to a wide English-speaking public in the middle years of this century. Marvin Harris says, in his The Rise of Anthropological Theory (1968: 409), that the 'artful presentation of cultural difference [by the Boasian school of anthropology, discussed below] must be reckoned among the important events in the history of American intellectual thought', and I can only concur. The dilemma it generates is, to put it bluntly, whether any sense of absolute value, or of 'human nature', can survive a thoroughgoing acceptance of the cultural relativism recommended so forcefully by so many in the anthropological profession.

Even anthropologists, however, have been reluctant to press the logic of their own profession to anything like a Vancean extreme. The 'origin myth' of the discipline, one might say, comes in the words of a chief of the 'Digger Indians' of California, as reported by the anthropologist Ruth Benedict (doyenne, along with Margaret Mead, of the school of American anthropology founded at the turn of the nineteenth/twentieth centuries by Franz Boas). The 'Digger Indian' chief said, according to Benedict:

In the beginning ... God gave to every people a cup, a cup of clay, and from this cup they drank their life ... They all dipped in the

¹ See, for instance, both Tiedman 1980 and Spinrad 1980.

water ... but their cups were different. Our cup is broken now. It has passed away.²

Benedict reported this at the start of chapter 2 of her book Patterns of Culture, the most popular work of anthropology ever written, which since its publication has sold more than two million copies, and which was still, in 1968, a generation after it first appeared, according to Marvin Harris, 'the most important single source of recruitment for anthropology as a profession' (Harris 1968: 406). But what does the chief's image mean? Its explicit meaning is obvious and is commented on immediately by Benedict. The cup is culture, in the sense of 'way of life'. The chief is saying that although he is still alive, and some of his people are still alive, their traditional culture is dead, and cannot be revived. However, his image also has marked implicit meaning, both more attractive (for Benedict and her many followers) and more questionable. The allegory implies, first, that life is the same for all peoples, like water; but, second, and in spite of that, there are different ways of containing the life-experience, in the 'cups' of culture. Third, every people has a different culture, and, fourth (and this point is made explicit and strongly agreed to by Benedict), all these cultures have the same value, so that the loss of even the most meagre and apparently unsuccessful is 'irreparable'.

This last opinion has become the centre-piece of almost all professional anthropology, and also an unchallenged axiom within modern American culture (see remark by Allan Bloom quoted above, p. 86). More cautious and more professional dissidents among the anthropological discipline put it different ways, but they still note the point. Robert Edgerton, in his book *Sick Societies*, says that what *Patterns of Culture* proclaimed was that 'all ways of life were of equal value and that all standards of behaviour were relative' (1992: 33). Much of the energy of anthropological theory since has gone into explaining that within a particular culture, customs which appear to us to be foolish, insane or evil, are in fact examples of 'adaptive behaviour'. Why did the Aztecs eat people (one might ask)? Because they had no domestic meat-animals and were protein-starved. Why will starving Hindus not eat beef? Because if you eat your draft animals in the drought you are sure to die in the monsoon.³ And so on.

² Ruth Benedict, *Patterns of Culture* (1935), cited here from the Routledge paperback reprint of 1961 (p. 15). Marks of omission indicate only Benedict's interjections.

³ These two cases are put by Marvin Harris, in *Cannibals and Kings: The Origins of Cultures* (1977) and *Cows, Pigs, Wars and Witches: The Riddles of Culture* (1975).

So strongly are these beliefs embedded in the scientific discourse of the profession that any anthropologist who criticises 'his' or 'her' people – as Colin Turnbull did when he suggested to the Ugandan government that the Ik, who left their old people out for the leopards, really ought to be dispersed – will be ostracised and accused of colonialism at the very least (see Edgerton 1992: 6–7).

In all this there is something strange, and perhaps dangerous. I quote from the start of Edgerton's book, which is very conscious of its own challenge to a dominant intellectual orthodoxy. Edgerton says on page 1, very carefully, as one who walks on thin ice, that his thesis is that:

Slavery, infanticide, human sacrifice, torture, female genital mutilation, rape, homicide, feuding, suicide, and environmental pollution have sometimes been needlessly harmful to some or all members of a society, and under some circumstances they can threaten social survival.

Is this perhaps not a trifle over-tentative? A hard heart might be able to concede that slavery and infanticide, to take the first two on the list, might bring some benefits to some members of societies that practise them, namely, slave-dealers and surviving siblings. But human sacrifice? Is it not the case that this is *always* 'harmful to some ... members of a society' (the ones who get sacrificed), and has never done any good to anyone at all, not even the sacrificers?

To say that straight out, however, is to impose one's own standards on members of another culture, so becoming guilty of ethnocentrism, or worse; and if one were to act on such a belief one would also, to turn the matter back towards science fiction, be guilty of violating the guiding rule or 'Prime Directive' of the *Star Trek* television series – which is that no vessel or employee of Star Fleet may interfere with 'the normal development of any society', and that everything is to be regarded as expendable in defence of this principle.⁴ In practice, the *Star Trek* films and programmes have consistently flinched from the logic of their own Directive. It could be tested, for instance, by allowing Star Fleet to encounter something unquestionably horrible (like the Atlantic slave trade or the all-but-extinction of the 'Digger Indians'), only to

But even such practices as witch-burning or female genital mutilation have been defended as 'adaptive', as Edgerton notes.

⁴ Quoted here from Okuda *et al.* 1994: 261. For a balanced but kindly view of *Star Trek*, see Disch 1998: 97–105.

refuse on principle to interfere; but this never happens.⁵ However, the underlying dilemma of cultural relativism, studiously ignored or evaded in contemporary mass-market entertainments, is brought into much sharper focus in the narrow-market science fiction from which *Star Trek* sprang: and in particular in the work of Vance.

It can be shown at the start that Vance is familiar with and indebted to the whole tradition of American cultural anthropology, quite possibly (in view of its popularity) borrowing from Benedict's Patterns of Culture in particular. The second in Benedict's series of strange cultures was that of the Dobu of Melanesia, a tribe apparently of aggressive paranoids, quite like the Darsh of Dar Sai in Vance's The Face (1979). When Benedict says that in Dobu 'Every man's hand is against every other man', while 'Dobuan social organization is arranged in concentric circles' (1961: 95), one may remember the Darsh game hadaul in Vance's 1979 novel The Face, which is played, or fought, in a series of concentric rings, all competitors against all others. When Benedict says of the Kwakiutl that they have a system of inherited names, which are felt to pass on the attributes of all the ancestors who have ever borne them (1961: 132), one may again think of the 'Emblem Men' in Vance's 'Planet of Adventure' series (1968–70), who inherit a personality from the accumulated history of the emblem they bear. And, even if one rejects the link to Benedict, there can be no doubt about Vance's continuous feigned citations from anthropological works of the future. In his 1961 story 'The Moon Moth' we find extensive quotations from The Journal of Universal Anthropology, while the standard work on Sirenese culture seems to be one called The Faceless Folk: just like, one might say, such genuine scholarly works as Elizabeth Thomas's The Harmless People (1959), C.T. Binns's The Warrior People (1974), Colin Turnbull's The Forest People (1962). Vance also takes up with gusto the real anthropological habit of writing, as it were, snapshots of a culture, based on the Benedict assumption that cultures show a 'consistent pattern of thought and action' (1961: 33), a 'configuration', or - one might as well say - a personality. Vance's account of the Darsh thus runs in part as follows (it is feigned to be an excerpt from a Tourist's Guide):

⁵ It must be conceded that in a series which now amounts to many hundreds of hours of viewing-time, seven full-length feature films, and many published scripts and novels, written by many hands, there may now somewhere be an exception to this statement. Nevertheless, *Star Trek* in general has remained very careful not to question the values of its mid-American primary audience: see further my review article, 'Burbocentrism' (Shippey 1996).

Lest the reader cultivate a negative impression of the Darsh, their virtues must be indicated. They are brave; there are no Darsh cowards. They never utter falsehoods; they would thereby compromise their pride. They are guardedly hospitable, in the sense that any stranger or off-world wanderer arriving at a remote shade is provided food and shelter as his natural right. The Darsh may confiscate, pre-empt or simply avail himself of any object for which he has an immediate use, but he will never deign to pilfer; the stranger's belongings are safe. However, should this stranger discover a pocket of black sand, he might well be confronted, robbed and murdered. The Darsh admit such acts to be crimes but apply no great moral indignation to the perpetrators.

In regard to Darsh food, the less said the better ... (1979: 76)

In its neutral tone, its weighing of different factors, even in its rhythms, Vance's 'snapshot' seems strongly similar to parts of Benedict's account of the Dobu – for instance, this passage:

The Dobuans amply deserve the character they are given by their neighbours. They are lawless and treacherous. Every man's hand is against every other man. They lack the smoothly working organization of the Trobriands, headed by honoured high chiefs and maintaining peaceful and continual reciprocal exchanges of goods and privileges. Dobu has no chiefs. It certainly has no political organization. In a strict sense it has no legality. And this is not because the Dobuan lives in a state of anarchy, Rousseau's 'natural man' as yet unhampered by the social contract, but because the social forms which obtain in Dobu put a premium upon ill-will and treachery and make of them the recognised virtues of their society.

Nothing could be farther from the truth, however, than to see in Dobu a state of anarchy ... (1961: 94–5)

Much of the bizarre charm of Vance's novels (as of books like Benedict's, which did not sell two million copies on mere intellectual rigour) stems indeed from his ability to invent one weird or eccentric social system after another, and to make their eccentricities seem in a way logical, or, to use the professional term, 'adaptive'. The Darsh cultivate a truly appalling cuisine so as to appreciate better the taste of pure water in an arid world (*The Face* (1979)); the inhabitants of the city of Ambroy forbid any kind of mechanical duplication, whether by print or machine tool, to keep up the artistic reputation of their goods

(*Emphyrio* (1969)); the 'faceless folk' of Sirene use no money, because of their absorption in a constant competition for status, and wear masks lifelong because masks indicate the fine grades and fluctuations of status better than the bare face one inherits from one's parents ('The Moon Moth' (1961)). But explanations like these carry weight only to an audience prepared for them by some awareness of the strangenesses of real-world anthropology.

Vance's fascination with culture furthermore explains some of the more obvious features of his style, like the habit of writing long footnotes, and introducing strange words which resist translation, both imitations of the professional language of cultural anthropology. Finally, and particularly obviously, he has devoted a whole book to what is perhaps the most extreme of all the claims of Benedict-style cultural relativism, namely, the assertion (made by B.L. Whorf in the late 1930s) that the different languages people speak create 'different worlds of meaning': so that those of us who speak European languages are aggressive and manipulative because of our habit of verb-transitivity, while Hopi Native Americans are attuned to Einstein's Theory of Relativity because they have no verb tenses at all.6 The theory has not stood analysis well. But in his The Languages of Pao (1958) Vance portrays a massive experiment in social engineering through linguistics, in which children of a passive people are made selectively warlike, industrial or mercantile by changing the language they speak, all explained in obviously Whorfian ways.⁷

Vance has, in short, more than any other science fiction writer 'colonised' the entirely new imaginative space created by the nineteenth-and twentieth-century science of anthropology, as fantasy writers have colonised the other new science of archaeology. But, one has to ask, what is he using it for? Is it merely local colour? To answer that, one has to note, beneath the constant Vancean surface of strange 'xenography', the recurrent Vancean theme of human 'plasticity'.

This occurs on two levels, physical and cultural; though the former exists (so far) only in science fiction. The idea that humans will in the future be able to breed themselves or be bred into different sub-species, or possibly even species, as different from each other as Pekinese and Rottweiler dogs, has clearly been in Vance's mind from the start of his

⁶ Whorf's essays are conveniently collected in Carroll 1956.

Vance's Whorfian explanation is put into the mouth of Palafox, dominie of the Breakness Institute, at the end of chap. 9.

⁸ I borrow the term from Dowling 1980. For a later survey, see Andre-Driussi 1998.

writing career. The fantasy creatures of *The Dying Earth* (1950) – erb. grue, deodand and dragonfly-riding Twk-man - are assumed or stated to be the products of genetic engineering, while in Vance's much later work, Night Lamp (1996), we encounter a human culture, the Roum, which lives off the labour of two specially bred slave-species, Seishanee and grichkins, while being continually menaced by the 'white houseghouls', results of a breeding experiment that went wrong. Similar artificially generated species appear in several of Vance's science fiction novels (for instance, Emphyrio (1969) and The Last Castle (1967)); while his four-novel 'Planet of Adventure' series (1968–70) is structured on the idea of a planet divided between four competing alien species (Chasch, Wankh, Dirdir and Pnume), each of which has in different ways, and for its own different purposes, created a human variant that claims spiritual and genetic kinship not with other humans but with its alien owners: Dirdirman and Dirdir, Pnumekin and Pnume, and so on, The plausibility of this recurrent motif depends less on awareness of DNA and cloning (both of which post-date Vance's first uses of it) than on a memory of Darwin and 'the origin of species'; but it is strengthened further by the widespread conviction that people are indeed culturally and intellectually 'plastic'. One cannot avoid seeing the interaction of physical and cultural 'plasticity' in the deliberate and painstaking symmetries of Vance's award-winning novella, originally published in Galaxy (Aug. 1962), The Dragon Masters.

The primary symmetry of this work is obvious and made explicit within the work itself. On the world of Aerlith a few humans still live in scattered valleys, the relics of a war long over. They have lost the capacity for space travel. At intervals, however, when a planet swings close to Aerlith, they are raided by hostile aliens, looking for human slaves whom they can use as raw material for their breeding programmes. On the last of these raids, before the action of the novella itself, however, a number of the aliens are cut off and captured by humans, and are then used themselves as raw material for a human breeding programme, which turns the alien 'Basic' stock into fighting dragons. Humans then produce a variety of warlike slave-species -Termagants, Fiends, Blue Horrors, Juggers. The Basics do the same with humans, producing Heavy Troopers, Trackers, Giants, Weaponeers. Basics breed riding-humans, and humans breed riding-dragons. The two sides, then, are mirror-images of each other, in terms of physical 'plasticity'.

In the long interval since the last Basic raid, however, memory of the aliens has grown dim, and the immediate issue on Aerlith appears to be conflict between two human groups, each mustering their own

dragon armies: on the one side, Banbeck Vale, led by Joaz Banbeck, on the other, Happy Valley, led by Ervis Carcolo. Banbeck is convinced that the Basics are about to return, and keeps trying to divert Carcolo's attention to mutual defence, but when this fails carries on with the human civil war – which he is just about to win when the Basic spaceship does indeed make its predicted appearance. But there is another factor in the politics of Aerlith, and in the structure of The Dragon Masters, which is the strange society of the 'sacerdotes'. These people form as it were a Zen culture co-existing with but detached from the rest of Aerlith. Sacerdotes are indifferent to cold or pain, always appearing naked; they live within a network of secret tunnels that gives them access even to Banbeck's private quarters; they always speak the truth, but always evasively; their philosophy is one of total non-involvement. Joaz Banbeck, the novella's central character, then faces, so to speak, a war on three fronts: against Ervis Carcolo, a war of human/dragon against human/dragon; against the alien Basics, a war of human/dragon against dragon/human; and against the sacerdotes, a war whose object is to gain their attention and assistance.

Finally, there is one character who seems totally redundant to the action of the story (otherwise extremely tightly structured), and is therefore valuable perhaps as a thematic key: Phade the minstrel-maiden, a kind of *geisha* counterpart to the sacerdotes' Zen. She does nothing at any time except to see a sacerdote at the start, and to amuse Banbeck here and there with her naivety. But it is possible that doing nothing is her function. At the novella's first major crisis, when the Basic spaceship lands in Banbeck Vale. Phade freezes in terror:

Phade looked at [Banbeck] in a daze, beyond comprehension. She sank slowly to her knees and began to perform the ritual gestures of the Theurgic cult: hands palm down to either side, slowly up till the back of the hand touched the ears, and the simultaneous protrusion of the tongue. Over and over again, eyes staring with hypnotic intensity into emptiness.⁹

The ritual gestures achieve nothing and lead nowhere. Her paralysis, however, is matched by a whole series of paralyses throughout the story. When Joaz Banbeck's ancestor Kergan Banbeck captures the Basics from whom all later dragon stock is derived, a human Weaponeer comes to demand their release. He is unable to understand Banbeck's refusal, and

⁹ The novella was first published in *Galaxy* for August 1962, and in book form the same year.

when this is persisted in, he and his fellow-slaves go mad. The captured Basics also in a sense go mad. If their species, the Revered, are the masters of Destiny (they tell themselves), and their present situation is incompatible with controlling Destiny, then they:

were something other than the Revered: a different order of creature entirely. If this were true, what were they? Asking each other the question in sad croaking undertones, they marched down the cliff into Banbeck Vale.

This inability to cope with altered circumstances other than by ritual gesture (Phade), going mad (the Weaponeer), denying one's own nature (the Basics), is repeated again and again in the main body of the story. The simplest form of mental paralysis is that of Ervis Carcolo, who keeps on fighting his own war against Banbeck long after it has become pointless and unwinnable. The dialogue of Kergan Banbeck with the Weaponeer is repeated in another failed negotiation between Joaz Banbeck and a Weaponeer, this time stranded on the latter's inability to grasp that Banbeck's dragons are slaves, not masters, and that the alien/ human situation he knows has been symmetrically reversed. The most frustrating sequence of conversations in the book is the set of three (one in a dream) between Joaz Banbeck and one sacerdote or another. In the end, it is the sacerdotes who win the war against the Basics, provoked by Banbeck's cunning into turning the propulsion unit of their hidden spaceship against the Basics' ship. But they themselves see this as failure and self-betrayal, persisting in their ideology of non-involvement and their denial of their own humanity.

All this, it has to be said, does not look like cultural plasticity. The problem Banbeck faces, on every front of his three-front war, seems rather to be total and non-negotiable cultural stasis. Everyone he meets, to put it bluntly, would rather die or go mad than change their minds to accommodate a new situation. The entire structure of *The Dragon Masters* seems to set physical plasticity against cultural fixity. But at this point one might return to Ruth Benedict, the 'Digger Indian' chief, and his fable of the water and the cups. The point of that, as seen by Benedict, was the irreplaceable value of the individual cups. If one thinks of the nature of pottery cups, though, is it not the case that they are malleable, and 'plastic' in that sense, while they are being made, but, once fired, become at once useful and unalterable, prone to breakage and (Benedict's word) 'irreparable'? Benedict, of course, meant that the *loss* of a culture was irreparable, but one might perversely take the point that a culture as fragile, unalterable and irreparable as a pottery cup is, to say the least,

vulnerable: like the cultures or 'mindsets' of Phade, Carcolo, the Basics, their human slaves and the sacerdotes, all in Vance's fable.

Not only the central character but also the hero of *The Dragon Masters* is Joaz Banbeck - a characteristic Vancean hero in that he is distinguished not by strength or fortitude, but by flexibility, shrewdness, and a mixture of insight (into how other creatures think) and detachment (from the often dangerous and vulnerable assumptions that underlie how they think). It is tempting to regard him as a kind of self-taught anthropologist, but that is not quite the case, either with Banbeck or with Vance's other hero-figures. The set of stories collected in 1966 as The Many Worlds of Magnus Ridolph show a similar ambiguity in their central figure. Ridolph is like an anthropologist in that he solves his problems almost entirely on the basis of cultural knowledge: in 'Coup de Grace', for instance, locating a murderer simply by showing how murder would not fit the cultural norms of all suspects but one, in 'The Kokod Warriors', defeating a coalition of crooks (who want to exploit a native culture) and do-gooders (who want it to conform to their own liberal values) by superior understanding of how the alien culture works. Ridolph is unlike an anthropologist, however, at least one of the long-dominant Boas/Mead/Benedict persuasion, in that he is prepared to work within the norms of an alien culture for his own ends and even his own profit.

In the same way, at the highly satisfying climax of the 1961 story 'The Moon Moth', Edwer Thissel, till then an inept figure continually exposed by his own assumption that the quasi-medieval culture of Sirene must inevitably be simpler than his own, triumphs by turning the assumptions of Sirenian culture back on themselves. As Thissel is led maskless and disgraced to his death by an off-world criminal who declares that he, Thissel, is the criminal, a Sirenian mob dismisses claims of murder and slavery as trivial - 'Your religious differences are of no importance' - and falls on the criminal (who has taken Thissel's mask) for the 'crimes' that Thissel has committed within their culture: accidental rudeness and musical ineptitude. Their contempt for Thissel then turns to awe when Thissel points out that he has overcome his enemy by appearing in public without a mask - 'Not a man among us would dare what this maskless man has done', say the onlookers.¹⁰ Thissel has, of course, by his own standards, or ours, done nothing. But if an alien culture prefers to judge by its own standards, so be it: again, not a professional attitude (the anthropologist-figure in 'The Moon Moth' is unhelpful and ineffective) but a successful one.

¹⁰ 'The Moon Moth' appeared first in *Galaxy* for August 1961, and was reprinted in *The World Between and other stories* (1965).

A further character who moves through alien cultures, at once accepting and manipulating them, is Adam Reith, the hero of the 'Planet of Adventure' series. He too characteristically finds himself opposed by characters locked inside their own myth (humans who refuse to believe that they are human), but reacts to this energetically and destructively. As with the human slaves in The Dragon Masters, on Tschai alien breeding programmes have demonstrated physical or genetic plasticity but created cultural fixity, which Reith shatters without qualm. All four characters, then, Banbeck, Ridolph, Thissel and Reith, combine a readiness to understand alien cultures and a reluctance to judge them (the main message of works like Benedict's) with a sturdy refusal to ignore their weaknesses (as do the writers and critics attacked, for instance, by Edgerton). Nor do any of them show any respect for Star Fleet's notorious 'Prime Directive'. However, the most striking and even-handed presentation of the dangers and attractions of cultural relativism in Vance's work occurs in his 'Durdane' trilogy, and in particular in its first part, The Faceless Man (first published in The Magazine of Fantasy and Science Fiction, Feb./Mar. 1971, and in book form as The Anome (1973)).

The world of Shant seems almost to have been set up virtually as an anthropological laboratory experiment. It consists of 62 cantons, all of which have entirely different laws and customs. What is accepted practice in one canton may be a capital offence in another. The only overriding authority is that of the Anome, 'the Faceless Man', who operates a system of immediate capital punishment against those who break the laws of their own canton. The Anome in fact practises total cultural relativism, in a way which is understood and accepted by all inhabitants. 'Each of the sixty-two cantons uses a different set of rules', explains one character. 'Which are the best, which the worst? No one knows, and perhaps it doesn't matter if only men abide by any one of these sets'. A higher status character points out the impossibility of judgement in a more intellectual style in the second book of the 'Durdane' trilogy, putting forward the theses that:

Every social disposition creates a disparity of advantages. Further: Every innovation designed to correct the disparities, no matter how altruistic in concept, works only to create a new and different set of disparities. ¹¹

¹¹ Jack Vance, *The Brave Free Men*, likewise published as a two-part serial in *F&SF* July/Aug. 1972, and in book form in 1973. The final volume, *The Asutra*, came out in *F&SF* May/June 1973, and in book form the same year.

Shant is, in short, a world of 'co-existing and equally valid patterns of life', to use a phrase from Benedict (1961: 201), but one which is quite literally so. It is a world where the relativistic ideal has become reality.

There is, furthermore, some support for the relativistic ideal within the story. Its hero, Mur, is born into a society of total misogyny whose adult males shun any contact with women. Why? Because, we learn, they have access to a drug, galga, which allows them far more powerful sexual experiences than real intercourse. Granted that this might prove an irresistible temptation even in our society, how do the Chilites manage to procreate? They prostitute their women, but bring up the resulting children as their own. Finally, why do Chilite women accept this unequal deal? Because, it transpires, they have their own satisfactions and their own modes of retaliation by threatening Chilite men with ritual pollution. The 'cup' from which the Chilites drink the water of life appears, then, to be a repulsive one, by our ethnocentric judgements, but Vance goes out of his way to show that it might work, or, to use the professional term once again, that the Chilites' behaviour is 'adaptive':12 while the essence of the government of Shant is that it never makes ethnocentric judgements.

But could this laboratory experiment work long term? In the 'Durdane' sequence Vance sets up two challenges to the ideal of relativism so carefully presented: one active, one passive. The active one is a threat from outside. An alien culture (we learn eventually) has bred a race of giant humanoids, the Roguskhoi, who are capable of siring their own imps on human women, but whose partners will never again be able to bear human children – a mode of biological attack not unlike some now practised on insect pests. How can the Anome cope with this threat, faced as he is with 62 cantons who cannot agree on anything, even the need for resistance? The citizens of Shant are under total control, as all wear torcs, which both indicate their canton and their identity and contain an explosive charge that can be remotely detonated. But, as the torcless Roguskhoi spread, the Anome's powers are used only to execute complainers, and to counsel inactivity, in another variant of the paralysis seen on Aerlith:

the ANOME counsels a calm mien. These disgusting creatures will never dare to venture down from the wilderness; their depredations

¹² In *The Faceless Man*, Ifness, the anthropologist from Earth, says of the effective extinction of the Chilite society: 'I regret the passing of any unique organism; there has never been such a human adaptation before in all the history of the race'. This is a classic Boas/Benedict formulation.

are not likely to molest folk who make it their business to avoid reckless exposure of themselves or their properties.

In the end the situation can only be saved by overthrowing the Anome and removing the torcs, and with them the combined paralysis/stability/relativism of Shant.

The other threat is in its way more pointed. Star Trek's 'Prime Directive', as we know, commands non-interference, but the characters rarely if ever face up to the Directive's extreme implications. On Shant, however, Mur, escaping from the control of the Chilites, finds himself pursued by a band of farm boys assisted by half-sentient alien trackers, the man-eating ahulphs. If they catch him, he will be given to the ahulphs for the crime of stealing food, as is perfectly legal within Canton Frill. Mur scrambles into a carriage driven by a stranger, who converses amiably but makes no attempt to help Mur in any way, not even by increasing speed. The stranger, we learn eventually, is Ifness, a Fellow of the Historical Institute on Earth, whose First Law is: 'Fellows may never interfere in the affairs of the worlds they study'. The Law is clear (much more so than the Prime Directive), and Ifness obeys it. But, however benevolent non-interference is in theory, in this case it means throwing a child to the beasts: because some cultures are cruel. The dilemma, as has been said, would not be allowed to arise on mass-market television, but Vance presents it as starkly as possible. Mur escapes by his own devices (which is to that extent an evasion), but Ifness returns to the story, in the end abandoning the ideals of his Institute.

The points that seem to arise from The Faceless Man are, then, that Vance understands 'multiculturalism' perfectly well, and is prepared to show it working, even against the presumptions of our culture, as in the case of the Chilites; but that he has also created in his story two institutions committed to cultural relativism and non-judgemental behaviour, namely, the Earth Institute and the Anome, the government of the Faceless Man; and, finally, that he leaves no doubt through his story that these institutions are either impotent, or evil, or both. The Institute in the end is forced to intervene in the affairs of Shant. The rule of the Faceless Man is overthrown. Mur (or Gastel Etzwane as he becomes) turns into another inter-cultural hero like Ridolph or Adam Reith, who understands, and refrains from judgement, but also refuses to allow a non-judgemental stance to inhibit action. The compromise is a failure in logic, perhaps, for the question of absolute value has not been answered, but shows a certain practical sense, and an engagement with reality, well beyond the reach of Star Trek.

One point which has I hope been proved by the arguments above is

that Vance is not only familiar with the anthropological literature of his time, but has learned a good deal from it. He also appears sympathetic to at least some of the claims of the Boasian school, in particular, to their belief that there is no such thing as 'human nature', only infinite cultural variation. Benedict went out of her way, in Patterns of Culture, to point to the slender evidence available for feral children, and to say that if one subtracted learned culture from humanity, then what one had left was just 'these half-witted brutes' (1961: 9). Vance seems almost to go further in his continuing suggestions that human nature can be altered out of recognition, even physically, even to the extent of creating separate species, whether as a result of genetic engineering or more simply selective breeding. Where Vance disagrees with the Boasians is over the issue of evaluating or comparing cultures. While he accepts that there is no scientific way of doing this (or at least offers no approach to one), Vance does present again and again cultures which fail to react to change or crisis and are accordingly crushed.

Some would say, of course, that the existence and extinction of such cultures in the recent American past was the trauma that gave rise to the whole phenomenon of cultural relativism, but Vance tends to present cultural failure as a form of paralysis, to be neither excused nor admired.¹³ Characters who persist with a theory or a set of attitudes outdated by events - like Aila Woudiver, the would-be Dirdirman in the third book of the 'Planet of Adventure' series, or Ylin Ylan, the 'Flower of Cath' in the second book - are wiped off the board. By contrast, in the same series we are offered a string of characters - Ankhe at Afram Anakho the Dirdirman, Zap 210 the Pnumekin girl, and with more ambiguity Traz Onmale the Emblem Man - who change their attitudes, are liberated from their oppressive birth-cultures, and switch to a different 'cup of life' without disaster and even with gratitude. Vance also more than once turns satirical fire on 'do-gooders' who affect sympathy for alien cultures while in practice wishing to use them for their own political agenda, as most obviously in *The Grey Prince* (1974): the charge is one of which the Boasians, and in particular Margaret Mead, have more than once been accused.14

¹³ There is another classic case in Vance's novella, *The Last Castle*, first published in *Galaxy* for August 1966, where the gentlemen of Hagedorn refuse even to recognise the revolt of their Meks, for fear of loss of dignity.

Margaret Mead's 1928 classic Coming of Age in Samoa, which is referred to with approval by Benedict, and which had immense influence through its apparent demonstration of social calm achieved by sexual freedom (not least on Aldous Huxley's Brave New World four years later), has been convincingly demolished as an ideologically motivated travesty by Derek Freeman,

In all these respects it should be noted that Vance was not entirely without predecessors or collaborators in the science fiction field, whose use of anthropology has been more widespread than is always granted. To name only three examples, the 'cultural detective' idea was used prominently by Asimov in his 'Lije Bailey' stories, beginning with *The Caves of Steel* (1954); there is an obvious and flattering portrait of Margaret Mead as 'Dr Margaret Mader' in Heinlein's juvenile *Citizen of the Galaxy* (1957); the relationship of Ursula Le Guin with cultural anthropology is both personal (for her father and mother were both prominent Boasians) and authorial (with *The Left Hand of Darkness* (1969) imitating the conventions of the anthropologist's notes, to say nothing of later works). The potential ironies of well-meant interference with alien cultures were also a common feature of 'Campbellian' science fiction.

Science fiction does, however, remain at some level science fiction. and the authors' attachment to this dominant discourse of our age was always hard to square with Benedict's demand (for instance) that we should 'train ourselves to pass judgment upon the dominant traits of our own civilisation' (1961: 179). Vance here went as far as any with the complex ironies of his 1958 story 'The Miracle Workers', discussed at length in item 5, above, in which we see at once a working rival to science (which suggests that science too is a cultural relative), and scientific method once more raising its head (which suggests that it is in fact an absolute). 15 But Vance on the whole shows little faith in absolutes. As has been remarked (Dowling 1980: 133-4), his invented worlds are characteristically ones of intense parochialism within a universal frame; and they share such a marked lack of interest in any but the most rudimentary forms of government as to suggest that Vance has no faith in any of them. 16 Nevertheless, he has, I believe, gone further than any other author in exploring the vital and sensitive issues of cultural comparison, absolute and relative value, the balance between multiculturalism and self-respect. This is the unrecognised stem that supports his brilliant flowers of style and of xenography. He deserves to be taken as more than a great entertainer.

Margaret Mead and Samoa: The Making and Unmaking of an Anthropological Myth (1983), with a further follow-up discussing the profession's dismayed or hysterical reactions in Freeman's 'Afterword' to his *The Fateful Hoaxing of Margaret Mead* (1999).

¹⁵ 'The Miracle Workers' was first published in *ASF* for July 1958, and reprinted in *Eight Fantasms and Magics* (1969).

¹⁶ A point made by Peter Weston in an unpublished paper, 'Big Planet as Bosnia', given at the International Conference for the Fantastic in the Arts, at Fort Lauderdale, Florida, in March 1996.

7 Introduction

SF Authors Really Mean what they Say

This piece was first delivered on 22 March 1996 as the Guest Scholar lecture at the International Conference for the Fantastic in the Arts. held every year in Fort Lauderdale, Florida. The audience consisted mostly of academics, not all of them concerned with science fiction -'the fantastic' is a much bigger category than sf, and includes, besides fantasy, much more 'canonical' material like 'magic realism'. This must serve as my excuse for dragging in definitions of theoretical terms, though of course there was a point in doing so. One of the strange things about too many literary critics is that while they no doubt mean what they say, they do not mean it literally. They proclaim (following both de Saussure and T.S. Eliot) that words have no fixed meaning, but in everyday life they expect to get exactly what they ask for. They are all for diversity and against canonicity, but all too often anything that does not fit the agenda (like sf, not to mention Tolkien) will be written off as 'not literature'. Challenge authority is the name of the game, but the authority of the liberal, middle-class, haut bourgeois literary profession is sacrosanct, as my colleague John Carey pointed out (see p. 4, above). And so on.

By contrast, sf authors *really* mean it. They do not think that things have to be the way they are, they are quite sure they are not going to stay that way, they enjoy stepping outside their own *habitus* and trying to see it from outside. All this means that the definitions of terms like 'textuality' and 'différance' – drawn up by literary scholars without reference to or awareness of sf – often fit sf much better than mainstream, or canonical, classics. It is one reason why I kept waving things during the 1996 lecture, as indicated in the text here by remarks within square brackets. I understand what is meant by saying 'everything is a text', and it is quite easy to demonstrate it, though in sf one would probably say, more accurately and less literarily, 'everything contains information, if you know how to process it'.

Something I did not say in the lecture, but which becomes obvious in the context of this volume, is that the 'alternate history' sub-genre clearly relates to the 'change-the-past' sub-genre discussed in item 4, above. In 'alternate history' the past has been changed, but writers of 'alternate history' have taken up a position well towards the plus end of the 'possibility' axis of Figure 1, above. They all motivate the change that has taken place by some seemingly trivial or accidental event, or non-event, in the past, which like the points on a railway line has sent history spinning down an ever-diverging track. They may be all over the place as regards the 'desirability' axis, however, and this is one of the tricks that Kingsley Amis plays on his readers: the world of Hubert Anvil seems artistically immensely superior to anything we have, as well as much more peaceful and harmonious. Later on in the story the price of it all is betrayed (baffling and upsetting inexperienced sf readers, as explained in detail in item 8, below).

So, 'change the past' relates to 'alternate history'. 'Alternate history' further relates to the 'world-changing invention' story, as well as the 'time travel' story (which has its own further logic and further subdivisions). It is connections like these that make me think that maybe there is some meta-frame or overall structure within sf which could be revealed by the structuralist approach abandoned by critics for the past fifty years. One reason for abandoning it was that it seemed to be robotic, but in sf that is clearly not the case. The 'alternate history' sub-genre offers a clear instance of sf authors arguing with each other. If one of them picks x as a change-point, another will think of y. Or if they pick the same change point (several writers ever since Winston Churchill have picked the Battle of Gettysburg in the American Civil War) then they will give different views of what would happen, what would have happened, next (and my uncertainty about which tense to use takes us back to the comments on Qualified Reality in item 3, above). And they take different views about 'steamboat time' or the unstoppability of technology.

In fact, as said in this piece, if sf is its own language, it is like a real language: there are set rules of grammar (or we wouldn't understand each other at all), but there is perfect freedom to invent new words, though there is absolutely no guarantee that they will keep the meaning the inventor intended. Language is both neater and more complicated than non-linguists imagine – and most critics these days are non-linguistic to a shameful degree – and, *mutatis mutandis*, the same is true of sf. The roboticism here comes from literary theory (see Terry Eagleton's dehumanising attempt – which, to be fair, he has since abjured – to cut authors down to size and replace them by social forces, as cited below). The late Iain Banks could have told him differently

(and, no doubt, would have, as you would realise if you had ever met Iain Banks; see his remark, quoted on p. 87, above).

Perhaps I could sum up authorial interactions in sf by saying that while it is communal – cue for long definition of 'intertextuality', which I will skip – it is also unpredictable, or, to go back to the French word I keep using in defiance of Gustave Flaubert, *imprévisible*. If the plot was not unpredictable, there would be no fun in it, but the fun is increased if the unpredictability takes place within the genre frame. And if you do not understand the genre frame, you cannot read the plot at all (see next item!). I should add that I learned an awful lot about all this by working with Harry Harrison, on both the alternate history trilogy mentioned here and his preceding one, the *West of Eden* sequence. All critics should go to school with an author.

Alternate Historians: Newt, Kingers, Harry and Me

The title of this paper may seem, to a linguistic purist, to be already in error.¹ It is true that the science fiction sub-genre of 'alternate worlds' or 'alternate histories' has already been accepted into the canon of possibilities, as defined, for instance, by the Clute and Nicholls *Encyclopedia of Science Fiction* (1993: 23–5). The word 'alternate' might well, however, seem to be a mistake. According to the *Oxford English Dictionary*, as first printed, in the volume for the letter 'A', of 1884, but still in the revised edition of 1989 (i. 367–8), the root meaning of 'alternate' as an adjective is always something 'Done or changed by turns', as in the term 'alternating current'. The phrase 'alternate histories' suggests, then, that the real world and its alternate other are somehow flashing on and off in pairs. The word intended, surely, is 'alternative': according to the *Oxford English Dictionary* again (sense B.4), 'one of several courses which may be chosen'.

One reaction to the purist is simply to say that words take on the meanings generally attributed to them, and I have no objection to that strategy. However, for once, I would defer to the purists, but still maintain that, although in most cases of 'alternate histories' 'alternate' may be the wrong word, *in this case* the phrase is 'alternate *historians*', and the purist meaning of 'taking turns' is deliberately intended. Each of the four writers mentioned in the title has at least a potential double existence, as I can demonstrate.

To take them in order, 'Newt' is Newt Gingrich, best known to the public [in 1996, when this piece was first delivered] as the Speaker of the [US] House of Representatives, but also, in collaboration with William Forstchen, the author of an 'alternate history', entitled *1945* (1993). He is both a writer and a political figure, and there is no doubt

¹ The pedantic point here is also made by Duncan (2003), which gives an overview of the genre's nature and history.

that the correlation is kept in mind by most readers of his half-authored book. 'Kingers', meanwhile, is by the late Sir Kingsley Amis, well known as a person to members of the audience here – for instance, Brian Aldiss [to whom at this point in the lecture I turned for confirmation] – better known to most as an author of mainstream as well as genre fiction, doubling also as both a writer and (more influentially) a critic of science fiction. Among other aspects of doubleness which one might note in the case of Amis is the fact that, although he is the author of what I regard as one of the classics of the 'alternate worlds' sub-genre, his novel *The Alteration* (1976), this has never been much regarded within the field, and has been left imprisoned in the ghetto of the mainstream: his attempt to alternate mainstream and genre was appreciated by neither side (a point made much more fully in the piece that follows).

To take myself, then, immodestly out of turn, my two claims to being an 'alternate historian' come in the first place from being, like Mr Gingrich, a collaborator – in my case with the established author Harry Harrison in a series of three 'alternate world' novels, *The Hammer and the Cross, One King's Way, King and Emperor* (respectively 1993, 1995, 1996); and, in the second place, like Sir Kingsley, from attempting the two roles of author and critic of science fiction, so that one sees the field by turns both from inside and from outside.

The fourth name in my list, Harry, ought, of course, to be my collaborator Harry Harrison. But he too alternates, at least in the course of this address, with the very well-established author Harry Turtledove (also, it may as well be said, at one time an academic and editor of *The Chronicle of Theophanes: An English translation* (1982)). One odd coincidence is that both Harries have in a way written the same book, about the Confederacy winning or hoping to win the Civil War by the introduction of time-travelled weapons, in Harrison's case as *A Rebel in Time* (1983), in Turtledove's as *The Guns of the South* (1992). If these authors were critics, one feels there would be cries and disclaimers and redefinitions of plagiarism flying around. In the more realistic world of fiction, there is no need to do more than say, again, coincidence.

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This, however, brings me on to my first point about considering science fiction 'alternately', which is that there is a kind of knowledge known to the critic, and a kind known to the author, and that more serious attempts should be made to integrate them, instead of keeping them, so

to speak, in separate areas of the brain, or the library. The first thing I would say about 'alternate histories' is, I believe, a purely critical remark, of little or no interest to the creating mind. It is that this sub-genre of science fiction, like most if not all of them, is heavily rule-bound. It obeys a kind of grammar. Rule 1 for the alternate history, corresponding as it were to the 'Sentence = Noun Phrase + Verb Phrase' of traditional grammar, is: Find A Divergence Point – a point where the real history we know and the alternate history we are being introduced to split off the one from the other. There are evident sub-rules for this main rule. The divergence point, one might say, should be (1) plausible, (2) definite, (3) small in itself and (4) massive in consequence. In the rhetoric of alternate history sub-rules (3) and (4) ought of course to work by playing against each other. What is wanted is the biggest possible change of effect from the smallest possible change of cause. All the examples I consider obey both rule and sub-rules, and it follows that I have no difficulty in identifying what the divergence points are.

Gingrich and Forstchen's, to take 1945 as the first case, occurs on 6 December 1941. The novel 1945 declares that Hitler had a minor and in itself non-significant accident on that day, and was accordingly out of action for a short while. What is the significance of the non-significant accident? It is that 6 December 1941 was the day before the Japanese attack on Pearl Harbor. If someone more sensible than Hitler had been directing Germany in the immediate aftermath of that event, Gingrich and Forstchen suggest, Germany would not have declared war on the USA. Surely (a conventional view might have it) Roosevelt would just the same have declared war on Japan's ally Germany, so history would have turned out the same? That, however, might be considered as a matter of American practical politics, on which one of the authors of 1945 must be considered, outside his authorial role, as a major authority. And, he says, or his book says (for I can see no way of disentangling alternate authorities here), that Roosevelt not only would not have, but could not have. He would have stuck to the one enemy, Japan. If, then, events had followed that course, what would the world have looked like in 1945? One has to give Gingrich and Forstchen every credit for obeying the sub-rules. Their divergence point is absolutely definite, ominously plausible, small in itself, and obviously potentially massive in consequence.

The divergence point in Amis's *The Alteration* is presented with more literary artifice, but arguably is not as satisfyingly clear as that of *1945*. It is given to us with a studied generic self-reflection, of a kind clearly too difficult for several of Amis's mainstream literary reviewers.² In

² They are listed in Dale Salwak's 'reference guide' to Amis (Salwak 1978:

the world of *The Alteration*, SF (Science Fiction/Speculative Fiction) has become TR (Time Romance) or IF (Invention Fiction), while Alternate Worlds have become CW (Counterfeit Worlds) – Amis holds up narrative for a moment to address the critical point of whether CW is or is not a form of TR. The divergence point is, however, buried in the paraphrase of the plot of a CW novel, The Man in the High Castle, by Philip K. Dick. This, of course, is in our world an AW novel as it is a CW novel in The Alteration. But the plot of the alternate Man in the High Castle has nothing to do with Dick's Man in the High Castle (published in 1962, a novel rather like 1945, about the world created by the defeat of the Allies in the Second World War). Instead, the alternate plot summary presents a world much more like ours than either the world of Dick's known and actual novel or the world of The Alteration. Between these several possibilities readers have to pick their way. Without on this occasion trying to show the process of decoding at work, it seems to me that the divergence point indirectly indicated by the CW novel is this. The world of *The Alteration* was created when the plan of Henry Tudor to call his eldest son Arthur in the hope that he would fulfil the ancient prophecy of Arthur's return, succeeded instead of failing as it has done on every other occasion in English history.3 This Arthur married Catherine of Aragon and fathered a Prince Stephen, who with the aid of Pope Germanian I defeated a rebellion by his wicked uncle Henry in our world Henry VIII, creator of the Reformation, in the alternate world Henry the Abominable – and won a Holy Victory that established Catholicism permanently in the Christian world. There is an irony in this familiar to anyone who has ever looked closely at a contemporary British coin [at this point, when the lecture was being delivered, I pulled a coin out and showed it], namely, that British monarchs up to the present Queen have determinedly retained even on their coinage the title 'D.F.', Defensor Fidei, Defender of the Faith, awarded to Henry VIII by Pope Leo X, and never yielded by his heirs even though indignantly rescinded by Pope Paul III after Henry's Reformation. In the world of The Alteration there is no irony, the Kings of England are Defenders of

^{144–9).} Several accused Amis of all but plagiarising the 'alternate world' idea, not noticing his coded internal references (for which, see below). See at much greater length item 8, below, 'Kingsley Amis's Science Fiction and the Problems of Genre'.

³ Henry I called his heir Arthur; he drowned in 1120. Henry VII called his heir Arthur; he died in 1502. Edward the Black Prince called his eldest son Arthur; he too died before his father and grandfather, Edward III, for Richard II to succeed in 1377. This public relations exercise has not been tried since the sixteenth century.

the Faith, and there is no quibble about which faith they are defending. From this accidental survival of a now-forgotten prince there follow, in *The Alteration*, appropriately massive (and ironic) consequences. With the triumph of Catholicism both Martin Luther and Thomas More become Popes – the former the Pope Germanian who triumphs over Henry – northern Europe is retained for the papacy and, by alternate-year 1976, Christendom and the Pope's authority are coterminous. No World Wars, no science, no Communism, and only the Schismatic colonies in New England to hint at what might have been (or to us, of course, what is).

One has to say that in spite of its cunning self-reflection, this scenario on the whole loses out to the Gingrich/Forstchen one in terms of definiteness: there is no definite date of change to point to, and the details above have to be extracted with some labour from a fairly extensive narrative. The Alteration scores high on plausibility, though - its story is after all a good deal more plausible than the continuing use of 'D.F.' on British coins, which no novelist could have invented. It may on the aggregate score higher than my own divergence point in the trilogy mentioned above, one so recondite that perhaps no one has ever noticed it. I can prove the rule, however, by referring to a story that in some ways acted as the pilot study for the trilogy, a short story called 'A Letter from the Pope'.4 The divergence point here is perfectly clear, both historically and personally. Years ago I recall observing, in volume 1 of the English Historical Documents series, the translated texts of two letters from Pope John VIII to Ethelred Archbishop of Canterbury (see Whitelock 1955: 811–13). In the first of these the Pope remarks that all the English clerics in Rome have agreed to wear ankle-length tunics instead of hip-length ones, and that this must now be the rule. In the second of them he sympathises with the Archbishop's problems with his king, and declares, sternly, 'we have admonished the king to show due honour to you ... if he wishes to have the grace and benediction of the apostolic see'. The irony lies in the date of the second letter, 'end of 877 or early in 878'. As we know from The Anglo-Saxon Chronicle, at exactly this date (5 January 878), King Alfred of Wessex was forced into flight by a surprise attack on his court by pagan Vikings, to burn the cakes (at least in legend), gather his forces, and win the victory which kept England within Christianity. Quite what the king would have said if a stern and totally irrelevant letter about tunic lengths and the rights of the Church had in fact arrived at this point can only be imagined: and that imagination, of course, is the basis of 'A Letter from the Pope' and

⁴ It came out as Harry Harrison and Tom Shippey, 'A Letter from the Pope', in Benford and Greenberg 1990: 185–213.

the trilogy that followed it. I feel that this divergence point must at least score highly on historical definiteness and psychological plausibility, as well as on intrinsic triviality. As for massive consequence, one can only remark that had it not been for King Alfred this conference would be speaking Danish.

The divergence point for both Harry Harrison's *Rebel in Time* and Harry Turtledove's The Guns of the South is once more almost a traditional one. going back to Ward Moore's famous 'alternate world' novel Bring the Jubilee (1953), and further back indeed to the seminal collection of essays edited by J.C. Squires, If It Had Happened Otherwise: Lapses into Imaginary History (1931), with its famous piece by Winston Churchill, 'If Lee Had Not Won the Battle of Gettysburg'. All four works, Churchill, Harrison, Moore and Turtledove, present a world in which the Confederacy won the Civil War. Churchill and Moore both centre their alternate histories on the traditionally tiny divergence point - the early seizure by the Confederates of Little Round Top, which (so the theory goes) would have been an easy business on 1 July 1863, but which was to lead to bitter defeat the following day. The two books by the two Harrys do not follow quite the same 'for want of a nail the battle was lost' format, but it could be said that this is because they have moved over to a slightly different sub-genre of science fiction, not the pure or classic 'alternate history' but the closely related 'change-the-past' story, of which the paradigmatic example may well be L. Sprague de Camp's Lest Darkness Fall (1941), with behind it Mark Twain's A Connecticut Yankee in King Arthur's Court (1889). The Alteration and The Guns of the South are alike, for instance, in that they show us a world historically different from our own, but in the first case the difference is just accident, in the second it is the result of deliberate design on the part of time travellers from our era, who go back in time to give the South AK-47 automatic rifles and consequent victory. Both sub-genres carry the insistent message that history was not inevitable, that things did not have to be the way they are, and were not the way they now seem. Both rely heavily on our developed sense of anachronism (which they continually upset). The 'change-the-past' sub-genre, however, can afford to be less economical with its divergence points, in that time travellers may make several attempts to change the past, as in de Camp's novel, or may act as a continuous diverging force, as in Turtledove's. It could be noted here that the Harrison version of the Confederate victory plot is notably more parsimonious than the Turtledove one: Harrison allows only one 'insertion' into the past, with one invention (the Sten gun, chosen for particular purpose), and in that respect sticks closer than Turtledove to the rules of definiteness, plausibility, smallness and massiveness laid out above. One might conclude perhaps that within the overall 'grammar' of science fiction, 'alternate history' and 'change-the-past' follow similar but slightly different 'clause structures'.

Nevertheless, I hope the first point I wish to make, the critic's point, is established. 'Alternate histories' are rule-bound, and the rules, like the divergence points, are easy to discover.

By contrast there is a question about all these novels which is probably critically unanswerable, so much so that critics have developed a theory which says that it is improper even to ask it: where does it all come from? where did you (the writer) get the idea? what was the inspiration of this work? These are interesting questions, and if they seem naive or unprofessional I believe that is simply because there seems to be no way for a critic to answer them by pure reason alone. We critics have constructed an ideology to excuse (or to deny) failure. And one can see how the failure goes. If a critic were so incautious as to ask, 'why did Kingsley Amis write The Alteration?', he or she might come up with several plausible answers, based on 'study of the text'. It could be said that The Alteration sprang from extreme authorial dislike of the political situation in Britain in the mid-1970s, when the Left seemed to be in complete control, when Anthony Burgess wrote his bitter and angry 1985 (1978) as a coda to Orwell. There is plenty of evidence to support this view from within 'the text'. It is a running if illogical joke within The Alteration to introduce characters from our real world, as if they would have been born regardless of all other changes, but to give them a role opposite politically but (the implication goes) identical temperamentally to the ones they have actually fulfilled. So Jean-Paul Sartre becomes a hair-splitting Jesuit, Monsignors Himmler and Beria kneel side by side in the cathedral, as prelates of the Church's dreaded Holy Office – and Officers Foot and Redgrave of the Secular Arm of that same organization turn up within the narrative to castrate and murder the liberal Father Lyall. Foot and Redgrave were familiar names in Britain in the 1970s, the former (Michael Foot) at that time Secretary of State for Employment, later Leader of the Labour Party, the latter belonging to a whole dynasty of left-wing and far-left-wing actors: it is not clear whether Amis was thinking of Michael, Corin, Lynn, Vanessa or maybe all four. Both Foots and Redgraves in any case presented themselves as passionate advocates of freedom, the rights of the underprivileged, and so on, while showing a familiar admiration for Stalin. Amis's implied point is that the passion was only disguised self-assertion, that like so many revolutionaries of our history these two could (in different circumstances) commit atrocities under the pretext of belief. Anthony Burgess too seems, in The Alteration, to have been a victim of the Secular Arm.

A critical argument could then easily run as follows: Amis's dislike of tyranny led him to see contemporary politics as a kind of theocracy, and so to imagine a world with theocrats in power, and so one where the papacy crushed its rivals and became a theocracy. The argument would be logical, undisprovable from the text, critically unassailable (but, as it happens, wrong).

An alternative and even more literary argument might be to say that The Alteration sprang above all from 'intertextuality', from response to literary texts within a genre self-reflectively present within the work. Amis again gives many clues in this direction. Not only does he mention the classic Philip K. Dick novel, The Man in the High Castle, he also mentions Galliard, by Keith Roberts (an allusion to the real and very similar 'alternate history' Pavane, by the author named (1968)), The Orc Awakes, by J.B. Harris (a kind of cross between Tolkien and The Kraken Wakes, by John Wyndham, whose real name was John Beynon Harris (1953)), and even, almost invisibly buried beneath a casual reference to a railroad engineered by 'the great Harrison', another classic 'alternate history'. Harry Harrison's A Transatlantic Tunnel. Hurrah! (1972). which is largely about railways. The point was revealingly missed by several of Amis's mainstream reviewers (see further in the item following) who pounced on the basic idea of The Alteration with cries of 'this has been done before!' (as if no one should write in any genre once we had one example of it). But it would be easy to turn the point back on such reviewers, and see The Alteration as a work stemming not from political anger, but from literary emulation.

This argument too would I believe be wrong. Kingsley Amis actually told me what set him thinking about The Alteration, sometime in the summer of 1977. The occasion was the presentation to him of the John W. Campbell Award for best sf novel of 1976. I was the Award secretary at that time, Jim Gunn asked me to make a little speech saying why we thought it deserving of the award, and I did so, saying some of the things repeated here. But Amis then told me, in a very relaxed and friendly way (which was not his normal reputation) that the spark which set off his novel was neither political resentment nor literary abstraction, but the existence of an artefact. Though it is customary for critics to disbelieve authors who say such things, arguing that they have ample motive for falsehood, the author's solution strikes me in this case, as in most cases, to be more elegant, more informative, and above all more unpredictable than those I have suggested above - and see the remark made twice above, about sf and its preference for le mot imprévisible. The central 'alteration' in Amis's novel is after all not the great alteration which has created a different world, but the minor

surgical alteration to be carried out on the choirboy Hubert Anvil, to make him a eunuch and preserve his singing voice. The artefact which set the novel working in the author's imagination was a recording, an old gramophone record, of just such a person singing. The amazing thing about this artistically (Amis said) was that it was the sound of a soprano, but one singing with the power and timbre of a full-grown man – a sound which could never be heard in nature. The amazing thing about it historically is that in Italy somewhere, and in some unexplained way, it had remained the practice to continue to castrate boy singers not into the twentieth century, but long enough into the nineteenth for survivors to be preserved on a gramophone record. Such a survival seems to contradict much of what we know, or think we know, about history. Surely such a practice must have become illegal, as it was always immoral? After all, nineteenth-century Italy was a part of European civilisation - wasn't it? The castrato singing on a disc is an apparent anachronism of exactly the same type as the cover of Harry Turtledove's The Guns of the South [which at this point I held upl, which shows Robert E. Lee holding an AK-47, banana-clip magazine and all. But it is no invention, it is a reality. The doubts it generates about our normal interpretations of reality are quite enough to create a narrative: in this case, a narrative that explains how such an 'alteration' could be not only tolerated, but socially praiseworthy.

The surprising but satisfying quality of Amis's explanation makes a writerly point to set against the critical one made above. If critics can see how alternate histories are rule-bound, and could set themselves if they so wished to write the rule-book, then writers can furnish an extra dimension to the rule-book, and continually bring in the strange, the individual and the unpredictable. One could say that while critics could write generic grammars, which are intrinsically finite, writers can produce the generic dictionary – and dictionaries are intrinsically open-ended, for anyone can at any time introduce an entirely new word. A further implication of this image is that to learn any language a child has to interiorise both the grammar and the vocabulary; just as writers have to learn both the conventions of their genre and the continual need to step outside them, to revive and renew them with elements that have never been used or noticed before. My overriding point is that is it a critical weakness, in a living field with living informants still available to us, to insist on sticking to the critical rules drawn up for the study of dead literatures, by dead authors, often in dead languages. In this area, writer/critic alternation should be welcomed, if only because it is possible.

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In saying this, however, I am running counter to a whole corpus of established critical belief, and critical theory. I would like to justify that by turning to two topics not normally connected: first, the particular nature of the reading science fiction experience (see item 1 in this volume), and, second, the oddly close match between that experience and several of the more extreme tenets of some modern critical theory. Leaving writers and critics to one side for a while, I would like to consider the nature of science fiction textuality.

'Textuality' is of course now a term of art. According to the Toronto *Encyclopedia of Contemporary Literary Theory*, which I cite here only as a statement of what is generally accepted:

the term marks both a breakdown of the boundaries between literature and other verbal and non-verbal signifying practices, and a subversion of the principle that any text can function as an object whose meaning is coherent and self-contained. (Jones, in Makaryk 1993: 641–2)

Associated with such redefinitions are a string of theses that I cite here in no particular order. They go, for instance:

Words speak us [i.e., we do not use language, it uses us. We ourselves are linguistic constructs].

Everything is a text, and there is nothing outside the text [i.e., there is no such thing as reality outside our reading of it, because we construct reality linguistically, i.e., textually].

The author is dead [He or she is now an author-function, or an ideological product. Who was George Eliot? According to the critic Terry Eagleton, scornfully cited by Jackson 1994: 224, 'The phrase "George Eliot" signifies nothing more than the insertion of certain specific ideological determinations – Evangelical Christianity, rural organicism, incipient feminism, petty-bourgeois moralism – into a hegemonic ideological formation which is partly supported, partly embarrassed by their presence'. So much for authors!].

History is only another discourse [Since there is no reality outside the text, and texts are linguistic constructs, even documentary history is at best only a myth].

Language is power [Since words speak their users, those who can control

or manipulate the sign-system will eventually control both thought and people, and indeed reality, because there is only linguistic reality].

Theses like these may well seem offensive (like the dehumanising definition of 'George Eliot', which, as admitted above, the author has since abjured) or potentially dangerous (like the last one, with its close echoes of Orwell's Newspeak and the beliefs of O'Brien the torturer in Part 3, chap. 3 of 1984). They do, however, at any rate within science fiction, relate to rather clear points. Going back to the quotation about 'breakdown of the boundaries between literature and other ... signifying practices' [I was speaking at this point to the live audience], three times already in this address you have seen me: turn to Brian Aldiss for confirmation (he is a text); take out a coin and read its inscription (it is a text): hold up a picture of Robert E. Lee with an AK-47 (it is a text). There is no mystery about any of these statements. And when one looks more closely at textual passages of science fiction, and especially of 'alternate history', and considers what is going on while one reads them, the provocative theses listed above perhaps lose much of their mystery, and indeed their provocation. Because, as in this volume I keep saying, sf authors really mean them; they are not just 'gesture politics'. Take, for instance, the passage near the start of The Alteration, describing St George's Cathedral at Coverley, Oxford, centre of the English Empire:

Apart from Wren's magnificent dome, the most renowned of the sights to be seen was the vast Turner ceiling in commemoration of the Holy Victory, the fruit of four and a half years' virtually uninterrupted work; there was nothing like it anywhere. The western window by Gainsborough, beginning to blaze now as the sun first caught it, showed the birth of St Helena, mother of Constantine the Great, at Colchester. Along the south wall ran Blake's still-brilliant frescoes depicting St Augustine's progress through England. Holman Hunt's oil painting of the martyrdom of St George was less celebrated for its merits than for the tale of the artist's journey to Palestine in the hope of securing authenticity for his setting; and one of the latest additions, the Ecce Homo mosaic by David Hockney, had attracted downright adverse criticism for its excessively traditionalist, almost archaising style. But only admiration had ever attended – to take a diverse selection - the William Morris spandrels on the transept arches, the unique chryselephantine pyx, the gift of an archbishop of Zululand, above the high altar, and Epstone's massive marble Pieta. (7–8)

Nine works of art are mentioned in this passage, all of them fictional, but all except one (the pyx) ascribed to known English artists. The first of them, Wren's dome, perhaps causes no particular surprise. There is a Wren's dome at St Paul's, and translating it to St George's is not much of a change. As the works continue to be listed, though, two effects are created: one, a growing awareness of what might have been if talents as scattered as Hunt's and Gainsborough's had been brought together, and two, a realisation that in this world outsiders have been reconciled and brought into harmony, as they were not in real history. In our world William Blake found no artistic patron till his last years, and worked in the cheap but fading medium of watercolour. William Morris created a series of murals for the Oxford Union; they too were allowed to fade and disappear. Furthermore, though Blake wrote the great hymn 'Jerusalem', with its strange appeal to 'build Jerusalem / In England's green and pleasant land', his patriotism seems cranky, almost insane, while most of the others show no particular national feeling at all. On his trip to Palestine, Holman Hunt painted, in our world, not 'the martyrdom of St George' but 'The Scapegoat' - an image of rejection, not of triumph. In Amis's world these talents have been enlisted to create a genuine national shrine, which includes in it not only the half-mythical St George (England's patron saint, removed in our world from the Catholic canon in 1969) but also the genuine (if clearly mythicised) figures of St Helena and St Augustine. The cathedral is a centre at once of artistic genius, of national feeling, and of Catholic feeling. 'There was nothing like it anywhere', says Amis, and there is nothing like it anywhere: our loss, our failure.

But the sense of failure becomes most acute, perhaps, at the 'Ecce Homo' mosaic by David Hockney. In our world, David Hockney was born in Bradford, England in 1917, but moved to Los Angeles in 1978. He is famous for his creation of the 'California modern' style. How strange to see a work of his criticised for traditionalism, even archaism! And the work is an 'Ecce Homo'. This means only 'Behold the Man', and is traditionally a portrait of Christ taken down from the Cross, as is clearly intended here. In our world, Hockney created no religious art. He is, however, as famous for his homoerotic works as for his modernism; and in the dialect of Amis and his coevals, 'homo' (pronounced 'hoe moe', not Latin homo) was a disparaging term for a homosexual. It is hard to know how to react to this imagined mosaic. It seems to say: (1) in the alternate world, Hockney would have had no need to go into exile; (2) he would have been brought into the centre of the culture instead of being marginalised; (3) he would have been a traditionalist not a rebel; (4) his talents would have been recognised and enlisted for religious ends – so far so good. But (5), perhaps, his homoeroticism would have been suppressed; and (6), even more uncertainly, it would have broken out in yet another way, in portrayals of masculine beauty in a religious mode – unless, that is, the 'Ecce Homo' reference is a mere pun.

I have spent more space here 'explicating' the references than Amis did in creating them, and not succeeded at the end. My main point, however, is to show how easily passages like the one quoted fill modern definitions of textuality. Just as parts of this address have shown that there really is no boundary 'between literature and other verbal and non-verbal signifying practices', so the cathedral description very obviously subverts 'the principle that any text can function as an object whose meaning is coherent and self-contained'. The description is not coherent. I have no idea how I should take the 'Ecce Homo' pun, if pun it is, and little more about how I do take it. The description is not self-contained either: to understand it one needs to bring in as much awareness as possible of real art history. It relies on a principle of running contrasts, or alternations. And yet at the same time 'there is nothing outside [this] text', for Amis's world has no existence whatsoever outside the text of *The Alteration*. Its whole history genuinely is 'only another discourse', and the tempting and beautiful image the work (for a while) creates (a world where passenger pigeons still darken the sky, where Yamamoto was an architect not an admiral, and where Nagasaki and Hanoi are not names of horror but of peace) is entirely a linguistic construct, though one necessarily abetted by the reader's contrastive and comparing responses. The Alteration, in short, is a 'textbook example' of the principle of 'textuality'. It seems to be what textuality means.

Is this just another coincidence, or a *tour de force* by an unusually literary author? One could easily make a similar demonstration from Gingrich and Forstchen's *1945* (though this is a book whose alternations I found significantly harder to follow). The basic scenario of the novel is that in its alternate history the USA has defeated Japan, and could now join with Britain to fight Germany. But by 1945 Germany has defeated Russia, and is prepared to refight the Battle of Britain with rockets and jet planes. On the other hand, the USA has all but developed the A-bomb. Hitler needs to destroy the bomb factory at Oak Ridge, Tennessee, and sends Otto Skorzeny to do it. All that stands in his way is the sheriff of Oak Ridge, Tennessee, presented to us playing cards quietly with his deputy and a guest in a scene quite unlike anything in Amis, one of emphatic ordinariness. When I first read it I failed indeed to note a critical sentence as the sheriff and his guest leave in response to the first vague alarm:

Alvin followed his friend out into the porch, casually snagging his battered Springfield rifle from where it leaned by the door on the way by, and proceeded on to Frank's Ford. (263)

The guest, it seems, is Alvin York, 1918 hero of the First World War. Is he just a character in the novel, in the fictional universe? He was, apparently, in reality a deputy sheriff in Tennessee in 1945. It would have been possible for him to have clashed with Otto Skorzeny. But, of course, Alvin York is also a myth, and his 'battered Springfield rifle' is an icon. He now forms part of the myth of 'the American rifleman' (a phrase I learned incidentally only from science fiction),⁵ of which other parts are Fenimore Cooper's Natty Bumppo, a fictional character, and Davy Crockett, a historical character. York, in 1945, is somewhere between the two. Exactly as with *The Alteration*, 1945 is penetrated by other stories, other texts, other allusions, creating the running contrasts with what readers know did happen, and their continuing assessment of plausibility, without which alternate history could not work: Even though, one has to say, different readers are bound to make different assessments and even different recognitions (as my near-blindness to a specifically American myth tends to show).

The critical term which can hardly be avoided here is Derrida's différance, with its double meaning of 'difference' and 'deferral'. The Toronto Encyclopedia of Contemporary Literary Theory explains that 'if there are only differences [within the system of language] then meaning is only produced in the relation among signifiers not through the signified; the signified is thus endlessly deferred and delayed through the differential network' (Adamson, in Makaryk 1993: 534-5). I am a good deal less clear what this means than with the earlier definition of 'textuality', and I do not accept the pseudo-Saussurean point from which the argument begins (thoroughly destroyed by Jackson 1991), but there is no doubt that this is a reasonable description of a reader of alternate histories at work. Alvin York and his battered Springfield rifle, or David Hockney with his Ecce Homo mosaic, have to be seen in their immediate textual contexts: the difference between that and what we regard as the real-world context (York in uneventful retirement, Hockney in Californian exile) has to be recognised, thus différence; but judgement as to which is more real or more plausible has to be deferred to allow the novel to continue to

⁵ It occurs in chapter 26 of Kurt Vonnegut's *Player Piano* (1952). For the creation of the Alvin York myth, largely through film, see Lee 1985. A final point about myth, authors and reality, is that Vonnegut was himself an 'American rifleman' in the Second World War.

be read, thus différance. And this process, repeated literally thousands of times in the course of these complex narratives, which even more than other science fiction genres rely on detail and on a continuous flow of information, creates an exceptionally strong sense of how fragile our own 'real' history is. Things did not have to be that way. Maybe, indeed, they were not that way. What, after all, do most of us know first-hand about the Second World War, still less the English Reformation, and how reliable would even first-hand knowledge be? Books like 1945 and The Alteration are profoundly disorienting. They depend very heavily on 'intertextuality', and they make you feel how much of our perceived reality is intertextual too.

And yet, to add a writerly coda to the critical point just made, I do not think this is just a matter of sporting with signifiers in a purely linguistic world. Though I have said little about Turtledove's Guns of the South, I regard it as an admirable book because although it takes on a central current American anxiety, over race, it does so without falling into the comic-book style of so much official history. I have no reason to disbelieve the careful statistics of the US Presidential elections of 1864 appended to the book, though these help to define its plot as the former Speaker's sense of practical politics helps to define his. There is an aggressive and challenging realism in its make-up. I could say much the same about my own collaborations, in the first of which (a point I cannot imagine anyone knowing but myself), every single Norse name used in the fictional events of 865-6 was drawn from current Yorkshire place names and could be the real name of a member of the Norse Great Army of that period. Other events in the book (including some of the most unlikely ones) stem from traditional textual sources, such as Simeon of Durham's Historia Regum, or untraditional ones, such as the bones of a long-dead sacrificed female quern-slave, buried alive in Yorkshire with her back broken. For a final example of reality penetrating textuality, I would note that a major difference between Harrison's Rebel in Time and Turtledove's Guns of the South is that between a Sten gun (Harrison's central artefact) and an AK-47 (Turtledove's). Harrison, a former sergeant machine-gun instructor, knows perfectly well how inferior the former weapon is; but also that it can be made, and was made, from simple materials well within the scope of 1860s technology. The difference makes his work significantly more economical in terms of 'changing the past' than Turtledove's. Behind all these remarks lies the assertion that while castrato recordings, Presidential statistics, bones in the ground and Sten guns may be merely textual events to almost all readers, they have not been so to the writers, myself included. And the writers are trying (successfully or not) to drive that home to the readers.

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What I have said so far may be summarised briefly. First, 'alternate histories', like other science fiction sub-genres, are rule-bound, and critics can work out the rules. Second, and by contrast, 'alternate historians' are not rule-bound in the same way, and accordingly have a kind of knowledge denied to critics but not (in the science fiction field) necessarily inaccessible to them. Third, 'alternate histories' demonstrate in an obvious and literal way critical concepts often taken to be highly recondite, like 'textuality' and différance.

What this adds up to, however, is a major critical opportunity. To generalise for a moment, it seems fair to say that nothing this century has been as obvious in the human world as the triumph of science and technology. It has been the dominating fact of our lives and our parents' and grandparents' lives. Much further down the scale of visibility, but none the less apparent, has been the failure of the humanities to keep pace. After a century of English studies, and thirty years of poststructuralist theory, we seem to be no nearer research strategies. or empirically testable hypotheses, than Aristotle. It may be that this stems from the nature of the subject, but it can also be seen as a failure of nerve. I have commented, in the first chapter of repeated editions of my book on Tolkien, The Road to Middle-earth (1982-2004), on one early-twentieth-century failure of nerve, over the insights of comparative philology and of linguistics, and have presided over resultant organisational funerals, including the abandonment of Tolkien's philological option within the English Department of the University of Leeds, in 1983, and the closure of that university's Department of Linguistics ten years later (though since repealed): even in academia, there is a price to be paid, in the end, for failure. A second and later failure of nerve, it seems to me, occurred with the structuralist project, abandoned in the late 1960s just when it seemed to be developing a research strategy and testing its hypotheses, and (as also mentioned in item 2, above) dismissed elegiacally by Roland Barthes as le rêve euphorique de la scientificité (see Jackson 1991: chaps 3 and 4 for a detailed account). Science fiction criticism, however, seems a natural field in which to attempt to recover the lost euphoria. It is both rule-bound and creative, it has a defined corpus with living informants, it exemplifies many critical concepts in extreme and even literal form. The major inhibition of my own youth fear of non-respectability, non-canonicity - has not gone, but has in its turn become non-respectable. The major obstacle now seems to be fear of the whole phenomenon of triumphant scientific discourse. A perceptive commentator on the history of literary theory, cited several times already,

indeed says exactly that. Commenting on 'textual metaphysics', he quotes a major theorist of deconstruction and says:

This would be plausible as a general world view only in a world where science and technology did not exist, and we manipulated things by verbal magic. In the universe of the technologically blind, the literary theorist would be king, which is one reason for believing that all this mystical theory is an elaborate way of escaping from the discourse of the sciences. (Jackson 1991: 201)

If this were true, it would be shameful, Science fiction criticism, however, seems to me uniquely able to integrate scientific discourse and literary discourse, while in the case of sub-genres such as 'alternate history' we are also able, and obliged, to bring in the discourse of such intermediate disciplines as history, archaeology and anthropology. Even if this project were to fail, one might remember the remark of the poet and critic A.E. Housman (a former Fellow of St John's College, Oxford, like myself and Sir Kingsley, just to make one more reference to the coincidences of reality). He said that the practice of criticism was 'not at all like Newton investigating the motions of the planets ... much more like a dog hunting for fleas' (Carter 1961: 131). If this were so, my remarks above would be wrong. But Housman was speaking of textual criticism, not of literary criticism (of which he had a much lower opinion still). As sf critics we might hope, if not to emulate Newton, then at least to construct a more scientific technique for the practice of literary criticism – which would at least help us to catch a few more critical fleas.

8

Introduction

A Revealing Failure by the Critics

I ended the preceding piece with a strong feeling that there was more to be said about the sheer difficulty of reading sf in general, and 'alternate history' in particular, and Kingsley Amis's two sf novels gave me the opportunity to draw this out. Just for once, sf got reviewed by the mainstream, and the results - it took me a long time to trace them all - were abysmal. The mainstream reviewers very nearly literally didn't know where to start. I should say that I have been a very steady writer of reviews for more than thirty years, ever since I was signed up by the Literary Editor of the Guardian in the urinal after delivering Kingsley Amis's award-presentation speech, as mentioned above (p. 131). I know that reviews for academic journals and reviews for the daily and weekly newspapers are very different animals. For the former, you have years to work in, and often some idea of what professional opinion has started to say. With the latter, you have a deadline measured in days from book arriving to copy being printed; you often know nothing about work or author; you may have several to review at once; there may be an editorial agenda you have to keep an eye on, and - this is the big difference however dull the book is, you have to make the review sound interesting! People are paying money to read this! So I can easily sympathise with reviewers getting things wrong, staging a controversy, barking up the wrong tree, etc.; it happens all the time. But the responses to Kingers's sf had an extra element of utter and often angry bewilderment, which I thought told us something about sf as well.

There is a clue in one of the great authorial put-downs, which I did not have the good fortune to hear, but which I have been told about. Apparently, some critic, or maybe a creative-writing teacher, was handing out the usual spiel about how your story had to have characters, how they had to be alive, how they had to come alive from the first moment, etc. At which a sepulchral voice from the audience – Avram Davidson's – boomed out the first words of Dickens's famous 'A

Christmas Carol': 'Marley was dead, stone-dead. To begin with'. So, do stories really have to be based on interesting individual characters? Bert Smallways, centrepiece of Wells's *The War in the Air* (1908), is deliberately uninteresting, dead average or worse, as his name suggests. The Time Traveller, in The Time Machine (1895), doesn't even get a name. And there are no characters in Wells's 1903 'The Land Ironclads', which I picked as lead story for my 1992 Oxford Book of Science Fiction Stories, just a dumb-cluck reporter. The story is about things – and, admittedly, the type of person who makes things. Wells's reporter is all set to write a piece dehumanising these, which he intends to call 'Mankind versus Ironmongery'. But, as Wells wrote in the last sarcastic words of his complex and sympathy-shifting story, the half-dozen unimpressive young tank-crewmen standing round at the end in their un-heroic 'blue pyjamas', 'had also in their eyes and carriage something not altogether degraded below the level of a man'. See further my discussion of the 'fabril' concept above (pp. 41-2).

Anyway, even John Carey decided to play this card in his review of The Alteration. Carey is a former colleague, even more critical of the literary intelligentsia than I am, and I have every respect for his opinion. But he took the easy route in saying Amis's novel was good for the usual reasons (interesting characters, flesh and blood, etc.), whereas I think it is good because of its provocative scenario and very deft handling of the built-in sf expectations, of which mainstream reviewers were not aware. Most of the other reviews were just shameful. Sometimes it was because the reviewers just didn't know enough to start, like the poor fool who didn't know the meaning of his own phrase deus ex machina don't try Latin on people like Amis, he got a proper education long ago. Sometimes they just didn't catch on to the clues provided, like Amis's jokes about other alternate history titles, or the references to Shakespeare and Huxley and Orwell, etc. But most of the time it was the old problem: sf sits loose to its writers' and readers' habitus, it is prepared to see 'this world' as temporary, optional or just plain accidental, and this comes over to many as dreadfully threatening, especially - and here I am being personal - to people who feel they have done OK in this world but might not do so well under different ground rules.

Anyway, Amis's works are very literary indeed in some ways – he taught English at Peterhouse, Cambridge, and you can't say fairer than that – but he took the broad view of literature, writing not just sf but other genres like ghost story (*The Green Man*), detective story (*The Riverside Villas Murders*), James Bond story (*Colonel Sun*), etc. They really should not have tried to teach him his business. Another thing he was good at was avoiding the all too traditional sf cop-out ending. And, finally, though

his memoirs were received with trepidation by all, for he had a wicked tongue and no scruples, careful use of the index indicates that he never had a bad word for anyone within sf: he was a trufan from way back. It is a pity, accordingly, that *The Alteration* has never quite established itself among sf readers, while *Russian Hide and Seek* has vanished off the radar screens. Get 'em and read 'em.

Finally, since this functions as a reinforcing coda to the piece above, I have been able to cut out some of the plot summary required in the original independent version.

Kingsley Amis's Science Fiction and the Problems of Genre

When Kingsley Amis's first science fiction novel, *The Alteration*, was published in 1976, it created an immediate problem. Amis was by then a well-established author, and his book had to be reviewed. But though the editors of literary reviews demanded some sort of response from their reviewers, neither in that case nor in the case of Amis's second science fiction novel, *Russian Hide and Seek* (1980), were they prepared (with one single exception) to allow someone familiar with science fiction the freedom of their columns. We have as a result a corpus of some thirty responses to *The Alteration* as a science fiction novel which mainstream reviewers were obliged to take seriously, and about half that number for *Russian Hide and Seek*. Surveying that corpus is a dispiriting exercise, but it does at least illuminate the difficulties which mainstream critics face in dealing with science fiction. The difficulties centre for the most part on unrecognised characteristics of genre.

One has to concede that the review columns of weekly journals are not the place where one looks for deep judgement, to some extent precluded by the need for rapid response, usually without any useful precedent to react against or build on. A few total failures are thus only to be expected. Probably the most unfortunate remark made by any reviewer came from the anonymous writer in *Kirkus Review* for 15 November 1976, who complained about the book's 'deus ex machina dénouement'. The phrase was apparently just a way of signalling the reviewer's disapproval of an unexpected ending. But what happens in

¹ Dale Salwak's *Kingsley Amis: A Reference Guide* (1978) came out in time to catch most of the reviews of *The Alteration*, which I have supplemented from the cumulative *Book Review Index* produced each year by Gale Research Co., Detroit, Michigan. These works should be consulted for page and volume numbers, the format of which differs a good deal in these varied and non-scholarly publications. A fair number of reviews of both books are of course mere mentions.

The Alteration, as will be seen below, is in the first place quite literally an ennouement not a dénouement, a knotting, not an unknotting; and, far from having a god appear 'from the machine', i.e., as a stage-resolution to overcome obstacles and unite lovers, Amis's God reaches 'into the machine', again quite literally in machinam (note the use of the accusative case to signify 'motion towards'), to create his absolutely opposite resolution. Amis is said to have remarked once that while a bad review might upset his breakfast, he would not let it spoil his lunch. A phrase as haplessly inept as the one in Kirkus Review would have kept him amused at least till dinner.

Other misapprehensions are of familiar type. Reviewers often have something they are determined to say, and use the books they are sent merely as convenient pegs on which to hang their conviction. So Pearl K. Bell, in New Leader for 6 December 1976, was set on proclaiming the degeneracy of England, a society of 'private shabbiness and public collapse'. Here Amis was increasingly in agreement with her, as one can see from both the novels here discussed; but agreement from an English author would have spoiled the totality of Bell's denunciation. The book was accordingly written off as 'capricious, and uninspired, fooling around', while the reviewer went beyond expression of opinion into factual error by insisting that, of course, this degenerate nonsense had been taken seriously by 'all the earnest British reviewers, starved for home-brewed fiction of genuine substance'. In fact it had not. Michael Irwin, in the Times Literary Supplement (TLS) for 8 October 1976, and Nick Totton in the Spectator a day later, had both criticised it as respectively small-scale and 'trivial'. Bell's review (as often) says more about the reviewer than the work. Nevertheless, her rating of the book, if not her argument, was generally accepted. Of the thirty reviews of The Alteration seen, there are only three favourable ones of any substance: P.H. Johnson's in the Listener for 7 October 1976, John Carey's in the New Statesman a day later, and an anonymous one in The Economist on the 16th. Most mainstream critics of The Alteration condemned it,2 and their condemnations are fairly consistent, if (in my opinion) arguably, and even provably, mistaken.

If one disregards merely personal agendas like the one above, the

² This contradicts the statement by Dale Salwak (1992: 198) that 'the book world evidently agreed' with Philip Larkin's judgement of the book as 'a remarkable imaginative feat'. Salwak's statement is based on *The Alteration* receiving the John W. Campbell Award as best science fiction novel of 1976. But the Campbell Award (of which I was at that time the secretary, see item 7, above) is frequently 'contrarian' and does not at all represent consensus opinion, while Larkin was a close personal friend of Amis.

mainstream attack on Amis can be located in three major areas, briefly labellable as: the names, the ending, the point. All in their different ways exemplify generic problems in science fiction.

To begin with the names: The Alteration is an 'alternate universe' story, and like all such, starts from the premise that at some time in the past a historical event did not take place. (The unwritten 'rules' of the genre are discussed at length in item 7, above.) In this case, the non-event is the death of Henry VII's son Prince Arthur, who in the world of The Alteration succeeded to the throne of England instead of his younger brother Henry (in our world, Henry VIII, in Amis's, 'Henry the Abominable'); and by doing so prevented the English Reformation and allowed Roman Catholicism to dominate Europe and (most of) the world. The connection with reviewers' complaints about names goes like this. If the English Reformation had not taken place in the 1530s, one might naturally ask what might have happened to such contemporary figures as Martin Luther and Thomas More, the one a founder of Protestantism, the other a martyr for Catholicism. As explained above (p. 128), Amis's reply is that both would/might have become Popes - strengthening the Papacy and further explaining the logic of his world. Such exercises in 'what if?' speculation are part of both the humour and the underlying subversion of the whole 'alternate universe' sub-genre. But how far can it reasonably be taken? Most alternate universe authors tacitly assume that once histories have started to diverge, historical figures will vanish as well. To labour the point, if Catholicism, with its celibate clergy, had remained established, many men who became Protestant ministers in reality would have remained Catholic priests and left no descendants; their descendants would not have been available as mates and parents, those who would have been their mates would have married differently, after four centuries no one's family tree would be unaffected.

In most alternate universes, accordingly, while there may have been amusing rewritings of biography back in the far past – Martin Luther as Pope, Mohammed as a reforming Byzantine bishop³ – figures from the present have been erased. In *The Alteration*, though, they are still there, but comically or mordantly transposed. (This is what makes Amis's running joke about his own contemporaries, strictly speaking, illogical; see, again, p. 130, above.) The book opens with a funeral in Cowley Cathedral, of King Stephen III. There never has been a Stephen III, and he has no modern counterpart, but praying in the cathedral are two cardinals from 'Almaigne' and 'Muscovy': Cardinals Himmler and Beria.

³ For the latter, see Harry Turtledove's novel *Agent of Byzantium* (1994). Turtledove is one of the authors discussed in item 7, above.

Other recognisable names from the modern world are scattered through the book. The point of such juxtapositions always takes far longer to explain than to grasp, but, in brief, one can say that such scenes argue tacitly, if again subversively, that character remains a constant, while proclaimed ideology is a variable. They work, like much of science fiction, by a process of 'cognition' and 'estrangement',⁴ i.e., by forcing the reader to note differences from reality (thus 'estrangement') and then to recognise the cumulative logic of the differences (thus 'cognition'). Their overall complexity helps to make *The Alteration* a virtually perfect example of 'textuality' as it is nowadays defined (see p. 133, above), and is furthermore a significant part of the texture of the book.

The critics, however, did not like them. They did not choose to attack them on logical grounds, though that would have made a kind of sense. Instead, the complaint seems to have been a general unease as to whether the 'name-game' was meant seriously or not. 'Fooling around', wrote Pearl Bell; Nick Totton declared that 'the fun quickly palls unless some further point is being made'; 'How amusing', said Christopher Lehmann-Haupt in the New York Times for 14 January 1977, clearly not very amused at all; Bruce Cook conceded in Saturday Review for 2 May 1977 that 'he has tried to toss in some laughs'; words like 'odd' and 'fanciful' were freely used. The most serious attempt to articulate the shared unease came from Michael Irwin in the TLS, who noted 'The numerous transcription jokes', thought they provided 'only waterish fun' (so agreeing with most of his colleagues), but added that what this did was to create an 'uncertainty of narrative level'. It all seems 'merely an intellectual construction, a diagram of possibilities', encouraging in the reader 'knowing alertness rather than imaginative involvement'.

In this Irwin did, I believe, put his finger on a major element in science fiction. His 'knowing alertness', one might say, is merely another term for that 'cognitive estrangement' mentioned above as a defining feature of the genre. It cannot be denied, furthermore, that all alternate universes are 'intellectual construction[s]', even, one might as well admit, purely intellectual constructions. The problem seems to be that critics like Irwin feel that that is not enough. They want 'involvement', they want the 'Counterfeit World to be truly a "world", something to be pictured and half-believed in'. Half-believed in? Anyone who believes in the reality of a counterfeit world, or alternate universe, is insane, and even trying to 'half-believe' in it is the wrong approach. I would suggest that the point of Amis's 'transcription humour' in *The Alteration*, and indeed

⁴ The term 'cognitive estrangement' was first used by Suvin (1979); see item 1, above.

of the whole 'alternate universe' sub-genre, is in exactly the opposite direction: not to create belief in the counterfeit, but to subvert belief in the real, or in what is accepted as real. To take just one detail from the hundreds in Amis's novel: in our real world, Sir Richard Grenville of the *Revenge* is an iconic figure of desperate valour in the English fight against Catholicism; in *The Alteration* he has become an iconic figure of desperate valour in the Catholic fight against Islam, at Lepanto (see *The Alteration*, pp. 111–12). We know the latter not to be true. Are we sure of the truth of the former? And of the whole discourse-structure that lies behind it?

One may say that Amis was tacitly arguing not only that Sir Richard, Beria and Himmler might under other circumstances have served their respective Popes rather than Queen Elizabeth, Stalin or Hitler, but also, and much less acceptably, that under other circumstances even the most disapprovingly right-wing American critics of weak-kneed British socialism, like Pearl Bell, might have been fervent Communists (though they would no doubt have remained just as disapproving). It is perhaps not surprising that this train of thought was not pursued by mainstream reviewers. To appreciate science fiction, it has been pointed out, one has to be prepared to contemplate the relativity of one's own *habitus* (see Huntington 1991: 59–75, and, further, pp. 13, 27, above).

None of Amis's reviewers, even the few positive ones, was willing to do so. Even John Carey spoke of the 'educational game' *The Alteration* could have been instead of the 'outstanding novel' it was 'if Mr Amis had not given his ideas flesh and blood'. At bottom there is a disagreement here about the relative worth of cognition (the diagram, the ideas, the alternate world) and sense-experience (involvement, flesh and blood, the world accepted as real). Those who value only the latter will not be able to take the former seriously, will see its techniques only as 'fun'.

The same sort of disagreement emerged in much more conscious form in the hostility voiced to Amis's ending. To recapitulate the novel's plot: Hubert Anvil, a ten-year-old boy chorister, is to be castrated in order to save his voice from breaking and preserve it for the Church and the service of God. Hubert runs away, and finds sanctuary with the only force strong enough to defy the Church, the Schismatics of New England. Once the New England ambassador has Hubert aboard the American airship *Edgar Allan Poe*, he is 'Altogether safe ... The English or Papal authorities may no more board this aircraft than a ship of ours

⁵ Page-references to the two novels discussed are from the first British edition of *The Alteration* (London: Jonathan Cape, 1976) and from the first paperback edition of *Russian Hide and Seek* (Harmondsworth: Penguin, 1981).

at sea' (182). But at just this moment (183), Hubert is taken ill, with bilateral torsion of the testicles. He has to be removed from the airship to be operated on, and the only treatment in the end is castration. It seems, then, that the God whom Hubert has been trying to escape, and who has seemed all along a creation of a purely earthly tyranny, is real. To revert to the misapprehension of *Kirkus Review*, this cruel God has reached into the airship (*in machinam*, 'into the machine') to twist Hubert's testicles, and take by force what has not been offered to Him voluntarily. A 'booby-trap', said Pearl Bell; 'a stroke of coincidence', said Nick Totton; 'What does Amis mean by his ending?', inquired Lehmann-Haupt; 'disappointing if not absurd', said J.D. O'Hara in *New York Times Book Review* (30 January 1977); 'brutally ironic and gratuitous', echoed Samuel Hux for *New Republic* (28 May 1977).

To respond to this, one has to ask, 'what is a coincidence?', and to note that Amis actually foregrounds just that question. A continuing cognitive thread in the book is the use of words with slightly different etymologies (usually Italian) from those now current, to show the fictional world's shift of cultural power. One of them is 'concurrence' for 'coincidence', a word used, and challenged, in the book itself (see p. 190). But there is also an argument in the book that Hubert's castration is not a coincidence. It is a response to prayer, specifically, to the prayer on p. 175 by one of Hubert's sincerest well-wishers, that, if he should not desire to return, God should 'bring it about in Thine own way that he forsake the path of rebellion and outlawry and be brought at last to serve Thy will'. The ironies of the passage are as usual too complex to explain briefly; they include the fact that the prayer is seconded, as it were, by one of the book's most sinister figures, but that that figure's motives are entirely honest.6 The main point, however, is that the prayer is answered literally, 'in Thine own way'. There are other cases in English literature of divine answer to the letter, not the spirit, of a mortal's prayer (see the mention of Chaucer, below), but they have proved critically acceptable. The reason Amis's did not was partly lack of attention, but largely, once more, failure by mainstream critics to respond to the complexities of genre.

An early example of a mainstream, indeed a 'canonical', author venturing into the realm of science fiction is Mark Twain's *A Connecticut Yankee in King Arthur's Court* (1889). This belongs to the sub-genre not of 'alternate universe' novels but of the 'change-the-past' story. The

⁶ The sinister figure is Abbot Thynne's servant Lawrence. He is apparently responsible, in entirely different ways, for *both* the novel's acts of castration (see pp. 125, 175).

difference is that while in the former sub-genre readers find themselves in a world which has already been changed, in the latter a figure from the contemporary present in some way or other goes back in time and tries to start the process by which Rome shall not fall, the Dark Ages shall not take place, etc. It should be noted that the intention is always ameliorative – the time traveller is there to create a better future, i.e., one which reaches the present sooner. The challengeable naivety of this procedure is strongly marked in Twain (though critics have tried to rescue him from it by imposing one ironic reading or another). But for all Twain's humour the point of his story is perfectly explicit. His Yankee, 'the Boss', tries, in Twain's anachronistic Arthurian setting, to do three things: to impose the values of freedom of worship versus Catholicism; of America versus England; and of science versus superstition.

The first two of these relate obviously to Amis's setting. In The Alteration there is no doubt that the Roman Church is a tyranny, which has no scruple about castrating Hubert ad majorem gloriam Dei, or about massacring its own subjects, in order to keep down the population without being obliged to go back on its position about contraception. Resistance to tyranny, freedom of worship, and hope of escape for Hubert, are all furthermore located for most of the book in America, home of the Schismatics. America is also the centre, in The Alteration, for the third of Twain's positive forces, science. All kinds of scientific speculation, and especially those connected with electricity, are firmly controlled in Europe by the Church, which is why the world of The Alteration presents on the whole a nineteenth-century appearance: no internal-combustion engines (though there are some diesels, which do not require an electric spark), no heavier-than-air flight - and a prohibition not only on scientific research but also on that other form of speculation, science fiction. The choirboys do in fact read surreptitiously the genre they call TR, Time Romance, of which a branch is Counterfeit World, and these are in a way parallel to our terms sf. Science Fiction and Alternate Universe. But TR cannot even be called 'science fiction'. for science has been made in effect pornographic; and who, the narrator asks, 'would publish a bawdy pamphlet under the heading of Disgusting Stories?' (27).

The hints that things are different in America proliferate through the novel. The New England ambassador at one point starts to say, 'Our inventors are the finest in the world; not long ago, two of them ...' but then breaks off (22). The mention of a pair of inventors can hardly fail to make one think of the Wright brothers, and indeed, much later, just after Hubert has been declared safe, another American continues:

'I think I may safely tell you this ... Three years ago, at a place in our state of Waldensia, two scientists, the Smith brothers, launched a flying machine, one that lifts itself by means of wings, not gas'. (182)

To return to generic expectations: It is obvious that Amis has framed his story so that it looks for most of its length like the 'triumph of science over superstition' plot so standard, and so unquestioned, in naive science fiction, adding to it the equally familiar themes of the quest for freedom and the superiority of America.

But then he lets his naive readers down - and these include the majority of his mainstream reviewers. The New England pastor goes straight on from his boast about the Smiths/Wrights above to explain to Hubert that in America there is a colour-bar, based on principle, with the aim of keeping whites and Native Americans (there is no black slavery in this world) in a state of 'separateness', i.e., apartheid (the Dutch word for 'separateness'). By doing so he drives a wedge between the ideas of freedom and America, so denying Twain on one level. And at the same moment Hubert's 'bilateral torsion' is revealed. Mere coincidence (as the reviewers said)? Or another perfectly deliberate rejection of an unscrutinised assumption? For the 'science versus superstition' plot is based on the belief that anything non-scientific must be merely superstitious. There is no such thing as magic, and while writers and critics are still reluctant to declare outright that there is no basis in religion, they operate often from a tacit basis of agnosticism. Twain's 'Boss' in Connecticut Yankee is undeceived about the former belief, strongly though he states it, by the successful revenge of Merlin. Is it not a precise parallel to have Amis's readers undeceived about the latter belief, by the revenge of God?

The reviewers' collective anger and dismay in fact seems to have had several motives, including a feeling that Amis was guilty of blasphemy. But those who felt that way should at least have cleared Amis of the charge of exploiting coincidence (acts of God are not coincidental), while those who stuck to the charge should have noted the way in which coincidence is presented as an answer to prayer. Actually, Amis's *in machinam* stroke is consistent not only with *The Alteration* but with some of his other genre novels, in which there is a repeated suggestion that one logical explanation for the world as it stands is that there is a God, but that He is *not benevolent*. The most evident scene demonstrating this is the apparition of the 'young man' in chapter 4 of Amis's ghost-story *The Green Man* (1969). Here one can only say that God appears in person. He has some entirely traditional properties, such as control of

the afterlife, but neither foreknowledge nor (total) omnipotence. He is in fact a game-player, who sometimes (as in the Incarnation) detaches a piece of himself to join the human pieces on the board, but remains at all times bound by his own rules, including – and this has direct relevance to the 'coincidence' of *The Alteration* – 'the one about everything having to seem as if it comes about by chance'. Much the same set of 'rules', it might be said, applies in *The Alteration*. It is as if its similarly neutral or amoral God has bound Himself not to frustrate rebellion against Himself, unless devoutly asked to do so – as he is by Abbot Thynne and his sinister servant Lawrence. But these studied reversals of generic expectation (the Twain plot) and of religious expectation (traditional belief or agnosticism) were read as mere carelessness or lack of invention by most of Amis's critics. They wanted, one has to say, a simpler and a more triumphalist story.

Nor could they see the ultimate point of it all, several of them confessing themselves honestly baffled. If it is 'an attack on corrupt, tyrannical government', observed P.L. Adams for Atlantic Monthly (Feb. 1977), 'it seems needlessly oblique, while as anti-clericalism it comes some centuries late'. Perhaps it is trying to say that things always turn out much the same, guessed Thomas R. Edwards in the New York Review of Books (3 Mar. 1977), in which case 'this seems to me an intolerable moral'. It is just a book 'by a man grown angry in middle age', said J.D. O'Hara, opting for a personal dismissal. The book is trying to say, wrote Dean Flower in Hudson Review 30 (summer 1977: 305-6), that 'an artist cannot be castrated', which is not true, so that the novel fails from 'deficient thought' - a comment contradicted on more than one level by what happens in the book. Here in particular Amis's mainstream reviewers seem to have been baffled by simple inability to take in the characteristic content of science fiction (and other, older literary modes); they could have reached better solutions by pursuing quite orthodox literary enquiries, such as considering the novel's structure.

The title of *The Alteration*, as one might expect, is significant. It means both what has happened to history, and what is meant to happen to Hubert. 'Alteration' is in fact a euphemism for 'castration'. Hubert's surgical castration is, however, not the only castration in the book. In a subplot, Hubert's mother is seduced by her confessor, Father Lyall, who is betrayed to the authorities, and then brutally gelded and killed by agents of the Secular Arm. A natural question ought to have been,

⁷ Another example of a similarly macabre explanation of coincidence occurs at the end of *The Anti-Death League* (1966), an Amis novel which contains some aspects of science fiction.

what is the thematic significance of the deliberately repeated motif of 'alteration'? The answer is obvious enough. Amis sees the world he has created as metaphorically a castrated one, in at least two senses – its imposition of celibacy on its ruling class, its deliberate denial of science. Meanwhile, the castration inflicted on Hubert, we are told, is bound to have the effect of destroying him as a composer while preserving him as a singer. But since his world has forbidden electronics, his skill will die with him, and there will be no record of it.⁸ As for the castration of Father Lyall, the point with regard to that, again many times repeated (even in the scene described as 'graceless, grotesque fornication' by Samuel Hux in *New Republic*), is that sexuality is a mystery no one has the right to forbid, whether to the supposedly celibate Lyall, or to Mistress Anvil, who has clearly become a mother while remaining sexually unawakened.

Amis's argument, then, is that sexuality and creativity, whether in art or science, are connected. Without the former, the celibate-dominated world of The Alteration, deeply impressed by art though it is, finds its image only in its Yorkshire-born Pope. He appears at Hubert's first post-alteration performance not because music is among his keenest pleasures, for, as he says to his confessor, 'You know bloody well it isn't, but appearing in the character of the foremost of all lovers of art is' (p. 204). The world of The Alteration is not predominantly a fable about tyranny, but about creativity. And - in a kind of prophetic rebuke to his reviewers, in their innocence of the techniques and results of science fiction creativity - the last faint trickle of testosterone which Amis allows in his story is indeed sf, or rather TR, Time Romance. In the book's last scene, two of Hubert's childhood friends visit him, and one is revealed as an author of TR - also, not accidentally, as 'a man with a wife and child and another on the way'. The book's last irony is that true creativity lies not in the officially sponsored magnificence of Hubert's singing - sterile on two levels, from Hubert's eunuch state and from the impossibility of recording or passing on his art – but in the despised genre of TR. The aria Hubert is about to launch into on the penultimate page is, in another unnoticed irony, 'Che e migliore?', Italian (as reviewers might have noted) for 'What is better?'

There is one final clue to the meaning of *The Alteration*, which reviewers would have noticed if they had remembered the principle

⁸ As said in more detail in item 7, above, the flashpoint of inspiration for the novel was in fact Amis's hearing of a 1909 recording of a *castrato* singing. The story is confirmed by Salwak (1992: 199–200). Note the irony of the discussion on p. 32 of *The Alteration*.

that what appears most narratively redundant in a work is likely to be most symbolically significant. A section of the novel which seems quite pointless is the Native American myth told to Hubert first by the ambassador's wife and then continued by their daughter, Hilda. It tells how a man, White Fox, eloping with his lover, Dawn Daughter, transfers her from his own horse to a spirit horse to escape their pursuers; but then she vanishes, taken away by the god who sent the spirit horse, leaving behind only mysterious hoof prints on the edge of a cliff. Hubert holds the myth to him after he has been castrated, and after Hilda has come to visit him in hospital. But he changes the ending in his mind: in his version the lovers are not parted.

It does not require a great deal of thought to work out the point of this.9 The myth emphasises regret and loss, and insists that these things are true, though people (entirely naturally) are reluctant to face such truths. It is one of the functions of literature to remind them, and here one may point to one of *The Alteration*'s most unexpected analogues: Chaucer's Knight's Tale. This is in most respects a romance, a genre traditionally and nowadays often scornfully associated with wish-fulfilment (rather like science fiction). In Chaucer's romance, though, another seemingly insoluble problem, of two lovers contending for the same woman and promised success by two different divinities, is solved by a third divinity, Saturn. Saturn's solution is neat and final. Its only drawback (to humans, not gods) is that it takes not the slightest account of human suffering. Chaucer's Saturn, one may say, works in the same way as Amis's God of The Green Man or The Alteration. But the Knight's Tale is also remarkable for its succession of rhetorical questions, which ask, directly, what is the point of existence? Chaucer's lover Palamon despairingly asks one question of the 'crueel goddes that governe / This world', namely, 'What is mankynde moore unto you holde / Than is the sheep that rouketh [cowers] in the folde?' At the end his dying rival Arcite echoes him, 'What is this worlde? what asketh men to have, / Now with his love, now in his colde grave / Allone, withouten any compaignye?' Palamon's 'cruel gods' are like Amis's. And Arcite's question needs only slight re-emphasis - 'what is this world?' - to stand as an epigraph for *The Alteration*. The question is posed automatically by the construction of an alternative world. Only those who are sure they know the answer can afford entirely to disregard it.

⁹ I said something to this effect in the 1977 presentation speech mentioned on p. 131, above. Amis said to me afterwards that he thought I was right, but that he had never worked this out logically: he just knew the myth had to be there.

Amis's second science fiction novel, *Russian Hide and Seek*, meanwhile, begins very strangely indeed, with an episode in which its central character Alexander torments a ewe by riding around it till it 'ceased to run and let out a sound not unlike the cry of a human infant', becoming exactly Palamon's image of humanity, a cowering sheep. The image puzzled several of the novel's reviewers, not unreasonably. Reviews of this novel were, however, both fewer and harsher than those of *The Alteration* four years before. Amis was by this time increasingly identified as an ideological enemy by sections of the liberal press, so much so that Blake Morrison remarked in his review in the *TLS* (16 May 1980), 'the point has been reached where, in youngish, liberal circles at any rate, to profess an admiration for Kingsley Amis is to risk ridicule and even assault'. Yet once again the major reason for the incomprehension and even anger which Amis faced was a lack of appreciation, from supposed literary sophisticates, of the subtleties of genre.

It could be said that they had some excuse, on this occasion, for problems with genre, in that the first and most evident problem of Russian Hide and Seek is that one cannot for some time tell what genre it is in. The novel could be read for some time as if it were, perhaps, a historical novel set in tsarist Russia. In the first few pages, the only traffic we see consists of horses and mules; all the furniture inside Alexander's bedroom is made of birch; he himself is an 'ensign in the Guards', but is addressed as 'your honour ... your excellency', which would not be the case for an ensign in the British Guards, even in the nineteenth century; the names are possibly or specifically Russian: Alexander, Nina, Vanag, Korotchenko. The first internal hint that this is not a work by Turgenev or Tolstoy comes from the words 'old boy' on p. 14, which are italicised and specified as being in English - so that all preceding dialog has presumably been in Russian. Bilingualism is common in tsarist Russian novels, but would be Russian/French, not Russian/English. Slowly, clues of this kind accumulate in exactly the style of mingled 'cognition' and 'estrangement' discussed above. The card-players use English money (31), though inflation seems to have reduced it to about one-thousandth of its 1980 value (41). On p. 30 we discover that the story is definitely set not in Russia but in the English Midlands. On the next page there is a hint that the Russians have been there for 'half a century', though no more precise date is ever given. All this would enable even readers who had not read the cover to deduce that they were dealing with a work of science fiction, set in a future in which England had suffered Russian conquest and occupation, and

¹⁰ As is confirmed and commented on by Paul Fussell (1994: 5–7).

had been reduced to a pastoral state by depopulation and technological embargo: in effect, a 'post-Holocaust' story, a science fiction sub-genre as familiar as the 'alternate universe'.

Most reviewers deduced as much and then stopped. That is not, however, the end of the novel's generic complexity, though it does mark the start of much reviewer confusion. Paul Binding, in the New Statesman for 23 May 1980 (a strongly left-wing journal), attempted to show from internal evidence that Amis had refuted himself. Since Amis's thesis. he declared, was that 'Russian culture is beastly', the very existence of the Russian novels Amis imitated negated the thesis. One could reply that since Amis openly mentioned the novels, he could not have been putting forward Binding's thesis, which was in its turn self-refuting. Meanwhile, Paul Ableman, in the Spectator for 17 May 1980, was even more scathingly sarcastic, insisting that the novel simply did not make sense, that no one in the book 'seems to behave in accordance with anything remotely resembling human motivation', that it lacked 'any real purpose or vision', and that it was 'a non-starter'. Though Blake Morrison in the TLS appealed for fair play and tried to give it – he did note that it was not till chapter 4 'that we are sure which century this is and what has taken place' - the best he could say for the novel was that it was 'a political drama'. It is pleasant to record that the reviewer for Encounter (Nov. 1980), Penelope Lively, herself a well-known author of works including fantasies, saw through the generic problems enough to say:

I suspect the obvious reading of the novel won't do ... I don't think Kingsley Amis is just writing about what will happen if the Russians come. *Russian Hide and Seek* can also be taken as a fable of what might even if they don't.

But in a sense the best guide one receives lies not in what the reviewers put forward as answers but in their sometimes angry rhetorical questions. What has Shakespeare got to do with all this, Ableman asked himself, for instance. How could it be 'that Aristophanes and Euripedes [sic] should speak clearly down the ages [but that] Shakespeare should be utterly lost ... after a mere fifty years'? An answer could have been found for the question if Ableman had been more patient with the other internal literary references he noted, to the science fiction classics *Nineteen Eighty-Four* and *Brave New World*, instead of simply berating Amis for 'snatching at fragments from other people's books to shore up his own'.

Deliberate use of genre uncertainty in fact continues in *Russian Hide* and Seek even after the 'Turgenev hypothesis' has had to be rejected.

Another science-fictional sub-genre, besides the 'alternate universe' and the 'post-Holocaust' stories, is the 'enclosed universe'. The most extreme version of this is the 'generation starship' story, which centres on the idea of an interstellar vehicle that is despatched knowing it will take generations to arrive, and whose inhabitants in the end have forgotten their purpose. A classic example of this is Non-Stop (1958), by Brian Aldiss, to whom (with his wife Margaret) Amis's novel is dedicated. But the tension of the 'generation starship' story is shared with other examples of the 'enclosed universe' plot, stemming from Wells's story of 1904, 'The Country of the Blind'. It is caused by the logical inability of those inside the enclosed universe to believe in the existence of any universe outside, for which, after all, they have no evidence. Why should a blind society believe in sight? An underground society believe in the sky? Tension comes, then, from the contrast between what the reader knows - there is such a thing as sight, there is a world outside the starship, the universe is enclosed – and the reader's forced awareness that, within the rules of the enclosure, there is no logical way to demonstrate this.

In a sense, both Nineteen Eighty-Four and Brave New World are 'enclosed universe' stories.11 In Nineteen Eighty-Four, Winston Smith lives in a world where all access to historical information is destroyed, except his own faulty memory (he begins the book by trying to keep a diary), and occasional encounters like the one with the old prole in Part 1, chap. 8, who tells him something which we readily recognise to be the truth, but which Winston is not equipped to understand. The moral of Brave New World could meanwhile be said to be 'Each one of us ... goes through life inside a bottle', the bottle being both the one from which foetuses in that world are decanted, 12 and the metaphorical bottle of social conditioning. To revert to Ableman's question above, a clear link between Brave New World and Russian Hide and Seek is the use in both of Romeo and Juliet, and the fact that in both the play is regarded as ridiculous if not incomprehensible. Ableman asked, how could this happen? And the obvious answer which he ignores is, by changing people's social conditioning.

There is, of course, strong resistance to the idea that people are merely the products of their social conditioning, but the idea has at least to be

¹¹ I argue this in more detail in two articles, one on *Brave New World*, in Frank Magill's *Survey of Science Fiction Literature* (Magill 1979: i. 247–53) and one mainly on *Nineteen Eighty-Four*, item 12 in this volume.

¹² The scientific background to Huxley's work is well treated in David Seed's article on the book in the *Companion* he edited in 2005.

tolerated for the tension of the 'enclosed universe' plot to develop. Russian Hide and Seek works hard to develop that toleration, and also to break down its enemy, the ironclad confidence of one's own habitus, of the centrality of 'this world', normal outside science fiction. A continuing strand in Amis's novel is the appearance of fragments of false history. Thus Alexander and his friends know (p. 42) that the English part in the Second World War consisted of no more than occasional 'armed actions' like 'the Dieppe raid'; that the Russian invasion was necessary to prevent endemic 'Faction battles at soccer and race riots at cricket' (53); that it was welcomed because it put an end to the unheard-of menace of strikes (57); that 'the final stage of capitalism' was marked by starving pensioners, dying children, cowering immigrants (133-4). All contemporary readers can gauge precisely how much or how little truth there is in these stories (which are exactly parallel to the official Ingsoc history book which Winston reads in Nineteen Eighty-Four Part 1, chap. 7, and which he repeats to the old prole to try to prompt true memories in Part 1, chap. 8). One has to remember, though, that if one is not sure about the genre of a work, one cannot evaluate the data it contains. Might Russian Hide and Seek not after all be an 'alternate universe' story in which the history of the Second World War was different? This possibility is closed by the appearance of one character in Amis's novel who does remember the far past, and whose memories are the same as ours: D-Day, Arnhem, elections, etc. But this is not made clear till page 118.

One may say, then, that for several chapters of Russian Hide and Seek the reader could be in a historical novel, and for several more, in an 'alternate universe' novel; even though the 'enclosed universe' possibility is also kept alive, and eventually becomes dominant, through the 'cognitive' strategy of having the characters make continuous slight but noticeable errors of speech or interpretation - saying to each other in their ritualised English, 'How are you making, old chap?' (rightly, 'doing', p. 75), believing that the English upper classes relished 'gherkin sandwiches' (actually, cucumber, p. 133), offering a farrago-interpretation of 'Knocked 'em in the Old Kent Road' (p. 42). If they get all that wrong, the analogy goes, their history must be wrong too. The reader's continued uncertainty with the whole text, however, is a constant reminder that no intelligence can rise above its data. Alexander's friends are not stupid, they are, like Huxley's Lenina Crowne or Orwell's Winston Smith, just not well-informed. Moreover, unlike both Huxley and Orwell, Amis resists till a late stage the temptation to have his characters penetrate to the knowledge the reader would like them to have. In Nineteen Eighty-Four there is an instinctive understanding even in Winston that 'you had been cheated of something you had a right to', though 'It was true that he had no memories of anything greatly different' (Part 1, chap. 5). Amis goes out of his way to deny that this would be possible. No one notices failings that would be obvious to us, 'because no-one had ever known any different' (104). In the same way, Huxley has Helmholtz Watson responding to Shakespeare's poetry because of its intrinsic power (according to Huxley). In Amis no one can understand Bunyan or Shakespeare, and even the native English reject or resent their own past culture as expressed in sermon or play (126, 171, 176, 188). No one in Amis breaks out of his or her 'bottle'. It was perhaps this pursuit of the 'enclosed universe' plot to its logical, nihilistic conclusion which most disturbed and offended his reviewers; though *Nineteen Eighty-Four* and *Brave New World* reach similar conclusions, if with less generic fidelity, or generic play.

Many other points could be made about Amis's novel, and some of them have been. It is very much a product of its time, written just after the notorious British 'winter of discontent' that elected Mrs Thatcher. A clear parallel to it is Anthony Burgess's bitter 1985, published in 1978, exactly between the two novels discussed here, an obvious response to Orwell, and well-known to Amis (who brings Burgess into The Alteration as a TR writer (p. 203)). 13 Its theme, as Lively perceptively noted, is 'deculturation', something which can happen without any foreign invasion at all, while its title, referring to the game of 'Russian Hide and Seek' (a variant on Russian Roulette), exposes the abyss of utter boredom that is left when culture vanishes, and in which even sexuality (a continuing theme in the novel) is swallowed up. Director Vanag's explanations on pp. 232–42 finally fall into the same authorially didactic mould as O'Brien's in *Nineteen Eighty-Four* and Mustapha Mond's in Brave New World: they assuage at last the reader's curiosity about 'what really happened', and why.

On the whole, and with the distinguished exception of Ms Lively, these points were not seen, and if half-seen were angrily rejected. To some extent this was caused by political antipathy, as Blake Morrison noted. As with *The Alteration*, however, the major cause of shared and extensive blindness by a representative set of experienced professional readers was unfamiliarity with the generic features of science fiction, and refusal to believe in their sophistication. In the end, Amis's science fiction novels were too clever for their mainstream reviewers – as has too often been the case with the entire genre.

¹³ The anonymous reviewer in *The Economist* mentioned above speculates that *The Alteration* could be 'a birthday tribute from Mr Amis to Mr Burgess, and one of splendid aptness to them both'.

9

Introduction

A Glimpse of Structuralist Possibility

Like item 4, above, this piece started as a talk delivered at the Birmingham Novacon, that of 1974. It too turned into an article in *Foundation*, and formed the basis for successive entries on 'Magic' in the Nicholls and Clute (subsequently the Clute and Nicholls) *Encyclopedias* of 1993 and 1999. Since then the 'New Age' movement has led to a considerable revival of interest in magic. Ronald Hutton's 2003 discussion (see especially his chapter 4) covers the long nineteenth-and early-twentieth-century arguments about it better than I can. In an article of 2007, not included here, I tried to work out what Tolkien, Charles Williams, and most of all C.S. Lewis thought about it, Lewis being extremely learned in the recondite field of Renaissance magical and proto-scientific thinking, and typically coming out with highly and deliberately contrarian answers.

However, rereading this piece years later reminds me as usual most of all of what I did not know back then. One thing I did not know was that not only did Randall Garrett write his 'Lord Darcy' stories about magic for John W. Campbell, he was also busily writing ESP stories for him at the same time, as 'Mark Phillips' and in collaboration with L.M. Janifer. If I had known this, I might have made more then of the point about Garrett's Sir Thomas Leseaux (on p. 177). When the magic theorist in the alternate world angrily dismisses as old-wives' tales things that we know work (like penicillin and digitalin), there is a deliberate parallel with the scientific theorist in our world angrily dismissing things that, well, are rumoured to work, but which cannot be admitted to work because they do not fit current scientific paradigms: phenomena like dowsing, or telepathy, or ghosts, or supernatural apparitions and warnings. All this was very much part of Campbellian sf. Much of it went well off the rails, like dianetics and the famous 'Dean Drive' for spaceships, and most of all Scientology. But there was a perfectly valid point behind it all, which was the one famously made by Thomas Kuhn:

innovations are much more readily accepted if they fit an accepted framework, and innovations which do not, which contradict such a framework, are liable to be dismissed as mere insanity or childishness, till the weight of evidence becomes overwhelming – at which point suddenly everyone will prove to have been in favour of change all along. I remember, incidentally, putting some similar point to Sir Roger Elliott, Professor of Physics at Oxford University, author of the 'Elliott Equations', well-known to nuclear physicists, and at that time my next door neighbour, and handing him one of *Analog*'s factual articles in support. He read it carefully, handed it back, and remarked, 'These chaps just won't do the experiments'. If I had been quicker on the uptake I would have replied, 'But where would they get the funding?', which is what John Campbell might have said. (No, Campbell would never have said anything so moderate.)

Whatever the case, another hook-up between sf sub-genres is obviously between the 'world where magic works' story and the 'ESP' story. The former connects to 'alternate history', the latter to the 'world-changing invention' story, as in Bester's *Demolished Man* (1953) and *The Stars my Destination* (1956). It makes me want to draw another diagram, like the ones on p. 82, above and p. 164, below, but this time of 'the inner structure of science fiction'. But maybe that is a job for another time and another book ...

The Golden Bough and the Incorporations of Magic in Science Fiction

Magic exists only in the mind. This is the belief that obviously underlies the Oxford English Dictionary's authoritative definition, that magic is 'the pretended art of influencing the course of events ... by processes supposed to owe their efficacy to the power of compelling the intervention of spiritual beings, or of bringing into operation some occult controlling principle of nature' (OED, ix.185). Pretended, supposed, some occult principle: the words convey the detached scorn of the Edwardian lexicographer (the volume for the letter 'M' of the Oxford English Dictionary came out initially in 1908), secure in his superior knowledge. Nevertheless, his opinion remains the common modern one; while even in 1908 it was already ancient. In 1605, Francis Bacon had written in Book 1 of The Proficience and Advancement of Learning, sympathetically but firmly, that there were three sciences 'which have had better intelligence and confederacy with the imagination of man than with his reason', and so dismissed astrology, alchemy and natural magic all together. More surprisingly, three and a half centuries earlier his namesake Roger Bacon had not only asserted that the powers of art and nature were infinitely greater than those of magic, but had also pre-empted Clarke's Third Law ('Any sufficiently advanced technology is indistinguishable from magic') with the remark that multa secreta naturae et artis aestimantur ab indoctis magica, 'many secrets of nature and of art are thought by the unlearned to be magical'. 'Magic', then, is just a word that ignorant people use to explain things they do not

¹ In his *Epistola de Secretis Operibus Artis et Naturae, et de Nullitate Magiae*, included in Bacon's *Opera Inedita*, ed. J.S. Brewer (London, 1859) (vol. 15 of the Rolls Series). In view of this letter, it is especially ironic that Friar Bacon should have survived in legend only as a conjurer; see The *famous historie of Friar Bacon* (London, 1629) or Robert Greene's play *Friar Bacon and Friar Bungay*, written some forty years earlier.

understand: in the face of such well-directed scepticism it is surprising that the concept has survived.

Yet the 'world where magic works' is a common setting for science fiction. Is this not, as hostile critics would say, just one more piece of evidence for the genre's inherent escapism? In some cases the answer is, obviously, 'yes': Robert Heinlein's Glory Road (1963) starts: 'I know a place where there is no smog and no parking problem and no population explosion', and goes on from there to shed worries, plausibilities and inhibitions up to and beyond the likely limits of pleasure; it also includes a few rather perfunctory magical props, like dragons and pentagrams. But Glory Road is weak precisely because of the absence of constraints on its hero, and the feebleness with which turns of the plot are rationalised; it cannot be called representative.² If magic is not 'escapist', then, can it be considered instead as a 'radical alternative', a device by which authors express their resistance to present-day scientific philosophy, their awareness of its materialistic and exploitative tendencies? Once again, this thesis works quite well for some books, like C.S. Lewis's That Hideous Strength (1945), and Ursula Le Guin's initial 'Earthsea' trilogy (for which see item 10, below). But one of the surprising things about 'worlds where magic works' is that they have very often been created by authors who are normally the solidest devotees of hard technology and the engineering outlook - Poul Anderson, Larry Niven, Sprague de Camp and the early Heinlein, to name no more. It seems unlikely that these writers are proclaiming either a flight from science or a resistance to it; their goal is rather the extension of science's domain, a takeover of magic rather than a surrender to it. In this endeavour science fiction writers have, as often, collectively developed an intellectual position of some complexity and even rigour; they have also, as often, been relying on good old-fashioned nineteenth-century precedent.

In the case of magic, this precedent has been almost single-handedly Sir James Frazer's enormous compilation *The Golden Bough* (finally growing to 12 volumes in the third edition of 1913–15, the one used here). It is doubtful whether any science fiction writer has ever read this all the way through, but then no one has needed to, since its ideas are evident from the start, easily graspable, and endlessly restated. Almost as much as is necessary, for example, can be deduced from the diagram which appears as early as page 54 of volume 1, showing the various 'branches of magic' (Figure 2). The drive towards generalisation alone makes it clear that Sir James assumed that magic was ubiquitous:

² See Harry Harrison's characteristically understated review (Harrison 1964: 6–8).

when an English yokel puts ointment on the nail rather than on the wound, and an Australian aborigine burns his enemy's nail-parings to give him fever, *The Golden Bough* points out they are doing the same thing, that is, utilising the principle of 'contagion' below. Similarly, pricking manikins with needles to cause injury and pouring water on the ground to bring rain are both acts of 'homoeopathy', no matter who does them or where they are done. Magic, then, is an evolutionary stage through which all societies seem to pass, whether savage, classical, or even modern European – so Frazer concluded, although the conclusion worried him, as one can see from volume 1, pp. 236–7. Nevertheless, besides being ubiquitous, magic also appeared to him to be systematic: modern Europeans might laugh at the ludicrous gap between cause and effect in the examples cited, but they could not deny that there was felt to be a cause-and-effect relationship.

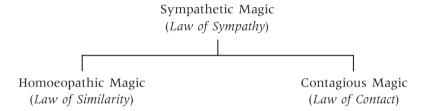


Figure 2 The branches of magic according to the laws of thought which underlie them, from Sir James Frazer's *The Golden Bough*

From this Sir James deduced a third and most influential point: that in essence primitive magic was not like primitive religion, as most observers had assumed, but was instead similar to science, in its belief that the universe was subject to 'immutable laws, the operation of which can be foreseen and calculated precisely'. The Golden Bough makes this claim overtly in volume 1, pp. 220-2, but the implication is there in the diagram alone. Magic can be classified according to laws; and these laws can be stated in terms analogous to those of physics. Frazer actually formulated the Law of Contact as: 'things which have been in contact with each other continue to act on each other at a distance after the physical contact has been severed', and there is in this at least an echo of Newton's Law of Universal Gravitation, which also deals with action-at-a-distance. The echo is reinforced by casual allusion to the Third Law of Motion some 90 pages later: 'In magic, as I believe in physics, action and reaction are equal and opposite'. Of course, there can be no doubt that Frazer saw these similarities as a joke, partly against the savage (who could not formulate his own principles with anything like European exactness), and partly against the scientist (who invented notions like 'ether' on very much the same scanty evidence as that for magical 'sympathy'); Frazer remained at bottom, like the definer of 'magic' for the *Oxford English Dictionary*, unalterably convinced of the separation between science and magic and the total superiority of the former. Nevertheless, the idea was there: and it is a relatively short step from saying that magic is very like science to saying that it is actually a form of science. It is this further step that many science fiction authors have, with varying levels of seriousness, been happy to take.

Direct quotation of Frazer is fairly common. Sprague de Camp and Fletcher Pratt, at the start of their 'Incomplete Enchanter' series in Unknown in 1940, have Dr Chalmers remark that medicine-men believe that they are working through natural laws. 'Frazer and Seabrook have worked out some of these magical laws. Another is the Law of Contagion: things once in contact continue to interact from a distance after separation ...'. Later on, the other principle, that of similarity, is applied to shrinking the nose of Snögg, the troll-jailer. In Magic Inc., a few months later, Robert Heinlein did not need or bother to mention Frazer's name, but could refer casually to reconstructions based on the 'law of contiguity' and the 'law of homoeopathy': the latter meaning in essence that the part is the whole, the former that structures are implicit in their components. More detailed expansions have appeared since. Still, the real potentials of the 'Frazerian' story were exposed as well as anywhere in that early period by Fritz Leiber's unduly neglected novel, Conjure Wife (1943).3

This appears to be based on a frightening anecdote from the *Malleus Maleficarum*, in which a man talking casually to his little daughter discovers to his horror that she and her mother are both witches, as are many women, all unsuspected by their male relatives. In the same way, Leiber's hero, Professor Saylor, discovers suddenly and by accident that his wife has constructed round him a great web of magic defences to cover him from the malice of the other faculty wives, all of whom, like her, are witches by instinct and tradition. Dismissing it as superstition,

³ Like *Magic Inc.* and *The Incomplete Enchanter, Conjure Wife* appeared first in *Unknown* (April 1943). References here are to the Penguin reprint of 1969, which follows an American book-version of 1953.

⁴ See Montague Summers's translation of 1928 (2.1.13). Leiber need not have read this to get the idea, since it is quoted in Margaret Murray's very well-known *The Witch-Cult in Western Europe* (1921: 172).

he makes her burn her charms; and then, of course, his life turns into a paranoid's nightmare, with student accusations, missed promotions, charges of academic plagiarism, and so on. In the end his wife, left magically defenceless, is turned into a soulless zombie by her female enemies. It will be obvious that Leiber has made one big change from the notions of the Malleus: while his images of the powers of witches are at least as gruesome as ancient ones, he nevertheless accepts magic as ethically neutral, usable protectively as well as aggressively. Nor does the place of magic against religion concern him at all, however vital it was for the witch-hunters Sprenger and Kramer. Further, at the moment of crisis, *The Golden Bough* appears, as talisman-cum-guidebook. For Saylor is a professor of sociology (which we would now call social anthropology) and, faced by a zombie wife, he falls back on his academic speciality. He accepts the assumption that the superstitions he has studied detachedly for so long are all garbled reflections of a real truth; takes down his textbooks (The Golden Bough is the only one mentioned); finds some seventeen formulas for calling back the soul recorded by primitive peoples, and reduces them all to a master formula. This combination of superstition and scientific method proves unconquerable, and the story ends (again, unlike the Malleus, where the wife was burnt) with triumph and reunion.

The surprise in all this, for an unprepared reader, lies in the direction of Professor Saylor's progress. When we hear the word 'magic' we inevitably think of reversion, savagery, effortless absence of ratiocination; to find magic then put into an academic context and sharpened by mathematical rigour is inevitably arresting. The juxtaposition becomes part of the stock-in-trade of all 'magical' authors, who have a particular penchant for setting stories in and around learned conferences:5 there is an especially close resemblance to Conjure Wife thirty years later in Roger Zelazny's Jack of Shadows (1971), where a computer is even dragged in to replace Professor Saylor's symbolic logic. But it is obvious, too, that Leiber enjoys the process of academic argument for its own sake. After all, if his hypothesis is true, it throws up one major question straight away: why has magic never been reduced to order before (given the amount of research dedicated to it the world over)? The question is in a way the reverse of one asked by Frazer, which was why magic had not been exposed before: and the answers to both are curiously similar. In a

⁵ Both Garrett's *Too Many Magicians* and the second part of *The Incomplete Enchanter* use this trick; de Camp repeated it twenty years later in *The Goblin Tower* (1968). Doctorates and professorships abound in almost all the other books cited.

relatively comic passage (i. 242-3), Sir James had pointed out how hard it was for even intelligent men to prove conclusively that the seasons did not, for instance, follow the rites that men carried out to bring them; he presented a plausible picture of the 'practical savage' turning a deaf ear to 'the subtleties of the theoretical doubter, the philosophic radical', and ventured to suggest that in England, anyway, the former would on general grounds be hailed as safe, sensible and hard-headed - much more trustworthy than any over-intellectual theorist! Leiber seems to have picked up from this at least the adjective 'practical'. 'Magic is a practical science', Saylor theorises, because it is inevitably concerned with 'getting or accomplishing something'. This means that the personality of the operator is a part of the magical operation; and this means that experiments are inherently non-repeatable. One of the bases of scientific method is accordingly removed, helping on the one hand to explain the absence of any 'general theory' of magic, and on the other administering a check to modern assumptions about the universal scope of experimental science. A second point returns one to the definition of magic in the Oxford English Dictionary, 'the power of compelling the intervention of spiritual beings'. Obviously, if personalities rather than forces are the object of experimentation, further irregularities are likely to enter, making the whole thing more difficult. And, finally, Saylor notes that 'Magic appears to be a science which markedly depends on its environment' - in other words, it is subject to rapid change. The constants of physics may perhaps change as well (so Leiber suggests), but, if they do, they do so slowly. Magic, however, needs to be continuously updated by trial and error, and is as a result likely every now and then to fail and be discredited.

So, magic is affected by fluctuations in its controllers, in what it controls, in its surroundings: these are perfectly logical explanations for why people have kept on trying with it, without being able to reduce it to an exact science, and variations of them have been used by most later writers on the theme.⁶ Their coherence is enough to turn one's scepticism, at least momentarily, against the assumptions of science rather than those of magic – why should experiments be capable of repetition by another experimenter, or in another time and place? Is that not assuming something unproven about the nature of the universe? In this way scientific method is turned against itself. And all the way through, *Conjure Wife* draws power from its cool and rational tone, its

⁶ Blish, for instance, remarks that 'magic is intensely sensitive to the personality of the operator' in *Black Easter*, chap. 3; while the end of Anderson's *Operation Chaos* amplifies the idea of rapidly changing 'constants'.

everyday setting, while its central images – the cement dragon, the Prince Rupert drop, the shattering mirror – all carry a physical as well as a magical explanation. The book's penultimate paragraph, indeed, offers a rational explanation (that all the women involved are psychotic) as an alternative to the fantastic one (that they are all witches), while the last words of all are Professor Saylor saying evasively, 'I don't really know'. All this makes *Conjure Wife* fit one rather strict definition of fantasy, that it takes place just as long as one is uncertain about how to explain events.⁷ However, it also points out one way in which *Conjure Wife* does not fit the normal development of 'Frazerian' science fiction, for all its pioneering motifs and explanations.

This is, that most 'worlds where magic works' are alternate worlds, parallel worlds, future worlds, far-past worlds. Conjure Wife is one of very few to be set in a recognisable present.⁸ It gains from this, of course, in realism; but loses, inevitably, a quality of romance. It has witches, and spells, and even the glimpsed presence of He Who Walks Behind; but there are no centaurs, or werewolves, or mermaids, or basilisks, or any of the other ancient images of fantasy. The only dragon in Conjure Wife is a cement one. Yet there is clearly an urge in many writers and readers to resurrect these images and use them again, partly no doubt as a result of 'escapism', but at least as much out of a kind of intellectual thrift: ideas compulsively attractive to mankind for so long, it is felt, are too good to throw away. Nevertheless, this urge, powerful though it is, is met by an equally powerful current of scepticism. Twentieth-century readers, especially those with some scientific training or inclination, cannot even pretend to believe in anything that makes no sense, i.e., anything that has no rationalistic theory to cover it. Frazer and The Golden Bough provided a rationale for magic, as exploited by Leiber in Conjure Wife. But he dealt only with natural forces. How could his lead be extended to the more exciting paraphernalia of fantasy?

Here the pioneering figure, as so often, was Robert Heinlein, the man 'who first incorporated magic', as Poul Anderson called him thirty years later. His *Magic Inc.* (which appeared first as 'The Devil Makes the

⁷ Put forward by Tzvetan Todorov (1970): things are either *étrange* (abnormal) or *merveilleux* (supernatural; there may be a period when one is not sure which category an event is in: 'le fantastique occupe le temps de cette incertitude'. The theory is more neat than comprehensive, though it has often been cited academically.

⁸ Only Blish's *Black Easter* is comparable, and that not very much so. It needs to be said that *Black Easter*, while evidently in this sub-genre, is nevertheless so individual as to demand special treatment, preferably in company with the other volumes of *After Such Knowledge*.

Law' in *Unknown* (Sept. 1940)) is set firmly in an alternate world full of salamanders, demons, gnomes, witch-smellers, etc. Yet the hallmark of the story is a kind of hard-boiled materialism characteristic of Heinlein at any time, but in this case working extraordinarily well, to produce a species of literary effect hardly possible in any earlier period. The tone is set in the first scene, where the 'Heinlein hero', Archie Fraser (it seems unlikely that the name is just a coincidence), confronts a thug who is trying to sell him 'protection'. The situation is such a cliché in thrillers and films as to seem absolutely predictable; but both characters talk from the start as if magic was normal. Not only normal, one should say, but calculable and even trivial, for it is one of the strong points of Archie Fraser's characterisation that his job – he is a building-materials supplier – does not bring him into contact with magic very much, being thoroughly earthbound and involving too much 'cold iron'. As a result, he sees it both peripherally and objectively, concerned all the time to evaluate it in terms of cash. After his refusal to pay 'protection' and the consequent gutting of his store by gnomes, undines and salamanders, Fraser's real concern is not with what he has had destroyed - being covered by insurance – but by the longer-term effects:

I was not covered against the business I would lose in the meantime, nor did I have any way to complete current contracts; if I let them slide, it would ruin the good will of my business, and lay me open to suits for damage. The situation was worse than I had thought ...

The paragraph just quoted could come from any book set in normal and contemporary America; and that is the level on which Fraser continues to think. Faced with the problem outlined he talks to his insurers; then to a professional salvage consultant; then to one in private practice. Fees are negotiated, percentages adjusted, the threat of a monopoly exposed. The fact that on another level the conspiracy is literally Hellish, the practitioners demons, the consultants warlocks and witches, receives no overt comment from the principals and is studiedly underplayed. But the result of the coolness projected is, of course, reassurance. The idea behind it is: Fraser is a materialist; he believes in demons; if someone as sceptical as him is convinced, there must be some evidence for it ... And so even the suspicious twentiethcentury reader is drawn along, partly hostile, partly enchanted, but at least having his rationalism soothed (by Fraser) at the same time as it is irritated (by the events of the story). Further, the reader is assured early on that there are some things, even in a fantastic universe, which can be reacted to as firmly and as negatively as usual; in the first scene, Fraser pounces on the thug who is threatening him because he notices he is wearing an amulet – and this means 'he was superstitious, even in this day and age'. The 'this day and age' is a characteristic post-Enlightenment formula, and so is the concept of 'superstition', 'unreasonable' or 'groundless' belief, as the *Oxford English Dictionary* says (xvii.241). The phrase makes Fraser, once again, akin to us in spite of his acceptance of magic; and since he only accepts some magic, part of the interest of *Magic Inc.* is finding out where and how he draws his boundaries of belief.

On this, Heinlein spends a great deal more time than is strictly necessary for the narrative. Having been visited and threatened, Fraser goes over to see a friend of his, one Jedson, a fellow-businessman but one with a larger stake in magic - and finds him trying to get a witch to make clothes. The clothes never get made, the witch is irrelevant, but the scene (a fairly long one) tells us a good deal about the nature of magic: one, that it is often not cost-effective, two, that it works by homoeopathy and contiguity, as already mentioned, but three, that there is something beyond this involving the Half World of the demons. Similar side-issues crop up continually. Catching a taxi allows a digression on the dangers of travel over consecrated ground (where magic stops working); a scene in the state capital brings up remarks on the attitude of trade unions to non-human labour; going to a restaurant points out how useful illusory magic food is to a slimmer. And the real function of all this 'wasted' space is not to fill in the background or show off Heinlein's bizarre imagination, but to remove magic from the sphere of the fantastic/supernatural and bring it solidly down to the everyday/ commercial/legal/exploitable.

It might seem that de-glamorising magic ruins its point! But that would be to misconceive the attraction that magic has for the modern reader (of science fiction, anyway). For we are all in a sense blasé, in a sense spoilt. In a world of half-understood scientific miracles, mere strange things (like wonderful cures or marvellous implements) no longer have much power to shock; seven-league boots and flying horses are more or less with us already. But what we have become greedy for are novel theories, or systems, or inferences, or anything which suggests that there is a world outside the dimly understood but strongly felt cage of scientific probability, of the universe as-it-seems-at-the-moment. Where a medieval mind, in short, would be happy with a magic lance, we want to know how magic lances are made, whether the magic resides in weapon or user, what happens when magic lance hits magic shield, and in general what kind of world view is necessary to produce and enclose any such phenomenon. It is this

itch which Heinlein's asides scratch so effectively; they show us how people very similar to ourselves would react if just a few of the bars of our intellectual cage were relocated.

From this point of view, the side-issues of *Magic Inc.* are in practice its high points. The story itself, of mobsters overcome by rugged individualists, has no surprises. It exists only to allow the detailed presentation of an alternate world (though admittedly one caught at a dramatic moment); and in reading about that alternate world one's pleasure comes for the most part, first from comparing it with one's own, and second from comparing it with the uninhibited world of ancient fantasy and fairy-tale. The similarities with the latter are obvious, superficial; with the former they are deep-rooted in the characters' attitudes. The book could not work without the resultant double tension, the evocation of romance only to have it crushed and the presentation of sordid reality only to see it spin unpredictably away; and the pervasive tone that results, while hard to characterise, is at any rate something distinctive and novel in the history of literature, something marked above all not by credulity but by wit - the simultaneous perception of similarities and differences.

One might think that what has just been said would be an adequate *raison d'être* for any literary form; and, in literary terms, so it is. Science fiction writers, however, tend to adopt sterner criteria than mere critics. And James Blish, notably, has stigmatised the whole sub-genre of books about magic (in his 1968 'Preface' to *Black Easter*) as classifiable 'without exception as either romantic or playful' – remembering perhaps that though it is only a short step from saying that magic is like science to saying it is a form of science, nevertheless it is a markedly definitive one. Is his criticism true, and is it adequate? Can 'worlds where magic works' be defended on grounds other than those of entertainment? These are questions that science fiction authors are themselves inclined to pose: they are not all easy to answer.

One can begin by admitting the immediate force of Blish's categorisation. The 'romantic' half of magic literature covers what are usually called 'sword and sorcery' books, from Tolkien to Robert E. Howard: books which present magic without trying to explain it, books which recreate (or exploit) an ancient glamour. Heinlein and Leiber, though, both fall presumably into the 'playful' bracket first because they have no serious interest in the history of magic, second because they are concerned with drawing as much complexity as possible from as few 'rule-changes' as possible. A comic streak is discernible in both, rather faintly in Leiber (the running parallel of small-town America with savage Polynesia), pretty obviously in Heinlein (the rescuing demon

who turns out to be from the FBI, snap-brim hat and all). The streak becomes a distinguishing mark in Poul Anderson's *Operation Chaos* (published as a book in 1971), at least in its earlier chapters. The first story, for instance (published as 'Operation Afreet' in *Fantasy & Science Fiction* 1956), ends with the psychoanalysing of the enemy spirit, who turns out to have a phobia about water; the juxtaposition of ancient and modern lets us feel comfortably superior as well as amused. Something could be said about the way in which Andersen moves from the mere manipulation of logical twists in that story to the genuinely powerful analogies of 'Operation Changeling', set in the same universe but written thirteen years later, but the reasons are political rather than magical, and have to be left. It is enough to say that through his career Anderson in particular has been able to confirm Blish by contrasting magic and science, fantasy and reality, in a way that is not only 'playful' but almost diagrammatically so.

In his early book, Three Hearts and Three Lions (1953), for instance, Anderson relies virtually exclusively on the transit from what one might call 'legendary datum' to 'technological answer'. Thus, in one scene, the hero Holger is pursued by a dragon; since it is, like all proper dragons, fifty feet long, winged and fire-breathing, even a Beowulf can hardly hope to beat it fair and square. 'How'd ye conquer him, best o' knights?', as the swan-maiden so rightly asks. 'A little thermodynamics is all', replies Holger modestly. 'Not magic. Look, if the creature breathed fire, then it had to be even hotter inside. So I tossed half a gallon of water down its gullet. Caused a small boiler explosion ... Nothing to it.' The operative words, of course, are 'had to': dragons 'have to' have internal heat to a rationalistic mind, a modern one, just as giants have to be squat (to bear their own weight, by the law of proportion), and dwarves are bound to be cheeky (in overcompensation for their inevitable inferiority complexes). Even in fantasy, what is known cannot be put aside. Most of Holger's adventures, accordingly, follow this pattern: a 'legendary datum' is presented, something familiar from fairy-tale, as that dragons breathe fire, or that fairies cannot touch iron, or that some human children are werewolves. This is then scrutinised closely, to show that (as we would expect of primitive notions) the data contain 'unconsidered assumptions' that appear self-contradictory; fairies, after all, have equipment of the same kind as men, werewolves have human parents, dragons presumably have animal intestines. A 'logical query' emerges: what metal do fairies use, since they must use something? How do dragons contain their internal heat? How do werewolves survive

⁹ See my review, *Speculation*, 31 (1972): 28–9.

infancy? And then we are given the appropriate 'technological answer' – fairies must be able to work aluminium, magnesium, beryllium ... dragons must have guts like boilers. As for werewolves, they can only be explained by the concept of a recessive gene. 'If you had the entire set, you were a lycanthrope always and everywhere – and were most likely killed the first time your father found a wolf-cub in his baby's cradle. With an incomplete inheritance, the tendency to change was weaker.' So some werewolves, like haemophiliacs, survive by accident till puberty, and till other influences trigger their metamorphosis.

Arguments like this have a kind of delight to offer, especially when they are urged on as thick and fast as they are by Anderson. They give one permission to believe in fairyland, they allow one to speculate that ancient stories are indeed the garbled descendants of truth. Nevertheless, they do start and end in comedy: wizards with spectroscopes (Anderson), English knights with old-school ties (Astolph in de Camp and Pratt's *The Castle of Iron*), wizards who turn not into elephants but into plaguegerms (Merlin in T.H. White's *The Sword in the Stone*). 'Playful' is a fair description of them. To go further, one needs to look at what is perhaps the greatest *tour de force* in 'Frazerian' literature, Randall Garrett's 'Lord Darcy' series, mostly from *Analog.*¹⁰

This contains echoes of practically all the works mentioned so far. In *Three Hearts and Three Lions*, for instance, the elf-duke sings a few lines of an epic:

Gérard li vaillant, nostre brigadier magnes, tres ans tut pleins ad esté en Espagne conbattant contre la Grande Bretagne.

The lines are modelled on the start of the *Chanson de Roland*, greatest of the Charlemagne romances of our world, the books which provide the fantastic universe into which Holger has fallen (or re-fallen, since he is in romance terms the paladin Ogier the Dane). But, of course, they are about the Napoleonic wars, history to us, fantasy to the elf-duke; and their hero is Conan Doyle's Brigadier Gerard. Randall Garrett, too, draws on Conan Doyle, since Lord Darcy and his henchman Master

¹⁰ The series comprises four novelettes, a serial and four shorter stories, all but two published in *Analog* between 1964 and 1976. The serial, *Too Many Magicians*, was published in book form in 1966 and the stories were collected as *Murder and Magic* (1979) and *Lord Darcy Investigates* (1981). All nine works were collected in an omnibus volume as *Lord Darcy* (1983), and two further short stories were added in an expanded version of the latter in 2002. Citations here are from the 1983 volume.

Sean O Lochlainn are evident analogues of Sherlock Holmes and Dr Watson (down to Lord Darcy possessing a brilliant, fat, bone-idle cousin like Sherlock's Mycroft). They inhabit an alternate universe in which magic has developed rather than science, as in *Operation Chaos*, and the main result of this is that Master Sean, the forensic sorcerer, is far more important than Dr Watson ever was. As in *Magic Inc.*, the high points of the Garrett series are in fact his explanations and experiments, not the detective story that encloses them. And, finally, Garrett's creation resembles *Conjure Wife* and *The Incomplete Enchanter* in being solidly and overtly based on Frazer.

Yet it embodies distinct and even massive development. It will be remembered that Sir James stated the Law of Contagion as: 'that things which have once been in contact with each other continue to act on each other at a distance after the physical contact has been severed'. De Camp and Pratt rephrased this as 'Things once in contact continue to interact from a distance after separation'. Master Sean, however, states it firmly and early as:

any two objects which have ever been in contact with each other have an affinity for each other which is directly proportional to the product of the degree of relevancy of the contact and the length of time they were in contact and inversely proportional to the length of time since they have ceased to be in contact. (*Lord Darcy* (1983): 22)

Here the Newtonian analogy is inevitable, deliberate. If one can state the Law of Universal Gravitation as $F_g = G((m' m'')/(r^2))$, one can easily rewrite Garrett's Law of Contagion as $F_c = A((rc'lc'')/t)$. There is a rigour in the framing never apparent before. There is also an expansion. All previous authors had stuck close to Frazer's two basic principles, similarity or homoeopathy and contagion or contiguity. Garrett uses both, but adds the Laws of Relevance, Synecdoche and Congruency, with Psychic Algebra (and evidently a great deal more) lurking in the background. The laws are not just stated, furthermore, but used and explained. The concept of 'relevancy', for instance, which Garrett has added to Frazer's Law of Contagion, comes up at least five times in the five works that make up the 'Lord Darcy' series. In the first of them, 'The Eyes Have It', it functions in two of the 'forensic' tests that Master Scan carries out to assist Lord Darcy's murder investigation. First, it establishes that a button has been torn from a particular robe; then a spell is cast on the bullet taken from the murdered man's heart and now set up on a pedestal in line with the muzzle of a suspect gun:

As the last syllable was formed by his lips, the bullet vanished with a ping! In its vise, the little gun vibrated.

'Ah!' said Master Sean. 'No question there, eh? That's the death weapon all right, my lord. Yes. Time's almost exactly the same as that of the removal of the button ...' (Lord Darcy (1983): 23)

After this demonstration of expertise, the question is pretty evidently why magic cannot find the murderer as easily as it can identify the weapon. But here 'relevancy' returns. As Master Sean explains, a gun is 'relevant' to the bullet it fires in a way that is not true, for instance, of a dress and its wearer; the gun changes the bullet strongly and quickly, while being worn affects a garment only slowly, if at all. So the best of sorcerers cannot trace a murderer from a single clue. Obviously, it would ruin the story if he could, and it is vital for Garrett to leave some room for Lord Darcy's deductive powers. Nevertheless, 'relevancy' makes a kind of sense, first, because we can all see that some contacts are just more intimate than others, and this ought to be allowed for in any 'Law of Contagion', and, second, because the whole scene can hardly fail to make us think of present-day ballistics testing. We too can identify a gun from a bullet; but not a person from his clothes. In a later story, 'The Muddle of the Woad', the point comes up again. Once more, a scrap of cloth is a clue, and once more Master Sean regrets that 'relevancy' cannot help, while preparing an apparatus consisting of a tumbler and several pounds of fine green floc (i.e., finely chopped linen), if cloth is ripped, he remarks, it can be repaired by a kind of seamless mending:

but that's a simple bit of magic compared to a job like this. There, all [one] has to do is make use of the Law of Relevance, and the two edges of a rip in cloth have such high relevance to each other that the job's a snap.

But this floc, d'ye see, has no direct relevance to the bit o' cloth at all. For this, we have to use the Law of Synecdoche, which says that the part is equivalent to the whole – and contrariwise. (*Lord Darcy* (1983): 135)

And he goes on to put the floc and the scrap in the tumbling barrel, cast his spells, and have the whole thing revolved for several hours. The result is 'reconstruction', a long robe of fuzzy floc, capable of being seen and measured, but without any structural strength: the undifferentiated linen has attached itself to the original scrap in the way that the latter's inherent structure has dictated. Again, what is plausible in this experiment is its limitations. Heinlein had proposed a similar trick in

Magic Inc., but there the whole thing was simpler, sturdier, more reliable – in fact, it all worked 'just like magic'. Garrett makes the binding forces much feebler, not stronger, as Master Sean says, than the attraction of rubbed amber for lint (or what we would call 'static electricity'). Nevertheless, the experiment suggests to us once more that a piece of cloth may be 'relevant' to another but not to a third, a hypothesis that simultaneously makes sense and offers the laws of magic something obvious to work on. Later, the same principle is used to differentiate an accidental ink stain from deliberate handwriting (intention makes the latter 'relevant' to the paper in a way the former is not) and again to explain how some keys are 'relevant' to some locks.

The true detection in all this is being done by the reader! What Master Sean says is as often as not explanation for why he cannot solve mysteries, and so at times has a rather marginal reference to the Sherlocking that is the ostensible subject of the story; in 'The Eyes Have It', for instance, Master Sean identifies the murder weapon, and finds that its owner is a black magician. However, this man turns out to be quite innocent of the case under investigation; the murder is solved purely logically by Lord Darcy, and Master Sean's last test – developing the image on the dead man's retina – is both inadmissible as evidence and curiously misleading. Has magic, then, led nowhere? In a sense, yes. But in a deeper sense the reader gains his pleasure not from outguessing Lord Darcy (as he might do in a conventional detective story) but from evaluating the logic of Master Sean. It is vital that what he says should appear logical, and internally consistent ('relevancy' has to be the same principle under all its variant aspects); also, that what he says should be plausible, reminding us at least from time to time of phenomena we really believe to exist – like static electricity or ballistic markings. In the same way the 'magic' has to be recondite to be arresting, and matter-of-fact to be convincing. Randall Garrett's stories are successful precisely insofar as these conflicting criteria are met; but when they are satisfied (as they are with great wit and thoroughness) a literary effect is created which is quite different from, and superior to, the jigsaw-puzzle neatness of even the best of Sherlock Holmes. The story is there for the setting, in short, and not the other way round.

Is all this merely 'playful'? James Blish probably thought so. At one point in *Black Easter* he has one of his characters quote Master Sean: 'As a modern writer says somewhere, the only really serviceable symbol for a sharp sword is a sharp sword'.¹¹ The casual nature of the reference is slightly patronising and suggests a consciousness of superior knowledge.

¹¹ Black Easter, chap. 8, echoing Too Many Magicians, Analog (Sept. 1966): 151.

For all its consistency, Blish seems to have considered Garrett's magic as no more than an intellectual construction without historical truth, hence a game – and so much can be accepted. The 'Lord Darcy' stories, though, are serious in a way that *Operation Chaos* and *Magic Inc.* are not: they enshrine a genuine interest not in the history of magic but in the history and nature of science. A part of their total effect is in fact ironic. And (as modern literary critics know to their cost) nothing, nowadays, is allowed to be quite as deadly serious as that.

The point is made briskly by an unimportant but recurrent character, Sir Thomas Leseaux, the theoretical thaumaturgist. It needs to be remembered that Garrett, like his predecessors, is aware of the fundamental question, if magic works, why have we not been able to systematise it? And his answer involves an element not used with any force by de Camp or Leiber or Heinlein or Anderson: that is, the Talent. Something else that makes magic different from science is that some people can do it while others cannot, not because of their intellectual power or lack of it, but because of some indefinable but quantifiable faculty, like a gift for music or mathematics. Master Sean has the Talent and Sir Thomas Leseaux has not. However, this does not stop Sir Thomas from being a Doctor of Thaumaturgy, it means simply that he does pure research and others put it into practice. It means also that he is committed to the theory of magic in a way that even Master Sean is not; and here the irony sets in. In 'The Muddle of the Woad', Sir Thomas is lecturing Lord Darcy on the evils of superstition (another hangover from Magic Inc.). The lower classes, he insists, 'confuse superstition with science':

'That's why we have hedge magicians, black wizards, witches' and warlocks' covens, and all the rest of that criminal fraternity. A person becomes ill, and instead of going to a proper Healer, he goes to a witch, who may cover a wound with moldy bread and make meaningless incantations, or give a patient with heart trouble a tea brewed of foxglove or some other herb which has no symbolic relationship to his trouble at all. Oh, I tell you. my lord, this sort of thing must be stamped out!' (Lord Darcy (1983): 123)

Here the primary irony is against Sir Thomas. We no longer believe in 'incantations', but 'mouldy bread' makes us think of penicillin; foxgloves contain digitalis, a drug used in treatment of heart diseases. So the witch-women may know something after all. The second irony, though, is against pure scientists of any kind. Sir Thomas ignores facts that are outside his theory; in his world, the facts are materialistic – so can there

be 'facts' that are magical? Symmetry suggests it, and the scorn with which unorthodox phenomena are treated is a constant in both real and imagined worlds. Garrett is then indicating once more the bars of the scientific 'cage'. It is hard to know how far he means it seriously, but at any rate he presents it much less fancifully than Anderson or Heinlein. Sir Thomas's revelation of bias, like Professor Saylor's half-lecture in chapter 16 of *Conjure Wife*, addresses itself to a genuine question: why, if there is anything in magic, it has not already become evident. The answer is coherent, if not absolutely cogent.

In any case, the parallels between scientific and magical history reach extraordinary density all through Garrett's series. In the course of one story or another we come across the magic equivalents of freezers, torches, televisions, vacuum cleaners: in each case the implement is provided with a theory of operation, and some hint as to how the evident technological bottleneck (e.g., filaments in light bulbs) has been noticed and unblocked. Other references also suggest that even if the theoretical superstructure of the 'magic' world is different from ours, it still has to deal with the same phenomena: in trying to determine the identity of a dead man (in 'A Case of Identity') Master Sean performs a blood test based on the number 46. He has no idea why this is significant, and to him biology is a stifled art, but 46 is the number of human chromosomes; his method is strange but his answer is right. Still other references frankly make us wonder, like Lord Darcy's remark on number symbolism: 'Inanimate nature tends to avoid fiveness'. Sir Thomas Browne, that early half-scientist, thought differently (his The Garden of Cyrus (1658) was devoted to the collection of quincunxes of all kinds) but it seems to be a 'fact' - could it mean anything? More extensively, the whole of Too Many Magicians, the only full-length novel in the series, is linked thematically by the notion of the human mind deluding itself. At the start of the story Master Sean has his magic bag returned to him by a series of unconscious but hardly accidental transfers; later we have the 'Tarnhelm effect' explained to us, which shows that no one can be made invisible, but people can be conditioned against looking directly at what they fear; the technological secret at the centre of the book is the Royal Navy's new 'confusion projector', a spell which makes it impossible for men to carry out destructive activities, like loading guns. One could shrug all these off as mere fantasies, but the subject-matter has got uncomfortably close to matters we believe to be real, but as yet outside an adequate materialistic theory: the unconscious mind, psychic compulsions, hypnosis. Recognition of this may indeed make one laugh, and to that extent the novel is still 'playful'. But the fact is not dispersed by laughter: recognition of that is also part of the novel's effect.

There is indeed an overall suggestion of the 'radical alternative' about Garrett's world, politico-culturally as well as magico-scientifically. The latent similarity to Sherlock Holmes is useful, to begin with, in that Victorian England provides a rough analogue to the state of technical progress in Lord Darcy's world: steam-trains but horse-drawn carriages, gas-lights but no electricity, a kind of telegraph but neither wireless nor telephones. 12 The 'feel' of things is historically familiar. But against this there is a series of marked differences. Since the political history of the world is changed (Richard I did not die in 1199, but recovered to found the Plantagenet Empire ever more solidly), Lord Darcy is not allowed the fundamental irresponsibility of Holmes. He is in the service of the Duke of Normandy (service is personal rather than to the state). he has a stricter theory of ethics than Holmes's blend of common law and class feeling, and both he and Master Sean are good Catholics, since the Church, revitalised by its control of magic, has never needed reform. It is hard to evade the conclusion that this imaginary world is somehow nicer than both its analogues, Victorian England and contemporary America, being at once strict, fair, personal and devout. Randall Garrett does not follow through to denounce the pervasively bad effects of materialism on the psyche, or to follow Mark Twain in assuming that science, democracy and nonconformism are all much the same thing: but he knows there is a case for both theories, and their latent presence gives his stories further intellectual mass. Probably the burden of the series is that Frazer wrote truer than he knew: Victorian England did have savage analogues, and so do all human societies. The position of assured superiority taken up, for example, by the Oxford English Dictionary lexicographer is inevitably a false one.

Magic exists only in the mind, as has been said. Another way of putting that is to say that magic is an accident of history. If a phenomenon fits current theory, then, however improbable it is, it is 'natural'. If it does not, it is inevitably 'supernatural'. But it is a mistake to think this borderline a fixed one. Rainbows kept a touch of the supernatural till Newton, magnets till William Gilbert (at least).¹³ In the present day,

¹² It seems likely that the Holmes-analogue misled Garrett slightly at an early stage; he introduces a 'teleson' to parallel the Victorian telegraph, but realises later what an anomaly anything electrical would be. In *Too Many Magicians* we are told that no one knows how the 'teleson' works. [After this piece was printed in *Foundation*, Randall Garrett wrote to me on this point, saying cheerfully that he 'denied the allegation and defied the alligator'. Regrettably, I have since lost the letter, and, alas, forgotten his explanation, but he did have one: the 'teleson' was not a mistake.]

¹³ William Gilbert wrote his De Magnetis in 1600, and has a claim to have

ghosts, hypnosis, clairvoyance and dowsing are all supernatural in differing degrees; it would be rash to think they will all forever remain so (or all be brought to heel). Magic, therefore, need not be just a word used by ignorant people to explain what they do not understand, but a word used by sensible people to indicate that they know their understanding is limited. This thesis underlies all the books that have been discussed here, and one should not allow semantic prejudice to disguise its essential modesty, on a serious level, nor its capacity for producing wit, on a comic one.

There remain three final caveats. One is that this article has assumed that all threads run from Frazer. This need not be entirely true: de Camp and Pratt mention W.B. Seabrook, who wrote a series of books on witchcraft and primitive custom between 1928 and 1941. Larry Niven has based an entire series on the proposition of J.H. Codrington (1891), that mana is 'the belief in a supernatural power or influence ... present in the atmosphere of life', readily accessible as quoted in the article on 'magic' in the 1954 Encyclopaedia Britannica, vol. 14, p. 1043. Niven takes Codrington's metaphor literally, as Leiber did with Frazer's 'laws', and the process of development is the same. But this shows only that not all magic stories need have their roots in the same bit of the nineteenth century (though, as it happens, Frazer actually quotes Codrington at i. 227, so perhaps they do). Second, it is evident that science fiction motifs have a life of their own. Several of the authors discussed quote each other, even answer each other's conundrums (it is characteristic that James Blish should actually defend 'superstition', quite logically, against both Heinlein and Garrett in Black Easter, chap. 8). This means that some authors have probably never heard of Frazer or Seabrook or anybody else in that field, but have got their ideas from science fiction itself. One can only remark that this does not seem to happen as often as might be expected; in many authors, honest passion for learning outweighs even the boredom jammed into obsolete anthropology, thus providing almost the only audience still surviving that is interested in The Golden Bough for itself.

But, finally, one should remark that Sir James did reach one audience besides writers of science fiction, and that is, writers of books on the occult. Margaret Murray, in particular, decided at some time before 1920 that magic was neither magic nor science, but actually religion: 'Ritual Witchcraft', not 'Operative Witchcraft', as she put it. The further story of

founded electrical studies by doing so; he also believed, however, in contagious magic (putting ointment on nails not wounds), and thought magnetism had something to do with it.

her mission has been detailed in *Europe's Inner Demons*, by Norman Cohn (1975), and more recently by Ronald Hutton's *Triumph of the Moon* (1999). Her influence, indeed, continues to grow through different versions of the 'New Age' movement. Nothing is more characteristic, however, than the indifference shown to this development by authors of science fiction. Anderson and Heinlein make perfunctory gestures towards established religion; Leiber, de Camp and Pratt ignore it; James Blish respects orthodoxy and heresy about equally. Garrett, the only author actually to bring religion into his story and use it sympathetically, nevertheless stops to make evident and derisive references to the Murray-cult in his picture of 'The Holy Society of Ancient Albion' in 'The Muddle of the Woad': fanatics without grasp of history or logic, whose self-aggrandising desire for excitement is open only to exploitation. Curiosity about magic, in short, can be tolerated, but never reverence for it. This is only the last of many ways in which magic and science are treated identically.

10 Introduction

Serious Issues, Serious Traumas, Emotional Depth

Like the previous one, the essay that follows takes up the issue of the relationship between magic, science and religion, the famous triangle as proposed by Sir James Frazer, in which any two of the three terms are opposed to the third. Magic and science are manipulative, they are supposed to work, while religion is petitionary (a point made firmly by C.S. Lewis at the start of the fourth of the 'Chronicles of Narnia', *The Silver Chair* (1953)). Meanwhile, magic and religion are regarded, by us, as 'supernatural', while science is 'natural science', two against one once more. The third two-against-one contrast is that religion and science are two powerful forces in the contemporary world, while magic has dwindled to being something only in the imagination, an entertainment.

And what has any of this got to do with science fiction, or fantasy even? There are two points I did not stress in this essay, but might have done if I had thought (or possibly, if I had known). One is that there is a good reason for relating Ursula Le Guin to anthropological theory, which is that she was brought up on it. She gives her own name as Ursula K. Le Guin, and the K. represents her maiden name, which is Kroeber: she is the daughter of two of the most prominent early-twentieth-century structural anthropologists, in the American Boasian tradition, Alfred and Theodora Kroeber. Even more than Jack Vance (see item 6. above) she is saturated in structural or cultural anthropology. Her The Left Hand of Darkness (1969) follows the established sf tradition of imagining a culture with radically different ground rules from our own, but does it semi-professionally, in that the novel incorporates some nine sections of anthropological field notes, which it is the job of the reader to relate to the main story (cognition and estrangement once again; see item 1). Her Always Coming Home (1985) goes even further in the same direction, adding music and myth to the presentation of an imagined culture, and indeed goes so far as to downgrade the sense of story - as do the later 'Earthsea' books, Tehanu

(1990), The Other Wind (2001) and Tales from Earthsea (2001), written many years after their predecessors.

The other point is one I find myself making with increasing stridency. usually with reference to Tolkien, but it applies here as well, and to much of sf too. It is that literary critics are still prone to writing off fantasy and sf as escapist, not serious, not concerned with real life, etc., whereas for most of the human species last century - apart from the small, privileged, sheltered, literary coteries of Britain and America the serious issues were precisely those dealt with in fantasy and sf. The main ones last century were industrialised warfare and the corruptions of power (see Tolkien), and we hope very much that they will not be the main issues of this century too. Another vital question, tackled by authors from Wells onwards (see item 2, above), is whether a sense of morality can co-exist with belief in evolution by natural selection (which means, to be frank, 'over-produce and cull'). A third is the relationship between nature and culture (see Vance and Le Guin again), but many others as well - there are few sf authors entirely unconcerned with it. And then there is the question of life and death, which is the centre of the 'Earthsea' books discussed here. How does one manage in the aftermath of the great lapse of religious faith, everywhere in the Christian world outside North America, which dates back also to the nineteenth century? All these are very much more serious contemporary issues than the kind of thing I was made to write essays about as a Cambridge undergraduate: personal emotional development (E.M. Forster), fine distinctions of taste (Henry James), the impossibility of ever expressing anything adequately (T.S. Eliot), etc.

And sf surely tells us that this century is very likely to be worse! Which is more 'escapist', *Pride and Prejudice* or the 'Earthsea' trilogy? Not that I have anything against *Pride and Prejudice*, a work which has shown astonishing powers of survival. But the argument from seriousness and contemporary relevance goes just the other way, whatever Bridget Jones may say.

I would add that in my reading Ms Le Guin counts as one of the twentieth century's 'traumatised authors'. There are some clear cases among sf and fantasy authors, like Kurt Vonnegut, who was in Dresden the night the British fire-bombed it, or George Orwell, shot through the throat in the Spanish Civil War, or Tolkien, who went over the top with the Lancashire Fusiliers at the Somme, or William Golding, who commanded a rocket-firing ship on D-Day and then at the dreadful battle of Walcheren. Le Guin is not quite one of those, and her 'trauma' is perhaps inherited rather than personal. But her mother wrote what is I think the most awful book I ever read in my whole life, about 'Ishi', the

last sad free survivor of the genocidally destroyed natives of Northern California (I refuse to give a reference to it: take my warning, do not read it, certainly not the adult version). Ishi was not his real name, which he would not tell anyone, and see the essay that follows for the significance of that! But Theodora Kroeber's account of his life and his people's extinction seems to me to be at the bottom of what must be Le Guin's most famous and most-anthologised short story, 'The Ones who Walk Away from Omelas' (1973), a story which upsets everyone, not just me. This is what gives her work something that seems to me to be denied to many mainstream classics of last century: genuine emotional depth. That too can co-exist with sf and fantasy.

The Magic Art and the Evolution of Words: Ursula Le Guin's "Earthsea" Trilogy

In chapter 13, part IV of C.S. Lewis's *That Hideous Strength* (1945), the changing relationships between magic, science and religion are expressed in a conversation between Dr Dimble (a teacher of English) and his wife. Dr Dimble remarks:

'if you dip into any college, or school, or parish – anything you like – at a given point in its history, you always find that there was a time before that point when there was more elbow-room and contrasts weren't so sharp; and that there's going to be a point after that time when there is even less room for indecision and choices are more momentous ... The whole thing is sorting itself out all the time, coming to a point, getting sharper and harder.'

This process of increasing distinctiveness is partly moral, partly practical; the drive of Dr Dimble's argument is towards justifying the use of magic (in the person of Merlin) against science (as represented by the diabolist National Institute of Co-Ordinated Experiments), and he maintains it by asserting first that magic was in Merlin's time not opposed to religion, though now unlawful for Christians, and, second, that when it had real power it was less occult and more materialistic than it is now generally taken to be. 'Merlin', he concludes, 'is the last vestige of an old order in which matter and spirit were, from our point of view, confused'. In Merlin's day, then, magic, science and religion were not the separate things they have since become.

The conversation, as one would expect from Professor Lewis, contains a good deal of semantic truth. The word 'science' itself is defined in the *Oxford English Dictionary* as 'A branch of study which is concerned ... with observed facts systematically classified and more or less colligated by being brought under general laws' (xiv.649), and a definition of this kind is now what most people think of when they use the word. It is,

however, only the fourth heading offered by the Oxford English Dictionary, and is recorded in that sense only from 1725. A man using the word in the fourteenth century, say, might mean no more than 'mastery of any department of learning' (Oxford English Dictionary, sense 2). If that were the case, the distinction between 'art' and 'science' (now so critical in universities) would be hard to perceive; and the area we now call 'scientific' might be inextricably confused with the area governed by the ars magica or 'magyk natureel'. The modern distinction between 'astrology' and 'astronomy' is not recorded until around 1480,1 while 'alchemy' is still jostling 'chemistry' a century later. To give a literary example, Chaucer in his 'Franklin's Tale' explains the story's central fantastic event by referring fairly impartially to 'magyk natureel', to 'sciences / By whiche men make diverse apparence', to 'illusioun', to 'apparence or jogelrye', even to 'supersticious cursednesse'; the man who works the miracle is indifferently a 'clerk', a 'philosophre', a 'magicien'. This Chaucerian lack of distinctiveness is no doubt part of what Lewis's Dr Dimble had in mind.

The point, however, should be of interest to critics as well as to semanticists or historians, for the very sharpness and hardness of modern concepts raises inevitable problems for the writer of fantasy. 'There is a desire in you to see dragons', remarks one character in Ursula Le Guin's 'Earthsea' trilogy to another, and he seems to speak for and about many modern readers and writers. But, however great their desire, all modern people, apart from very young children, have dragons classified irrevocably as fictional/fantastic, along with wizards, runes, spells and much else. Writers of fantasy in the present day, then, do not have the Chaucerian freedom, and are always faced with the problem of hurdling conceptual barriers. They know that magic, in particular, cannot be assumed, but will have to be explained, even defended, from the scepticism now intrinsic in the word's modern English meaning. Of course, this restriction offers a corresponding opportunity, one which, like the problem, would be ungraspable by a medieval author: the modern fantasist, by his explanations and his theories, is enabled like Dr Dimble to comment on the real world, to create novel relationships, to suggest that the semantic 'grid' of Modern English is, after all, not universal. His art is rescued from the standard jibe of 'escapism' -'It's only a story!' -by its covert comparisons between 'fantastic' and 'familiar': the story embodies argument as well.

¹ The Oxford English Dictionary does not regard the issue as settled till much later (i.734–5), but there is a clear statement of the current distinction in Robert Henryson's poem of Orpheus and Eurydice, ll. 586 ff.

Such creation of relevance from what appears to careless readers as unbridled fantasy is embodied as well as anywhere in modern literature by Ursula K. Le Guin's trilogy of books, first published 1968, 1971 and 1972 respectively, A Wizard of Earthsea (WE), The Tombs of Atuan (TA), The Farthest Shore (FS).2 Significantly enough, it is based on a semantic point. The archipelago world of the trilogy (we never find out where or when it is) is devoid of science, but based on magic. Le Guin identifies the workers of magic reasonably indifferently as wizards or witches or sorcerers, but there is one term she does not use, and that the commonest of all in Modern English: a worker of magic is never described as a 'magician'. The reason, of course, is that this term has a familiar current sense, deprecatory if not pejorative, 'a practitioner of legerdemain'. The word has been much affected by the rise of 'scientist'; it contains strong suggestions that magic is no more than a 'pretended art', as the Oxford English Dictionary so firmly insists – an affair of rabbits up sleeves and deceptive mirrors. A 'magician', then, is barely superior to a 'conjurer' or a 'juggler'. Le Guin, accordingly, makes consistent use of the base-form from which 'magic' itself is derived, 'mage', from Latin 'magus'; and from it she creates a series of compounds not recorded in the Oxford English Dictionary at all: 'Archmage', 'magelight', 'magewind', 'magery', etc. The point may seem a trivial one, and yet is close to the trilogy's thematic centre. The continuous and consistent use of words not familiar to modern readers reminds them to suspend their judgement: their ideas, like their vocabulary, may be inadequate, or wrong.

This, indeed, is the basic point repeated through the first half of the first book in the sequence, *A Wizard of Earthsea*. Definitions of magic are repeatedly implied, or stated, and then turned down or disproved: the definitions bear a close resemblance to those current in our world. 'You thought', says one of the characters to the hero, Ged, 'that a mage is one who can do anything. So I thought, once. So did we all'. The idea is immediately reproved as boyish, dangerous, the opposite of the truth (which is that a mage does only what he must); nevertheless, we recognise it immediately, familiar as we all are with such phrases as 'it works like magic', which imply that magic is effortless, unlimited. The magic of Earthsea, though, is given moral boundaries; in an earlier scene it was given intellectual ones. There, Ged, still a boy and only just exposed to magic, finds himself facing a piratical invasion with the men of his village. In this situation, he naturally wishes for some

² As said in the 'Introduction' to this essay, there are now three further works in the series: *Tehanu* (1990), *The Other Wind* (2001) and the collection *Tales from Earthsea* (2001). They are markedly different from the earlier trilogy.

blasting stroke of magic, and rummages in his spells for one that might give him some advantage. 'But need alone is not enough to set power free', the author reminds us: 'there must be knowledge'. The maxim gains added point by being a total reversal of a standard and familiar modern theory of magic, the anthropological one, stated most clearly by Bronisław Malinowski, that magic is in essence a cathartic activity, called forth by stress, and working insofar as it produces confidence. 'Science is founded on the conviction that experience, effort, and reason are valid; magic on the belief that hope cannot fail nor desire deceive' (Malinowski 1954: 87). But Ged understands perfectly well the difference between desire and fulfilment, hope and fact. He is, in short, not the self-deluding savage whom Malinowski regards as the appropriate and natural practitioner of magic.

Ged is, in fact, at all times rather precisely placed within a framework of anthropological theory. For Malinowski's 'cathartic' notion is not the only influential modern explanation of magic. Even more widespread were the 'intellectualist' theories of Herbert Spencer, E.B. Tylor, Sir James Frazer and others, by which magic was, as it were, a crude and mistaken first step in the evolution of man towards science and the nineteenth century, a 'monstrous farrago', indeed (so Tylor 1871: i. 120), but nevertheless one based on observation and classification, if not experiment: something closer to science than to religion (so Frazer argued, Golden Bough, 3rd edn, i. 221) because based on the assumption that the universe ran on 'immutable laws'. It may seem that the magic of Earthsea can be reduced to a kind of unfamiliar technology in this way, since it depends on knowledge and has severe limits to its power, but that too would be wrong. For the very first thing that Le Guin does in the trilogy is to show us one way in which magic differs profoundly from science: it all depends on who does it. Ged, as a boy, overhears his aunt saying a magic rhyme to call her goat. He repeats it, ignorantly and by rote - and calls all his goats, calls them so strongly that they crowd round him as if compressed. His aunt frees him, promises to teach him, but at the same time puts a spell of silence and secrecy on him. Ged cannot speak, indeed, when she tests him; but he laughs. And at this his aunt is afraid, to see the beginnings of strength in one so young. All this, evidently, is not like our experience of science. A light turns on, an engine starts, regardless of who is at the switch; but spells are not the same. A mage, then, is knowledgeable, like a scientist; but his knowledge needs to be combined with personal genius, a quality we tend to ascribe to artists. And, unlike both, his skill (or art, or science)

³ There is a handy guide to all these in Evans-Pritchard 1965: chap. 2.

has some close relationship with an awareness of ethics – something we expect, not of a priest, perhaps, but of a saint.

It is the oscillation between concepts of this kind (and they are all familiar ones, even if readers do not feel a need to voice them consciously) which draws one on into A Wizard of Earthsea, searching for conclusions; and the book is evidently a Bildungsroman, a story of a sorcerer's apprenticeship, where one's attention is simultaneously on the growth of personal maturity, as one would normally expect, but also on the acquisition of technique. Once again, the basic processes of magic in Earthsea depend on a concept brought to prominence by early modern anthropology: what one might call the 'Rumpelstiltskin theory'. This is, that every person, place or thing possesses a true name distinct from its name in ordinary human language; and that knowing the true name, the signifiant, gives the mage power over the thing itself, the signifié. The theory behind this simple statement is expressed in many ways and at some length all the way through A Wizard of Earthsea. One of Ged's first lessons from the mage Ogion (a lesson whose inner meaning he fails to understand, equating it with mere rote-learning) is on the names of plants. Later, and better educated, he spends much time at the Wizards' School of Roke learning lists of names, and nothing more, from the Master Namer, Kurremkarmerruk. Even at the end of the book he is still explaining the ramifications of the theory to casual acquaintances (and, more relevantly, of course, to us). A key point, for instance, is the distinction between magical illusion and magical reality; it is relatively easy for a mage to appear to take another shape, or to make people see stones as diamonds, chicken-bones as owls, and so on. But to make this appearance real is another matter. Magic food and water do not really solve problems of provisioning for though they may satisfy eye and taste they provide neither energy nor refreshment. That is because the thing transformed retains its real identity, which is its name. As the Master Hand (or instructor in illusion) observes at one point:

To change this rock into a jewel, you must change its true name. And to do that, my son, even to so small a scrap of the world, is to change the world. It can be done ... But you must not change one thing ... until you know what good and evil will follow on the act. The world is in balance, in Equilibrium. A wizard's power of Changing and of Summoning can shake the balance of the world. It is dangerous, that power. It is most perilous. It must follow knowledge, and serve need. To light a candle is to cast a shadow. (*WE*, chap. 3)

As with the definitions of magic, what is said here is in the end strikingly dissimilar to early modern statements of the importance of names, above all in its concern for morality, and its sense of philosophical considerations outweighing mere technology. Sir James Frazer opened his chapter on 'Tabooed Words' by saying firmly if carelessly that the reason why 'the savage' thought there was a real bond between signifiant and signifié was that he was 'unable to discriminate clearly between words and things' (Golden Bough, ii. 318). The statement is an echo of Bacon's remark, so close to the development of self-consciously scientific attitudes, that the 'first distemper of learning' comes when men 'study words and not matter', a remark rapidly hardened into a simple opposition between words and things.⁴ Sir Francis probably believed in the truth of Genesis 2:19-20, which would give him pause; but Sir James had no real doubt that things were always superior to words. What Le Guin is clearly suggesting, though, is that this promotion of the thing above the word has philosophical links with materialism, industrialisation, the notion that, as Dr Dimble says in the passage of Lewis's novel already cited, to modern men, 'Nature is a machine to be worked, and taken to bits if it won't work as he pleases'. In her imagined world, the devotion to the word rather than the thing is bound up with an attitude of respect for all parts of creation (even rocks), and a wary reluctance to operate on any of them without a total awareness of their distinct and individual nature. To the Master Namer, even waves, even drops of water, are separate, and not to be lumped together as 'sea'; for the mage's art depends on seeing things as they are, and not as they are wanted. It is not anthropocentric. Le Guin puts this over more fully and more attractively than analytic criticism can hope to, and, as has been said, it is for much of the time the explanations of technique, limitation and underlying belief structure that hold the attention of even young readers.

The questions remain: 'Where does the background stop and the story start? What is the story really about?' By asking these one sees that the semantics and the explanations and the detailed apprenticeship of Ged are all necessary preparations to allow the author to approach a theme which cannot be outranked in importance by those of the least 'escapist' of 'mainstream' fictions, and which can perhaps nowadays only be expressed in fantasy: matters, indeed, of life and death. This theme

⁴ Bacon made the remark in Book I of *The Proficience and Advancement of Learning* (1605), not far from the place where he dismisses alchemy, astrology and natural magic as imaginary sciences. He was echoed noisily by Abraham Cowley in his *Ode to the Royal Society* and Thomas Sprat in his *History of the Royal Society*, both published in 1667.

has been adumbrated by the Master Hand's statement quoted above, and by the mage Ogion's summary of the magical and anti-scientific viewpoint: 'being ... is more than use ... To speak, one must be silent'. For the temptation which runs as a thread through the account of Ged's apprenticeship is to act, to exploit his power, to reject the wise passivity of the true mage. He shows this from his first appearance, when he calls the goats, not because he wants them, but to make them come; his instinct is fostered by the witch-wife who is his first teacher; and it leads him to repeated acts of mastery when he attempts to summon the dead (to please a girl), and does do so (to outdo a rival). This instinct is not entirely selfish, for he acts several times for others' benefit, saving his village from the pirates, saving his later 'parishioners' from the threat of a dragon. But it is always dangerous, exposing Ged three times to bouts of catalepsy, and furthermore inhibiting his development and causing him to be sent away twice (affectionately enough) from his mentors at Re Albi and at Roke. It is dangerous not just because it breaks the rules of magery, including the often-mentioned but dimly defined concept of Equilibrium, but because light and speech draw their opposites, shadow and silence: which are, quite overtly, terms for death. In seeking to preserve and aggrandise himself (and others) Ged draws up his own extinction.

The point is made clearly enough when Ged (like the Sorcerer's Apprentice) reads his master's book for a necromantic spell, discovers a shadow watching him and is saved only by his master's return; and again when (like Marlowe's Dr Faustus) he calls up the spirit of the most beautiful woman known to history, to show his power, and – unlike Dr Faustus, though in line with the severer morality of Earthsea – calls with it a shadow-beast, which savages him and pursues him ever after. In a way, though, the most powerful scene of the book is a relatively incidental one when Ged, from pure disinterested affection, breaks the first rule of magic healing and tries to bring back the dying son of his friend from the land of the dead. This 'undiscovered country' is visited spiritually, but conceived physically, and its almost casually undramatic nature makes a stronger impact than any charnel-scene:

he saw the little boy running fast and far ahead of him down a dark slope, the side of some vast hill. There was no sound. The stars above the hill were no stars his eyes had ever seen. Yet he knew the constellations by name: the Sheaf, the Door, the One Who Turns, the Tree. They were those stars that do not set, that are not paled by the coming of any day. He had followed the dying child too far. (*WE*, chap. 5)

Ged turns back up the dark hillside and climbs slowly to the top, where he finds the 'low wall of stones' (why 'low'? we wonder) that marks the boundary between life and death. And there he finds the shadow-beast waiting. Nevertheless, it is not that which is frightening, but the land of the dead itself, with the little boy running uncatchably downhill into it: a conception lonelier and less humanised than the Styx which Aeneas crosses with his golden bough, and yet closer to Classical images than to the familiar Christian ones of Heaven and Hell.

It may be said that the fear of this dim place underlies the whole of the Earthsea trilogy, to be faced directly in the third book. But the land of the dead also acts as an ultimate support for the structure of ideas already outlined. Ged's temptation is to use his power; it is a particularly great temptation to use it to summon the dead or bring back the dving: he rationalises it by wishing to 'drive back darkness with his own light'. And yet the respect for separate existences within the totality of existence, which is inherent in magic dependent on knowing the names of things, resists the diminution of others that comes from prolongation of the self, extension of life. One might say that the darkness has rights too. So the nature of his own art is against Ged, and his attempts to break Equilibrium with his own light only call forth a new shadow. The shadow, as has been said, appears in the 'Sorcerer's Apprentice' scene, becomes tangible and ferocious in the 'Dr Faustus' scene. The questions that agitate Ged and the reader from then till the end of the book are: 'What is it? Has it a name?'

On this last point opinions are divided. Archmage Gensher says it has no name. Ogion, the dragon of Pendor, and the sorceress of Osskil, all insist that it has. Their disagreement is one of philosophy, not of fact. For Le Guin is evidently no Manichaean; her powers of darkness are essentially negative (shadow, silence, not-being) rather than having a real existence that is simply malign. It follows that the shadow-beast, being absence rather than presence, should be nameless. But Ogion says, 'All things have a name'. The puzzle is resolved in the only possible compromise when Ged, after being hunted by the beast and then turning to hunt it instead, catches up with it in the desolate waters beyond the easternmost island. As he catches up, the water turns to land; evidently, to the dry land, the 'dark slopes beneath unmoving stars', which we have seen before as the land of the dead. Here man and shadow fight, and fuse; the land turns back to sea; for each has spoken the other's name simultaneously, and the names are the same, 'Ged'. The shadow, then, is equal and opposite to the man who casts it; it does have a name, but not one of its own. And the scene rounds off the definitions of magic, the debate over names, the running opposition of death and life. Le Guin glosses it (via Vetch, Ged's companion) by saying, at the very end of the novel:

And he began to see the truth, that Ged had neither lost nor won but, naming the shadow of his death, had made himself whole ... In the Creation of Ea which is the oldest song, it is said, 'Only in silence the word, only in dark the light, only in dying life: bright the hawk's flight on the empty sky.'

The key words are perhaps 'his' and 'empty'. The first tells us that Ged's call to resist death would, in the end, not be selfless but self-preserving; the beast was born of fear. The second reminds us that – since the sky is empty, hiding no divinity – the fear is justified, but has to be accepted as Ged accepts and fuses with his shadow. Yet the emptiness that frames his mortality also enhances it. He is the bright hawk, of the last image, for his use-name is 'Sparrowhawk'. The story then makes a clear final point, needing almost no critical exegesis. What should be realised further and more consciously, however, is first that this point about the nature of existence is in harmony with the earlier discussion of the nature of magic, with its restrained if not submissive philosophy; and, second, that all the philosophical implications of *A Wizard of Earthsea* exist in defiance of twentieth-century orthodoxies, whether semantic, scientific or religious. It is an achievement to have created such a radical critique and alternative, and one so unsentimentally attractive.

One final way in which the book may be considered is indeed as an alternative (one might say a parody or anti-myth, if the words did not sound inappropriately aggressive). Ged's re-enactment of the scene of Helen and Dr Faustus has already been noted, as has his return from the land of the dead, reminiscent of the Aeneid in its difficulty hoc opus, hic labor est, as the Sybil says (vi. 129) - though different in being done without a golden bough. To these one might add the final scene. For one of Sir James Frazer's great achievements in The Golden Bough was to create a myth of wasteland and fertility rite and a king who must die, a myth mighty yet, as one can see just from book-titles. The regenerative aspect of that myth, as Jessie Weston restated it, was the 'freeing of the waters', the clearing of the dry springs. In Ged's sudden return from the dry land of the dead to the open sea, we have a version of it; yet it is typical that with the 'glory of daylight' that is restored to him comes 'the bitter cold of winter and the bitter taste of salt'. The weakness of Sir James's myth was that it asked us to accept a cyclic process as rebirth; and Le Guin knows the limits of such consolation.

More positively, there is another aspect in which *The Golden Bough* is rejected by A Wizard of Earthsea. Sir James entitled his third volume which contains the discussion of names - 'Taboo and the Perils of the Soul'; and his account of true- and use-names was accordingly entirely about psychic dangers and the universal mistrust of savages. But Ged and his companions, once again, are no savages, for all their habits of nomenclature. Repeatedly in the book we have moving scenes where characters, instead of concealing their names as is normal and advisable, reveal them to each other in gestures of trust and affection. Vetch saves Ged at a black moment by this gift; at Roke the Master Doorkeeper tells his name to all graduands, in a mildly comic rite of passage. And that is the final impression that Earthsea gives: a world surrounded by the ocean in space and by the dry land of the dead in time, but still bright, warm and fearless, removed from both the insecure exploitativeness of modernity and the meaningless murderousness of Frazerian antiquity. It offers a goal rather than an escape.

In a story so concerned with the fear of death and the assertion of life, one must expect to find strong statements of pathos, as with the pointless and unstoppable death of Ioeth, the little son of Ged's fisherman-friend. Throughout A Wizard of Earthsea, however, pathos is very rarely caused by deliberate, human cruelty; and what cruelty there is comes not from the Inner Lands, but from the eastern empire of Karego-At. The pirates who raid Ged's village at the start are Kargs; and when Ged, pursuing his shadow, finds himself wrecked on a desert island, the two wretched creatures he finds living there are maroons, left by the Kargs as a move in some dynastic struggle. There is, again, a pathetic scene as the female member of the pair shows Ged her two treasures, a broken ring and the embroidered silk dress she was wearing when abandoned as a baby, and presses the former on him as a gift. But the sense of human cruelty is restated when Ged offers to take the meroons away, and the man refuses: 'All his memory of other lands and other men was a child's nightmare of blood and giants and screaming: Ged could see that in his face as he shook his head and shook his head' (WE, chap. 8). It is an extreme move, then, to set the second book of the trilogy in Atuan, one of the four islands of the empire; and to use it as a setting for discussion of another element not represented in the first book, the nature of religion. The change may be felt the more sharply by many modern Americans or Europeans if we see it further as a move from strangeness towards familiarity: for the Kargs are more like historical Europeans than are Ged's people from the Inner Lands. They are white, for one thing, while Ged is brown. They are fierce, hierarchic, imperialistic, slave-owning. They have an organised state religion, and indeed an organised state, both unfamiliar in the rest of Earthsea. And, officially at least, they do not believe in magic. 'What is this magic they work?', asks one character in The Tombs of Atuan, to be told, firmly, 'Tricks, deceptions, jugglery'. And, again: 'How do they get the power? ... Where does it come from?' 'Lies' is the orthodox answer; 'Words', suggests another, more open-minded but not much better-informed (*TA*, chap. 4). The Kargs, in fact, agree with the *Oxford English Dictionary*. They are the first sceptics to appear in Earthsea.

This is perhaps not too apparent in the opening scenes, which once more oppose pathos to cruelty. The book begins with a mother watching the child who is soon to be taken from her; and goes on to describe the 'installation' of the child as priestess of the cult of the Nameless Ones, a cult that depends on the theory that as each priestess dies she is reborn as a girl-baby, who has then to be identified and brought back. The ceremony of dedication is purposely a cruel one, in which the child is symbolically sacrificed, and progressively deprived of family, and name, and membership of humanity. Once Tenar is made priestess she has to be called Arha, 'the Eaten One', because the Nameless Ones have eaten her name and soul; she cannot be touched, either in affection or (and this is cruel too) in punishment. Kargish religion appears horrific, then, both in our terms, which exalt family life and individual rights, and in the values we have learnt from A Wizard of Earthsea, values that depend so ultimately on the right to be called by one's proper name. But, as has been said already, Le Guin thinks that even the darkness has rights, and as the book unfolds we are forced to consider what all this cruelty is for, what is its basis in reality. The option exercised by Frazer, of looking on at savage foibles with amused contempt, is not left open.

For there are depths even beneath the horror of Kargish religion. The cults of the Nameless Ones, and the Godking, and the God Brothers have, after all, some good points. They offer an escape, in particular, from the fear that haunts *A Wizard of Earthsea* and *The Farthest Shore*, the fear of exile to the dry lands of the dead. The Kargs do not believe that they will go there. Kossil, priestess of the Godking and in general representative of all that is worst in Atuan, regards the inhabitants of the magelands with a scorn which does not rise to pity, because they are subject to death as she is not: 'They have no gods. They work magic, and think they are gods themselves. But they are not. And when they die, they are not reborn. ... They do not have immortal souls' (*TA*, chap. 4). Her last sentence is a terrible one, redefining humans as animals, but it shows the assurance her religion offers. The real fear beneath Kargish religion is to have that assurance taken away, to have the whole thing exposed

as a tragic mistake, or swindle, and the threat that Arha, accordingly, fears most is that of atheism – even if this is a warm and affectionate atheism like that of Earthsea mages or many modern agnostics. To this threat she is exposed in the persons of three sceptics: her friend/subordinate Penthe, her teacher/rival Kossil, her liberator/seducer Ged.

The first of these is easily subdued. Penthe does not believe in religion, which she knows, on the sensible ground that the Godking is only human. On the other hand, she believes in magic, of which she has no experience, in an entirely credulous way: 'they can all cast a spell on you as easy as winking'. The 'solidity' of Penthe's unfaith frightens Arha for a moment, and shows that reason can still work even in the stronghold of superstition. But her opinions are evidently not generally reliable, and she is soon brought to heel by a touch of fear. Arha makes her point, that 'Penthe might disbelieve in the gods, but she feared the unnameable powers of the dark – as did every mortal soul' (*TA*, chap. 4).

Kossil provides tougher opposition. As the story proceeds, we realise that she too fears the dark, but has little belief in the religion she herself represents (the cult of the Godking), except as a focus of secular power. And she, unlike Penthe, is consistently sceptical even about her own fear, and is prepared to put matters to the test. It is almost the turning-point of The Tombs of Atuan when Arha discovers Kossil in the Undertomb – the place most sacred to the Nameless Ones, where light is totally prohibited - digging in the ground to discover whether Arha has really killed her prisoner, Ged, and doing it with a lantern burning. And the Gods do not react. Arha is converted to atheism on the spot, and weeps because of it, because 'the gods are dead'. The true turning-point, however, is the reaction of Ged. He too has brought light into the holy place, searching for the lost half of the Ring of Erreth-Akbe - the ring the female maroon gave him was the first half - and he has been trapped as a result, provoking a crisis of conscience for Arha, who ought to kill him but cannot. Nevertheless his attitude is very different from Kossil's or Penthe's. Neither superstitious like the latter nor incredulous like the former, he expresses firm belief in the Nameless Ones, and asserts that it is only his magic power that is keeping them from a violent reaction.

All this leaves a modern reader slightly baffled. The story drives us to identify with Arha, and to accept Ged's authority. The one tells us that the dark gods exist, the other's grief makes us want to believe it. But we are more likely, intellectually, to agree with Kossil and Penthe, and to be repelled in any case by the cruelties inflicted on Arha in the name of the religion she serves. So, who is right, about the Nameless Ones, about reincarnation, about souls? As with the anonymity or

otherwise of the shadow-beast earlier, there are questions with quite objective answers at the core of The Tombs of Atuan. Nor are the new answers very dissimilar. Ged's central statement is that the Nameless Ones are powers, but not gods, and that their strength has two sources. One is the innate cruelty of the universe - a concept familiar to us since the time of Darwin. The other is the human reaction to that fact, the impulse to propitiate and sacrifice and offer scapegoats. Just as the shadow-beast was born of Ged's fear of (his own) death, so the Nameless Ones feed on the institutionalised cruelty, itself born of fear, which took Tenar from her mother and made her Arha, the Eaten One. They would exist without worship, but their worshippers make them stronger. Ged's essential point, and Le Guin's, is that though the universe cannot be denied, and loss of one kind or another is therefore inevitable, what can be controlled is the placatory impulse which seeks to control death but in practice makes an institution of it. Pathos is always with us, in short, but cruelty can be stopped.

This is a satisfying conclusion for the reader of The Tombs of Atuan, because it suggests that all its main characters have seen some part of the truth, Penthe and Kossil in rejecting the value of organised religion, Arha in believing that it must nevertheless have some basis. It must be said, however, that in spite of the novel's overt theme of liberation, there are implications at the end at least as grim as those at the start. The hope of future life is gently taken away, for one thing, when Arha sees her mother (whom she does not recognise) in a dream. Her mother comes to her in the quasi-angelic form which she has decided is representative of the souls of the damned, those who are not reborn, even though (according to Kossil) Arha's mother, as a gods-fearing Karg, would naturally be reincarnated and not be among the damned at all. Still, Kossil is wrong. And it is a further ironic twist that the vision of this lost relation should signal precisely the abandonment of belief in metempsychosis, since it contradicts the old 'intellectualist' theory of Herbert Spencer, that the concept of the soul and of religion itself took its rise from seeing dead people in dreams.⁵ But Ged has no consolation to offer here, any more than he has over the book's final tragedy, which is that in order to escape Ged has to kill the only person who ever loved Arha in her priestess-life, and whom she continually threatened and tormented in return. Losses are not recovered in Earthsea, and even as the book ends with its vision of flags and sunlight and towers, one may recall Arha's furious outburst earlier:

⁵ See Evans-Pritchard 1965: 23–4. Le Guin uses Spencer's theory more overtly in Hare's speech in *FS*, chap. 3.

'It doesn't matter if there's oceans and dragons and towers and all that, because you'll never see them again, you'll never even see the light of the sun. All I know is the dark, the night underground. And that's all there really is. That's all there is to know, in the end. The silence, and he dark. You know everything, wizard. But I know one thing – the one true thing!' (*TA*, chap. 7)

Maybe she spoke truer than she knew. Certainly the story's last act contains a kind of sacrifice, and Arha's wish (which is overruled) to be cast out of humanity like the wretched Kargish maroons.

There are, of course, some warmer elements in the story, clustering for the most part round what magic is allowed to appear. By his gift of insight Ged restores Arha's name, Tenar, to her; and one might think that by doing so he has made himself able to exploit her. But in a neat scene near the end, after they have escaped the earthquake that is 'the anger of the dark', we see that Ged does not use magic just to preserve himself. He calls a rabbit to him by using its true name, to show Tenar. But when she suggests eating it – and they are both hungry – he rejects the idea as a breach of trust. Presumably he has felt the same scrupulosity about her. So there are intimations of courage and self-mastery in the book, indeed prominent ones. They cannot, however, conceal the conclusion that while Le Guin felt that early modern anthropologists had not been able to provide satisfactory theories of magic, she could on the whole agree with their models of the genesis of religion. Like Ged, Sir James Frazer thought that 'religion consists of two elements ... namely, a belief in powers higher than man and an attempt to propitiate or please them' (Golden Bough, i. 222). The latter without the former gives us ritualism (Kossil), the former without the latter approximates to Ged's standpoint, in Frazerian terms a 'theology' without a 'religion'. Frazer found it difficult, in fact, to find real examples of belief coupled with indifference, but there is a further analogue of sorts to Ged in the person of Frazer's contemporary and fellow agnostic, T.H. Huxley. In a famous passage he insisted that social progress depended 'not on imitating the cosmic process ... but on combating it',6 a view harsher and more self-reliant than Ged's, but projecting a similarly moralistic

⁶ In his famous *Evolution and Ethics and Other Essays* (Huxley 1894: 83). As remarked in item 2, above, Huxley was a major influence on Wells, and on later writers, such as – it seems to me – Richard Dawkins, who also tackles the issue of whether belief in evolution can be combined with morality and altruism, and comes up with the same answer. See his *The Selfish Gene* (Dawkins 1976: chap. 1).

humanism. In this respect at least scientist and magician agree (as Frazer insisted they should). But there is no room in the agreement for those who wish to intercede with the universe, or think there is anything to do with the Nameless Ones except ignore them, or else rob them and run.

The movement of the first two books of the trilogy is then on the whole downwards, into a deepening gloom, and towards us, towards familiarity. It is continued and even accelerated in the last book, *The Farthest Shore*, which describes what things are like when the magic starts to run out. Earthsea begins to resemble America in the aftermath of Vietnam: exhausted, distrustful, uncertain. This is conveyed in a series of interviews with wizards who have lost their power, and who try, not to seek help, but to justify themselves to Ged, now grown old, and his young companion Arren. The first one they meet is a woman, once an illusionist, who has turned instead to being a saleswoman and employing in that trade the more familiar arts of distraction and hyperbole. She has, in short, become a conjuror, and defends herself dourly:

'You can puzzle a man's mind with the flashing of mirrors, and with words, and with other tricks I won't tell you ... But it was tricks, fooleries ... So I turned to this trade, and maybe all the silks aren't silks nor all the fleeces Gontish, but all the same they'll wear –they'll wear! They're real, and not mere lies and air'. (FS, chap. 3)

She has a point, even a business-ethic; but her equation of magic with mumbo-jumbo has robbed the world of beauty. She distinguishes herself sharply, furthermore, from the drug-takers who now for the first time appear in Earthsea, but when Ged speaks to one of these he insists similarly that eating hazia helps you because 'you forget the names, you let the forms of things go, you go straight to the reality' (FS, chap. 3). There is something ominous about the 'reality' both speakers oppose to 'names' and 'words'; one remembers the subjection of 'words' to 'matter' discussed earlier. The point is sharpened by a third experience on the silk isle of Lorbanery, where the inhabitants insist that magic has never existed, and that things are the same as ever, but where the workmanship has become notoriously 'shoddy', economics is rearing its ugly head, and a 'generation gap' appears to have been invented. In the end, even the innocent Raft-folk who never touch inhabited islands are affected, as their chanters fail to carry through the ritual dance of Sun return; their forgetting the old songs represents the breach of tradition, the failure of authority, which has been, in some sense, the inheritance of the Western world since the mid-nineteenth century. Earthsea, in a word, has grown secularised; and we recognise the condition.

The root of the process is told us many times, and is entirely predictable from the two preceding books. It is the fear of death, the voice that cries (so Ged puts it), 'let the world rot so long as I can live'. But the fear of death has been on or near Ged since the first few pages of *A Wizard of Earthsea*. The new if related factor in *The Farthest Shore* is more precisely the hope, of life. A wizard has arisen who is able, for the first time, to go through the land of the dead and out the other side, to return to the world after his own death. His example, and the promise it offers, give those who know of it a new hope; but their preoccupation with that hope makes them fear the future more and love the present less, while their wish to preserve themselves is inherently destructive of the Equilibrium through which name-magic works. Besides, the breach that the wizard has made is imagined as a hole through which the magic of the living world runs out, so that the change affects even the ignorant.⁷

There is, to a modern reader, something almost blasphemous in these statements about the dangers of eternal life. In the final confrontation near the exit from the dead land, the reborn wizard boasts:

'I had the courage to die, to find what you cowards could never find – the way back from death. I opened the door that had been shut since the beginning of time ... Alone of all men in all time I am Lord of the Two Lands'. (FS, chap. 12)

Opener of gates, conqueror of death, promiser of life – one can hardly avoid thinking of Christ, the One who Harrowed Hell. Probably one has been thinking of Him since the dark lord first appeared, holding out 'a tiny flame no larger than a pearl, held it out to Arren, offering life' (FS, chap. 3). And yet in Earthsea the one who brings the promise is a destroyer; the Christian of Pilgrim's Progress, who flees from his family with his hands over his ears, shouting 'Life, life, eternal life!', now reappears as the wizards who abandon their trade and turn the world to shoddiness and gloom. The gifts of magic and of religion could hardly be more fiercely opposed. Yet the weakening of magic in Earthsea resembles the weakening of religion here. For there is a consistent image which underlies The Farthest Shore, and which seems to be taken from another book about the failure (and reattainment) of belief, Dostoyevsky's Crime and Punishment. There the morbid, sensual, ghost-haunted roué Svidrigaylov propounds his personal theory of eternity. Raskolnikov has

⁷ An idea repeated in the third book of Phillip Pullman's 'Dark Materials' trilogy, *The Amber Spyglass* (2000), with much the same implications.

just said, 'I do not believe in a future life' – a statement that holds no terrors. But Svidrigaylov replies:

'And what if there are only spiders there, or something of the sort ... We're always thinking of eternity as an idea that cannot be understood, something immense. But why must it be? What if, instead of all this, you suddenly find just a little room there, something like a village bathhouse, grimy and spiders in every corner, and that's all eternity is'.8

Raskolnikov rejects the idea as horrible and unjust. How can you tell, asks Svidrigaylov. 'I, you know, would certainly have made it so deliberately!' Ged's enemy seems close to Svidrigaylov, especially in that both have an abnormal terror of death; and his promise of eternity is inextricably spidery. His use-name, to begin with (he has forgotten his true name), is Cob, the old English word for spider. And when Arren dreams, he dreams of being in a dry, dusty, ruined house, full of cobwebs that fill his mouth and nose; the worst part of his dream is realising that the ruin is the Great House of the wizards of Roke. After Ged is wounded, Arren's paralysis of the will is like being wrapped in fine threads, and he thinks 'veils of cobweb' are spun over the sky. When the witch of Lorbanery confesses her failure of power, she says that the words and names have run out of her and down the hole in the world, 'by little strings like spiderwebs out of my eyes and mouth'. The action begins with the Master Patterner of Roke watching a lesser patterner, a spider. There are many other contributory references. All suggest the entrapment of life in something powerful yet tenuous: if Cob has his way, both the lands of the dead and of the living will become like Svidrigaylov's bathhouse: dry, dusty, covered by his personal web.

In both works, faith (whether in magic and Equilibrium or in Christianity and eternal life), is wrecked by doubt, a parallel which ought to clear Le Guin of the charge of wilful blasphemy. She is implying, not that Christianity leads to morbidity, but rather that the present inability of many to believe in any supernatural power lays them open to fear and selfishness and a greedy clutching at hope which spoils even the present life that one can be sure of.

Her striking presentation of the land of the dead, so alien to either Christian or Classical concepts, seems also to have a root in the great lapse of faith of the late nineteenth century. For in *The Farthest Shore*

⁸ Cited here from the 1951 Penguin translation by David Magarshack, 305.

Ged and Arren have actually to pass through this country, and see it as a strange analogue of the land of the living: people, streets, houses, markets, movement – but no emotion. Arren saw 'the mother and child who had died together, and they were in the dark land together; but the child did not run, nor did it cry, and the mother did not hold it, nor even look at it. And those who had died for love passed each other in the streets' (*FS*, chap. 12). The last sentence offers no eternal cure for the pathos of parting we so often see in Earthsea. But it is also strongly reminiscent of the A.E. Housman poem so popular in the 1880s and 1890s:

In the nation that is not
Nothing stands that stood before;
There revenges are forgot,
And the hater hates no more;
Lovers lying two and two
Ask not whom they sleep beside;
And the bridegroom all night through
Never turns him to the bride.⁹

To be dead = not to be: that is Housman's faith, and Earthsea's orthodoxy. Cob's blasphemy is to try to cure that stable situation, from the ignoble motive of fear and with the joyless and desiccated result already indicated. Yet one hardly likes to blame him, for the dead land is a dreadful image, and it seems only natural to shrink from it, as indeed many others have done in the trilogy beforehand – Ged trying to recall the dead, the Kargs inventing reincarnation as a protection. Le Guin has no trouble in convincing us that loss of faith is unfortunate, nor that joy in life is a proper goal. What is difficult is persuading us that the latter can co-exist with the former, or (to put it in the symbols of her trilogy) that magic is worthwhile even when it promises no immortality. The solution, for the last time, turns on an objective realisation, about names.

It is significant that Cob (like Arha) has forgotten his true name, but that Ged, who says he can remember it, never restores it to him. The failed wizards whom Ged interrogates insist steadily that to be reborn you have to give up your name, but that it does not matter because 'A name isn't real'. Blasphemy again, by Earthsea standards, but, as always with Le Guin, even the worst characters are not simply wrong. They are right to say that names and new life are mutually exclusive. For the simplest way to describe the shades in the land of the dead is to say that

⁹ Poem 12 in A.E. Housman, The Shropshire Lad (1887), ll. 9-16.

they are names, which go there and must stay there. Whether one should say they are only names is doubtful, and one has an almost insoluble problem in translating such statements into our own terms. Perhaps one should say that a man's name is his self, his sense that he is who he is; once the man is dead this never returns. This means that those who take Cob's promise are deceived. What they get is eternal consciousness, but consciousness without personality. Which is worse, to be an unreal name/shadow, or a nameless awareness? The metaphysics are hard to solve. Ged's final insistence, however, is that human beings are indeed dual, as people have long thought, but not by being bodies and souls, rather bodies and names. Of the hero Erreth-Akbe, he says, that though his image has been summoned by Cob it was still 'but a shadow and a name'. When he died, his name descended to the shadowland, but the essential part of him remained in the real world:

There he is the earth and sunlight, the leaves of trees, the eagle's flight. He is alive. And all who ever died, live; they are reborn, and have no end, nor will there ever be an end. All save you. For you would not have death. You lost death, you lost life, in order to save yourself. Yourself! (FS, chap. 12)

It is ironic that Ged in the end proposes a Kargish doctrine of reincarnation. But one should note its limitations. Ged says only that dead men return to their elements; he does not say they will be reborn as persons, or reborn with memory, or reborn in any process of justice. He says no more than any agnostic can accept, but strives to make it a positive affirmation.

We are on our own; living is a process not a state; reality is to be endured not changed: precepts of this nature underlie the Earthsea trilogy. Of course, it is not the business of literature to hutch such moral nuggets, nor of criticism to dig for them, and especially not when dealing with books as full of the sense of place and individuality and difference as Le Guin's. Nevertheless, it has to be said that these three books clearly aim at having some of the qualities of parable as well as of narrative, and that the parables are repeatedly summed up by statements within the books themselves. Mages appear to think in contrasts. 'To light a candle is to cast a shadow', says one; 'to speak, one must be silent', says another; 'There must be darkness to see the stars', says Ged, 'the dance is always danced ... above the terrible abyss'. In their gnomic and metaphorical quality such remarks are alien to modern speech; and yet they turn out to be distinctively modern when properly understood, the last one, for example, relying strongly on our rediscovery of the

importance of social ritual (the dance), and our new awareness of the extent of time and space (the abyss). A reader may start on *A Wizard of Earthsea* for its spells and dragons and medieval, or rather pre-medieval, trappings; we would be imperceptive, however, if we failed to realise before long – however dim the realisation – that we were reading not just a parable, but a parable for our times.

It is tempting to lead on and declare that Le Guin is a 'mythopoeic' writer (an adjective many critics find easy to apply to fantasy in general). The truth, though, seems to be that she is at least as much of an iconoclast, a myth-breaker not a myth-maker. She rejects resurrection and eternal life; she refutes 'cathartic' and 'intellectualist' versions of anthropology alike; her relationship with Sir James Frazer in particular is one of correction too grave for parody, and extending to 'The Perils of the Soul' and 'The Magic Art' and even 'The Evolution of Kings', his subtitles all alike. As was said at the start, she demands of us that we reconsider even our basic vocabulary, with insistent redefinitions of 'magic', 'soul', 'name', 'alive' and many other semantic fields and lexical items. One might end by remarking that novelty is blended with familiarity even in the myth that underlies the history of Earthsea itself, the oldest song of The Creation of Éa that is sung by Ged's companions in at least two critical moments. 'Only in silence the word', it goes, 'only in dark the light'. By the end of the trilogy we realise that this is more than just a rephrasing of our own Genesis as given by St John. Le Guin takes 'In the beginning, was the Word' more seriously and more literally than do many modern theologians; but her respect for ancient texts includes no great regard for the mythic structures that have been built on them.

SF and Politics

11 Introduction

A First Encounter with Politics

This piece had a complex gestation, which may explain some of its awkward spots – though it touched enough of a chord to be adopted as part of the Open University manual in Social Studies (1981), a couple of years after it was printed. In the late 1970s, science fiction criticism was still relatively uncommon in academic circles – I had published four articles in ten years (see items 4, 5, 9 and 10, above), but they had all been in semi-fan or low-circulation journals. The time was ripe, though, for something more ambitious, and, as a Fellow of St John's College, Oxford, I had the appropriate credentials. I was accordingly approached to contribute to a collection which would put sf criticism on the map.

What would I like to write about? Heinlein, I suggested. No, there was a book about Heinlein already, by Alexei Panshin (1968). OK, I said, I'll write something theme-based, not author-based, and the theme will be the Cold War. That was fine, but I had not realised how contentious was the topic of who started the Cold War. Was it the case that Truman had dropped the bomb on Japan in order to intimidate the Russians, as has been suggested? Possibly as a result of talking to Brian Aldiss, who in 1945 was a teenage soldier in the Far East, I had always assumed that his likely motive was anxiety over the cost in Allied lives of an invasion of the Japanese mainland (lives which might have included Brian's, as Brian often remarks). H. Bruce Franklin has added a further dimension to the debate by pointing out in his book War Stars (1988) that Truman had been brought up on wonder-weapon stories in mainstream journals like Saturday Evening Post, while David Seed's American Science Fiction and the Cold War (1999) has both updated and widened our vision. I had failed, however, to think about such matters, and the article as printed in 1979 was the result of complex rewriting - though in the version printed here I have cut out several pages laboriously trying to place sf

¹ See also Booker 2001, and further in Seed 2005.

within 'literature' and within 'criticism', much of it repeating points made in item 5, above about the importance of the magazine contexts.

This was, I think, my first encounter with politics in sf, and it made me realise how little I thought about politics generally. This was probably a result of being brought up on science fiction, so much of which tended to assume that politics was just a third-order phenomenon, a response to the really decisive developments, which would be technological in the first place, and ideological in the second, as indeed is set out in the piece that follows. This was certainly naive, though that naivety was shared by most sf writers and readers, who (with the honourable exception of Heinlein's 'The Man who Sold the Moon' (1950)) did not foresee politics trumping technology. As Jerry Pournelle has said, 'I always knew I would see the first man on the moon. I never dreamed I would see the last'. But working out sf authors' politics remains difficult. They are habitually outside the box. Was Poul Anderson a techno-capitalist libertarian, as many have said? Both he and Harry Harrison have shown strong sympathy with the Danish model of state-run socialism, which co-exists happily with efficient capitalism and has made Denmark one of the richest as well as the most egalitarian countries in the world. None of this seems to fit the conventional Anglo-American two-party left/right divide.

Anyway, the five articles that follow are all in one way or another about politics, and for the most part about America. Parts of the titles -'Fall of America', 'Critique of America', 'The Military and its Discontents' - make them sound like an exercise in America-bashing, which they are not. It is relevant here to note that H. Bruce Franklin, mentioned twice above as a writer on sf, has had the honour of being listed as one of the '101 most dangerous professors in America' in David Horowitz's scattershot book of that title (2006). If you went by what is stated there, Bruce would come out as someone who should have been locked up as a menace to national security decades ago. In fact - as anyone who talks to him would realise - Bruce is a veteran, with many of the natural sympathies of veterans. He just does not agree with all aspects of American foreign policy, as determined by the suits down there in Foggy Bottom, DC, which is a very American thing to do. See, further, Ursula Le Guin, Kim Stanley Robinson and many of the other authors discussed in the articles that follow. I conclude that sf readers like me should indeed have paid more attention to real-world politics, dull and short-sighted though that may be. But also, and much more vehemently, politicians would often have done well, even in short-term real-world electoral terms, to pay attention to science fiction. If the canary keels over, you need to get out of the mine.

The Cold War in Science Fiction, 1940–1960

There are many definitions of science fiction, but one thing nearly all of them agree on is this: science fiction contains, must contain, some element known not to be true to the-world-as-it-is (see the start of item 1, above). But there is no rule that says you have to tell the reader which element that is. Consider, for instance, the first four statements from 'Solution Unsatisfactory', a story by 'Anson MacDonald' (really Robert A. Heinlein) published in *ASF* in May 1941:.

In 1903 the Wright brothers flew at Kitty Hawk.

In December, 1938, in Berlin, Dr Hahn split the uranium atom.

In April, 1943, Dr Estelle Karst, working under the Federal Emergency Defense Authority, perfected the Karst-Obre technique for producing artificial radioactives.

So American foreign policy had to change.

The first two statements are science fact; everybody knows about the Wrights, and everybody ought to know about Dr Hahn. The third is science fiction; it is the major technological datum of the story. What is the status of the fourth? In context it, too, is science fiction, the story's major non-technological datum. With hindsight, though, it becomes hard to take it quite so simply.

For what happens in Heinlein's story is this: Dr Karst accidentally develops, in a still-neutral USA of 1943, a radioactive dust of unprecedented deadliness. The American government supplies this to Britain to use on Hitler's Berlin; and is then faced with an appalling and unforeseen problem. For the secret of the dust is not beyond rediscovery, the example of using it has been given, and there is an immediate prospect of many

nations using it on each other out of fear or revenge. The 'unsatisfactory solution' of the title is to ground all aircraft, so that there are no delivery systems, and then institute a multinational 'Peace Patrol' of dust-carrying bombers to make sure no one evades the embargo. But who is to guard the guardians? The story ends with deliberate uncertainty, feelings of guilt and defeat: Dr Karst inhales her own dust, the I-narrator mentions that he is dying of cumulative radiation poisoning acquired during his delivery of the stuff to the Royal Air Force.

Now, much of this story is irrevocably dated, which may well be why Heinlein did not reprint it for nearly forty years (it is in his posthumous collection *Expanded Universe* (1980)). It has no Pearl Harbor, no Hiroshima, no atomic bomb, while the first sneak-attack of its new era comes from the 'Eurasian Union' (a euphemism for the USSR). On the other hand, its non-technological prophecies are almost uncanny: a nuclear weapon, used by the Allies, ending one war, and starting something else – a state of threatened peace whose major premises are a deadly secret, a short-lived technological lead, and the temptation to use both in a manner totally inhumane, but nevertheless in a sense comprehensible, born of the fear that someone else will do the same thing first. This is, in short, the 'Cold War', predictable and predicted in 1941.

However, to return to the last sentence of the passage quoted above, the point is not that for once a science fiction author guessed right, nor that he foresaw more than the existence of a new technology. It is that even in 1941, when no one could be in doubt as to which statements were factual and which fictional, Heinlein was trying hard and deliberately to make, through fiction, a true statement about the nature of his own society: that if technology changed, his society's foreign policy would change, would have to change, and its morality and constitution and everything else with it. The power of his story is indeed a product of two separate things: the provocative nature of the future he shows, and the force with which its premises are made to seem irrefutable – 'unpredictability' and 'plausibility', one might say, multiplied together.

An underlying (and highly provocative) belief is that history and politics are by-products of scientific research. The A-bomb, of course, appeared to prove this. Diplomacy became 'atomic' (or so one thesis put it), and Western society for a while seemed traumatised – not so much, one thinks, from the sheer destructiveness of the new weapon nor from moral doubts about its employment, as from its unpredictable quality, the way it was (unlike aeroplanes, rockets or radar) related to no previously familiar principle. 'If one shock like that can come out

of the laboratories', many people must have thought, 'how can you tell what's left inside'? The nervousness produced was expressed by many American politicians, writers, military correspondents. Science fiction authors, however, remained largely immune. For one thing, they liked weighing speculative possibilities, for another, they could feel that the world was at last conforming to their notions of how things ought to be, with the scientist firmly established at the top of the totem pole and politics calculable in terms of research and development. Besides, many years of painful scorn for the fantastic element in science fiction ('Horsemarines, Dan Dare, and bloody Martians', to quote a character from John Wyndham's The Kraken Wakes (1953)) were being most satisfactorily repaid. For a while, aficionados liked to recall the incident of the visit of Military Intelligence to the offices of Astounding in 1944, prompted by Cleve Cartmill's otherwise undistinguished U-235 story 'Deadline' (ASF (March 1944)).2 That showed science fiction had to be taken seriously! If only the rest of America had realised in time!

And yet the genre contained its own drive towards making statements about society-as-it-is, which prevented too long a rest on Cartmill and Heinlein's laurels. It prevented also the sort of simple 'extrapolation' of present into future which was in practical terms exemplified by the 'arms race' – A-bomb, H-bomb, cobalt bomb, strategic bomber, submarine missile, ICBM and so on. Stories about these might work, but they would lose in 'predictability' what they gained in 'plausibility'. Something more had to be done. So, while it was no doubt a great achievement to predict the Cold War from 1941, a much more broadly based reaction was to express itself in stories written from within the Cold War itself, after 1945. Society as a whole was adjusting gingerly to the possibility of nuclear extinction, and developing the sort of controls only hinted at in 'Solution Unsatisfactory'. But, once again, science fiction was groping for the second-order phenomena beyond the immediate horizon of reality: how would people react to these controls? Could anyone afford to let scientists remain at the top of the totem pole? Was there a way out of deterrents? These and other questions litter the science fiction magazines from the very start of the 1950s. In them reality and fantasy intertwine; without that intertwining, science fiction would have lost half its fascination.

² Astounding Science Fiction changed its name to Analog: Science Fact/Science Fiction in January 1960, an interesting fact in itself. Either title is abbreviated in this volume as ASF.

'Security and the "brains"'

The elementary strategy of extrapolation was, of course, tried, and not without success. The USA might find itself in an atomic war: Judith Merril's Shadow on the Hearth (1950) combined incongruity with probability by relating the event to an American commuter suburb full of housewives. 'But the war's over', says the heroine at the end, as she finally realises that her little girl's illness comes from her deadly cuddly toy, left out overnight in the radioactive rain; the new phenomenon of 'half-life' is integrated with the new indivisibility of war and peace. Meanwhile, the USA could engage in such a war and lose (or just not win): this prospect was explored best by Wilson Tucker's The Long Loud Silence (1952). Least thinkable of all, the USA, for all its 'minuteman' traditions, could in the new conditions of mass destruction be forced to surrender and face occupation: this was outlined in C.M. Kornbluth's Not This August (1955, retitled Christmas Eve in the UK). But Kornbluth's novel incidentally demonstrated why all these varieties of 'hot war' might be missing something out. For one of his accepted data – of course Hiroshima-derived – is that if one side gains a sufficient technological lead (e.g., by launching an A-bomb-armed satellite) the other side's fleets and bombs and armoured divisions are all immediately reduced to a value zero. This realisation leads to a further point: if technological lead is so important, the drama lies in achieving it, not exploiting it. Wars are now information wars, they are fought in filing cabinets. Or, to quote a character from Eric Frank Russell's With a Strange Device (1964), 'In this highly technological age, the deadliest strike one can make against a foe is to deprive him of his brains, whether or not one acquires them oneself'.

By an interesting semantic shift, 'brains' in that quotation has become a count-noun, its singular being 'a brain', and meaning 'a scientist capable of furthering weapons research'. The last clause of the quotation further indicates a long-standing popular phobia, especially in America (though Russell is British); for one could hardly fail to notice either the part played in the development of nuclear fission by German émigrés (Einstein, Frisch and in rocketry von Braun), or the belief of many that the Russian A-bomb of 1949 came from the same source, with a fillip from Western traitors (such as Fuchs, Nunn May, Greenglass). 'Brains', then, were valuable but treacherous. Russell actually does not develop these notions in this book; the 'strange device' of its title is simply a gimmick, a means of 'automated brainwashing' that makes scientists think they have committed murder and must flee from their jobs, the police, their friends in Military Intelligence. Still, the clashes between

state and individual, security agent and scientist, are there in potential in a single sentence. If one combined them with the all-politics-is-science belief and the technological-leads-are-total theory, one had a basic plot of intense importance and even human interest. All of it, furthermore, could be felt, like Heinlein's 'foreign policy' statement and Russell's sentence just quoted, to be fictional but also in essence true. These hints and implications were best exploited by Algis Budrys's famous novel *Who?* (1958, expanded from a short story in *Fantastic Universe* (Apr. 1955)).

Its central character is Lucas Martino, a scientist working on something called 'the K-88' - Budrys's firm rejection of the 'gimmick' strategy is shown by the fact that we never find out what this might be. It is enough to know that (like anything else from the laboratories) it might turn out to be the one vital thing, the thing that decides all human futures. But Martino's lab in West Germany near the border - this was before the Berlin Wall – blows up, and a Soviet medical team obligingly whisks him off to hospital. What they return is unrecognisable, a man half-metal. Is it Martino, or a Soviet agent trained to impersonate him? If the latter, then Martino is the other side of the wire, and the K-88 may turn out Soviet. One of these days, muses the American Security Chief at the start, his opposite number is going to outwit him critically, 'and everybody's kids'll talk Chinese'. One 'brain' (in this scenario) can outweigh the efforts of the rest of the world. But ever since Korea it had been accepted that everybody cracked, that 'brainwashing' was as certain as a surgical operation – see the Oxford English Dictionary entry (ii.482), which records the word from 1950, Frederik Pohl and C.M. Kornbluth's story 'The Quaker Cannon' from ASF (Aug. 1961), and the extended study by Seed (2004), which details the reception of the idea in the public at large. Finding out who the metal man is thus becomes very much a fulcrum of destiny. But, of course, he himself does not see things this way. While Who? is in one way a story about technological leads, it is also about the discrepancy between subjective and objective knowledge, about the incapacity of states and security systems to control, predict or even understand the intelligences on whom their existence depends.

So the FBI dog Martino's every step, try furthermore to find out every detail from his past, to check the one set of actions against the other and determine the presence or absence of a consistent pattern. Their massive filing-cabinet thoroughness is almost a parody of the way scientists are supposed to work, inductively, accumulating facts and waiting for the right truth to emerge. But, of course, induction by itself never pays off. Though Martino is inductive – he 'couldn't ignore a fact. He judged no fact; he only filed it away' – he also works largely by hypothesis, a habit which often leads him directly to the

right conclusion via the traditional 'flash of genius', but which also leads him, in youth, to scores of blind alleys and false structures. These are never discarded entirely: 'Another part of his mind was a storehouse of interesting ideas that hadn't worked, but were interesting – theories that were wild, but had seemed to hold together. To a certain extent, these phantom heresies stayed behind to colour his thinking'. They mean that when it comes to the K-88, he cannot be replaced. They also mean that, in personal terms, the actions of Martino before or after his accident may be perfectly logical to him (and to the reader who shares his mind); to the watchers and investigators, though, they are random, inexplicable.

This thesis keeps Who? from dating, even though many of its assumptions have been overtaken by events. It also shifts the story in the direction of fable or parable, stressing the element of general truth contained in the setting of particular fantasy. The central scene of the book is the one in which the metal Martino returns to visit one of the two girl acquaintances of his youth, Edith, now a widow with one son. All through his adolescence the peculiar logic of his mind has made it hard for him to form ordinary relationships. Now his half-metal body reflects and magnifies his inner strangeness. Can he get back to one of the few people he ever understood? The FBI men on their microphones wait with bated breath. But the answer never comes, for though Martino and Edith seem for a moment to recognise and understand each other, her little son, waking up, sees only a nightmare monster. Pursued by his screaming, Martino leaves, collides with a girl, sees in her (momentarily and erroneously) his other girl acquaintance, tries to introduce himself - and terrifies her, too, into panic. Driven by his mechanical heart, he rushes away down the street, the FBI trailing behind him in an ineffectual and (for one of them) fatal attempt to keep up. Their exhaustive enquiries afterwards never reveal what happened, nor (since naturally they cannot see the girl's resemblance to the now-forgotten Barbara) what triggered Martino's reaction. His phrase of self-introduction - 'Barbara - e io - il tedeschino' - becomes a personal analogue of the K-88, forever beyond explanation except in Martino's mind.

The interpretation of this 'Frankenstein's monster' scene is evident enough. Martino is an image of the scientist post-1945. Both are figures of enormous and world-changing power; yet both remain mortal, isolated, vulnerable. Both would like to be loved, and yet both terrify people through no fault of their own; they are bitterly hurt by ordinary reactions. Martino's clumsily powerful rush down the street, one might think, is a kind of image of the 'arms race' itself.

Meanwhile, the security men who watch with increasing bafflement and impotence, who are always trying to catch up and never to head off (because they never know where Martino is going), they represent the attempts of average men and normal politics to come to terms with the technology they have sponsored, though not created. Naturally, putting it all in these allegorical terms seems over-complicated and may not have been 'designed in' by the author. Still, it is in general there, in essence understood. Budrys rubs several of the points in by a sequence of ironies at the end of the book.

For the metal man really is Martino. He ought, then, on the 'brainwashing' hypothesis, to have cracked during the period he was in Soviet hands. He did not, simply because so much of him was then non-organic. However, the Soviet security chief did indeed have a scheme to replace him with another manufactured double from Martino's past, his old room-mate from MIT. This would give him time to complete the cracking, to steal the K-88. The plot failed because it depended on a 'sleeper', an American turned traitor by his own emotional vulnerability. But people like that are ipso facto weak, unreliable. The 'sleeper' reneges, the double drowns, the plot fails. Martino is returned in what ought to be a moment of Western triumph. 'A man is more than just a collection of features', he thinks, as he approaches safety in the last, 'flashback' scene, 'I haven't lost anything'. He is, of course, completely wrong. Where Soviet security inadequacies stop, American ones take over. Endemic suspicion and the inability to clear him totally mean that Martino never works again. Genius is crushed, pure science castrated by fear, incompetence, inductive thinking. The moral of Who? is that in scientific matters security systems are counterproductive (as useless as the descent of Military Intelligence on Astounding back in 1944). Admittedly, the fear that generates them is entirely explicable too, so there may be no cure. Still, the G-man and the genius are now yin and yang, growing out of each other but fundamentally opposed. In a sense, the most daring theme to which science fiction authors were attracted during the 1950s was that of inner treason: the obligation to resist at once the Federal government and constitutional processes.

For there had been more than one 'Cold War' going on within the USA. The true date of hell's birthday – according to a character in Wilson Tucker's *The Time Masters* (1953, also published in abridged form in *Startling Stories*, 1954) – was neither 6 August 1945 (Hiroshima) nor 16 July 1945 (Alamogordo), but 8 March 1940. On or about that date 'the President set up the National Defense Research Committee; both the Manhattan District and our organization grew out of that'. What 'our

organization' is never appears clearly, but Tucker is thinking of such events as the creation of the CIA in July 1947, the Bill for FBI investigation of Atomic Energy Commission applicants in August 1949, the ban on sending technical publications to the Soviet bloc in March the same year, and a series of other moves in the direction of tight control over atomic power. All this was highly illiberal. But the complaint voiced by Tucker and other science fiction writers was that it was unrealistic, too. They knew that whatever its etymology 'science' was not the same as 'knowledge'; the 'Deadline' affair had shown there was no need of a security leak to tell people about U-235 and critical mass. So you could not keep 'secrets' this side of the Iron Curtain just by restricting the passage of information. To quote Tucker again: 'There are only two kinds of men in all the world who still believe there are keepable secrets in modern science! One of those men is the blind, awkward and fumbling politician ... The other man is a jealous researcher ... Realistic secrecy in modern science is a farce'. The new exemplar of the clown, one might add, is the security agent trying to censor references to data which can be revealed by experiment.

There is no doubt here that science fiction was correct, nor that it was opposing a powerful orthodoxy. J. Robert Oppenheimer ('the father of the atomic bomb') had said 'you cannot keep the nature of the world a secret', and Eisenhower in 1945 had agreed with him, suggesting that the USA should make a virtue of necessity and share nuclear information, so aborting the arms race. But both were readily outvoted. By November 1945, the USA had decided not to share nuclear technology with Britain and Canada, who had helped to develop it. Because it was thought that this decision settled matters, many politicians were horrified by the Russian nuclear explosion of 1949. An easy explanation was treason. Loyalty investigations got fiercer, and the Rosenbergs were sentenced to death in March 1951. Meanwhile, the real secret of the hydrogen bomb had been revealed on television by a US senator trying to educate the nation in security!3 By a final irony, Oppenheimer himself (who appeared in Murray Leinster's The Brain Stealers (1947) as the head of a security system dedicated to keeping nuclear technology safe), had been tried and convicted in a case seen by many as a trial of the USA. The phobia over nuclear security was there before Senator McCarthy, and went straight back to the unpredictability trauma of 1945. Its development showed once more the split between those who felt science was still human endeavour and those who saw it as a djinn to be stuffed

³ For a lengthier account of these events, see Fleming 1961, esp. i. 315, 321, 411, 525.

back in the bottle. As McCarthyism advanced, science fiction became increasingly angry and sarcastic.

One can, for instance, turn over the pages of Astounding during the worst of the arms-race years and see one story after another about security: 'Security Risk', by Poul Anderson (Jan. 1957), 'Security', by Ernest M. Kenyon (Oct. 1955), 'A Matter of Security', by W.T. Haggert (March 1957). Others present the theme under less obvious titles. In Poul Anderson's 'Sam Hall' (Aug. 1953), the Major in charge of Central Records in a near-future state broods over the 'Europeanization of America: government control, a military caste ... censors, secret police, nationalism and racism'. All this has been created by a Third World War the USA lost, with a consequent revanche in the Fourth World War leading to world domination. The Major himself has a relation arrested by Security. To protect himself he rubs him out of the records, then creates a fictitious rebel 'Sam Hall' as a kind of therapy. The fiction comes to life (not in any supernatural sense) and cannot be caught because Security itself breeds rebels and traitors – as it has done with the Major. The point of the story is again the self-fulfilment of fear. Analogous or complementary points are made by the other stories listed. They insist that the USA has no moral or natural right to its technological leads, and that attempts to impose the contrary opinion will lead only to stagnation and totalitarianism. Security systems are the delusions of people who had not understood the nature of scientific discovery before 1945, and had learnt nothing since. Science is a tool, not a reservoir of knowledge which can be dammed.

'Abandoning security'

Following on this, or overlapping with it, came a further point about the nature of discovery: if science is not the same as knowledge, it is also not to be identified with truth. To put it another way, science does not progress additively any more than discovery works by induction. To advance, one has to discard. The true obstacle to development may then be that what needs discarding is deeply integrated in personalities and academic systems, too familiar to be challenged. In this view, the intellectual equivalents to security chiefs may well be senior researchers – both groups are committed to the status quo that has brought them eminence. A basic plot along these lines is given in Raymond F. Jones's novelette 'Noise Level' (ASF (Dec. 1952)).

This begins, conventionally enough, with Dr Nagle, the expert in electronics, sitting in the anteroom of the Office of National Research

while his colleagues try to get him security clearance to attend the vital conference to which he has been summoned. The first few paragraphs make clear Jones's lack of faith in the FBI and the 'bureaucrats' who think they can 'button up the secrets of nature which lay visible to the whole world'. But the concept of 'visibility' (or 'audibility') gets more thoughtful treatment in the rest of the story. For this conference has been called by the Office of National Research to inform senior physicists that antigravity has been discovered and demonstrated; there are films, tapes and eyewitness accounts to prove it. Unfortunately, an accident has killed the inventor and mangled his apparatus before the secret could be disclosed. The physicists' job is to make the rediscovery. But there is a distracting factor: the original inventor was close to madness, with a compulsive belief in levitation, mysticism, astrology, etc. and a reluctance to accept convention of any kind. Clues to his invention may lie in one of the 'mad' areas rather than one of the 'sane' ones.

'This was a project in psychology, not physics', observes its controller at the end. His physicists have in fact polarised. One faction, represented by Nagle, has accepted the real-life data offered and concluded that, since antigravity is ruled out by the state of scientific knowledge, something in that knowledge must be wrong: they identify Einstein's 'postulate of equivalence' as the root error, and by rewriting it manage to produce a feeble, clumsy, hundred-ton antigravity device (their films had shown a one-man flying harness). At the other extreme, Dr Dykstra of MIT insists that the whole thing - and especially the stuff about levitation! - cannot be true, eventually retreating into madness himself when his premises become untenable. The irony is that Dr Dykstra is, in a practical sense, right. The whole thing has been a fraud, concocted by the Office of National Research, its mainspring being the notion that invention is checked not by ignorance but by prior assumptions. To give the analogy of the psychologist-director: (1) all information can be expressed in a series of pulses, and is therefore contained in 'pure noise'; (2) 'there must be in the human mind a mechanism which is nothing but a pure noise generator, a producer of random impulses, pure omniscient noise'; (3) and somewhere else in the human mind there is a filtering mechanism set by education to reject 'all but a bare minimum of data presented by the external universe, and by our internal creativeness as well'. Nagle has managed to override the filter; Dykstra has had in the end to shut out all the noise.

This story evades some vital issues (such as the propriety of driving professors mad so the USA can have antigravity), and its sequels, 'The School' (ASF (Dec. 1954)) and 'The Great Grey Plague' (ASF (Feb. 1962)) are not inspiring. One might note, though, that just as Algis Budrys

in some ways paralleled the ideas of Karl Popper, so 'Noise Level' anticipated the central thesis of Thomas Kuhn's much-admired book The Structure of Scientific Revolutions (1962), offering a proto-structuralist view of science as an activity in practice culture-bound, though in potential (science fiction's fundamental loyalty) infinite. In one form or another, discrepancy between this potential and this practice became a staple of science fiction plotting: the characters embodying one side tended to be government officials, senior professors, security agents and politicians, those on the other, crackpots, engineers, social misfits and businessmen - anyone, in short, more interested in results than explanations. The theme is a good one; it relates to reality as well as to wish-fulfilment; perhaps the main criticism one can make of it is that, in the 'participatory' world of science fiction magazines, it leads easily to a kind of paranoia, in which the underlying statements about the world and those who run it turn sour and strident. One can see the dangers in two series of stories by Mark Clifton (some all his own work, others, rather bewilderingly, in collaboration with either Alex Apostolides or Frank Riley).

The more attractive of these is the sequence about the problems at 'Computer Research Inc.', in which the hero is not a scientist at all, but a personnel manager - another embodiment of the good or pragmatic paradigm. Much to his horror, he finds himself (in 'What Thin Partitions', ASF (Sept. 1953)) controlling an antigravity device - a bagful of curious cylinders. But he needs a poltergeist to activate any more, and he has done his job too well in curing the one he began with. At the end of the story he sends the US Army (who are interested in antigravity) a requisition in proper form for six more poltergeists, assuming that will be the end of it. Unfortunately, at the start of 'Sense from Thought Divide' (ASF (Mar. 1955)) the Army's Division of Materiel and Supply proves equal to the task - it delivers a swami - a fake, they admit - but nevertheless one who can sometimes do more than is theoretically possible. Production problems begin once again. The basic principles of this series, note, are exactly those of 'Noise Level': orthodoxy has built-in limits; frauds may contain an element of truth; real advance comes from amateur initiative plus professional finish. But the whole argument is handled with grace and humour. In an Astounding serial, however, They'd Rather Be Right (Aug.-Nov. 1954), Clifton and Riley put a similar thesis much more aggressively. The novel's plot need not be summarised, but in its central scenes an organic computer offers human beings health, beauty, rejuvenation – in exchange for their abandonment of 'single-valued logic', all belief-structures of any kind. Very few, in the authors' opinion, could pay such a price; the unexpressed concluding words of the title are '... than go on living'. This might be acceptable, even true, if not for the ominous word 'they'.

Readers of *Astounding* were evidently encouraged to see themselves as the leaven and the rest of America as the lump – something they appear to have enjoyed, since the 13th World Science Fiction Convention of 1955 voted the book the 'Hugo' award as best science fiction novel of the previous year. The 'ghettoising' of science fiction was not entirely imposed from without. If general readers, even after the A-bomb, kept on thinking of science fiction fans as 'escapist' or 'unrealistic', many writers and readers inside the genre responded equally thoughtlessly by regarding the bulk of their own society as mistaken, ill-informed and probably uneducable. They had a point, in the 1950s. But they took it too far.

A better-judged example of the same reaction can be seen in James Blish's, in retrospect, highly courageous book, Year 2018! (British title, They Shall Have Stars, published first in 1956, in Britain, but going back in outline to two more Astounding novelettes: 'Bridge' (Feb. 1952) and 'At Death's End' (May 1954)). The audacity of this is shown by the fact that even the earlier version contained a perfectly recognizable caricature of Senator McCarthy in the guise of 'Senator Francis Xavier MacHinery, hereditary head of the FBI.'4 The expanded version began, furthermore, with two Americans deliberately plotting treason: one, Senator Wagoner, the other, Dr Corsi, senior member of the American Association for the Advancement of Science, 'usually referred to in Washington', remarks Blish in evident allusion to the Oppenheimer affair, 'as "the left-wing triple-A-S"'. The speakers' discussion dovetails neatly into a joint politico-scientific opinion: the USSR has won the Cold War (this is Wagoner, by the end of the book), and it has done so because 'scientific method doesn't work any more' (Corsi, at the start). As another quasi-true statement this aphorism is particularly provocative: scientific method is supposed to work everywhere. But it is not a natural law, argues Blish/Corsi, only 'a way of sifting evidence', a new kind of syllogism. The reasons it need not work in the twenty-first century are, first, the control of technical information, and second, the low quality of those drawn to government research

⁴ He is 'D.O. MacHinery' in the magazine version. The change to 'Francis Xavier' in the book version later points the finger more definitely at McCarthy, whose connections with the Order of Jesus were well known. In the British magazine edition of October 1954, meanwhile, 'MacHinery' actually appears in one place as 'McCarthy', though we do not know whose Freudian slip this was.

(familiar notions in science fiction, as has been said), but third, the nature of the facts eventually under investigation – increasingly subtle ones, to be proved only by experiments of increasingly fantastic cost. This view (not entirely without prophetic force, as one can see from the NASA experience) means that Manhattan District Projects will have to stop. It is the crackpot ideas that must be winnowed now, the rejected hypotheses, the notions that are not senseless but out of style. The rebellions that Wagoner and Corsi lead are against scientific method and the 'McCarthyite' US. Behind them lie deeper loyalties to empiricism and to Western tradition, labelled though these may be (in 2018 or 1957) as treason and folly.

The projects set up finally eventuate as the 'gravitron polarity generator' or 'spindizzy' and the 'anti-agathic drugs' which halt old age; the two between them make interstellar flight a possibility. They also lead to disaster within the world of the novel. The impact of anti-agathics will destroy the West, and the Soviets only marginally later. The fact that such initiatives have been concealed will give power to MacHinery and his associates, whose suspicions (like Dr Dykstra's) will for once turn out to be true. Both originators of the new initiative will die by torture, Dr Corsi without knowing what he has brought to life, and Wagoner by the standard treason-penalty of immersion in the waste-dump of a radioactive pile. 'It's a phony terror', says Wagoner. 'Pile wastes are quick chemical poisons; you don't last long enough to notice that they're also hot'. Still, the macabre vindictiveness of the notion offers a final opinion on the 'decline of the West' that Blish foresees, on the long-term effects of victory at Hiroshima, on the way the Cold War could be fought and lost. It took courage to offer such a picture of America in the mid-1950s, when the Korean War was over, the Vietnamese one not yet on, and when the Strategic Air Command still held more than the balance of power. Even more daring, though, was the rejection of 'scientific method' and official physics so soon after their most apparent triumph. Science fiction authors have often been accused of letting themselves be mesmerised by mere technology. Year 2018!, however, shows one of them shaking off the glamour of nuclear power and the Manhattan Project while the rest of America was still trying to adjust to it. The rejection is as creditable, as implausible, as Heinlein's equally unnoticed predictions only a decade and a half before.

"Steam-engine time" versus the brain "in hiding"

All the stories discussed so far have their root in a critique of the relationship between science and society. The latter either cannot control the former (as in 'Solution Unsatisfactory'), or else breaks it in the attempt at control (as in *Who?*), or else provokes it into rebellion (as in *Year 2018!*). Failure of comprehension is embodied in the two emasculating theses of science as a body of information (some of it 'classified'), and of science as revealed truth to be dispensed through the educational system by the proper authorities. And yet in spite of all these antagonisms science was much more deeply integrated with society than the latter liked to admit. In science fiction this last notion is expressed by the aphorism 'steam-engine time'. 'When a culture has reached the point when it's time for the steam-engine to be invented', lectures a character from Raymond F. Jones's 'The School',

the steam-engine is going to be invented. It doesn't matter who's alive to do the inventing, whether it's Hero of Greece, or Tim Watt of England, or Joe Doakus of Pulaski – the steam-engine is going to get invented by somebody. Conversely, if it's not steam-engine time nobody under the sun is going to invent it no matter how smart he is.

This opinion contradicts a popular stereotype of the Great Inventor, promoted in the movies about Young Tom Edison which attract Budrys's scorn, and in the 'rituals of mass entertainment' pilloried in one of the epigraphs to Year 2018! - the 'hero-scientist ... discovered in a lonely laboratory crying "Eureka" at a murky test-tube'. But the raison d'être of that stereotype is that it makes it easy to fix responsibility on single men or single events. 'It is steamboat time', says someone at the end of Harry Harrison's In Our Hands, the Stars (ASF serial (Dec. 1969-Feb. 1970)); but he says it sadly, because the deadly and plausible image of science as one man's secret has led the security agents of many nations (the USA and Israel prominent among them) to join in a multiple fatal hijacking of the new spaceliner built by Denmark and employing the 'Daleth Effect'. The irony is that the secret was no secret all along. The discoverer's data were freely available. Once other scientists had the clues of knowing what had been done and who had done it, they could duplicate his work and even make his 'Effect' commercial; they were about to do the latter just as the hijack started. 'Steamboat time' means that the deaths were all pointless. And this is not just a fantasy, Harrison insists (via his character). The Japanese independently reinvented radar,

magnetron and all, in this way, during the Second World War; and as Wilson Tucker had said much earlier, Russian production of the A-bomb followed exactly the same pattern. 'Stimulus diffusion' is a fact of the modern world, not merely an anthropologist's curiosity. But people prefer to think of science as a kind of magic controllable only by individual adepts, because it gives them idols/scapegoats – Einstein, or Oppenheimer. To use the terms introduced in item 4, above, they prefer a 'Whig' interpretation of the history of science to a 'Malthusian' one: in science fiction, the debate over the causes of contemporary innovation paralleled the debate over innovations in history.

A serious issue raised was the mutual responsibility of the individual innovator and the society that made his innovation possible. Several approaches to this question are visible in 1950s science fiction. One could consider Astounding's long and quarrelsome discussion, in stories, articles, and letters, of patent law - something felt to symbolise and encapsulate America's ambiguous relationship with the inventor. On a much broader scale one might reflect that the many social satires or 'dystopias' published during the period tend to share one opinion, which is that the self-images of society are so powerful and so delusive that they channel rebellion just as much as they channel innovation. The heroes of Frederik Pohl and C.M. Kornbluth's The Space Merchants (1953), originally serialised in Galaxy as 'Gravy Planet' (1952), and of Kurt Vonnegut's Player Piano (1952) both start as agents of the system, and have to be virtually excommunicated from it before they can think of going into opposition. Deep in the core of the former book's assumptions, too, is the argument that just as the 'Consies' or Conservationists are necessary scapegoats of the consumer society, so the 'Commies', or forever-rumoured, forever-invisible American Communist traitors of the McCarthy era, are figments of the capitalist imagination, part of a drama which American society has written for itself, and into whose villain roles weak characters are drawn or thrust. However, full consideration of that issue would lead us away from weapon-makers and towards weaponusers. It is a point that the two are related: the A-bomb was publicly accountable, even if secretly produced. But next time that something like the A-bomb came up, where would a future Einstein's duty lie? It is this narrower question which underlies the Harry Harrison novel just mentioned; and also, more surprisingly, many of the 'telepathy' stories published during this period in Astounding and elsewhere.

Signs of it can be seen even in such an apparently low-level story as Eric Frank Russell's *Three to Conquer* (1956), serialised in *ASF* as *Call Him Dead* (Aug.–Oct. 1955). This opens with a man, a telepath, 'hearing' in his mind the dying call of a shot policeman. He goes to help, tracks

down evidence of what seems to be an interrupted kidnapping, and then, when he comes on the 'kidnapped' girl, shoots her dead. Her mind was projecting alien gabble; her body had been taken over by a parasite-organism from space. The rest of the story is devoted, very naturally, to fighting off the invasion. Yet it is, strangely, almost comic in tone, marked by the habitual irreverence of its hero, Wade Harper. He never obeys orders, always answers back, takes deliberate pleasure in waving at generals when he should salute them. Childish behaviour, especially for a telepath? The story itself insists that it is not. During the first few pages, for instance, we keep hearing, over the radio, of the apparently unrelated battle going on between the US government and the 'Lunar Development Company'. 'According to the latter the government was trying to use its Earth-Moon transport monopoly to bludgeon the L.D.C. into handing itself over complete with fat profits. The L.D.C. was fighting back. It was the decades-old struggle of private enterprise against bureaucratic interference'. One might note, again, the characteristic switch from definite fiction to hypothetical fact. What has this to do with Harper? Nothing immediate: but he sees himself analogously as a man under threat, one who will (from his job as a microforger) become 'federal property the moment war breaks out'; and will become it even sooner if they know he can read minds! The Venusian emergency makes him declare himself, but nothing less would have. And his continuous irreverence is a form of protest against government infringements of liberty.

There is something slightly crazy about this, even (much worse in science fiction criminology) contra-survival. After all it is sheer chance that the one telepath in the USA crosses the invaders' trail right at the outset. The odds were against it, they were even more against Harper as private citizen being able to undo the effects of (say) Soviet telepathic espionage managed by their more autocratic government. Surely Harper should know his public duty, indeed his duty to science. But Russell suppresses this obvious line of argument in favour of appeal to anti-government sentiment, and - traditional Astounding train of thought – to a continuing equation of government with social repression, conservatism, scientific orthodoxy. Harper's conversations with scientists are punctuated by their cries of 'Impossible!' 'Unthinkable!', while the FBI repeatedly let him down through their rigid obedience to orders. Both groups, though, are only manifesting an attitude that Harper (and Russell) see as essentially human - fear of the unknown, a wish to shut it out or deny its existence rather than make it a part of one's world. 'At the ripe age of nine', we are told, Harper 'had learned that knowledge can be resented, that the means of acquiring it can be feared'. So he is secretive as well as irreverent. At the end of the story it is presented as a triumph that he has contacted and married a female telepath without letting his watchers realise – if they did, of course, children of the union would probably become 'federal property' too. Harper is 'in hiding'. That's where innovators ought to stay.

The 'in hiding' theme relates closely to the 'noise level' one and that of 'stimulus diffusion', as well as to the stories about the failure of Security. They all assume that education is essentially education in acceptability, that society acts as a governor on human minds to prevent them realising their full potential, and that some similar mechanism triggers hate-and-fear reactions in those who detect novelty. 'In Hiding' itself is a story by Wilmar H. Shiras, published in ASF (Nov. 1948), and one of the many examples of amateur authors articulating one classic theme and never succeeding (or trying) again. It deals with the discovery of a super-intelligent child by a sympathetic psychologist, rather like Olaf Stapledon's Odd John 13 years before. But Shiras's Tim is a 'mutant' created not by Darwinian chance but by the exposure of his parents to radiation. He is also non-competitive, conscious above all of his own vulnerability to the hate-and-fear reaction. Sequels to the story in ASF (Mar. 1949 and Mar. 1950) recede into blandness. Other variants, like Mark Clifton and Alex Apostolides's 'Crazy Joey' (ASF (Aug. 1953), and the forerunner of the *They'd Rather Be Right* serial) take a grimmer view. However, the most thorough development of the theme - the book is dedicated to 'Paul Breen, wherever he may be hiding' - comes in Wilson Tucker's Wild Talent, serialised in New Worlds (Aug.-Oct. 1954): Superman versus the government.

The central irony of this book is that Paul Breen, the telepath, the 'new man', is by nature a loyalist. Like Russell's Wade Harper, he first displays his telepathic talent by hearing the call of a dying man – in this case an FBI agent or G-man (symbolic figure!) shot by the villains he is pursuing. But Breen, unlike Harper, is still only a boy, still 'in hiding'. With complete confidence, however, he writes down what he knows and posts the letter, covered in fingerprints, to: The President, The White House, Washington, DC. Eleven years later, in 1945, they get him. Drafted into the army, he has his fingerprints checked against the FBI's files with the massive, routine thoroughness then (as in *Who?*) ascribed to this organisation. His secret penetrated, he too becomes 'federal property'. But they do not like him. If 'brains' are valuable but potentially treacherous, 'brain-readers' are bound to be a good deal worse.

The 1945 date is of course a vital factor in all this. 'What's an atomic bomb'? asks Paul casually, having picked the phrase from the mind of a passer-by. The panic that ensues determines the official view taken of

telepathy: (1) it is something which shatters security (for if Paul were a Russian agent no screen could stop him); (2) but it might make security 100 per cent effective (for as long as Paul is not a traitor he can be a traitor-detector); (3) further, it is a potentially aggressive development (for Paul can mastermind a spy-ring himself).

The mixture of exploitation and anxiety mirrors reactions to the A-bomb itself. Its compulsive nature provides a sort of excuse for society; but then one is needed, for in an obvious way Wild Talent is a story of disillusionment. Its hero begins as a normal go-getting teenager riding the rails to the 1934 Century of Progress Exhibition in Chicago. By the end, he has chosen exile, alienated by the collapse of all his early father figures (the President, the FBI), and even more by his government's disregard of his own rights, the continuous 'bugging' by no means compensated by occasional pandering. And yet, in a sense, the American ideal remains intact. Mutant and superman himself, Breen nevertheless retains a respect for some of his associates, and a deeper, undervalued feeling for the mores of his youth - thrift, work, privacy, 'dating' and so on, 'We can't come here again', he says regretfully to his telepath fiancée at the end, as they wait for the escape boat. But she disagrees, and has the final word. To translate back into real-life terms, Tucker seems to be arguing that though contemporary societies are not fit to be trusted with new powers (whether nuclear or telepathic) this may nevertheless be a temporary phenomenon sprung from fear and militarisation, not a universal law. Hate-and-fear reactions should not be provoked - and that is why Superman goes 'into hiding' - but may be overridden.

Of course, in the case of telepathy, 'stimulus diffusion' was not imposing a panic-breeding time-limit. Not all science fiction was as balanced as this in its view of the merits and demerits of nationalism. In 1957, Sputniks I and II (with the ominous 2,000 lb payload of the latter) created something of a Pearl Harbor mentality, reflected in Astounding by several flights to familiar icons - Yankee inventiveness, teenage secret weapons and the like. 'Murray Leinster' produced a totally reassuring 'Short History of World War III' for ASF (Jan. 1958), while 'Darrell T. Langart' (or Randall Garrett) contributed a success-oriented reprise of Who?, 'What the Left Hand was Doing', to ASF (Feb. 1960). Yet even Garrett a little later wrote a novel in which the FBI lets the US collapse sooner than start the Last War – Occasion for Disaster, ASF (Nov. 1960–Feb. 1961), this time in collaboration with L.M. Janifer and under the pen name 'Mark Phillips'. Probably the most creditable sign of science fiction's detachment from and immunity to the worst crazes of the Cold War lay in its reaction to Vietnam involvement. Its authors were on the whole unsympathetic to the anti-industrial and 'technophobe' bias of many of the war-protestors, and showed as much in many stories (such as James Blish's bad-tempered 'Skysign' from *ASF* (May 1968), or Wade Curtis's sarcastic 'Ecology Now' and 'Power to the People' in *ASF* (Dec. 1971) and (Aug. 1972) respectively). However, as early as 1959, John W. Campbell Jr – *Astounding*'s editor, son of a Daughter of the American Revolution, and a man addicted to neat but callous solutions – was explaining in an editorial (*ASF* (Nov. 1959)) why attempts to impose democracy overseas were unlikely to be successful, and why Communism was probably the best option for members of some developing nations. The area he had particularly in mind was South-East Asia. And the editorial was called 'How to Lose a War'. Campbell had the grace to refrain from saying 'I told you so' ten years later, but he had provided one more example of a certain flexibility of mind producing better results than professional evaluations based on professional prejudices.

Conclusion

However, the value of science fiction and the science fiction magazines during this period is not to be quantified in hits and misses. What should have emerged from this essay is that the fantastic elements of the stories were a cover, or a frame, for discussion of many real issues which were hardly open to serious consideration in any other popular medium: issues such as the nature of science, the conflict of business and government, the limits of loyalty, the power of social norms to affect individual perception. It is this which science fiction fans felt they could not get anywhere else. Of course, a great quantity of science fiction was not about these themes, but dealt with robots, mutants, aliens, starships, asteroids, time travellers or any one of twenty other plot motifs. It would be a mistake, though, to think that even these did not contain a high proportion of serious thought, with a reference to real life not beyond recovery. Even more than most literature, science fiction shows a strong conventional quality which makes its signs and symbols interpretable only through familiarity; to instance only matters touched on above, it was a provocative act to polarise *Odd John* into 'Crazy Joey', while, after so many novels (The Space Merchants, Wild Talent, Year 2018!) had ended with innovators escaping from governments, it was a striking move by Harry Harrison to make In Our Hands, the Stars start with the same scene - and with the innovator's knowledge that his government was going to come after him. It was this collective quality which made much science fiction of the 1940s and 1950s, and later, a 'thinking machine'

for the convenience of people largely, it should be remembered, without academic support or intellectual patronage. Science fiction has moved up-market since then, and some of the Cold War issues have died with the Cold War itself. Not all of them, though: and the generally low quality of historical and scientific education in the Western world still creates an appetite, and a need, for thinking outside the educators' control.

12 Introduction

Language Corruption, and Rocking the Boat

This essay started off as a paper read at a conference on *Nineteen Eighty-Four*, in 1984, at what was then North-East London Polytechnic. I was not especially keen to take part, but in 1984 it was pretty well mandatory for everyone to read papers on *Nineteen Eighty-Four*. One reason I was not especially keen was that *Nineteen Eighty-Four*, along with *Brave New World*, is one of those works mentioned in item 2, above, only sort-of science fiction, but invariably put on academic sf courses by people who do not know much about it. Both works, along with some other dubious cases, like C.S. Lewis's so-called 'space fiction' trilogy, on which I have also written elsewhere, are the kind of sf acceptable to what I call (in item 2, above) the 'gatekeeper' paradigm.

However, I did have two things I wanted to say about Nineteen Eighty-Four and about Orwell. As regards Orwell, one reason he was acceptable to the 'gatekeepers' was that he was a left-winger, and since humanities professors are overwhelmingly 'liberal', that meant he was definitely OK. But he was a very disillusioned and disgruntled left-winger, for several reasons. He fought against Franco in the Spanish Civil War (from the left-wing point of view, that was good), and was gallantly shot through the throat (very good), but when he came back to tell people about it, it turned out he had been fighting with the wrong set of left-wingers (bad) - in fact, for the anarchists (very bad) - and since the communists hated the anarchists more even than they did the monarchists. Orwell found that no one wanted to listen. Israel Gollancz wouldn't publish his book, Homage to Catalonia, and his experience was treated as a non-event. Then the communists found it expedient to make common cause with the Nazis, and even after they had switched sides as a result of Hitler's attack on Stalin, Orwell continued to regard his former allies as potential traitors. One result is that Animal Farm is quite obviously a satire on the Russian revolution. Another is that the dreary despotism of Nineteen Eighty-Four is called 'Ingsoc', English Socialism. None of this was at all popular with left-wing critics, who performed strange evolutions trying to prove that Orwell was really on their side. The most prominent example was Bernard Crick, who was keynote speaker at the conference, and I thought I could at least say that he was flying in the face of the evidence (see below).

The other thing I wanted to say was that Nineteen Eighty-Four did look strangely like sf works in the familiar 'enclosed universe' tradition, like Heinlein's Orphans of the Sky (in book form (1951), but originally two novelettes from ASF (1941)), Aldiss's Non-stop (1958), Blish's 'The Thing in the Attic' in the Seedling Stars sequence (book (1957), story in If (July 1954)), Galouye's Dark Universe (1961), Jim White's The Watch Below (1966), and Harry Harrison's Captive Universe (1969): another very good example of sf authors doing deliberate variations on the same scenario). Orwell could not have read any of them except maybe another of Wells's 'paradigm stories', 'The Country of the Blind'. But the similarities are very strong. In an enclosed universe the person trapped inside it usually has a vision of the outside, one way or another: check, that is there in Orwell. Usually there has to be some document explaining to the person in the enclosed universe - who cannot possibly know any other way - how all this arose: check, that is there. And usually there is some hangover from the pre-enclosed universe, which the modern reader can recognise, but the characters in the story cannot: check, that is there too (see for details pp. 239-41). Is all this a case of literary borrowing? In Orwell's case, I do not think so. So maybe all this is integral to the logic of the story, which suggests again that structure can determine story, give it a kind of inner frame. At the conference I put all this to Crick in question time, I thought with unusual fluency and skill. I am not sure what I expected: a thunderous round of applause, perhaps, a tearful apology from Crick, a guarantee from all present never to come out with the old party line again? In fact, of course, Crick said 'Very interesting, I wish I'd thought of that', and passed on to other matters.

There is another irony in the whole situation, which is that Crick is no longer the great authority on Orwell; he is now Peter Davison, editor of the enormous and now-standard 20-volume Orwell. Peter and I started our teaching careers on the same day in the same English department at the University of Birmingham. Neither of us would have stood a sniff of a chance of a job in modern conditions. He had never attended university, had got all his degrees externally, had been a Petty Officer in the Royal Navy, and was way over-age for a starting lecturer. I had no graduate degree, had been selling bath-scourer for Colgate–Palmolive, and was way under-age, ditto. In those days, though, heads of department could back their judgement, and Professor T.J.B. Spencer was a good picker.

Peter published many editions as a Shakespearean and drama scholar, was promoted to Professor at St David's Lampeter, was headhunted from there to the University of Kent at Canterbury – and then, aged one week past 55, was asked to take early retirement! His wife Sheila – another formidable personality – approached the Vice-Chancellor and asked him, fiercely, 'Why are you asking my Peter to retire, he's the only one who ever does any work?' To which he replied, I am told, 'We had to, Mrs Davison, he's the only one who could ever get another job.'

That is British university logic for you. Peter, offended, did in fact retire, but did not get another job in academia, he became the manager of Albany, the immensely upper-class apartment block in central London, where the porters wear toppers and tailcoats, and was characteristically very good at it - how many professors could you plausibly say that about? But while he was managing Albany he took up editing Orwell. And not being a proper academic, content to sit in the library or (nowadays) surf the Internet, he went out on his own two feet to look for people who had known Orwell, many of whom were then still alive. And he found all sorts: letters, the scripts of Orwell's BBC talks, the cancelled chapter of A Clergyman's Daughter (the book does not make sense without it, but it had a rape in it, so it never got printed), the list of fellow-travellers Orwell gave to MI5 - did that cause a row! - as a result of which the corpus of known material by Orwell expanded by at least 300 per cent, most of which would have gone for ever if it had not been for Peter's efforts. Well, you can see why he wouldn't do as a professor. What a boat-rocker! The good thing about all this, for me, is that Orwell managed to escape the dead hand of officially accredited views, and if not through my efforts then through the efforts of a friend.

The other half of the article is about Le Guin and language, and all that I would like to add here is that it is another case of an sf author having a good hard think about an issue in an earlier sort of sf work, and replying to it fictionally with a great deal more intelligence than has been shown by most critical comment. She updated it, too, with the very timely ironies about Watergate-speak and Vietnam-language. Orwell on the corruptions of language is still good value, but what he did not realise was that a major corrupter of language in future would be graduate schools, especially in the USA: they teach a kind of jargon, you are not a member of the profession unless you use it, but using it, as has often been noted (frequently in the pages of the *TLS*), does not make for clarity anywhere outside the profession. Furthermore, it can happen that anyone who makes a point of writing 'accessibly' is written off as a hopeless lowbrow, or in my case the phrase was 'a textual rapist'.

I am still not sure what provoked that accusation, but I am proud of it. As the old proverb says, 'The insult of an enemy is tribute to the brave.' Anyway, it is much more satisfying than having someone say 'Very interesting, and now we must move on ...'.

Variations on Newspeak: The Open Question of *Nineteen Eighty-Four*

In a letter to *The Times* on 6 January 1984, Professor Bernard Crick, author of *George Orwell: A Life* (1980) and editor of the Clarendon Press annotated *Nineteen Eighty-Four* (1984), attacked *The Times* fiercely for having maintained in a previous editorial that the 'principal message' of George Orwell's novel was 'about the use and abuse of language for political purposes'. This was 'body-snatching', he replied (meaning that Orwell, safely dead, was being appropriated to stand for opinions and institutions he would never have tolerated); it led also to 'a comfortable, distancing reading of the text'. Worst of all, it presented Orwell as a simple writer, ignored the true complexity of *Nineteen Eighty-Four*, and failed to observe the multiplicity of its 'main satiric thrusts' (of which Crick identified seven). The final sentence of Crick's letter declared that 'when anyone says it [*Nineteen Eighty-Four*] has a single or principal message they are wrong: and such assertions tell one more about the reader than about the book'.

There is much in this reaction with which one can sympathise. One might well think that *The Times* had a certain vested interest in ignoring some of the objects of satire in *Nineteen Eighty-Four*, since it is one of them. Winston Smith spends much of his time in the Records Department of the Ministry of Truth falsifying reports in *The Times*, which has clearly become totally identified with the government (rather than just very largely, as in Orwell's own day). It is also nearly always acceptable in the terms of modern critical discourse to speak up for a work of art's complexity, and to accuse rivals of oversimplifying. Finally, no one is in favour of comfortable readings, the taste for the challenging or disturbing having become firmly established. Nevertheless, there is something ominous about Crick's last clause. It sounds rather like a threat ('if you persist in offering single or principal interpretations you will show yourself up in ways you are not aware of'). And in a situation where Crick's opinions, via the biography and now the 'standard edition'

of the text, are likely to become dominant, it seems only right that even his most critically mainstream pronouncements should be scrutinised. Is there nothing to be said, after all, for the view that *Nineteen Eighty-Four does* have a 'principal message', and that this is indeed not far from the theme of the assault on language?

One clarification which should be made immediately, of course, is that talking about messages of any kind is liable to be distracting when one is discussing a novel, as Crick indeed recognises on page 8 of his 1984 edition (from which all following quotations are taken). It would be better, at least initially, to consider structure: and here one has to say that however complex (or otherwise) Orwell may have been as a writer, the *structure* of *Nineteen Eighty-Four* at any rate is fairly simple, even conceivably too simple. It consists of three parts, none of them labelled or titled by Orwell. (Crick supplies part and chapter headings on the contents page of his edition, but does not introduce them to his text.) In Part 1, Winston Smith is introduced, and the scene is set of his home, his work, his neighbours and his frustrations. Part 2 details his love affair with Julia and his recruitment by O'Brien. Part 3 is set almost entirely in the cells of the Ministry of Love, and consists very largely of a long conversation with O'Brien.

This structure is, furthermore, in several respects rather clumsy. In a letter to Anthony Powell on 15 November 1948, Orwell wrote that the book was 'a ghastly mess', adding in a further letter to Julian Symons on 4 February 1949, that he had 'ballsed it up'.¹ Commentators usually take these remarks as the result of modesty, or of a sense (of course entirely plausible) that Orwell's terminal illness had prevented execution from matching intention. Nevertheless, and without any intention of carping, there are some odd things in the structure of *Nineteen Eighty-Four*. Movement between chapters, for instance, is very jerky, as one can see by looking at the chapter openings, so many of them simple-sentence, past progressive or pluperfect: there is often little continuity between one scene and the next.² It has surprisingly few characters: in Part 1 there are only five major speaking parts besides Winston, namely, Parsons, Mrs Parsons, Syme, the old prole of chapter 8, and Mr Charrington, and, arguably, none of these *is* major. In chapter 1, indeed, the only

See the four-volume Collected Essays, Journalism and Letters of George Orwell, ed. Sonia Orwell and Ian Angus (Collected Essays, iv. 513 and 536 respectively).

² For instance, Part 1, chap. 3, 'Winston was dreaming of his mother'; Part 1, chap. 6, 'Winston was writing in his diary'; Part 2, chap. 5, 'Syme had vanished'; Part 2, chap. 6, 'It had happened at last'; Part 2, chap 8, 'They had done it, they had done it at last!'; Part 3, chap. 1, 'He did not know where he was'.

words we hear from anyone at all are 'Swine! Swine! Swine!' from Julia (at this stage nameless), 'My Saviour!' (from another woman never named), and 'B-B! ... B-B!' (from everyone communally). Common in the novel are fragments of overheard conversation – for example, from the proles in chapter 8, or Julia and the 'duckspeaker' in the canteen in chapter 5, while several characters are reduced entirely to the status of 'noises off', like Winston's wife Katherine, or, of course, Comrade Ogilvy, who never exists at all. None of these comments, naturally, needs disbar Nineteen Eighty-Four from being entirely successful in its own way. However, they may well suggest that as a narrative it is not complex, however many its satiric thrusts. The overall effect at times is of a series of silent stills, while at the heart of the whole novel there lies Winston's abject failure of a diary, a journal with no dates, a book its author does not know how to write, a text whose principal message is quite ambiguously 'DOWN WITH BIG BROTHER', written 'over and over again'. Winston is not Orwell, nor is his diary Nineteen Eighty-Four: but it may be significant that the novel springs from an extraordinarily unselfconscious and craftless literary artefact, and one presented to us with far more respect than contempt.

If we return to the novel's structure, the unspoken question most readers must find themselves asking would then appear to be, not (as Crick would have it), 'what messages emerge from this work's complex syntax?', but, more simply, 'what holds these disparate scenes, outcries, or fragments together?' And if the structure of Nineteen Eighty-Four is simple, the answer to the latter question ought to be simple as well: the strand running through the majority of the disconnected scenes and overheard conversations is that of Winston trying to recapture the past. Crick indeed suggests in his 1984 edition that the book's 'positive themes' are once again not single, but double, 'memory and mutual trust' (11), and once again it may seem heartless to argue for the removal of one of them. However, there is oddly little about 'mutual trust' in Nineteen Eighty-Four, even as an absence, apart, of course, from the central love and betrayal of Winston and Julia. By contrast, the theme of memory is pervasive. Winston is liable to introduce the subject at any moment, however unexpectedly, and there is a sense that throughout the novel Winston (and Orwell too) is trying to convert the reader to an appreciation of the vital importance, not the mere desirability, of objective evidence and recorded history. Thus, Winston rejects all the more obvious toasts which O'Brien proposes on his recruitment to the 'Brotherhood' - 'To the confusion of the Thought Police? To the death of Big Brother? To humanity? To the future?' - and insists on making it 'to the past'. "The past is more important", agreed O'Brien gravely'. Goldstein's book says flatly, 'The mutability of the past is the central tenet of Ingsoc'; and though it may be said that this is all a fiction composed in the cellars of Miniluv (I shall argue below that it is not), this particular statement rings true. One should add that there is obvious symbolic importance in beginning *Nineteen Eighty-Four* with the purchase of a diary: for diaries are to record the past *in*, and, furthermore, the diary that Winston buys attracts him simply because its very texture and beauty seem to him a proof that the past *had happened* (and had been different).

The diary, indeed, like the glass paperweight and the photograph of Jones, Aaronson and Rutherford, functions as 'a little chunk of history that they've forgotten to alter'. It is a mute testimony. Or, one might well say (remembering the discussion on p. 134, above), even though blank, it is still a text. Other slightly more articulate texts or testimonies are the nursery rhyme of 'oranges and lemons', and the garbled stories of the old prole whom Winston interrogates in the pub: these at least reach the level of words, though they are not words that Winston can understand (the reader is in a different position). Outnumbering and overpowering these memorial kernels, however, are the repeated memories, dreams and failures of memory of Winston himself. Even statistically, these must take up a considerable portion of the book, and they extend from the book's sixth paragraph – when Winston is trying to 'squeeze out some childhood memory that should tell him whether London had always been quite like this' – to its penultimate page, when Winston suffers the 'uncalled' and 'false' memory of himself playing Snakes and Ladders with his vanished mother. The climax of Nineteen Eighty-Four is, of course, its last sentence, 'He loved Big Brother'. But one might feel that the true collapse is not that maudlin moment, nor the terrified betrayal of Julia, but this spectacle of Winston, the diarist, the committed quester for memories, for the first time trying not to squeeze one out, but to reject one which has come without his seeking. In any case, in between the book's second page and its second last, there are at least ten sequences in which Winston drifts into a retrospect of one kind or another, remembering an air raid shelter, or the taste of chocolate, or a scene of women buying saucepans, or a dream of his mother and the Golden Country; and this does not count the repeated scenes in which Winston notes others apparently failing to remember about the war with Eurasia, or the reduction of the chocolate ration, even though these trigger most prominently reflections on 'ancestral memory', Winston's loneliness, and the way the past 'has been actually abolished'. Winston's job, furthermore - another entirely unpredictable piece of ironic invention - is to destroy the past by means of his speakwrite and his 'memory hole'. It does not seem too much to say, first, that Part 1 of *Nineteen Eighty-Four* consists entirely of a series of variations on the theme of recapturing, or abolishing, the past; and, second, that, even after Julia and O'Brien have entered the plot to provide it with some narrative movement, this theme remains dominant or principal, even if not exclusive.

Professor Crick, it must be said, would certainly stigmatise this as mere one-sided delusion. He notes wryly that 'the intensity of Orwell's writing gives the illusion of a single hidden truth, and indeed many people have searched for the key and, even worse, claim to have found it' (19). It may be some excuse to say that the impression Nineteen Eighty-Four makes on this reader is not that of a hidden truth but of an area of bewilderment, a set of questions to which Winston and Orwell obsessively return, but to which neither knows the answer. It is an obvious pointer that Winston's reading of the Goldstein book breaks off just as he is about to learn the ultimate answer of why the Party has decided 'to freeze history at a particular moment of time'. He gets as far as 'this motive really consists ...', then discovers Julia is asleep, and puts the book aside for a later moment that never comes, reflecting as he does so that so far he has learned nothing he did not know already. Clearly, Orwell also got no further than posing himself the riddle. But this particularly obvious unanswered question is only part of a general bewilderment which sweeps over Winston repeatedly, as to why he is alone, why no one else thinks as he does, and also (this one strongly shared by the reader) how everyone else in the story seems to manage to accept total contradiction effortlessly and without breaking down. 'Was he, then, alone in the possession of a memory?', Winston asks himself in the canteen. Later on, he watches with utter amazement as the Hate Week speaker changes from Eurasia to Eastasia 'actually in mid-sentence, not only without a pause, but without even breaking the syntax' - and the crowd of Parsonses, for all their involvement with hundreds of metres of bunting and posters, follows him with no apparent trace of strain or remembrance. The story insists on telling us that people can do this. It gives up on the question of why; and even on the question of how, the answers given - 'doublethink', 'blackwhite', and 'crimestop', among others - remain barely comprehensible. Nevertheless, the psychology of the other inhabitants of Airstrip One is the basic puzzle, or the basic challenge, of Nineteen Eighty-Four, and the puzzling element in it is that their minds seem able to shut off critical areas (like memory) at will, and without apparent loss of efficiency elsewhere. O'Brien, in short, has something missing. But he is not stupid. Is he mad?

Professor Crick, confronting this problem at the one moment when it reaches the level of the bizarre, is quite clear that the answer to the last question is 'yes'. His critical introduction to Nineteen Eighty-Four says so again and again: O'Brien 'is mad' on page 31; on page 48 his claims 'that "our control over matter is absolute", that "the earth is the centre of the universe", and that he could levitate if he wished, just as the Party could reach the stars ... are absurd, as Winston and the reader realize'; and on page 64, 'O'Brien turns out to be insane, he thinks he can levitate and reach the stars', while for good measure we are reminded in note 94 that 'all this, and "I could float off the floor like a soap-bubble if I wished to", must indicate that absolute power has driven O'Brien mad'. Of course, common sense is entirely on Crick's side. Just the same, calling O'Brien mad (however many times) does not settle the issue. He is, after all, telling Winston that beliefs ought to rest on evidence: and Winston has no evidence, except memory, which is entirely subjective. It is true that the reader has evidence, any amount of hard and tangible evidence, not only that O'Brien's evidence does not exist, but that O'Brien does not exist either, nor the Party, nor Oceania, nor Airstrip One. But to bring this in is to destroy the whole effect of the novel. Nineteen Eighty-Four could not work without at least the entertainment of a belief that people could practise doublethink, that people do practise doublethink, that we may be doing it ourselves, that within the world of the novel the evidence is all on O'Brien's side, and (our) common sense is an extremely poor shield to trust in.

At this point one needs to consider the issue of genre. Nineteen Eighty-Four is on the whole regarded as only marginally related to science fiction, a judgement which is on the whole correct (if only for Orwell's rather surprising lack of interest in technology). However, there are moments – including the episode in which O'Brien sets himself above the law of gravity – in which it comes close to the science fiction sub-genre of the 'enclosed universe'. Of this, the paradigm is Wells's short story 'The Country of the Blind' (1904), set in an enclosed valley inhabited only by blind people. Later examples, like Robert A. Heinlein's Orphans of the Sky (1941) or Brian Aldiss's Non-Stop (1958), are set in enormous 'generation starships' where inhabitants have forgotten that their world is artificial, or in sightless caverns beneath the earth, like Daniel E. Galouye's Dark Universe (1961). Whatever the setting, though, some points and some tensions seem to remain fixed. One is that the reader has to be asked to identify with a central character who is sighted (not blind), or who knows his world is artificial (not natural), or who, at worst, seeks to break out from a situation he finds intolerable, instead of accepting it as part of the natural order of things, like his fellows. Tension comes,

however, from the fact that the reader has simultaneously to be made to understand that the majority of supporters of the status quo has in a sense got right on its side. Their beliefs may be wrong (because of their limited evidence), but they are not illogical; while, at the same time, the thought is projected that no one's evidence is anything but limited, and that the reader is more likely to resemble the conservative majority than the initiating hero. In Heinlein's Orphans of the Sky, one character, rather like O'Brien, insists that the stars are only an optical illusion, created by tiny lights behind glass in a small unlit compartment; he rests his belief on logic, common sense and natural facts. Orwell had probably not read this. It had appeared as two connected novellas, 'Universe' and 'Common Sense', in ASF (1941), but did not appear in book form till after Orwell's death: though Orwell had come across 'Yank mags', there is no sign that he had ever read one. He had, however, almost certainly read Wells's 'Country of the Blind', in which the sighted Nunez totally fails to shake the belief of the blind sages that they are living in an enormous stone cavern, and that all the evidence Nunez points to is susceptible of some other explanation. He cannot even convince them that he can see (for they all know they cannot).

The parallels between *Nineteen Eighty-Four* and the 'enclosed universe' are then easy to draw. Winston's universe is, for one thing, quite tightly enclosed: he never gets far from London, and when he does - the outing with Julia in Part 2, chap. 2 - it seems strange and implausible. Such visions of 'the outside' are, however, common, perhaps essential, in 'enclosed universe' stories, because they provide reinforcement for the hero's otherwise unlikely urge to escape. Hugh Hoyland thus sees the stars in Heinlein's novel, Roy Complain the sun in Aldiss's, and Winston 'the Golden Country' in Orwell's. Even what Winston sees in London (he slowly realises) could be faked, as perhaps are the rocket bombs. He is very largely at the mercy of what he is told. Yet, like the heroes of Heinlein, or Aldiss, or later authors, he does not believe what he is told, preferring instead to be driven by 'some kind of ancestral memory that things had once been different'. Like Wells's Nunez, he has a faculty (memory, as Nunez's is sight) that appears to be completely lacking in his fellows; even Julia, like Nunez's partner Medina-saroté, shows little belief or interest in it.

The most important parallel, though, lies in the strategy of dealing with the reader, where Orwell and his science fiction successors and predecessors operate so similarly as to make one think their procedure intrinsic to stories of this type. As has been said, the reader naturally identifies with the sighted person, or the rebel, or the man with a memory, the hero who is making his way towards an awareness of truth.

Yet, at the same time, the reader cannot help seeing how partial and limited this character's knowledge really is. When, for instance, Winston reads the Party history book, we know (but he does not) that people did wear top hats before the Revolution: but that this was by no means a uniform, nor the prerogative of the capitalists. In the same sort of way, the Heinlein novel has one character reading a physics textbook, and then delivering an allegorical commentary on it: the reader realises the textbook is true, the commentary a product of the enclosed universe. In Orwell's Party history textbook, the truth and error are more thoroughly mixed; but once again the reader is in no doubt as to which is which. For instance, the answer to Winston's question, 'could you tell how much of it was lies?' is obvious to us - as is the answer to his later difficulties in sorting out the old prole's account of top hats and Boat Race night, and his second 'huge and simple question, "Was life better before the Revolution than it is now?"'. But just as we recognise how easy these answers are, outside the enclosed universe, we also recognise how literally impossible it is for someone inside the enclosed universe to reach them at all.

All such stories, then, face the problem of how the hero or the rebel is to come to an understanding of his universe, which, by the logic of the story, he cannot possibly reach on the available evidence alone. The normal solution in such cases is to provide a 'captain's log' – a document of some kind which explains what has happened and is somehow (often with very little plausibility) transferred to the hero's possession. Both Heinlein and Aldiss use this device, as (with slight updating) does Harry Harrison in Captive Universe (1969): it is demanded by the logic of the situation. In the case of Nineteen Eighty-Four, the analogue to the captain's log is of course the Goldstein book, a device with almost no logical plausibility at all! O'Brien says he wrote it (in which case it ought to be totally false). On the other hand, he says that as a 'description' it is true (and it is only the description we read, not the program for revolt). But there seems no reason why a real O'Brien should allow a true history to circulate, or even know enough to create one. The fact is that Orwell uses the Goldstein book to deliver an authorial lecture, or, one might say, to bridge the otherwise uncrossable gap between Winston's awareness and our own. There has to be an explanation for Airstrip One, or else Nineteen Eighty-Four would slide towards fantasy; but no one in the story could provide it in propria persona except at the cost of breaching the characters' mental enclosure.

The force of reclassifying *Nineteen Eighty-Four* with enclosed universes and 'The Country of the Blind' is in a way to make excuses for O'Brien. According to our understanding of the universe, he is mad; but then

so is the Captain who refuses to believe in the stars in Heinlein's novel, and so are the 'blind men of genius' who devise 'new and saner explanations' for the universe (devoid of space and sight) in Wells's story. But it would be wrong to think that Wells's blind philosophers were *not* 'men of genius'. They were, given that they could not see. And O'Brien is sane, given that he has no memory and no interests outside the Party. It is true that in Wells's gentler fable even the blind men who propose to remove Nunez's eyes do so with the best of intentions, meaning only to make him sane; but then O'Brien too insists that he means to 'cure' Winston. The real difference is that in the Edwardian story a cured rebel would be allowed to live.

It seems wrong, then, simply to insist that modern readers' views are too secure to be shaken, and that O'Brien can be dismissed as clinically insane. Both Orwell and Winston are too bewildered for that. The area of their bewilderment is largely psychological. Winston never really manages to answer the questions central to, and generated by, the whole one-track structure of Nineteen Eighty-Four: how can people be intelligent in some areas (like the technicalities of Newspeak) and utter fools in others? Do they repress unwanted knowledge, or do they manage somehow never to take it in? Above all, what are the mechanics of oblivion? Winston understands the mechanics of his job well enough, which is, of course, dedicated to eliminating documentary evidence. Just the same, a history of sorts (he feels) ought to be reconstructable from mere personal memories, like his own and the old prole's, and maybe Julia's or Charrington's. However, the story insists that he is wrong. The rest of the population of Airstrip One can do something, mentally, that he cannot. It is on this ability, even more than on falsifying The Times, that the Party depends. It is against this shared consensus that Winston, all through Part I and later, assembles his dreams and his memories, and his diary.

Orwell, of course, felt that there was a basis for the Airstrip One mentality in real life; otherwise he would hardly have bothered to write *Nineteen Eighty-Four*. His *Collected Essays*, however, suggest that though he recognised the phenomenon he was not very much more able than Winston to imagine how it was actually produced. The scene in Hate Week when the speaker changes in mid-sentence from denouncing Eurasia to denouncing Eastasia has an evident root in Orwell's analysis of the state of mind of a convinced Communist before and after the start of the Second World War. 'For years before September 1939', everything he wrote had to be 'a denunciation of Hitler'; then for twenty months (between the Nazi–Soviet Non-Aggression Pact and Hitler's invasion of Russia) he had to become pro-German, while 'the word 'Nazi', at

least so far as print went, 'had to drop right out of his vocabulary'. But then, 'immediately after hearing the eight o'clock news bulletin on the morning of 22nd June 1941, he had to start believing once again that Nazism was the most hideous evil the world had ever seen' (Collected Essays, iv. 89). The ludicrous, if truthful, precision of timing, and the interesting momentary focus on vocabulary, are clearly seeds for scenes in Nineteen Eighty-Four. However, Orwell went on in that essay only to talk about stultifying effects on literature, not about the problems of the mind. In the same way, though one may feel sure that his fear that controlling the press was the same as 'actually' abolishing or 'actually' destroying the past³ came from his own experiences in Catalonia, these do not seem to have led him to any clear non-fictional portrait of how the mind of a censor (or a self-censor) works. Probably the nearest he got to it was in his excellent and still-valuable 'Notes on Nationalism', of 1945, in which he asserts that nationalism as he defines it is 'widespread among the English intelligentsia' as a 'habit of mind', that it leads to a general 'indifference to objective truth', a fascination with the idea of altering the past, and an ability to know facts 'in a sense' or on one level, but nevertheless simultaneously to find them completely 'inadmissible' (Collected Essays, iii. 412, 420-1, 428). One might say that all this made literally true and supported by an immense organisation of enforcement gives us the world of Nineteen Eighty-Four. Still, the motivation behind the 'nationalist' escapes Orwell as it escapes Goldstein. So does the trick of doublethink, of letting a fact, as it were, penetrate the mind only so far and no further.

Is doublethink not in essence a matter of language? Orwell hesitates to say as much, and there are some arguments against the theory. In Winston's time, for instance, Newspeak is by no means firmly established, though he sees vagueness and oblivion already all around him. On the other hand, there is also continuing evidence of thought-crime: and the point of Newspeak, as Syme says, is to make thought-crime 'literally impossible, because there will be no words in which to express it'. Furthermore, it looks as if Newspeak is only a development of mentally stultifying forms of Oldspeak; the man in the canteen, whom Winston overhears with horror in Part 1, chapter 5, is talking English, though the words he says are 'not speech in the true sense: it was a noise uttered in unconsciousness, like the quacking of a duck'.

Unconscious speech is admittedly hardly more comprehensible than doublethink, but from such scenes, and from Orwell's other remarks

³ The adverb is used insistently by Winston, though one's natural reaction is to think it a mistake; see Crick's edition (Orwell 1984: 187, 290).

on language, one can construct a theory which is at least implicit in Nineteen Eighty-Four, and which goes some way to explaining the novel's central bewilderments. It is in some respects not a very strong theory, for Orwell's grounding in the English language at Eton was totally inadequate and left him at the mercy of linguistic prejudice ever after.⁴ But it would go something like this. To begin with, Orwell thought that the structure of a language had something to do with the character of its speakers. One can see from his notes on 'The English Language' in 'The English People' (1942) (see Collected Essays, iii. 40–6) that he thought English was intrinsically an anarchic language (which is very far from the truth); but that this healthy inheritance was vulnerable to all sorts of corruptions. Hence the space given in the 'Appendix' on Newspeak to the regularisation of noun and verb declensions (a matter of little importance), together with the complete absence of comment on all the things a real '1984' state would feel obliged to eliminate from English (like the powerful time-classifications of the English verb system, about which Orwell knew, consciously, nothing useful whatever).

Going on from there, Orwell thought that it was easy enough for words to exist without things to refer to (see his remarks on 'lackey' and 'flunkey' in 'As I Please' for 17 March 1944, Collected Essays, iii. 135), but that in such cases the words came to dominate the mind of their user. The same was true of the absence of words. The abolition of 'Nazi' from the vocabulary of the conscientious 1940 communist did nothing about Nazis, but it did at least inhibit any consistent recognition of the fact that the German state was run by an anti-communist party - not much of a loss, one might think, but the beginning of one. From such observations sprang the idea of Newspeak as a means of political control. But their ludicrous nature seems also to take us straight to doublethink. Did the 1940 communist not know that the Germans with whom Britain was at war were Nazis? Of course he did. But refusing to put a true label on them somehow prevented him from having to take the knowledge any further. One would like to say that this state of mind remains incomprehensible, but by this stage most of us must begin to feel twinges of guilt: such exercises in mislabelling are too common to feel distanced from. Newspeak, then, may be our best avenue into doublethink, and into the whole area of bewilderment over psychology in which Winston and Orwell both flounder, but to which they constantly direct us. It may, therefore, not be completely unreasonable to say, first,

⁴ He confessed that 'English' was hardly a subject at all in his schooldays; see *Collected Essays*, iii. 210. Some analysis of Orwell's linguistic mistakes is made in a piece in the *TLS* by Roy Harris (Harris 1984).

that the connecting thread of Nineteen Eighty-Four is abolition of the past, and of memory; but, second, that insofar as this is considered rationally explicable, and not mere fantasy or nightmare, the explanation lies in a deliberate assault on language that we are capable of recognising as an exaggeration of genuine and observable linguistic habits – not exactly what *The Times* said in its leader of 31 December 1983, but close enough.

No one could deny, furthermore, that this has remained a live issue. Few would follow Orwell's assumption, in the Newspeak 'Appendix', that the relation between word and thought was one-to-one. However, the question of what the relation *is* has remained fascinating; as has the problem that Orwell left unsolved, of how to get inside the mind of a 'doublethinker'. Finally, while not everyone has been able to agree with the assumptions of Newspeak, few would disagree with Orwell's earlier remark in 'Politics and the English Language' (1946) that '[the English language] becomes ugly and inaccurate because our thoughts are foolish, but the slovenliness of our language makes it easier for us to have foolish thoughts' (*Collected Essays*, iv. 157). Slovenly and foolish variants of English have been framing thoughts ever since Orwell's novel was written; they might not have become subjects for fiction if other writers had not read *Nineteen Eighty-Four The Times* way, the way that Crick rejects.

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The clearest Orwell-inheritor as language-satirist appears to be Ursula Le Guin. It seems undeniable that at least some of her work is a conscious reaction to *Nineteen Eighty-Four* and Newspeak, or an engagement with it. However, before considering that (in her novel *The Dispossessed* (1974)), it may make sense to look at her relatively elementary satire/parody of 1972, *The Word for World is Forest* (published first in Harlan Ellison's 1972 anthology *Again, Dangerous Visions*, and cited here from the authorised Signet reprint). This is quite clearly a comment, even a homily, on Vietnam; but it is distinguished first by an attempt to do what Orwell could not (namely, probe the mental processes of an extreme, double-thinking nationalist); and, second, by its demonstration of the ruinous effects of jargon.

The first of these effects is achieved in the presentation of the book's main villain, one Captain Davidson, largely through the device of *style indirect libre*. As the novel opens, with Davidson waking up, we seem to be reading a description of his mind by the traditional novelistic omniscient narrator: 'Two pieces of yesterday were in Captain Davidson's mind

when he woke, and he lay looking at them in the darkness for a while'. Since it *is* Davidson's mind, though, a majority of the vocabulary and grammar is his: 'It looked like that bigdome Kees was right'. A shockeffect, however, is created by the merging of the two modes, omniscient narration and direct quotation, as in Davidson's sudden vision of what the alien world will become:

a paradise, a real Eden. A better world than worn-out Earth. And it would be his world. For that's what Davidson was, way down deep inside him: a world-tamer. He wasn't a boastful man, but he knew his own size. It just happened to be the way he was made.

Here, there are several indicators of indirect speech: past tenses, like 'would' and 'was', use of the third person in 'his' and 'He' and 'Davidson'. All these predispose us to accept the sentences as the work of the omniscient narrator, and, therefore, true. But the sentence beginning 'for that's what Davidson was' is simply too boastful to be accepted that way. One realises suddenly that it is in fact a translation of what Davidson is saying to himself, 'That's what *I am*, way deep down inside *me* ... *I'm* not a boastful man.' But when Davidson says he isn't boastful, he is! And when the narrator appears to say 'that's what Davidson was', it is neither truly what he was nor the voice of the narrator. One finds oneself re-evaluating everything that has gone before, to try to sort out its reliability; and from then on the reader is continually waiting, even in passages of apparent narration, for the Davidson personality to signal itself by vocabulary, grammar or paranoid opinion.

One main result is that attention is very strongly directed to what is distinctive about Davidson's thoughts, and the language that controls them. Probably his most identifiable trait is a refusal to accept or need explanations. Thus, in fairly quick succession, we have:

He knew his own size. It just happened to be the way he was made. (37)

'It's a fact you have to face, it happens to be the way things are.' (38, direct speech)

He was a patriotic man, it just happened to be the way he was made. (43)⁵

⁵ One might note that Orwell spoke up for 'patriotism', as opposed to 'nationalism', in 'Notes on Nationalism' (*Collected Essays*, iii. 411), but Le Guin feels the word has been poisoned.

Some men, especially the asiatiforms and hindi types, are actually born traitors. Not all, but some. Certain other men are born survivors. It just happened to be the way they were made. (77)

Along with this there goes a very heavy use of the adverbs 'actually', 'really', locutions like 'the fact is', the adjectives 'normal', 'practical' and (especially) 'realistic', along with the noun 'reality'. Davidson, one can see, is committed to 'the way things are'. Or, rather, he thinks he is. His tragedy is first that he cannot tell his own opinion from reality, and second (much more seriously and less commonly) that his own continuing denial that there is any need for explanations prevents him from any form of self-analysis. He has an aggressive ideology based on denying that he possesses anything as unnatural as an ideology at all. Appropriately, then, his own internal monologue drifts in and out of the narrator's comments; we see that his mind has been irretrievably poisoned by false meanings and ready phrases.

More interesting as satire, though, if not as fictional experiment, is the presentation of Davidson's superior Colonel Dongh. By one of the book's most obvious ironies, he is a Vietnamese; and the English he talks is clearly a parody of that already tediously familiar to Le Guin from official American communiqués. One is obliged to give fairly extensive samples. In example 1, Colonel Dongh is responding to an accusation from the anthropologist Lyubov that an alien assault on one of his outposts has been motivated by human enslavement of the aliens:

(1) 'Captain Lyubov is expressing his personal opinions and theories', said Colonel Dongh, 'which I should state I consider possibly to be erroneous, and he and I have discussed this kind of thing previously, although the present context is unsuitable. We do not employ slaves, sir. Some of the natives serve a useful role in our community. The Voluntary Autochthonous Labor Corps is a part of all but the temporary camps here. We have very limited personnel to accomplish our tasks here and we need workers and use all that we can get, but on any kind of basis that could be called a slavery basis, certainly not'. (67–8)

In example 2, the Colonel is speaking directly and reprovingly to Lyubov:

(2) The Colonel went on. 'It appears to us that you made some serious erroneous judgements concerning the peacefulness and non-aggressiveness of the natives here, and because we counted on this specialist description of them as non-aggressive is why we

left ourselves open to this terrible tragedy at Smith Camp, Captain Lyubov. So I think we have to wait until some other specialists in hilfs have had time to study them, because evidently your theories were basically erroneous to some extent'. (74)

In example 3, the Colonel has been captured by the aliens and imprisoned, with all his surviving men, apart from outposts under Davidson. He is helpless, but trying to bargain his way out:

(3) The point is, without introducing into this any beside the point or erroneous factors, now we are certainly greatly outnumbered by your forces, but we have the four helicopters at the camps, which there's no use you trying to disable as they are under fully armed guard at all times now, and also all the serious fire-power, so that the cold reality of the situation is we can pretty much call it a draw and speak in positions of mutual equality. This of course is a temporary situation. If necessary we are enabled to maintain a defensive police action to prevent all-out war. Moreover we have behind us the entire fire-power of the Terran Interstellar Fleet, which could blow your entire planet right out of the sky. But these ideas are pretty intangible to you, so let's just put it as plainly and simply as I can, that we're prepared to negotiate with you for the present time, in terms of an equal frame of reference. (106)

One can see that some of the features of this jargon would have been immediately familiar to Orwell: primarily, of course, the euphemisms. Orwell's brutal juxtaposition of the words pacification or rectification with the facts they represent is well known (Collected Essays, iv. 166). Exactly the same phenomenon (except that here it is sincerely meant) appears in Dongh's rejection of 'slaves' in favour of 'Voluntary Autochthonous Labor Corps', in example (1), or his use of 'defensive police action', in (3), to mean airstrikes with napalm bombs against undefended villages. Orwell also noted the use of 'pretentious diction', which Dongh exemplifies by 'previously', for 'before', 'very limited personnel to accomplish our tasks', instead of 'very few people to get the job done', and the preference for the 'ready-made phrase' like 'for the present time' or 'in positions of mutual equality', instead of words like 'now' or 'as equals'.

Other features, however, and more interestingly, appear to be new growths. When one considers that Dongh is a military man, accustomed to the use of weapons of terrible destructiveness, it is odd to notice how consistently tentative his speech is. The prime example in the samples

given is the end of (2). How anything can be 'basically erroneous' but only 'to some extent' defeats the mind. But one notes also how at the start of (1), an underlying 'which I think are maybe wrong' is not only inflated with long words but also extended with the needless 'I should state'. Why should Dongh state it? Why should he ask others to notice he is stating it? There is a formal, guarded punctilio about his speech which resembles nothing very much in Orwell's list of dislikes.

Added to this there is what one might call a 'hatred of foreground'. Dongh uses, in (1), the words 'context' and 'basis', in (3), 'factors', 'situation', 'frame of reference'. All imply something behind the event, something contributing to it or even enclosing it, but not the event itself. Some of them, like 'frame of reference', are among Dongh's favourite phrases. What does this preference imply? Before deciding, one should note at least three other fairly consistent features. One is a deep uncertainty over grammatical connection: 'because ... is why', in (2) is clearly tautologous, 'which there's no use', in (3) is a conflation of two different constructions, and both the 'and' in line 2 of (1) and the 'although' in line 3 seem on reflection either to be unnecessary or actively misleading. Uncertainty is furthermore particularly acute over grammatical cohesion: 'them' in line 5 of (2) is a long way from the antecedent 'judgements' to which it refers (or does it refer to 'natives?'); 'and also all the serious fire-power' in (3) is confusingly split from 'the four helicopters' to which it is parallel, and the verb 'have' to which it acts as object. Finally, Dongh has a simple habit of repeating words: 'any kind of basis that could be called a slavery basis', 'The point is ... beside the point', 'the entire fire-power ... your entire planet'. Euphemising, one can see, may be used deliberately and tactically. But many of Dongh's linguistic habits seem to be just clumsy and pointless.

Yet they foster a variant of doublethink. Just as Le Guin has taken up, in Davidson, the challenge of penetrating the mind of a 'nationalist', so in Dongh she illustrates how slovenliness of language makes it easier to have 'foolish thoughts', thoughts which may lead to genocide. Dongh's language *is not morally neutral*. In brief, one might say that his basic trouble is an inability to admit a contradiction, or a failure. Like Davidson, in this respect, his adopted posture is one of omnipotence. Nothing ever goes wrong. Some 'factors' of it may have been 'erroneous'; but the assumption is that these can and will be corrected. Since, however, even Dongh notices that things *do* go wrong, a certain guardedness of speech at all times has to be built in. Along with this there seems to go a willingness to be distracted from the grammatical line of a sentence (for there are many factors to keep track of and Dongh needs to list them all), and a feeble perception

of cause and effect. More could be said (the point made earlier about repetition, for example, still remains inscrutable). However, the final effect is of assumed omnipotence wandering in indecision: a strange correlation (given the Vietnam references) of syntax and strategy.

There is, furthermore, no doubt that Dongh's language was drawn from life. Which particular American spokesman or spokesmen Le Guin noticed one cannot now say, but the interesting point is that Dongh's is not an idiolect, a one-man variant. It seems instead to be a class dialect or trade jargon of the United States government in the 1960s, 1970s and 1980s. To many it will be familiar not even from Vietnam, but from the experience of listening to President Nixon's defenders on television. Samples here could be given very nearly literally ad nauseam, but I choose one from the developing Watergate scandal of 1973: after Le Guin's work, one should notice, but absolutely certainly unaffected by it. Its date rubs in the point that Dongh's language parodies not a party, but certainly a whole subclass or governmental faction. The example is from a White House briefing of 22 May 1973.6 Someone had just read to Leonard Garment, President Nixon's counsel, an earlier statement by President Nixon (one notes en passant its tentative but inflated diction) that he had been 'advised' shortly after the Watergate break-in 'that there was a possibility of CIA involvement in some way'. Who, the questioner asked, 'advised' the president of this? To the question Garment replied:

'There are some transactions that can be stated with certainty. There are others that must be stated with a certain degree of generality. The question of who, out of a possible number of persons, whether it be two, three, or four, who might have drawn particular information to his attention, or the totality of circumstances from which that suspicion or knowledge of supposed fact came, is something that really cannot be stated with certainty at this time.'

Most of the linguistic features of Le Guin's parody are here present. There is the choice of pretentious words: 'transaction' is especially odd for a scene in which someone can only have told the president something, or written him a letter. It goes, of course, with the president's 'advised'. We also note the ready-made phrase 'drawn ... to his attention', as well as (and this brings in the preference for backgrounding) 'totality of circumstances'. Especially confusing in the

⁶ Cited from Cross and Witt 1975: 88.

whole answer is loss of grammatical cohesion: 'who' in line 3 is far separated from the verb phrase to which it acts as subject, 'might have drawn' – so far that it makes one wonder whether perhaps it is the 'who' in line 4 that is the subject of 'might have drawn', in which case one would have to reconsider the sentence's entire structure. The objects of 'might have drawn' add further confusion. Finally, one notes once again the repetition of 'stated ... stated ... stated'. In this last case, it must be said, one might possibly think that Garment was aiming for a kind of rhetorical balance. But this flattering opinion tends to evaporate as one reads on. A little later the questioner indicated an apparent contradiction in an earlier presidential statement, and asked if the statement was wrong. To this Garment could quite honourably have replied that it was wrong, as the president had realised later, or that it had only been partially right. However, he actually replied:

'No. I think the April 30th statement represented the President's knowledge and recollection at that point stated to the finest state of certainty, and that process of investigation and examination has continued since then, and this statement is a more complete statement'.

Here the repetition 'statement ... stated ... state' (!) has no possible rhetorical defence. For good measure, 'that process' looks as if it ought to oppose 'this statement'. But it is merely another false trail.⁷

Many observers, watching Garment and his like, must admittedly have felt that this was not doublethink but double talk: a phrase recorded from 1938 and showing a rapid shift of meaning from 'deliberately unintelligible speech' to 'deliberately ambiguous or imprecise language; used esp. of political language' (iv.982). Garment, in other words, replied as he did simply in order to confuse questioners and drive them away. That motivation was no doubt present. However, it would be even more worrying if, as seems likely, presidential advisers both political and military simply could not turn this form of language off! If, that is to say, their confusion of syntax both reflected and created their thoughts, this would take us indeed from double-talk to doublethink, and strongly reinforce the Orwellian thesis that a new form of language could inhibit perception and prevent the most obvious facts from ever getting through. It is true that 'Garment speech' – prolix, confused, and

Garment's official White House biography says that, before becoming Nixon's counsel, he worked 'on a variety of various projects'! See Cross and Witt 1975: 43.

full of synonyms – is quite unlike Newspeak stylistically. However, the effect is much the same.

To return to Le Guin: it seems likely that *The Word for World is Forest* is only a parallel to *Nineteen Eighty-Four*, not a commentary on it. But this does not seem to be true of her later work. *The Dispossessed* (1974), which includes within it more or less overt reactions to most of the major European Utopias and dystopias, from Plato on. A major feature of the novel is that half the characters speak a language, Pravic, which has been designed specifically to correct, to make unthinkable, the error of its parent language, Iotic. Unlike Newspeak, Pravic is designed with the best of intentions, and to foster anarchy rather than state control. Nevertheless, *The Dispossessed does* offer a fictional answer to the *Nineteen Eighty-Four* thesis that 'thoughtcrime' will become 'literally impossible' without the right words to think it in. Le Guin, though, suggests strongly that Orwell was wrong.

A reader's first impression is that the experiment of Pravic has been a success. In an early scene an Iotic speaker uses the word 'bastard'. His Pravic-speaking listener does not understand it. In Pravic, 'marriage' does not exist either as a word or as an institution; there is, therefore, no concept of legitimacy, and no force in an accusation of illegitimacy. Bastardy furthermore has strong connections with rights to inheritance; but in Pravic no one inherits anything, for 'money' also exists neither as word nor as thing. The same is true of 'buy', 'profit', 'bet', 'private', 'propertied class', 'class', 'status' and much of the English vocabulary of possession. Even 'my', though it exists in Pravic, is not used as it is in English. On the whole, one sees rapidly and with approval that in this imagined world large areas of possessiveness, and of self-definition at others' expense, have been eliminated from tongue and brain.

The trouble is that they do not stay eliminated. Profit does not exist in Pravic, but the word 'profiteer' is used – to mean, strictly speaking, a speaker of Iotic, a member of a capitalist society, or someone who behaves like one. But just as in English people say 'bastard' to insult others, so in Pravic 'profiteer' has become a term of simple abuse. 'You're one of those little profiteers who goes to school to keep his hands clean', says one character. 'I've always wanted to knock the shit out of one of you'. There are no such people in the Pravic society; dirty work is rotated; everyone goes to the same kind of school. 'Profiteer' has become a simple reversal of 'bastard' ('rich person', as it were, as opposed to 'propertyless person' in our thinking). 'Shit' is also significant. In Pravic this is not a taboo word and carries no sense of obscenity or insult: 'shit-stool' for WC is the normal word. This too could be approved of, as natural and logical. However, in another strange reversal, the term 'excrement' (to

us a euphemism) has in Pravic acquired a strong political meaning for anything excessive, commercialised, unnecessary. 'Excrement', therefore, is used non-euphemistically, and again almost without meaning, as a swear word. It seems as if semantic spaces, however carefully vacated, have to be filled.⁸ With the best will in the world, Pravic is turning back towards Jotic.

There is, furthermore, a strong sense in Le Guin's novel that the thing can exist without the word. 'Buying' and 'selling' do not exist, in theory, in Pravic – one character rubs the point in by getting the first word wrong and pronouncing it 'bay'. This does not mean, however, that people cannot be bought and sold, even if no money changes hands. In an important scene the book's hero, a physicist, forces the right to have his work published by an implied threat to submit no more. This is a kind of bargain: 'They had bargained, he and Sabul, bargained like profiteers. It had not been a battle, but a sale. You give me this and I'll give you that. Refuse me and I'll refuse you. Sold? Sold!' As the book goes on, its Pravic-speaking characters come to the realization that in spite of all verbal quarantining their anarchic society has spontaneously regenerated 'government' and 'politicians'. By symmetry it has also allowed its own carefully invented vocabulary of social comment, which rests on such notions as the 'functional', the 'dysfunctional', and the 'organic', to become a deceptive jargon like that of the profiteers. 'Who do you think is lying to us?', demands the hero. The answer is, 'Who but ourselves?' - with its implication that doubletalk (if it ever existed) has become doublethink, and that some Pravic speakers are as confused as Colonel Dongh or the unfortunate aides of President Nixon.

It is not clear which of several possible conclusions one should draw from *The Dispossessed*. The simplest is to say that it tries to refute Orwell, claiming that no Newspeak could forever overpower the natural qualities of the human mind. Less optimistically, one might think that both *Nineteen Eighty-Four* and *The Word for World is Forest*, on the one hand, and *The Dispossessed*, on the other, could be right: in other words, that improving the human mind by verbal engineering, whether Pravic or Basic English, is hard, but that degrading it through Newspeak or Vietnam English is all too easy. However, the reader of these novels is at least directed to an open question, and a live issue. Does language

⁸ Anthony Burgess notes that this could be expected to happen even in Newspeak, in his *1985* (1978). 'Pejorative semantic change is a feature of all linguistic history' (51): in other words, people would use 'Big Brother!' where we might say 'Jesus Christ!'.

control thought? Are the many appalling forms of English we hear really meant, or translated out of some clearer language? Or do the forms of jargon which many of us are taught actually *prevent* us from ever seeing matters straight? It is troubling that to these questions there are no available answers, and very few published contributions. In some cases – as, for instance, that of the highly stylised student revolutionary jargon of 1968 – even the documents have vanished, and one is left, like Winston Smith, working from inadequate memories alone.

The war in Vietnam, one may think, would not have surprised Orwell (except insofar as it gave the lie to his theory of all-powerful super states). He would also not have been surprised even by new forms of perversion of political English. There can be no doubt, either, that he would have been entirely against 'comfortable, distancing' readings of his text, and that to this extent Professor Crick's reminders that Nineteen Eighty-Four is not simply about Russia or totalitarianism are valuable ones. I do not feel, however, that listing Orwell's many 'satiric thrusts' necessarily makes his novel more relevant or even represents it well. In particular ('body-snatching' though it may be), I cannot imagine that Orwell would have welcomed too much distraction from his central uncertainty - how could people deceive themselves as so many of his generation's intellectuals had? - and from the central theme of his novel Nineteen Eighty-Four, namely, the difference between a mind that tries to capture truth and a mentality that tries to abolish it by destroying language, on paper, in dictionaries, and at the roots of thought. Finally, it seems to me significant of cardinal error that the Crick edition of Nineteen Eighty-Four, besides repeating often that O'Brien is simply mad, finds itself obliged to maintain the thesis that the final 'Appendix' on 'The Principles of Newspeak' must be a joke, 'delightfully satiric' (see p. 55). We are told on the same page that when the 'Appendix' says it is 'difficult' to translate writers like Shakespeare, Milton, Swift, Byron and Dickens into Newspeak, we are meant to assume automatically that the job is impossible, to be protracted even beyond 'so late a day as 2050'; on page 74 this becomes, 'we know that the target for the final adoption of Newspeak will have to be postponed again and again'; while on page 119 (and this is 'body-snatching'), Crick finds it 'absolutely clear' that Orwell really thought Newspeak 'impossible' and that 'language will

⁹ An exception is Fowler and Hodge 1979. This too has its own bias, however. Like Crick (see below), it insists that the 'Appendix' on Newspeak must be taken ironically. I feel this view is untenable even from Fowler and Hodge's own citations: people dismiss as 'irony' thoughts they find too alarming to accept.

always escape from official control'. Note 37 finally paraphrases the last words of the 'Appendix' as 'no regime can simplify Shakespeare and it is barbarism to try'. ¹⁰

One would like to be so confident, in Shakespeare or in language. There seems, however, to be no great difficulty in simplifying literature, as long as one does not care how banal the result is. As for language escaping official control, this does seem very likely (witness *The Dispossessed*) but a really thorough experiment has never been tried. Quite small-scale ones (witness Colonel Dongh) have been far too successful. Orwell's awareness of language, I would conclude, had no great technical rigour, but was the result of sharp observation, the most painful experience, and genuine anxiety. Whatever else was drawn into *Nineteen Eighty-Four*, doublethink and Newspeak are at the heart of it.

¹⁰ Huxley takes the same view of Shakespeare's universal appeal (recognised not only by Bernard Marx but also by Helmholtz Watson) in *Brave New World*. Amis offers a much more robust view in his *Russian Hide and Seek* (see item 8, above). This too was felt to be unacceptable, unthinkable, not even think-about-able, by too many literary reviewers.

13 Introduction

Just Before the Disaster

This piece came out in the same volume as item 1, above, eventually reaching print in 1991. However, it started life as a talk given to the 'World SF' Conference in Zagreb, Croatia (then Yugoslavia), in July 1986. I have to express my thanks to the British Council for funding the trip, and to Krsto Mažuranić for running the conference and making the initial invitation. Speaking much more personally, though, that conference in Zagreb was a model for international co-operation and great good humour. Not only were the Brits and the Yanks there, like Jerry Webb and Joe and Gay Haldeman, but there was a complete representation from, as far as I could tell, all parts of the former Yugoslavia - Croats, Serbs, Bosnians, Montenegrins, Slovenes and Albanians too. A very few years later all that had been fragmented by nationalist politics. Sf is more important than national politics! It is more real and less imaginary. What happened is a grief to us all, on the political level, and a grief to me on the personal one, because in the turmoil I lost contact with all concerned. Krsto has died, as I have only just discovered, but if anyone does know the whereabouts and contact details for Vojko Kraljeta I would be very glad to receive them.

So there was something uneasily symbolic about delivering a talk about the collapse of one society in fiction just on the brink of the collapse of another society, in reality. Something I am aware of too – though I do not think it has occurred to any politician – is how similar, in some ways, are the former Yugoslavia and the present United Kingdom of Great Britain and Northern Ireland. The two states are/were the most prominent examples of former Roman provinces that were taken over by non-Latin speakers from outside the Empire, and which retained marked internal divisions, with odd parallels. The Serbs and the Croats, speaking more or less the same language but with a long record of mutual hostility, are rather like the English and the Scots. The Gaelic word for Scotland, Albann, comes from the same root as Albania. A further ethno-linguistic

group within the Balkans are the Vlachs, of what used to be called Wallachia, and this comes from the same root as the word 'Welsh', in Old English, Wealh. The Catholic/Orthodox hostility between Croats and Serbs finds a parallel in the Catholic/Protestant hostilities of Ireland. It makes me realise how quickly the kind of jokingly hostile relationship which used to be normal within sections of the UK population – as between sections of the Yugoslav population – can turn nasty. Of course, 'it can't happen here', as politicians love to say (saves thinking). But, if you read sf for long enough, you realise that all kinds of things can happen, and many of them seem totally implausible even in retrospect. Even the USA has some danger-signs flashing, though most of those in the stories discussed here have fortunately faded or gone out, even in the almost thirty years since the Zagreb talk was first delivered.

As for the content of the piece that follows, its appearance in a work that is to be published by a university press accounts for the appearance of some things I am now not so sure about. I remark in several of the articles above, notably items 2 and 7, how sf exemplifies clearly and even literally some of the concepts which figure more cloudily in the language of literary theory - 'textuality', différance, 'subjugated knowledge', etc. Although I phrased my remarks here about, for instance, the Fantasy & Science Fiction cover in Barthesian language, I am no longer sure that Barthes's complex apparatus of signs, signifiers and overlapping systems leads in the direction of clarity. Leonard Jackson (1991) points out how much of similar analyses is based on substantial misreading (and mistranslation) of what are in context very clear points made by Ferdinand de Saussure in an elementary course on the nature of language. How his spirit must shake its head over what has been made of him! Moreover, though Paul de Man gave me some genuinely useful terms to use, like 'disfigurement' and Verneinung, the argument from sf is much clearer than his argument from Shelley. I would add that de Man triggered one of the major rows over literary theory when it was discovered not only that as a young man he had written pro-Nazi pieces in occupied Belgium – a personal matter which might not affect his ability or otherwise as a literary critic – but then his supporters in the academic world wrote themselves into perfect circles trying to show that he did not mean what he wrote, no one means anything anyway, there is no such thing as meaning, etc. (see, at great and amusing length, Lehman 1991).

Subtracting all that, what is left is, I think, a statement about American values as contrasted, sometimes, with current American practice. And one of those values is, as I should not need to say, the right to free speech and open criticism leading to self-correction. What

strikes me now is the significance of Heinlein in all this. He crops up in all five of the articles in this section, and very prominently in the first, fourth and fifth. In the one that follows he is there only as a (possible) provocation for Ursula Le Guin, someone for her to counterpunch to, but he seems to have the same role for Kim Stanley Robinson in the article after that, on 'The Critique of America in Contemporary Science Fiction'. It may seem odd, finally, to put 'the Fall' before 'the Critique', but that is the way they occurred to me, and the way they seem to have occurred to Heinlein and Robinson too. Maybe you write about falls because they are dramatic, and then you get to wondering about declines, about the moment when the rot set in - the moment, of course, like Zagreb in 1986, when someone could have done something about it. If they had read enough science fiction to think that way, as no politician ever has (see coda to item 5, above). Except, maybe (see introduction to item 11), Harry S-for-nothing Truman, like Heinlein, a citizen of my own adopted state, Missouri, the 'Show-Me' state.

The Fall of America in Science Fiction

The picture on the cover of the December 1966 issue of $Fantasy \ \mathcal{C}$ Science Fiction is of the Statue of Liberty, recognizable immediately by its raised arm, seven-pronged diadem, and severely expressionless features. Yet the statue is lying on or rather in the ground, from which it appears to have been recently excavated. A small human figure in singlet and trunks stands by its lip, its gestures vividly conveying incomprehension. Four others look on in poses of doubt or inquiry. What this picture means is on one level obvious enough: this must be a scene from the future, indeed the far future, in which the Statue of Liberty has been not only felled and buried, but also forgotten, so thoroughly forgotten that the future excavators, whoever they are, can no longer even guess the purpose of the artefact they have discovered. The meaning of this cover is the precariousness of meaning, the evanescence of that which most Americans would take to be most solid, most eternal.

The device is a common one with science fiction illustrators. But it is worth considering quite how covers of that kind create meaning, perhaps especially in comparison with the 'mythical' effects created by the cover of *Paris Match* as memorably analysed by Roland Barthes in *Mythologies*. In his discussion of 'myth as a semiological system' in that work, Barthes describes a cover picture on which 'a young [African] in a French uniform is saluting with his eyes uplifted, probably fixed on a fold of the tricolour'. What does this mean to Barthes? His answer is to say that we are dealing here with two overlapping systems, each consisting of a signifier, a signified and a sign, but in which the sign of the first or linguistic system (a sign being the combination of signifier and signified) becomes in its turn the signifier of the second or mythical

¹ Cited here from Roland Barthes, *Mythologies*, selected and translated by Annette Lavers (Barthes 1973), but with reference to the original French text of 1957.

system, with a different signified and a different sign. Viewed as the final term of the first system, the Paris Match cover means no more than has already been said, 'an African soldier is giving the French salute'. But as the first term of the mythical system the cover prompts a whole train of thoughts about 'French imperiality', its essential rightness, the delusions of those who criticise it, the loyalty of those who serve it, etc. That is what the cover was designed to do, Barthes points out. He points out also, with almost equally evident rightness, that as the cover's mythical meaning gains force, point, appropriateness, so it loses individuality, biography, even story. The young African soldier whose picture was taken must have had a nationality, as well as a life history, of his own. But in the context of 'imperiality' (the salute, the uplifted eyes, the hypothesised tricolour in the background) all that is just not relevant. The only important thing about him is that he should be visibly 'not (ethnically) French'; that his pose and skin colour should (apparently) contrast, to be resolved by the ideology of 'imperiality'. The linguistic and the mythical systems can alternate, says Barthes:

the signification of the myth is constituted by a sort of constantly moving turnstile which presents alternately the meaning of the signifier and its form, a language object, and a metalanguage, a purely signifying and a purely imagining consciousness. (1973: 123)

Does this work with science fiction? It is very tempting to remark that what in Barthes is seen as the end product of mythical decoding for *Paris Match*, is for the reader of *Fantasy & Science Fiction* only the start: to understand the full significance of the Statue of Liberty cover one has to see first that the Statue has a mythical significance like that of the black soldier, and then to see that this significance is being denied. Furthermore, the act of working out how that could get to be denied the Statue is buried, the USA must have collapsed, the very concept of liberty must have lost importance – leads one in the direction of inventing a story (in this case Avram Davidson's 'Bumberboom'), so pouring back into the picture all the individuality, biography and detail leeched from the 'picture of a French black' (according to Barthes) by the process of mythification itself. The Paris Match cover is a myth, one might say, the Fantasy & Science Fiction cover is a 'myth disfigured'. The one tells its readers something they already know, tries to remove doubt about it, insists no further information is necessary. The other denies accepted

² For this concept, see Paul de Man's essay 'Shelley Disfigured', in his *Rhetoric of Romanticism* (de Man 1984: 93–123).

knowledge, challenges an accepted belief system, demands story, which shall explain how the picture and the belief system can be made to relate.

From this sketchy example, two points ought to emerge, both to science fiction's collective credit. One is about complexity of technique: a quality rarely praised in sf writers, who indeed often show great simplicity of technique in dealing with things in which they are not interested - character, for example, feeling, the fine social and moral discriminations which have been the staple of the English novel for centuries. Still, their compensation for this ought not to be entered solely on the side of 'ideas' or 'concepts', as so often it is. A science fiction story also often functions in an admirably Barthesian way, popping in and out of the 'turnstile' between myth and language, speaking now on the level of symbol and abstraction, but the next moment on the level of individuality and story, never allowing the reader to settle dully into either. The second point, more traditionally, is about the value of science fiction's subject matter. This claim too may seem incomprehensible to many doubtful or reluctant readers. Yet it is very easy to argue that people read and write science fiction in modern Western countries because it enables them to state and understand things about their own societies which verge on the taboo. The Paris Match cover, as Barthes well saw, was making a statement of control and conformism. The Fantasy & Science Fiction one may have been elegiac rather than critical, but it was offering a national ideal something other than reverence: it was considering the notion that America might (would? should? must?) eventually fall.

Stories of 'the Fall of America' have indeed been common for a long time, and fit without much persuasion into several recognisable types. Especially popular after the Second World War was what one might call the 'survivor story', in which an individual or a group survived by cunning and violence in the ruins of a shattered America: classic examples include George Stewart's Earth Abides (1949), Wilson Tucker's The Long Loud Silence (1952) or Algis Budrys's Some Will Not Die (1961). A variant type is the 'America invaded' story, in which a small band of heroes throws off the shackles of the Pan Asian/Soviet/alien invaders by using the traditional American strengths of technical ingenuity, freedom from superstition, irreverent humour, etc. This sub-genre was launched by Robert Heinlein's The Day After Tomorrow (original title Sixth Column (1941)) and continued in William Burkett's Sleeping Planet (1964), Larry Niven and Jerry Pournelle's Footfall (1985), the movies Red Dawn (1984) and Independence Day (1996), and M.J. Engh's A Wind from Bukhara (original title Arslan, 1976), with a commendably and unusually thoughtful example in C.M. Kornbluth's Christmas Eve (original US title Not This August (1955)). Yet in both 'survivor' and 'invasion' types, one should note that the Fall of America itself functions mainly as a datum, a way to get the real story started. Why the bombs should have been dropped, how the invasion could have been a success, are not questions generally posed. Concomitantly with this, American values are there to be revived or reasserted, not exposed to doubt.

Yet there are some stories, mostly from the 1970s and 1980s, which present a different scenario. In them the Fall is at least arguably America's own fault. The actual form of the Fall may involve occupation from outside or a kind of collapse under American society's own weight, but the most common element is neither war nor occupation but domination. The America presented in these stories is administered, or kept down, or financially overshadowed, by some foreign nation or nations: Arabs or Japanese, in stories discussed below; an international coalition in Kim Robinson's The Wild Shore (1984); an extra-national 'Peace Agency' in Vernor Vinge's The Peace War (1984), with responsibility piled elsewhere on Mexicans, Africans, almost everyone, in fact, except the Russians (too like the Americans to create an interesting situation) and the British (perhaps for reasons of historical sentiment). The roll call of dominating powers in itself indicates the reasons for a loss of national morale: failure in Vietnam, the Iranian hostage crisis, the oil crisis of 1974, the penetration of American markets by Japanese goods, all of which have shaken American self-belief in different ways. But what is interesting in the science-fictional reactions to recent history is the suggestion that not only American realities but also American values have been (will be, must be) in some way affected. Like the *Fantasy & Science Fiction* cover already discussed, this new sub-genre of 'Fallen American' stories exploits with particular force the techniques and ironies of 'disfigurement'.

Consider, for instance, a scene in Mike McQuay's novel *Jitterbug* (1984). It takes place at a sports field outside New Orleans, where the characters have gathered to watch 'our national pastime', which turns out to be a game between gene-engineered humans, most of them wide, low and weighing some 600 pounds, but others 15 feet tall and looking like 'walking toothpicks'. As one could guess from the physical types, the game played is a cross between two of the three distinctly American professional games, basketball and American football. But the 'ethnicity' of the scene is both rubbed in and rubbed out by the ceremony at the game start:

A large holo of Faisel ibn Faisel Al Sa'ud appeared in the middle of the field, and the musak switched to the Arabian National Anthem, everyone in the bleachers standing and bowing his head. (chap. 17)

In at least four ways - not counting the game about to be played this scene is as American as the Statue of Liberty. It has 'musak': it has 'bleachers' (first recorded by the Oxford English Dictionary from New Haven, Connecticut in 1892); it has the playing of a national anthem, done at all professional games in the USA, but only at international level in the UK, and then often greeted with general embarrassment; and it has the ritual of 'standing and bowing [one's] head'. This detail is admittedly not normal in the USA, where the rule is instead to stand at attention and (if the US flag is displayed) to place the right hand over the heart. But then McQuay's alteration of an established ritual contributes to the point being made in this scene of equal and opposite force to 'ethnicity' or 'Americanness', namely, defacement, insult, subjection. The American crowd is standing for the Arabian National Anthem; it is venerating a person, not an institution, and a foreign person at that; the crowd bows its collective head, to indicate not free allegiance but forced submission. The submission is forced (we learn from the story) not only by economic considerations. What the oil producers have done is to install golden domes in all major world cities, ostensibly as advertising devices but in fact to contain and threaten the release of the herpes-based 'Jitterbug' virus, a mutated, incurable, contagious organism which creates in quick succession impotence and death. After the destruction of Australia and the USSR by the 'Jitterbug', the house of Sa'ud begins a two-century domination of the world, enforced by control over money, energy and disease. America, clearly, can do nothing about this. McQuay's novel is in a way a 'scare' story, hinting not very darkly that all the above is only an extrapolation of the events of 1974; its moral lies in the threat that even the most distinctive Americanisms could be taken over without symbolic resistance. But there is an element of the wilful in the 'scare' that McQuay throws. In the end he is unable to accept the logic of his own position, allowing his central characters to repeat, mutatis mutandis, the ending of Huckleberry Finn and float off in a balloon to Wichita, where, they feel, there will be no dome and no 'Jitterbug'.

America, in that novel, accepts subjugation but does not actually commit self-betrayal. A further step in the direction of 'disfiguring' a national self-image is taken by Norman Spinrad's story 'A Thing of Beauty', from 1973.³ This story consists of six scenes. In the first, an American called Harris is visited by a Mr Ito, of Ito Freight Boosters of Osaka, a 'typical heavyweight Japanese businessman' (Harris reflects),

³ First published in the *Analog* issue of January 1973, later reprinted in the Spinrad collections, *No Direction Home* (1975) and *The Star-Spangled Future* (1979).

'a prime example of the type that's pushed us out of the centre of the international arena'. Harris, it transpires, makes his living by selling major Americana to foreign collectors. In the first scene his relationship with Ito wavers between superiority (for Ito's main motivation in seeking an American artefact is a wish to upstage his in-laws) and subservience (for Ito has both money and an Oriental tact over matters of 'face', to which Harris cannot rise). The next five scenes develop the contest between American and Japanese, over the sale of America.

What major artefact should Harris sell to Ito? Since the story is set in New York, the first thought must naturally be: the Statue of Liberty, known to Harris as 'the Headless Lady' - 'insurrectionists', we are told, blew its head off, though we are not told why. But Ito rejects his suggestion immediately. He agrees that the Statue is 'a symbol of America itself', but in its present state sees it as a reminder only of 'decline from your nation's past greatness'. To enshrine the Statue in Kyoto would be 'an ignoble act', a form of gloating. Harris does not share this feeling at all, regarding the Statue as 'just one more piece of junk left over from the glory days'; he loses face by being prepared to sell what Ito is not prepared to buy. But 'the customer is always right'. Harris's second attempt is to try to sell the Yankee Stadium, home of that third American professional game, baseball, though the Stadium is now derelict and the game played apparently only in Japan. There is something both perceptive and imperceptive in this selection by Spinrad: perceptive in that American sports are so strikingly 'ethnic', being rarely played by outsiders; imperceptive in the assumption that in a non-American-dominated future, they might somehow have caught on. But in any case Ito declines to buy the Stadium. He would like to have it, but his in-laws regard baseball as totally uncultured, so it would bring him no prestige. Harris's third try is to attempt to sell Ito the UN Building: an artefact, unlike the Statue of Liberty, 'in excellent repair', apparently because the 'insurrectionists' who destroyed the one 'had had some crazy attachment' to the other. But this try gives serious offence. Ito has no respect for the UN or its Building at all; he feels neither nostalgia nor excitement; to him the building does not mark 'one of the noblest dreams of man' but only 'a shrill and contentious assembly of pauperised beggar states united only in the dishonorable determination to extract international alms from more progressive, advanced, self-sustaining, and virtuous states, chief among them Japan'. At the end of this triad of symbolic scenes Harris has failed. He cannot think of anything American which would confer status on a Japanese.

Is this Harris's fault, or America's? The answer comes in the two last scenes. In the first, returning disconsolately to base, Mr Ito suddenly

sees a 'magnificent structure' and demands to know if it is for sale: the structure, filthy, crumbling, disused, is Brooklyn Bridge. Now the main point about this in an American belief system (as Harris immediately remembers) is that it is a joke. It is the thing traditionally sold by city conmen to 'suckers' from the sticks. For Mr Ito to want to buy it, then, makes him a 'sucker' and relates the whole story to the highly ethnic American proverb, 'Never give a sucker an even break'. When Harris says to Ito, 'I can think of no one more worthy of that honor than your esteemed self, Mr Ito', the Oriental ceremony of his language conceals a much relished insult. The contest between the two has been won by the American. Yet in the last scene his triumph is violently reversed. Harris, sitting in his office, receives a holo slide of Brooklyn Bridge, refurbished, in its new environment; it is, even he admits, 'very beautiful'. In an accompanying package from Ito there is a gold brick. Not a brick painted gold to sell to 'suckers', but a bar of real, pure, solid gold, crafted to look like a painted brick. Harris does not know what this means at the end, but we do. It means he was the sucker. He sold what he thought was a fake; but his customer knew it was real.

What this story very clearly means is that the Japanese is the true American. It is Ito who shows strong feelings about baseball, sadness over 'the Headless Lady'. He respects the icons of America as the American does not. As for his rejection of the UN Building, what this proves is: (a) true Americans, like Ito, do not respect the UN; (b) false Americans, like the 'insurrectionists' who spared the building and the federal authorities who keep it 'in excellent repair', do; (c) Harris has more in common with these latter groups than with Ito; they are all against America. Spinrad's fable is in fact interestingly balanced between a creditable openness - being American to him is not a matter of nationality - and a strongly chauvinist anger against Americans who betray their country and against an internationalism he finds incompatible with patriotism. There is a kind of symmetry, even, in the fate of the artefacts he mentions. Brooklyn Bridge can move to Osaka (where 'Americanism', we may conclude, is alive and well); but the Statue of Liberty, literally and symbolically 'disfigured', has to stay where it is. Yet both movement and stasis symbolise failure, a failure whose icon is 'the Headless Lady'.

The 'disfigurement' of the Statue of Liberty in 'A Thing of Beauty' is interestingly different from that of the *Fantasy & Science Fiction* cover. On one level (that of story), it is less. In Spinrad's world the history of the Statue has not been forgotten, is well known, forms indeed part of Harris's sales pitch. But on the level of myth the 'disfigurement' is much greater. The Statue has been decapitated, leaving it symbolically blind; it still holds a torch, but can no longer see its own light. Evidently, the

Statue is America, showing a light to the rest of the world, unable to see that light itself, self-blinded (the 'insurrectionists' were Americans), self-mutilated. On another level, one could say that the Statue is like the gold bar, which Harris, the slicker/sucker, thinks is a brick. What all this says is that Americans have betrayed/are betraying themselves – a theme repeated in Spinrad's interestingly parallel fable of an African-dominated future, 'The Lost Continent'.⁴ Yet two things are missing from Spinrad's fables. One is any direct questioning of American ideals, as opposed to American realisations of those ideals. The other is any explanation as to how all this happened, how the Fall got started. Other science fiction writers, naturally, have tried to fill these gaps of history and of critique.

An interestingly if deliberately non-serious example is Frederik Pohl's story 'Criticality', from the Analog issue of December 1984.5 This is set in New York, once again under foreign domination, indeed foreign occupation. This time the occupiers seem to be almost everyone: Canadians during the story's short time span, but only as a relief from the Gurkhas, while independent nations operating within the USA include the Apache, Alaskans and Puerto Ricans. Nobody in Pohl's world, it seems, wants to be an American at all except the Americans. Yet the surprising thing about his story is that the only Americans we meet in it, Marian and the narrator, are perfectly happy with their situation. For most of the story, a Canadian member of the occupying forces is trying to persuade the narrator that he ought to take offence more readily, and to get Marian to accept his proposal of marriage. Neither American understands him. What holds them up is what lost America the war and what gives the story its title, a quality for which no one has yet found an accepted word. Briefly, it is (on a personal level) the habit of 'rating' people: seven for grooming and five for originality, eight for figure and six for perfume. On a social level, it involves total tolerance: the narrator is unable to give the people who burgled his house anything but high marks for ingenuity. On a political level, it seems to include both: Americans are very critical of their politicians, but also totally forgiving. The president who lost the war gets re-elected because, as the narrator says, 'he acted ... he fired his Secretary of State and shook up the CIA. He acted fast and hard - what more could you ask?'

⁴ First published in Anthony Cheetham's collection *Science Against Man* (1970), but then reprinted in both the Spinrad collections in the note above.

⁵ It should be said that Pohl opened two of his later novels with grim pictures of foreign domination, Arab-orientated in *The Coming of the Quantum Cats* (1986), Chinese-orientated in *Black Star Rising* (1985). Neither novel, however, maintains the storyline of its opening.

There is a good deal that is recognizable in Pohl's portrait – the omnipresent 'how did you rate our service?' forms in American hotels and diners, the sense that voters are playing a complex game with their politicians – but clearly Pohl is trying to identify a more general underlying cultural pattern. One could summarise by saying that in his view Americans (a) have lost/are losing the ability to tell right from wrong, seeing everything instead as complex shades of grey; (b) have done/are doing so because of seeing life as a spectator sport, or perhaps as a string of commercials. 'Criticality' flourishes in what another science fiction writer, Kim Robinson, calls 'mallsprawl'. In the mall of life there is nothing to do but shop judiciously.

Pohl's fiction, symbol-free but jammed with detail, gives an answer on the level of story to the questions left aside by Spinrad's more evidently mythic fables: how will it happen? What's going wrong? Its jokiness may deter one from putting too much weight on it. Yet it is striking to see a kind of corroboration for it coming from Ursula Le Guin's story 'The New Atlantis' (1975),6 a story which furthermore adds a new twist to the notion of 'disfigurement'. 'The New Atlantis', to be brief, appears to centre on the notion of American capitalism. And though it is extremely dangerous to venture on the notion of 'sources' in this fluid field, it does look as if 'The New Atlantis' is not only a conscious rejection of Francis Bacon's essay, but also of a nearer progenitor, Robert Heinlein's sexist, cliché-ridden, deeply reactionary but rather striking story, 'Let There Be Light', from 1940.7 What connects the two stories is that they are both about the notion of a 'suntap', an efficient form of converting solar power. The Heinlein story, however, exists to say that although American capitalism is dishonest - the 'suntap' is kept off the market by vested interest utility companies - it still delivers the goods. The inventors solve their social problem (making a profit) by giving the invention away and then charging a tiny royalty on production. Capitalism means you can get rich and do good, says Heinlein (though you must never do good for nothing, or expect others to take a loss on moral grounds). Le Guin parallels the Heinlein technology; definitely rejects his ideology; yet, oddly, places herself in the same doubtful world of capitalist apologia/critique.

At first glance, her world looks like a horrid extreme of American

⁶ First printed in Robert Silverberg's collection, *The New Atlantis and other Novellas of Science Fiction* (1975), but to be found also in Le Guin's collection *The Compass Rose* (1982), from which it is cited here.

⁷ First printed in *Super Science Stories* for May 1940, but most easily found in Heinlein's collection *The Man who Sold the Moon* (1950).

capitalism, a parody of all the things Heinlein so readily accepted. She has noted, for instance, the deep isolationism of American sport, her heroine having to listen to a neighbour playing 'the weekly All-American Olympic Games at full blast every Sunday morning from his TV set'. More significantly, her world is drowned in advertising, everything over-promoted and under-fulfilled, so that a 'Supersonic Superscenic Deluxe Longdistance coal burner' means a broken-down steam bus; the 'Longhorn Inch-Thick Steak House Dinerette' sells meatless hamburgers; the Supreme Court does commercials, and the universities 'don't teach much but Business Administration and Advertising and Media Skills any more'.

Yet a closer look leaves one much more uncertain. See, for instance, the following paragraph:

I looked at the bottle. I had never seen aspirin before, only the Super-Buffered Pane-Gon and the Triple-Power N-L-G-Zic and the Extra Strength Apansprin with the miracle ingredient more doctors recommend, which the fed meds always give you prescriptions for, to be filled at your F[ederal] M[edical] A[uthority]-approved private-enterprise friendly drugstore at the low, low prices established by the Pure Food and Drug Administration in order to inspire competitive research. (*The Compass Rose*, 22)

What targets are being hit here? And how? The 'Super-Buffered Pane-Gon' is another perversion of capitalism; effort goes into slogans and sales, not product efficiency. The same joke underlies 'miracle ingredient more doctors recommend' and 'friendly drugstore', both well-established media phrases in reality. But what about the 'fedmeds' and the 'FMA'? How has government got mixed up with supporting private industry products? More than supporting, prescribing? The public image of capitalism is that it works by competition, decisions being made by free purchasers. But clearly that is not the case with Le Guin's heroine, who has to take what is prescribed for her (unless she can get aspirin on the black market). The fedmeds prescribe commercial products; the patient has to fill them at a 'private enterprise' drugstore, but one that is 'FMA approved'; the price paid is established by government agency; but allegedly 'to inspire competitive research', presumably between private company laboratories. It all sounds as if in 'The New Atlantis' the state has taken over, while still continuing to maintain a facade of respect for the free market ideology. So is this maybe a Communist world? The trees in the 'National Forest Preserve' 'all had little signs on saying which union they had been planted by'. There are 'nasty rumors' about the Rehabilitation Camps and FMA Hospitals. The FBI arrests anyone with purple fingers on suspicion of circulating material via 'sammy's dot' (i.e., samizdat). Somewhere in the background, a rebellion is going on by the Weathermen and 'Neo-Birchers'. Is this a left-wing view of dystopia or a right-wing one? Who can say? Does it matter?

To revert to Barthes, one can see that a phrase like 'Super-Buffered Pane Gon' would be extraordinarily difficult to decode in terms of signs, signifiers, and signified, first- and second-order systems. It contains 'painkiller' and 'hype', 'advertisement' and 'private enterprise', on linguistic and ideological levels, but also (from other elements in the paragraph) evident irony and ideological challenge. Probably no two critics would agree on which order these are perceived in, and if an order were agreed it would disappear again as soon as one tried to take in complications outside the phrase, outside the paragraph. Le Guin, one might say, moves round the Barthesian 'turnstile' of myth and language too quickly to be caught. But in any case a large part of her point is the total unreliability of the public language she uses, and of the myth it is designed to express. Overshadowing the whole story of the 'suntap' is the assertion that America is sinking (drowned symbolically by the heroine's tears). State reaction is to advertise real estate on land-fill and put up billboards with cute Disney-style beavers proclaiming 'IT'S NOT OUR FAULT!' Nothing, it seems, can get through the instant, skilled, verbalising response, not even free energy and a cure to the state's problems. It does not matter whether the verbalising is private enterprise or public administration. It is all a sequence of complex rhetorical 'figures' expressing an ideology to which only lip service is paid. Le Guin does not have to decide, in a way, which ideology she is rejecting. In parodying public language, in 'disfiguring' its 'figures', she is rejecting language, myth and competing myths all at once. At the end, the story is presented as a message in a bottle, left to bob on the dark seas which will have covered/are covering the towers of New York: an image like the Amazing Stories cover of February 1964, of the Statue of Liberty buried shoulder-deep in cracked mud, observed by space-suited visitors from a flying saucer.

'The New Atlantis' is a confusing story (more so than has been indicated), with many targets, including energy policy and sexual politics as well as creeping state control and public language. It is tempting indeed to take it as an overall and extreme *Verneinung*:⁸ a collective 'No'

⁸ The term is taken from de Man, 'Shelley Disfigured' (1984: 122). De Man here suggests, perhaps appropriately for Le Guin, that *Verneinung* may indicate not only 'negation', but also 'an intended exorcism'.

to the whole American cultural mix, from commercials to divorce and the ethic of continuous sexual dynamism. It does raise the question of what residual loyalties are possible. To American rituals (McQuay)? Past American ideals (Spinrad)? Drowned American decencies (Le Guin)? Put another way, what deserves to be dug up out of the past? Yankee Stadium or the Statue of Liberty? Oddly, but not altogether coincidentally, this issue is solved in similar form by two 'novels of disinterment', which consider the question of what undisfigured myths of America there may still be left.

These are Kim Robinson's *The Wild Shore* (1984) and David Brin's *The Postman* (1985). Both are 'post-Fall' novels, set on America's West Coast. Both take place 'after the Bomb', which in Brin's case generates a relatively traditional setting: 'Three-Year Winter', heavy 'dieback' among survivors, all leading to an America of small pre-feudal settlements. The collapse in Robinson's novel is more original: some foreign power (no one knows who) has driven 2,000 neutron bombs into major cities, and set them all off as simultaneous car bombs. But since then there has been a technological embargo on the USA conducted by the rest of the world. Japanese and Mexican ships patrol the California coast. Any attempt to build a railroad or restart unification draws laser fire from the sky. The world has concurred with the neutron bombers' judgement. Did America do this to itself, is Brin's question. Were they right to do it to us, is Robinson's.

The latter question centres in Robinson on Tom Barnard, the mentor of the teenage gang whose fortunes *The Wild Shore* follows. Barnard is so odd as to be a curiosity, a figure close (for the teenagers) to myth. 'I am the last American', he says', and he teaches his pupils authoritatively about America. Yet much of what he says is false. He makes the narrator, Henry, learn chunks of poetry, but relates them instantly to his own childhood. As Henry recites the speech from Richard II – 'with eager feeding, food doth choke the feeder' – Barnard breaks in: 'That was us all right ... He's writing about America there. We tried to eat the world and choked on it'. But when Henry reaches the John of Gaunt speech – 'This blessed plot, this earth, this realm, this England' – he breaks off. 'You can see why Shakespeare thought England was the best state', says Henry. 'Yes', says Barnard, 'he was a great American'. Like other paragraphs discussed above, this creates a strongly mixed effect. The boy Henry is totally misled. Why has Barnard misled him? To

⁹ Here he echoes a striking scene from George Stewart's classic *Earth Abides* (1949), Part II, chap. 5. In Stewart's novel, though, Ish is clearly a 'mythified' figure, as Barnard is not.

create nostalgic patriotism? If so, why the comment about 'tried to eat the world and choked on it'? We get a glimpse here of a kind of 'new text' Barnard is composing, a text in oral memory alone, a text which 'reads' Shakespeare as an American, and which assumes that America is the 'only begetter' of the past.

Yet every reader realises this is a false text, and soon the teenagers do too. The first scenes of the book show the gang digging up a coffin – its headstone says '1919–1984' – because Barnard has told them the old Americans buried their dead in coffins with silver handles. But when they dig the coffin up, its handles are silver-coloured plastic. You got a poor man, says Barnard. They wouldn't have coloured the handles silver, argues one of the gang, if they hadn't been real silver once. At this point many readers, ignorant of American funeral customs, may be genuinely puzzled: is Barnard lying again? Is his image of the old America partly true, or all a pious fraud? The provocations within the text are frequent, and Barnard himself keeps changing his mind. America 'tried to eat the world', he says. But when Henry challenges him for having told them all their lives how great America was, he replies:

'America was huge, it was a giant. It swam through the seas eating up all the littler countries drinking them up as it went along. We were eating up the world, boy, and that's why the world rose up and put an end to us. So I'm not contradicting myself. America was great like a whale – it was giant and majestic, but it stank and was a killer ... Now haven't I always taught you that?' (chap. 13)

'No', says Henry. And, still later (chap. 18), still protesting that (in one respect) 'America was evil', Barnard insists: 'we didn't deserve it. We were a good country'.

The debate extends round and past Barnard as an attempt is made to organise a Resistance against the Japanese. It's not worth it, says a gang member's father: there's no point in fighting 'for any idea like America'. He says this 'like the ugliest sort of curse', glaring at Barnard as he does so. But, by contrast, when the boys do join the Resistance, a member comments, 'Good to know that someone in this valley is an American'. Most ambiguously, when Barnard and Henry go south to see the centre of Resistance, they find a white house erected incongruously on a piece of broken freeway over the floodwater, with, above the house, 'a little American flag snapping in the breeze'. At dusk the flag is lowered while everyone stands at attention. 'Tom and I stood with them', says Henry, 'and I felt a peculiar glow flushing my face and the chinks of my spine' (chap. 7). Over-impressionable boy? Spontaneous

patriot? No clear indication is given. But this is not just a creditable even-handedness. The scene with the flood, the broken freeway, the white house, and the flag was in fact selected for the cover illustration of the original Ace Special text; and one can see how close it is to the Fantasy & Science Fiction cover with which this essay began. We have a string of icons of America - including a white house like the White House - but they are 'disfigured', by water, disuse, ruin. Even the white house is made out of place, simply by being on a freeway. The reader is put in the position of someone in the past looking forward to a future where all we know has become blurred, fogged by degraded information, where our certainties can be achieved only by archaeological inquiry - when they will cease to be certainties and become matter for debate. The coffin being disinterred at the start is ours; the headstone date is that of the book's publication. One clear result of the whole process is that the sense which Barthes had of myth as undeniable – imperative, buttonholing, frozen, arbitrary, admitting none of the doubts and fullness of speech - this has vanished totally. No one can say for sure how to take the cover of The Wild Shore, or its scene with the flag, or the debate within it over America: 'disfiguring' myth returns it to the sphere of argument. Significantly, not only do the characters argue over Shakespeare, they argue also over the meaning of a picture: black sky, white ground, two white figures, a blue ball in the sky, and an American flag. Does this prove Americans went to the moon? We know it does. The characters do not. They have dug up too many fakes already.

Their story 'disfigures' our myths (see the cover), and for them our myths are 'disfigured' (see the moon picture), or perhaps rather 'defaced' – they have lost their value, like a defaced banknote, or are suspected of being counterfeit. Yet one should note that in the 'white house' scene one item is not marked as out of place or inoperative, but remains doing exactly what it has always done and in exactly the same place as always: the American flag, snapping in the breeze. This last and undefined icon of America survives in Robinson. It is foregrounded by David Brin.

His story also begins with a grave-robbing. Alone, stripped by bandits, close to freezing, his hero Gordon stumbles on a wrecked jeep. It is a US Postal Service vehicle with the skeleton of its murdered mailman inside. At first Gordon sees the mailbags and the mailman's jacket only as insulation; but on the jacket's shoulder patch is the American flag When Gordon puts this on, he finds the scattered hill communities thrusting a role on him. He has to become the mailman, he has to deliver the letters, he begins to create new unity. He becomes the USA. The local

tyrants, totally survival-orientated as they are, are afraid or ashamed to fire on the flag. Brin creates, in short, a neat argument about the nature of civilisation: its essence is not freedom, nor free enterprise, but sending letters and having them delivered – the existence, to put it more abstractly, of accepted channels of communication. Is that what the flag patch stands for? Is that the unity of the USA? A unity broken not even by the Civil War, when, as Brin remarks, the US Mail continued to deliver letters across the battle lines for a full three years, as if refusing to recognise the conflict.

There is little doubt about the symbolism of the flag and the disinterred (or reborn) mailman in The Postman. Brin injects conflict into his novel by having unification challenged by a band of 'survivalists' who profess an extreme competitive individualist code and insist that it represents the true America. But one could also, as a final twist, see the book as a conflict of texts:¹⁰ the historical text of the survivalists, which proves (they claim) that they are the USA; Gordon's own journal, which proves all too clearly that he is a liar and there is no USA; the valueless, out-of-date, undeliverable letters for which men give their lives in the belief that they are the USA; one true letter which critically persuades a slave woman that Gordon's illusion of the USA is worth making the effort to realise. Perhaps the main point of Brin's fable of flags and texts is this. Everyone sees postmen every day; so often, in fact, that we have forgotten what they mean, or imply, or prove. We would understand this only if we did not have them. Then, indeed, they might become mythic figures, figures from 'before the Fall'. If the characteristic mode of science fiction is to take the Statue of Liberty and stamp 'CANCELLED' across it, Brin's mode is to take something never regarded as mythical and 'mythify' it.

Yet the operation in both cases is the same. One looks forward, to see people looking back. One takes present certainties, and views them through a haze of archaeological speculation. Both take arbitrary, frozen, inarguable myth, and surrounds it with enriching, explaining, confusing story. In their varying presentations of 'the Fall of America', science fiction writers show what they think of the icons of America now (and show that one of the meanings of America is freedom to do so). They also create artefacts which generate responses of extraordinary range and complexity. There is as yet no study of the tropes and techniques of science fiction; but it deploys an array of literary figures, especially

De Man, 'Shelley Disfigured' (1984: 95), asks: 'is the status of a text like the status of a statue?' This would require a complex reply if one were to compare Brin and Spinrad, but it would be a revealing one.

in areas of doubt, limited certainty, and false comprehension for which we have indeed 'no name readily available among the familiar props of literary history'. 11

¹¹ De Man, 'Shelley Disfigured' (1984: 98).

14 Introduction

Why Politicians, and Producers, Should Read Science Fiction

This article began as a talk delivered at Mexicon, in Scarborough, on 29 May 1993. It was published in *Interzone* 88, again in the Dutch literary journal File, and in a final revised form in Foundation (all in 1994). It counts, then, as one of those pieces of mine that have attracted most attention within the sf world. However, and probably not coincidentally, it also led to a clash in the literary world that forever terminated a not-very-beautiful relationship. As I recall, I had been invited to talk on the BBC radio literary programme Kaleidoscope, and got there to find that I was on trial for only having included one female author (Ursula Le Guin) in my Oxford Book of Science Fiction Stories. This actually was not true, in that a glance at the notes in the back would have shown that 'Raccoona Sheldon', alias 'James Tiptree Jr.', was really Alice Sheldon, while 'Lewis Padgett' was a blend, the proportions still unknown, of Henry Kuttner and his wife C.L. Moore. And, furthermore, a number of the stories selected, notably those by Sheldon, Schmitz, 'Cordwainer Smith', Wolfe and the end-piece by David Brin, were strongly femaleoriented and female-dominated. Still, there is no denying that in early sf, as in most pre-modern literary genres, female authors were underrepresented and often obliged to disguise themselves under initials and pseudonyms, like 'George Eliot' and the Brontë sisters: the past did not play by our rules.

Anyway, the smoke from this exchange of views was just about clearing when the lady moderator, perhaps a bit anxious about the social situation, began a long burble (in a markedly upper-class accent, and with the characteristically British upper-class iteration of 'one') about how *unfair* it was that people *criticised* programmes like this, and the Booker *award* business, just because one *always* found oneself interviewing people one couldn't *help* meeting at *dinner*-parties, because they were the ones who wrote the most interesting *books*. Not at all, I replied. The accusation is that you ignore people who write much more

interesting books, just because you *don't* meet them at dinner-parties. Like, for instance ... And this led into a long rant on the virtues of Geoff Ryman's 'Was ...' (1992), which I had just read and which should have been a cert for the Booker Prize if there was any justice. Subtle, sad, relevant, deeply affecting, working on almost a mythic level. What more could one ask? I have never been asked back on to *Kaleidoscope*, though it is true I did go off to America almost immediately after. It is an exclusion I have borne with fortitude, as the BBC clearly thinks academic riff-raff should turn up for the honour and glory of it, paying minute appearance fees and then short-changing you on the expenses.

That said. I think the most admirable feature of most of the works discussed here is their even-handedness. Robinson and Ryman in their different ways present devastating criticisms of American icons and American realities, of the kind that (if directed against one's native land) would get you locked up or worse in most of the countries belonging to the United Nations. Even Heinlein is well able to see such criticisms, and mounts equally aggressive if again quite different ones in other works (see item 15, below). Yet at the same time they can see the power of the icons, as does Brin in the novel discussed just above, and all the authors, Disch included, leave you unsure which way sympathies should go. Little Billy Michaels is, yes, a mass-murderer, but so are the people he comes in contact with like the cigarette-marketer, and you can see that what he is trying to do is teach people a lesson. It is a grim lesson and there are (one hopes) in reality other ways of learning it: the best one being, reading books like these. If only more people did ... But the literary caste and the major media spokespeople are too happy in their own habitus (see item 1, above). Or addicted only to gesture politics (see item 2). Or maybe sf and fantasy modes are too unfamiliar (see item 8).

Finally, one aspect of the coming-of-age of sf is surely, as mentioned in the piece that follows, the increasing complexity of structure in sf novels. It is always very risky to say anything about what makes an author do anything (see pp. 48, 132, above), but Robinson's *Pacific Edge* (1990) does look as if it might be a response to arguments like Greg Benford's (see Benford 1987) that Utopias are just not writable any more. Greg has a strong point: most of the modern Utopias I have read, from Wells's *A Modern Utopia* (1905) to Callenbach's *Ecotopia* (1975), and taking in Le Guin's *Always Coming Home* (1985), have been, if not unwritable (because written) and not quite unreadable (I read them), at least rather dull.¹ But Robinson worked out how to get conflict, and

¹ Many more Utopias are considered, more sympathetically, by Edward James (2003).

movement, into what could easily be a static non-story. It is a *tour de force*, and it could not be done outside sf. Alas that such works are not more generally recognised ... They are not just entertaining, it would do everyone good to read them, critics and politicians included.

The Critique of America in Contemporary Science Fiction

As with many people of my age, much of my early science fiction experience came from reading the works of Robert A. Heinlein, both his widely distributed 'juveniles' and others. It might be more respectful, and would certainly be more unusual, to try to identify the reason for Heinlein's appeal at that age,¹ rather than point out the many failings that appear as years go by for both author and readers. However, I would like to begin by pointing out a peculiar feature in Heinlein which is *not* something recognised later on, but which I can remember finding both peculiar and irritating even when reading his books as a teenager. This repeated plot feature is what I used to label mentally as 'the Heinlein switch'.

A clear example of what I mean comes in the Heinlein juvenile *Tunnel in the Sky* (1955). The basic situation of this is that a group of high school students is dumped, as a part of their survival training, on an alien planet, only to find itself accidentally marooned. In this situation the central character, Rod Walker, soon shows himself in true Heinlein style to be an able leader. He is practical, decisive, survival-orientated and fair. He is indeed what Alexei Panshin calls 'the Heinlein Individual, Stage 1' (1968: 169–70) – and just to rub Panshin's point home we see Walker at the very end of the book translated to the Heinlein Individual, Stage 2, a figure from the pioneer past, complete with pinto pony, fringed buckskin and Bill Cody beard (though without six-shooters, as a result of a Heinlein thesis developed in the book about armaments). Yet, for all his potential competence, Walker loses the election for leadership

¹ See the sensible caveat of H. Bruce Franklin (1980: 176), in which he remarks of Heinlein's much later work that it is no good stigmatising it as 'unreadable' in the face of sales figures. If people, even if they are not professional critics, demonstrably find Heinlein's work readable, then one has at least to search for 'the nature of its appeal'.

of the stranded group to one Grant Cowper, whom Heinlein, again in characteristic style, consistently presents as the archetypal administrator/ bureaucrat (a highly recurrent feature from the American present, often set in opposition to the Heinlein Individual and/or the American past). Cowper is impractical, corrupt, personally lazy, 'all talk and no results', fascinated by committees and by the mechanics of government, which to him is 'the greatest invention of mankind'. His political abilities ensure he wins the election against Rod. But Heinlein's plot ensures victory (and moral superiority) for the right. Cowper rejects Rod's warning to move camp from an evidently unsafe site; finds the camp under attack from migrating lemming-like carnivores; and is killed as a result of his own error and self-confidence.

At this stage the logic of the story would seem to demand a cry of 'I told you so' from Heinlein-author, Walker-character, or both, followed by a prompt removal from the camp. Instead, at the end of chapter 13, Rod Walker declares that he will not give up Cowper's ill-chosen and dangerous site to the carnivores:

'no dirty little beasts, all teeth and no brains, are going to drive us out. We're *men* ... and men don't *have* to be driven out, not by the likes of those. Grant paid for this land – and I say stay here and keep it for him!'

In the next chapter we find a memorial to the inept Cowper set up in the village square.

At this point Heinlein is doing something which Panshin picks out (1968: 112-13) as 'break[ing] out a bugle or a violin' - later on it is the 'fife and drum' - namely, appealing for a paragraph or two to sentiment, and then getting on with the story. But while the tactic may be basically 'shoddy', one has to concede the deliberateness, and the apparent narrative redundancy, of the strategy. One should reflect furthermore that a plot device which merely expedites story may be there just to save the author time and trouble. One which reverses or stalls the plot, however, is likely to be there just because it has such high significance for the author that he cannot bear to leave it out. One has to ask, then, why Heinlein should carry out 'switches' of this kind, not once but repeatedly? In a similar sequence in the non-juvenile Magic Inc. (first published as a novella in Unknown (May 1940), appearing in book form ten years later), the State Senate, set in this story in an alternate 'world where magic works', is about to pass a Bill which will make magic in effect a monopoly run by diabolic powers. Heinlein describes with gusto the apparently ludicrous way in which state governments conduct their business – based clearly on the real mechanisms of US government – and leads up to the sudden and unexpected passing of the disastrous Bill, against all kinds of assurances that it would fail. Next day the central characters see the State Governor and explain their justified fears. He turns down all their pleas – on grounds of pressure of business:

'Mr Fraser, there you see fifty-seven bills passed by this session of the legislature. Every one of them has some defect. Every one of them is of vital importance ...'

One would think that invasions from Hell would take a certain priority even so, but just where one would expect someone to say as much, Heinlein again switches sympathies:

I made some remark about dunderheaded, compromising politicians when Joe cut me short. 'Shut up, Archie! Try running a State sometime instead of a small business and see how easy you find it!' I shut up.

This scene is immediately followed by conclusive evidence that the main instigator of the Bill *is* indeed a demon, but it does not alter the rebuke. Heinlein appears to be saying, in a curiously unsceptical way, that government is so difficult that only professional governors can cope with it. Some would feel that there are more small businessmen who could run a state than professional Governors who could run a small business, but Heinlein – on this occasion anyway – is not among them.

Behind both these odd but typical incidents lies a fascination with, and a deep respect for, the mechanics of government, and specifically for the government and Constitution of the USA. One of the most surprising details in *Tunnel in the Sky* is the revelation that Rod Walker's group contains not one but two members who not only have read the Virginia Bill of Rights, but have memorised it: Heinlein does not indicate this as unusual. This fascination shows itself also in scene after scene dealing with the details of debate procedure, points of order, points of privilege, motions to adjourn, 'cinch bills', riders, legal fictions, etc. These all seem wildly out of place in conditions of elementary survival; the story and the author insist they are not. Heinlein comes over as presenting simultaneously extreme and convincing criticism of the incompetence of democratic government; and total acceptance of its necessity, in spite of that incompetence. It is this apparent double

standard which I identified as a teenager as shocking. I resented not only the author's assumption that he could flick his readers' emotions on and off with a blast of the bugle or an appeal to the fife-and-drum; but also, at some deeper level, a perceived contradiction in the thesis the author was propounding. One thing I was sure of was that this disagreement had something to do with being/not being American.

In a sense, the contradiction I have indicated has preoccupied most critics of Heinlein. Damon Knight, in an early commentary, provocatively entitled 'One Sane Man', nevertheless identifies Heinlein as both radical and conservative: conservative about the US Constitution, one might say, radical in his awareness of how it needs continuous non-constitutional rescue (Knight 1967: 76-89). H. Bruce Franklin meanwhile points to repeated clashes between, for example, love of the American Revolution and strong monarchic impulses (Franklin 1980: 41); extreme individualism and an ethic of 'social co-operation' (87); desire for individualism and veneration of authority (88); Darwinian worship of the 'fit' elite and a belief in the brotherhood (or at least the neighbourliness) of thinking beings (77); and so on. It is easy to make out the case that Heinlein spent much of his energy as a writer trying to reconcile the irreconcilable. Nevertheless, he clearly did not find these urges irreconcilable, and the commercial success of his fiction suggests that he went a long way towards persuading others of his position: as long, I suspect, as they were American others. I would agree here with Franklin's later summary statement that Heinlein's fiction encapsulated 'crucial aspects of modern American ideology and imagination' (1988: 141).

If I were now to try to explain 'the Heinlein switch' to my earlier self, I suppose that I would put it like this: Heinlein's primary urge certainly lies in dramatising 'the competent individual', the pioneer who will survive under the most extreme conditions. This is one aspect of the American self-image: the hardy pioneer, the Minuteman whose right to bear arms is enshrined in the Constitution. But another part of the American Constitution is its commitment to elementary democracy: one man, one vote, with extensions which Heinlein specifically endorses for race and gender, and with no qualifications at all about 'fitness' or vetting by higher authority. Now, if all democracies were composed of Minutemen, there would be no problem, for Heinlein. Since they are not, the question becomes how to square a Darwinian ethic with the much-venerated Constitution: must the right to vote be earned, or is it inalienable? Have the people the right to elect incompetents?

Heinlein's answers to these questions vary from book to book and

period to period,² but in the cases of *Magic Inc.* and *Tunnel in the Sky* his answer to the latter question at least would be that the people do indeed have the right to elect incompetents, but that this will rebound on them. In the end, the right people will come to the top (Walker lives, Cowper dies); or the system will correct itself (private citizens and the FBI do what the State Governor cannot).

One of the things that Heinlein is trying to say, accordingly, is that the American system is self-correcting. That indeed is its glory. Local incompetences are merely ripples against the tide. But while the American system may be presented as self-correcting, Heinlein's presentation of it – and this I think was the true source of my early annoyance with 'Heinlein switches' – is also self-validating. Just because of its integration of accusations of failure and incompetence, one might say that, in classic American science fiction of the early Heinlein era, belief in American ideals was so dominant as to make any sustained critique of America, no matter what the surface of the story might indicate, literally impossible.

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Nearly sixty years later the situation had become very different. Yet science fiction authors continued to show their debt to science fiction tradition, and to Heinlein in particular, at one and the same time rejecting him and arguing with him in true parent–child style. At once the most and the least Heinleinesque of contemporary authors is Kim Stanley Robinson. One of his major works is the brilliantly conceived 'Orange County' trilogy, consisting of *The Wild Shore* (1984), *The Gold Coast* (1988) and *Pacific Edge* (1990), each of them a near future story set in the same location, Orange County, California, and presenting quite clearly different 'time lines' for America: post-holocaust primitivism (*The Wild Shore*), dystopian capitalism (*The Gold Coast*) and utopian socialism (*Pacific Edge*). The last of these, of course, seems about as far from Heinlein as one could get, and on one level it is. It presents the story of a modest hero, Kevin, trying to preserve a patch of land from development in a largely autonomous community in California,

² Particularly contorted and problematic is the case of Heinlein's *The Moon is a Harsh Mistress* (1966), in one sense a grossly sentimental rewrite of the American Revolution on the Moon, but one which is opposed within the world of the book by Americans. See Panshin 1968: 110–16 and Franklin 1980: 159–71.

sometime next century. Kevin's opponent is the town mayor, Alfredo: one might note that 'mayor' is the title given to Rod Walker's opponent Grant, and that the autonomous nature of the community in which they live leaves Kevin and Alfredo almost as isolated in their battle as Heinlein's high school students on an alien planet. Alfredo, again like Grant Cowper, is good at politics, if personally corrupt, and eventually, if not with the drama of Tunnel in the Sky, has his more honest if less political colleague Kevin outmanoeuvred. Very like Heinlein's businessman-hero Archie Fraser in Magic Inc., Kevin then goes to see a more professional politician to get her on his side; only to have her tell him (just like Archie's wiser friend Joe in the excerpt above) that he cannot fight the system. The irony is that Robinson's politician is a Green, just like Kevin, and so in theory committed to his cause of conservation. But there are some issues you cannot win, she declares; it is impossible to fight every case; in effect paraphrasing the State Governor of Magic Inc., she declares that in the press of business there are issues more important than Kevin's. 'Politics is the art of the possible', she tells him (Pacific Edge, chap. 9).

At this point, if Robinson's Kevin were a Heinlein hero, he would bow to superior authority and the mechanisms of government; actually, Kevin loses his temper and walks out. The significance of the walkout and the hero's rejection of 'practical politics' is underlined by the background figure of Tom Barnard, Kevin's grandfather. He appears in all three of the works in Robinson's trilogy. In The Wild Shore he is an 'Ish' figure (the name is taken from George Stewart's classic Earth Abides (1950)) - a hangover from the past who explains America to a disbelieving younger generation in a primitive future. In The Gold Coast he is a marginalised old man dying in a hospital. In Pacific Edge he is the substitute narrator, the creator of the novel's utopian world. But in Pacific Edge the marked-off sequence of scenes in which he is the central figure is there to show us (a) how Utopia arrived and (b) the dystopia that could have happened instead. For most of Barnard's life in Pacific Edge the world is evidently sliding, not towards Kevin's Californian Utopia, but to a familiar dystopia: rigid controls, paranoid American isolationism, death camps for dissidents, AIDS used as a pretext for ever harsher government control. Barnard has lived through all this, trying to write a fictional Utopia as he does so. But, at one point, in despair, imprisoned within a dissidents' camp on false charges of carrying AIDS, he tears up his book. This book-within-a-book, in a sense, is the world of Pacific Edge; if it had stayed torn up, the book Pacific Edge could not have been written. What saves Barnard, and the Utopia, and Pacific Edge, is a characteristic American phenomenon, namely, release from the camp by a lawyer on grounds of 'procedural irregularity'. But the *advocatus ex machina* goes further and recruits Barnard for a serious and ultimately successful attempt to reform the USA from the inside (presented to us at the start of the book's very last chapter):

Look, Mr Barnard, he said. Tom. It takes more than an individual effort. And more than the old institutions. We've started an organisation here in Washington, DC, so far it's sort of a multi-issue lobbying group, but essentially we're trying to start a new political party, something like the Green parties in Europe.

He described what they were doing, what their program was. Change the law of the land, the economic laws, the environmental laws, the relationship between local and global, the laws of property.

Now there are laws forbidding that kind of change, I said. That's what they were trying to get me on.

Would Heinlein agree with this scene? Yes, in that it presents the practical thing to do as lobbying and litigating. No, in the declared opposition to 'the old institutions'. In the same way Kevin's education in practical politics is highly Heinleinesque. But his refusal to accept that education is not. At least twice in *Pacific Edge*, when the Green politician tries to educate Kevin, and when the lawyer gets Barnard released, we have the situation for a 'Heinlein switch'; but both times the characters refuse to bow to *Realpolitik* or accept the *status quo* – rejecting Heinlein, and criticising America, as they do so. It might indeed be said that the appearance of the lawyer in the death camp shows the same kind of ultimate trust in self-correction which Heinlein so often presents; but this self-correction does not come from politics or from government, but from subversives opposed to the (present) law and the government.³

The key to Barnard's reforms in *Pacific Edge* is reform of American corporation laws. Utopia is the result of forced legal decentralisation, with a concomitant new balance between individual and corporate power. What could happen if this radical step were not taken is presented vividly in *The Gold Coast*, the most realistic and least science-fictional

One of Robinson's strongest points is his refusal also of the classic idea of a static Utopia. He insists, via Barnard, at the start of chapter 4, that Utopia has to be a process, 'a dynamic, tumultuous, agonizing process, with no end. Struggle forever.' In making this statement he responds to the arguments of Greg Benford about the impossibility of static Utopias, in 'Reactionary Utopias' (Benford 1987: 73–83).

of the works in this science fiction trilogy. In this book corporate capitalism and the defence industry continue to run California; and for much of the time we find ourselves being educated in the realities of Washington power politics and (especially) defence procurement.

This is a world in which Robert Heinlein figured not as an author but as a real political influence. The relationship between science fiction writers, Heinlein included, and the Strategic Defence Initiative (SDI) of March 1983 is detailed by H. Bruce Franklin in War Stars (1988: 200-3). To this one should add the further story of Arthur C. Clarke and 'the bucket of nails'. Briefly, a key feature of SDI was the idea of placing laser-armed satellites in orbit with the capacity to knock down Russian missiles. Thirty years on, we know that the whole idea was technological fantasy, in fact, science fiction. However, even at the time, in a guest editorial in Analog, July 1983, Clarke - the only living hard-SF author comparable in eminence to Heinlein, and the man who first proposed the idea of a geosynchronous orbit for communications satellites – pointed out that the answer to such a satellite (even if it could be built and armed) was a bucket of nails launched into the same orbit but orbiting in the opposite direction, 'Sooner or later', Clarke pointed out, some piece of this 'barrage of space shrapnel' would strike the laser-satellite 'at 40,000 kilometers an hour' (1983: 163). Clarke and Heinlein met at a meeting of the Citizens' Advisory Council later that year, and, tiring of mere argument, Heinlein reached once more for the Revolutionary bugle and told Clarke that as an Englishman it was pure arrogance for him to venture any criticism of US government policy.

Accounts of this scene vary considerably,⁴ but all of them strongly confirm what was said above about the Heinlein generation being unable to imagine, or to tolerate, a critique of America. It can be no coincidence that five years later Robinson in *The Gold Coast* repeated exactly the same argument about the satellite and the bucket of nails, but put it in the mouth of a disillusioned SDI or 'Star Wars' scientist:

'Even if we could get it to work, all the Soviets have to do is put a bucket of nails in orbit, and wham, ten of our mirrors are

⁴ I have heard the story from Greg Benford, who was present. There is a very different account (in which Heinlein is absolutely right and Clarke self-confessedly wrong even about the technology) in Patterson 2014: 445–6, but this book is so hagiographical that I am inclined to distrust it. Patterson supports his account of the Clarke confrontation with many footnotes on pp. 630–1, but the reference to Clarke in n. 31 is wrong; and he makes no mention of the fact that SDI did not work, and could not work – as some besides Clarke realised at the time.

gone. Talk about cost-effective at the margin! A ten-penny nail will take out a billion-dollar mirror! Ha! ha! So we defend those mirrors by claiming that we will start a nuclear war with anyone who attacks them, so it comes right back to MAD to defend the very system that was supposed to get us away from all that.' (*Gold Coast*, chap. 42)

Robinson in fact presents with a mixture of empathy and horror the surreal world of the California defence industry: at the centre of his story are a father and son, the son (Jim) a committed anti-war saboteur, the father (Dennis) a senior executive in Laguna Space Research. With the 'fabril' bias so characteristic of science fiction.⁵ The Gold Coast makes it hard for its readers not to sympathise with the *latter*, the weapon-maker. Dennis McPherson's problem is this. He has developed a successful weapon, 'Stormbee', a pilotless computerised missile launcher which can on its own put an end to the threat of the 'Big Contingency' (a Soviet armoured attack in central Europe). No tanks could live with Stormbee. Stormbee, however, is a 'black program', commissioned by the USAF, but only on a disavowable basis. Dennis's firm is meanwhile commissioned as part of the SDI to develop another program, 'Ball Lightning', a method of destroying Soviet ICBMs in space with lasers. Ball Lightning is essentially non-feasible. The only way it could ever have been sold to the USAF and to the government was by a pilot study test; unfortunately, the test was a 'strapped chicken'. Robinson says here, dropping out of science fiction into historical fact, that:

the strategic defence program has a long history of such meaningless tests ... they blew up Sidewinder missiles with lasers, when Sidewinders were designed to seek out energy sources and therefore were targets that would latch onto the beams destroying them. They sent electron beams through rarefied gases, and claimed that the beams would work in the very different environments of vacuum or atmosphere ... and they set target missiles on the ground, and strained them with guy wires so that they would burst apart when heated by lasers, in the famous 'strapped chicken' tests. (*Gold Coast*, chap. 23)

To return to McPherson's problem: the USAF decides to punish his firm for poor progress with Ball Lightning by disavowing Stormbee – thus

⁵ For discussion of this word (it is not my coinage), see Shippey 1992: ix–xiv, and items 1 and 2, above.

leaving Laguna Space stuck with the research and development costs and no way of recouping them. This problem could apparently admit two solutions: one, a technical one, develop Ball Lightning; two, a political one, expose the USAF's deceit and force it into honest bidding and contracting. The technical solution is in reality impossible. Can the political solution work (as it does in *Pacific Edge* via Barnard's reforms, and as it would in a Heinlein 'juvenile')?

The answer in *The Gold Coast* is certainly 'no'. But once again the possibilities are put in highly Heinleinesque terms. As Dennis's friend Dan, the disillusioned scientist, rants at the folly of pitting satellites against nails, at the craziness of the whole industry, and at the immense waste of capitalist competition in defence, Dennis (both pragmatist and idealist) tells him:

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'That's the way it is' ...

Dan stares at him dully. 'It's the American way, eh Mac?'

'That's right. The American way.' (Gold Coast, chap. 42)
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The phrase is picked up a hundred pages later, as it seems that the USAF will be legally compelled to play fair:

The air force tried to assert that it was above the system, outside the network; now the rest of the network is going to drag them back into it. It's the American way, stumbling forward in its usual clumsy, inefficient style – maddening to watch, but ultimately fair. (*Gold Coast*, chap. 67)

We are close here once more to a 'Heinlein switch': an assertion that while much of the action has been maddening in its incompetence, nevertheless the mechanisms of government will work properly in the end, while the end will show that the frustration and incompetence were unavoidable, even essential, all parts of 'the American way'.

But again, that is not what happens in Robinson's presentation. Practical politics, the art of the possible, force Dennis's firm to remember that in this industry the US government is *the only employer*. It cannot be antagonised. Even when proved wrong, it has to be allowed to be right. Dennis is ordered to withdraw, his successful programme is closed, and he is fired. The 'American way' turns out to be what his impractical sponger of a son always argued, a kind of 'group hallucination'. In this story, the capable and efficient person, Dennis, the Heinlein Individual, the hero-in-potential, does not make alliance with the politicians, excuse their failings and subscribe to their beliefs, as in *Magic Inc.* or

Tunnel in the Sky. Nor is he saved from them by legal quibble or force of sentiment, as in Pacific Edge. Instead, the politicians destroy him; and to make humiliation worse his useless son, who cannot even hold a nut steady without grotesque accidents - a character who would be ruthlessly eliminated in a Heinlein world - his son is given the ultimate best of the argument. What The Gold Coast seems to say is that Heinlein, Robinson's authorial ancestor, was wrong about, in succession, (a) Star Wars, (b) 'the American way', (c) 'the art of the possible', (d) the qualities needed for survival. The Gold Coast and Pacific Edge between them show what America does wrong and what it could do right. Between them they mount a fierce and positive critique. Yet in their deep interest in political manoeuvring and their concern for more than technical solutions both books show a deep engagement with Heinlein. Both of them allow space for Rod Walker/Archie Fraser views to be expressed, and to be refuted. For their critique of America to be possible, Heinlein's refusal to entertain one had to be absorbed and overridden.

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The two latter volumes of Robinson's trilogy are distinguished by their close, detailed and informed realism, even within the science fiction mode. The first volume of the trilogy, however - as I have argued in item 13 above, see esp. p. 264 – works to some extent by a process I call the 'disfigurement' of icons. This is actually a very familiar mode on the covers of science fiction books and magazines: one takes a recognised icon - the Statue of Liberty is a favourite, see again item 13, but the White House or Nelson's Column would do as well - and shows it ruined, buried, altered, visited by alien tourists, its current iconic force denied (along with, by implication, the civilisation which conferred that force). It is interesting that this mode of operation has been very strongly taken up by two further contemporary critiques of America, both works of great power, both written by established science fiction authors but neither readily classifiable as science fiction, and neither of them as far as I know considered for any literary award in spite of their merits – a sign of how hard it still is for authors to climb out of the science fiction 'ghetto' or erase the science fiction stigma. These two works are Thomas M. Disch's The M.D. (1991) and Geoff Ryman's 'Was...' (1992).

It is significant that I cannot explain the plot of the latter without also explaining its structure, a constraint till now rare in science fiction; the complex structure of Ryman's novel in a way mirrors the careful typology of its title, 'Was...', and may have something to do

with the decision of the literary editor of the Guardian initially to reject my review of it, on the grounds that he 'did not know what category to put it in'. Just so. One way of explaining Ryman's novel, however, would be to say that it starts off from L. Frank Baum's children's classic The Wizard of Oz (1900), and puts forward the premise that its heroine, Dorothy Gael, was not fantasy, but real: a real girl, living on the real Kansas prairie, who was not snatched up by a tornado from her dull grey home and transferred to Oz, but lived on in Kansas. If this were true, Ryman proposes, she could have met the real Baum in 1881, and fired him to write his 'modernised fairy tale, in which' - as Baum says in his 1900 preface - 'the wonderment and joy are retained and the heartaches and nightmares are left out.' Baum meant there the 'heartaches and nightmares' of the traditional fairy-tale, but Ryman applies the phrase to the heartaches and nightmares of nineteenthand twentieth-century Kansas. The story he tells of Dorothy Gael is one of diphtheria, loneliness, physical abuse from corporal punishment at school and sexual abuse from 'Uncle Henry' at home. In this story Baum's attempt to help the real Dorothy, while a teacher at her school, by believing her accounts of sexual abuse, leads only to him being fired and her being ostracised as a case of sexual hysteria. Dorothy lives on as a crazy prostitute, to be discovered 75 years later as a very old woman at the Waposage, Kansas, Home for the Mentally Incapacitated - where she finally sees the film *The Wizard of Oz* on television. Only she knows it isn't true. Not the Oz bits, the Kansas bits. For one thing, she knows quite well that her dog Toto was not allowed to live on as her inseparable companion, but was killed by Auntie Em and Uncle Henry for being a nuisance.

Meanwhile, the book Baum wrote, and even more the 1939 Judy Garland film based on it, have reached iconic status in the USA, becoming a traditional part of the American family Christmas. Ryman explores, however, the reality of the film: 'Judy Garland's' real name (Frances Gumm), her relationship with her mother (who actually sued her daughter for support before dying in poverty), the sad story of her father (a movie theatre manager whom Ryman presents as continually forced to flee from one place to another by his homosexuality, of course greeted with no tolerance in the California of the 1930s).⁶ In 'Was...' the Hollywood world meanwhile produces an actor who makes his fortune by working in horror movies of child murder, contracts AIDS,

⁶ Ryman offers a bibliography in support of parts of his story in the sections 'Reality Check' and 'Acknowledgements' at the end of his book; see 'Was...': *A Novel* (1992: 350–6).

and spends the last weeks of his life obsessively trying to find the reality behind the *Oz* story, as if searching for a lost innocence; in this he is assisted by the psychiatrist whose life was changed by meeting the real Dorothy Gael dying marginalised in a hospital (like the Tom Barnard of Robinson's *The Gold Coast*). *Another* way of describing this multi-stranded novel would be to see it as a progressive exhumation of the real past from beneath multiple layers of concealment; and it is worth noting that all three of the novels in Robinson's trilogy begin with the characters *digging something up*.

Yet a third way of describing 'Was...' would be to say that it is a study of an American icon: The Wizard of Oz as book (a book for many years banned, ignored or censored by libraries and scholars); as film (a film which, to begin with, lost money, only to be rescued by television rights and the custom of showing it on television at Christmas); and as cultural signifier - the work which above all tells American children that 'home is best' and that the colours of Oz/fantasy should in the end be left behind for the greyness of Kansas/reality. In an interesting afterword, Ryman counterpoints realism or history, on the one hand, and fantasy, on the other, and says we should distinguish them carefully, 'And then use them against each other' ('Was...': 353). In a way, his 'history' of Dorothy Gael is an assault on an American fantasy. But then of course his history of her is fantasy (entirely made up, if grounded in real history and sociology), while the Oz fantasy has come true (at least as a commercial phenomenon). Just the same, a very blunt paraphrase of Ryman's book would be to say that it is an attack on an icon and on the self-satisfying beliefs that icon has served. It points to a real tragedy, a real corruption, spreading from the American heartlands to the Hollywood of Robinson's Orange County; the corruption is concealed by the icon made in Tinseltown.

Ryman's presentation of this hidden corruption through the image of AIDS in my view challenges comparison with Solzhenitsyn's *Cancer Ward* (1968), in which the spread of cancer via primary and secondary tumours is seen as an image of corruption working its way through the entire body of Soviet Russia. A similar metaphor runs through Thomas M. Disch's *The M.D.* The subtitle of this work is *A Horror Story*, and the elements of fantasy in it are stronger than in any of the books considered so far (the whole action is initiated, for one thing, by a vision of Santa Claus). Yet the last third of the book takes us into familiar, quasi-realistic science fiction territory in which America, as in sections of Robinson's *Pacific Edge*, has become a land of death camps, refugees, draconian government control abetted (as in Robinson's *Gold Coast*) by private but government-fattened companies with names like Medical

Defense Systems. The reason for this version of military law is not AIDS but the plague for which AIDS was only a warm-up: ARVIDS, or Acute *Random Vector* Immune Deficiency Syndrome. 'Random Vector' here means that this version of the disease, instead of needing direct blood contamination to be passed on, is transmitted casually, like a cold or 'flu. Anyone can get it, and no one knows why.

Within *The M.D.*, though, the cause for ARVIDS is identified as a fantastic one. Sister Mary Symphorosa, in a Catholic primary school, told little Billy Michaels there was no Santa Claus; he was a false god who must not be worshipped. As if in denial, a true god appears to Billy in the image of Santa Claus, and gives him a gift of curse and blessing, via a magic caduceus: the symbol of Mercury, also of the American medical profession. Billy uses his caduceus to reduce his stepbrother to a vegetable (Colmar's Syndrome); to make a disapproving teacher pathologically foul-mouthed (Tourette's Syndrome); to inflict strokes, baldness, tooth decay or asphyxiation on those who annoy him. He also uses his gifts to confer health, for the odd thing is that Billy does not come over as an unsympathetic person. His actions are often provoked by his strange but no longer particularly untypical family circumstances. Disch uses as his epigraph for the novel a soothing statement from the *New York Times*:

The young murderer doesn't come from a typical American family. The average American parent doesn't need to fear being murdered.

What is average? What is typical? In the saccharine world of American television, where everyone watches The Wizard of Oz at Christmas - we find Billy's father crying over it on page 39 - the American family is what it always was, father, mother, two or three children. In Billy's family, marked by divorce, as is now normal, there are six parents or step-parents (counting, for example, his mother's second husband's first wife and his father's second wife's first husband), with four children, some of them half-siblings, but some with only legal relationships (like Billy's stepmother's daughter by another father). While there is nothing implausible about the characters' marriages and remarriages, the result of them all can probably only be grasped by modern minds with the aid of a diagram. Nevertheless, this complexity of family relationships is mirrored by the tortuous nature of economic ones. Billy is brought up by a stepfather, Ben, whose daughter, Judith, is passionately in favour of social causes, including public health. Her father's research, however, is largely funded by the American Tobacco Association; he has to be polite and hospitable to public relations men who professionally deny any link between smoking and cancer. Billy reacts to the falsity of the situation by putting a curse on the tobacco executive's lighter: anyone who smokes a cigarette lit by it will get lung cancer.

One can see that Billy has a strong sense of justice denied by his family's way of life. There is a terrible fairness about (some of) what he does. Yet he is a murderer; he does come, regardless of the *New York Times*, from a 'typical American family', even if that family does not fit the family icon; and in the end he gets his M.D. and becomes, like most American M.D.s, extremely rich. Billy is especially rich, though, because he controls ARVIDS. We do not find out the mechanism till late on in the book, but what Billy has done is to put a curse on a prize bull:

'Let the meaty steers you breed
At the end of ten full years
Infect with plague, infest with tears
One half percent of those they feed.
Once this contagion has occurred
May it only be wholly cured
By my hand, my work, my word,
Upon receipt of the fee agreed.
Now to your task, and breed, bull, breed.'

(The M.D., chap. 81)

The name of the bull – and I return here to my early point about the significance of plot items, like the 'Heinlein switch', which are both redundant and unpredictable – is American Pride. Disch could obviously have called the bull anything. Calling it 'American Pride' sends an unmistakable metaphoric signal; more unmistakable even than presenting the cause of ARVIDS as eating hamburgers.

The M.D. begins in this way to look like an allegory: an allegory of what has rotted society, which is (and in reverse order of their appearance in this paraphrase): (a) nationalistic pride; (b) individual medical profiteering; (c) utterly dishonest public relations; (d) domestic and sexual breakdown; (e) refusal (see the New York Times quotation above) to admit any of the above. This is an extremely damning indictment. Yet it all stems, I repeat, from a source, Billy Michaels, whom it is hard to see as simply evil. He is, rather, an individual economic unit doing the best he can for himself, as he is supposed to under orthodox economic ideology.

Disch's critique and Ryman's link through the image of AIDS. Disch links with Robinson in their shared vision of a death camp future. Ryman links with Robinson geographically, in their shared view of Orange County as the place where the American dream and the American reality (Hollywood and the defence industry) are in closest

juxtaposition. All three authors are writing very specifically, sometimes using the exact phrases, about 'the American way', 'American pride', American icons, the American dream. What they have to say, one realises, would be intolerable and unspeakable to authors of an older generation like Heinlein, with his veneration for American history/ American myth, for 'constitutionality', for the ideology of freedom and government, check and balance. Yet Robinson at least is very strongly in a Heinlein tradition, with his combination of severe criticism of America and deep affection – 'We were a *good* country', protests Tom Barnard in *The Wild Shore* – as also in his concern, if an exasperated concern, with practical politics. In chapter 51 of *The Gold Coast* Jim McPherson, the shiftless son, recalls:

Johnson's ultimate test for literature, the most important question: Can it be turned to use? When you read a book, and go back into the world: *Can it be turned to use*?

How did it get this way?

Jim finds history useful in answering the last question; so does Ryman in his 'exhumation'; Disch uses a different mode, fantasy or allegory, to answer the same question. But one could ask the penultimate question, 'Can it be turned to use?', of all these science fiction or fantasy works. And while it could be argued that science fiction has had only limited or doubtful success in the real world - motivating NASA, but also motivating 'Star Wars' - it still seems to have a collective faith in the bedrock proposition of its founding father, H.G. Wells: 'If the world does not please you, you can change it.'7 Frederik Pohl has since given a convincing account of how democracy could be rescued by technology (by getting rid of the mayors and the power brokers, the Cowpers and the Alfredos; see the first section of his The Years of the City (1984)); Robinson has suggested that the key point is corporate law, and that this could be changed from the inside by the traditional route of litigation from Washington. Both these points would be recognised at least, perhaps even accepted, by a resurrected Heinlein. Even in the dystopian analyses of Disch and Ryman, American authors – Ryman is actually a Canadian - are trying to persuade their fellow citizens not to like what they're told to like; and to change it. As the disillusioned scientists of The Gold Coast tell each other, this may not work obviously or at once, but it is still, and not ironically, the American way.

⁷ Wells, The History of Mr Polly (1910), start of chap. 9.

15 Introduction

Saying (When Necessary) the Lamentable Word

Since so much of what follows is anti-militaristic, especially if one puts together the criticisms of Gabriel and Savage (1978), Fussell (1989), Franklin (1993) and Gibson (1994) – all of them, except the last-named, by the way, veterans, and the first three combat veterans – I would like to make clear that in my youth I actually volunteered for the British Territorial Army (which was liable to call-up for foreign service). If the UK had succumbed to appeals to take part in the Vietnam War I might have become a 'grunt' like Joe Haldeman – he is exactly three months older than I am.

What all the authors just mentioned are trying to say, though, in different but interlocking ways, is that the modern Anglo-American population is seriously psychologically unprepared for a world that is not growing less threatening. That is also what the sf authors I discuss are getting at. One may well disagree with their suggestions for toughening the population up – franchise restricted to veterans, says Heinlein, form private armies and militias, says Pournelle – but in that case other suggestions would be welcome. One which has some attraction is the creation of a rule which says no politician may commit troops to active service without either serving or having served himself or herself, or else committing a close family member to frontline duties. Totally civilian War Cabinets are a new phenomenon in British life, and not a welcome one; White House think-tanks could do with a dose of boots-on-the-ground as well.

However all that may be, this piece was written for the festschrift produced for I.F. Clarke, who has done so much to show the roots of early sf, especially Wells, in the Victorian sub-genre of 'England Invaded' novels. The drive of those novels was, of course, to create military and again psychological preparedness for what the authors saw (quite correctly) as a future of terrible danger, something which they projected from a threatening past on to a present of general complacency and

unwarranted self-confidence. *Mutatis mutandis*, the modern American authors discussed here (and further in Seed 2012) are doing the same thing as their British Victorian predecessors, one hopes with more success and less reason for fear.

Two points I find especially interesting are, first, the way in which quite localised traumas were incorporated into fiction: in the case of Heinlein, the lurking fear that (as shown in the Korean War) modern Americans were not ideologically braced for combat against a thoroughly ideological enemy; in the case of Pournelle and his many collaborators and contemporaries, the lurking fear that the US government, and possibly even the civilian population, was not on the same side as its armed forces. I do not think that either of these fears was well-founded. but it is possible to trace how they arose and how they were translated into fiction. The second point is the contrast between sf and 'mainstream', or, perhaps one should say, since so much mainstream now is sf, 'mass-market'. Heinlein's novel Starship Troopers at least has a thesis and a challenge. The movies made from it are best described as slack-jawed. Whatever one says about Pournelle and Stirling's 'mercenary' novels. they do project a sense of pain and loss. The 'mercenary' movies so illuminatingly discussed by H. Bruce Franklin in his MIA, or Mythmaking in America (1993), by contrast, operate on the principle that 'bad guys can't shoot'. Many events since then have proved that this is not a good basis for planning.

One does not have to be a bleeding-heart, nevertheless, to wonder whether some of this is going too far. The sadistic element in S.M. Stirling's outline of the Draka-dominated future is rather too carefully detailed for my peace of mind; and when the same author presents, in his 'Nantucket' sequence, a vision of a world in which only Americans have the firepower, I feel like telling him, 'dream on, buddy, it's not going to happen'. But for all that – and for all the furious critiques of military sf, militarism and the military mind in general which I often heard from Harry Harrison – military sf still has its strengths, as shown in the Niven-Pournelle-Anderson-Stirling sequence of 'Man-Kzin' stories, now extended by several authors, most notably the Australian Hal Colebatch (another careful reader of Kipling).

But my final remark is more wide-ranging. Sf has been around long enough now to show distinct peaks and troughs, with a slackening of interest in the 1970s and 1980s, a revival with 'cyberpunk', 'steampunk' and even 'biopunk' in the 1980s, 1990s and 2000s, and now, in the 2010s, perhaps, something of a slackening again. Too much sf now seems mesmerised by the one major scientific advance of the last generation, namely, computers – far futures are routinely dominated by the kind of

geek who in modern life makes a lot of money by setting up IT systems which are very advanced but don't work (ask the British government about this).

Other things are coming over the horizon. Everyone knows about climate change, but few foresee the coming energy crisis, with its concomitant shifts in world power. It may be (and many readers of *Analog* would go along with this) that the vital event of twentieth-century history is the one that didn't happen: using our brief century-long cheap-fossil-energy boom to make the technological breakthrough to space, new resources, and a sustainable life-style. How psychologically prepared are we for that coming realisation? And the others which have not been predicted? To use a phrase used several times already, sf should say *le mot imprévisible*, the word that is not predicted. If it upsets someone's cherished political apple-cart, so much the better.

Starship Troopers, Galactic Heroes, Mercenary Princes: The Military and its Discontents in Science Fiction

I.F. Clarke's demonstration of the debt owed by H.G. Wells's The War of the Worlds to General Chesney's till-then forgotten best-seller The Battle of Dorking remains one of the most suggestive facts in the history of science fiction. If science fiction is above all a 'fabril' mode, as I have suggested elsewhere (Shippey 1992: ix), then the area in which the fabril mentality first began to dominate European narratives was that, not of science fiction exactly, but, of futuristic military fiction - from which, however, there was an easy transit to the founding works of science fiction proper. As Professor Clarke has shown with increasing force in several publications (1966, 1979, 1995, 1997), works like The Battle of Dorking (1871) and its many successors made a great if not a lasting impression on generations of readers, till their predictions were at once verified and overwhelmed by two world wars. The War of the Worlds, in particular, follows Chesney's story in its careful setting of the whole narrative in the incongruously peaceful landscape of Surrey, in its exploitation of the ironic gap between Darwinian logic and civilised expectation, and in its tone, one might say, of challenging or threatening plausibility. Science fiction has followed in these tracks ever since.

Yet, for a while, as a result of the two world wars that put both *The War of the Worlds* and *The Battle of Dorking* so firmly in the shade, it seemed as if the connection between military fiction and science fiction had been broken. This indeed seems to have been the opinion of Professor Clarke himself, when he dismissed what may have been the forerunner of a new and post-Wellsian wave of 'Chesneyan' fiction as of no great importance. In his *The Pattern of Expectation*, Clarke notes the existence of Robert A. Heinlein's novel *Starship Troopers* (1959) but says that in it:

the accounts of jet-propelled infantry and a barbarous militarism are designed [only] to give a futuristic context ... In fact, there is no essential change. The ideas and the lethal weapons are the sentiments and the battle equipment of the Korean War enlarged to the cosmic dimensions of fantastic planetary worlds. (Clarke 1979: 297)

There is certainly a clear relationship between Heinlein's novel and the Korean War just concluded. But in the first place the same was evidently true of General Chesney's work and the Franco-Prussian War; and in the second place Heinlein's work, like Wells's, does contain the added dimension of science fiction: the urge to go beyond mere warning of what might happen to some statement, some redefinition, of 'the nature of [humanity] and [its] place in the universe' (Aldiss and Wingrove 1986: 25). Since Heinlein, furthermore, science fiction has recreated a genre of military fiction analogous to the one from which it arose, and once more stimulated by contemporary fears and disillusionments. 'Barbarous' it may be, or (in some views) ridiculous, but it deserves some consideration, if only as an example of a kind of 'parallel evolution'. This essay will look at some examples of military science fiction, and anti-military science fiction, not as a contradiction but as an extension of Clarke's studies of analogous material a century ago.

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To begin with, Clarke's dismissal of the 'ideas' of Starship Troopers as being merely the 'sentiments ... of the Korean War' perhaps underestimates the traumatic nature of that war for American patriots like Heinlein. In 1950, only five years after their seemingly final triumph in the Second World War, US forces suffered two shattering reversals, if not humiliations, first in June-July of that year, when US army units were brushed aside by the invading North Koreans, and again in November-December, when they were hurled into retreat ('the Big Bug-Out') by the counter-attacking Chinese. By 1953, the USA, if somewhat disguised as the United Nations, had been forced to accept an indecisive termination of hostilities for the first time since the War of 1812. Finally, alarm had been widespread when it was realised how disproportionately many US prisoners had died in captivity or become collaborators with the Communists. (See, for the above, Hastings 1987: chaps 1, 9, 15.) Fears of national degeneracy were as detectable in 1950s America as in 1870s Britain. Heinlein's references to the Korean experience, especially the Mayor Report on 'brainwashing' and the poor performance of some US conscript prisoners, are overt, and have been discussed elsewhere by Alastair Spark (1991: 144-5), as well as David Seed (2004). The response to Korea provides, then (as well as a characteristically half-successful element of science fiction prophecy), one of the main strands of the novel's structure.

This strand may be described very briefly as one which consists of conversations with 'stooges' - foolish and inept characters well out of place in their futuristic context, and existing solely in order, anachronistically, to put forward the received opinions of Heinlein's own times, for them to be exposed to derision and disproof. The first such 'stooge' is the girl in one of the high-school classes on 'History and Moral Philosophy' who repeats her mother's statement (common enough in liberal homes in twentieth-century America) that 'violence never solves anything'. Tell that to the dodo and the city fathers of Carthage, responds Colonel Dubois, the military veteran-turned-teacher who acts here as the story's ideological mouthpiece: violence settles at least who will live and who will die. A second pair of stooges are the parents of Juan Rico, the story's hero, who try to dissuade him from military service, have no respect for the citizenship status which their family has avoided for a century, and who in the course of the story are either killed by aliens (exposing the fallacy of their unexpressed assumption of security) or, more embarrassingly, converted to the Dubois ethic.

A third case is Private Hendrick. Hendrick takes up the whole of chapter 5, a fair proportion of a fourteen-chapter novel. To begin with, he is given the usual stooge role of asking silly questions - or, rather, sensible questions which are then exposed by the logic of the story as having been silly. Hendrick's first question is, why bother to learn knife-throwing in an age of H-bombs, 'when one professor type can do so much more just by pushing a button'? (A 1950s question, one should note, rather than a far-future one.) He receives in reply, from the instructor Sergeant Zim, who functions as the novel's main father-figure, a lecture about the relationship between military force and governmental control, whose main point is the need for restricted violence, a lesson or a punishment rather than total destruction. But Hendrick reappears a few pages later to demonstrate that he has not learned his lesson. Hendrick demands a hearing from an officer rather than accept lower-level punishment. As he puts his side of the case, he lets slip that he has struck an NCO (for trying to make him lie on an anthill). The matter is immediately taken out of his hands, he is court-martialled, publicly flogged, and dismissed the service (up to this point, resignation rather than dismissal has always been a freely available option). The point being made here is an odd one. Throughout the novel - and also throughout many of its successors in the post-Vietnam era - there is a striking and obvious influence from Kipling's poems and stories of the nineteenth century about the British Army in India (a small professional army, unlike the massive conscript armies of twentieth- and twenty-first-century experience). In *Starship Troopers*, for instance, poems by Kipling are referred to at the end of chapter 5 and in chapter 12, and a third is used as the epigraph of chapter 7, while the 'tailoring' scene in chapter 4 contains a further silent adaptation. But the case of Private Hendrick is exactly opposite to the case of Private Ortheris in the Kipling story, 'His Private Honour', from the 1893 collection *Many Inventions*. The sight of Heinlein contradicting a major role model indicates that the point being made here is particularly personal.

On the surface, the point being made is one about military discipline. In Kipling's army, while it was of course a court-martial offence for anyone to strike a superior officer, the offence was reciprocal. For an officer to lay hand or stick on a private was a court-martial offence and certain cashiering, avoided (in the Kipling story) only by the forbearance of the private. Heinlein's account of Private Hendrick, by contrast, builds up to an extensive lecture by an officer explaining that this is no longer the case, that Hendrick is 'under a misapprehension very common among civilians'. The dice are heavily loaded here, for the 'misapprehension' was also normal for Kipling's professional soldiers; and they are loaded further by Hendrick's failure to grasp the non-reciprocal nature of the officer's lecture, his careless admission and the immediate draconian nature of his punishment. However, the deeper points this whole incident has been constructed to make seem to be these. On one level, Heinlein is making the case against Dr Spock and the 1950s theories of child care: constantly, in his world, the virtues of corporal punishment are preached, smacking puppies, 'paddling' children, 'switching' teenagers, flogging criminals. On another, he is arguing against the whole notion of inherent rights, the 'divine right of the common man', as it is sarcastically termed later on in chapter 12. Hendrick (and through him the imagined reader) has to learn that he starts with no rights at all; in Heinlein's world, all rights, including in particular the right to vote, but in Hendrick's case also the right to hit back, have to be earned, and do not exist until earned. Heinlein never uses the term, but it was supplied for him by his successors in military fiction: Heinlein's recruits are 'janissaries', slave-soldiers. The difference between Private Ortheris and Private Hendrick is that the former is a citizen, the latter, effectively, a slave.

The counterpart to what I have called the stooge-strand of Heinlein's novel is the teacher-strand. Interspersed through the novel's action scenes of training and combat are classes, in Juan Rico's high school and in his officer-training course, in 'History and Moral Philosophy', in which

authority figures make points similar to the one outlined above in overt fashion (of course, usually in reply to questions, or bad answers, from further stooges). These scenes also fill in the history of Heinlein's imagined political system, which presupposes a post-Korean failure of democracy to cope with continued warfare against Asian Communists. The anxieties behind these apparently confident scenes need not be detailed, though it might be noted again that there is a close parallel (once more clearly seen by Heinlein's successors) between the anxieties of America in the 1950s and those of Britain in the 1900s: *Starship Troopers*, one might say, is the Wellsian equivalent of Kipling's Chesneyan story, now even more forgotten than Chesney, 'The Army of a Dream', from the 1904 collection *Traffics and Discoveries*.

This parallel can indeed be drawn out further. Kipling in a sense uneasily foresaw, and tried to avert by his fiction, the First World War, which was to kill his son. Heinlein should be given some credit for in a sense foreseeing, and offering a programme to avert, the coming debacle in Vietnam. The second major structural strand of Starship Troopers, like the stooge/teacher one, again a double strand, deals with the technology and ideology of the 'Mobile Infantry'. The technological part is of course pure 'fabril' science fiction, like Wells's 1903 story 'The Land Ironclads': the rocket-propelled suits, the 'waldoes' to amplify strength ('waldoes' being a Heinlein neologism now very widely used in reality), the array of personal weapons extended to tactical nukes. But Heinlein also spends what might seem to be disproportionate time on, for instance, the very small proportion of officers in his imagined army, and the insistence on multiple functions to cut out the development of an administrative 'tail'. Heinlein here showed more sense than the professional soldiers of the Vietnam generation. It has now been convincingly shown (if still not generally conceded) that the Vietnam failure of military morale was caused in large part by the multiplicity of officer ranks in the US army, combined with their concentration in non-combat zones (Gabriel and Savage 1978). As the new 'management' mode replaced the traditional 'leadership' mode, so the army's morale crumbled; and Heinlein at least foresaw that, as he also saw the pressures towards 'management' and the difficulties of resisting them.1

¹ When he notes, in chapter 13 of *Starship Troopers*, that 'the situation got so smelly in one of the 20th century major powers that *real* officers, ones who commanded fighting men, were given special insignia to distinguish them from the swarms of swivel-chair hussars', he means the USA. The point enlivens one of Heinlein's characteristic discussions of organisation problems – and is duly parodied by Harrison (see n. 6, below).

Heinlein also showed a certain prophetic talent in his focusing on the issue of prisoners. H. Bruce Franklin (not coincidentally one of the first critics of Heinlein) has demonstrated in his book *MIA*, or *Mythmaking in America* (1993) exactly how a totally unfounded belief in the North Vietnamese retention of American prisoners was first created, and then allowed to contaminate American politics, as it has to this day. The issue was by no means so prominent after Korea. Yet in one of the classes in 'History and Moral Philosophy', in chapter 12, the principle is asserted (by Rico, but confirmed by his teacher) that the non-return of even one prisoner is sufficient as a *casus belli*, and there is a hint that this refers to the Korean War and not the later conflicts Heinlein has invented. Furthermore, while it is conceded that this may be a sentimental and irrational weakness (not shared, for instance, by 'the Bugs'), it is also asserted, more emphatically, that 'It might be the unique strength that wins us a Galaxy'.

On this issue Heinlein in a sense foresaw the future (as he had done before, with remarkable insight, over nuclear weapons and the Cold War; see item 11, above). However, he did not foresee the false conclusions and the 'mythmaking' that would arise when parts of his future came true, like the crumbling of conscript morale, and others did not. Indeed, while I have up to this point tried to make what case can be made for Heinlein as a serious thinker on military matters, it has to be said also that there is a very strong element of sentimental nonsense in his presentation of a 'veteranocracy'. This can indeed be detected as early as page 1. The ship which carries Rico's contingent of Mobile Infantry is called the Rodger Young; and the name is, as usual, significant, though not only in the way Heinlein intended. In reality, Rodger Young won a posthumous Congressional Medal of Honor in the Pacific war against the Japanese, and all honour to him. However, Heinlein's knowledge of him came from the lachrymose 'Ballad of Rodger Young', composed by Frank Loesser, and both quoted and acknowledged in the novel. Paul Fussell, however, himself a genuine combat veteran, remarks in his book Wartime (Fussell 1989:125), that 'This song proved to be too embarrassing for the troops or the more intelligent home folks to take to their hearts', and quotes the author, saving in self-defence, 'You give [the folks at home] hope without facts; glory without blood. You give them a legend with the rough edges neatly trimmed'. The comment assigns Heinlein to the category of less intelligent home folks, alas, and there is a kind of confirmation of this elsewhere, late enough in Heinlein's life for him to have learned better. After the death of Theodore Sturgeon, a late novella of his was issued as Godbody (1986), with an introductory memoir by Heinlein. In this Heinlein recalls a meeting in his flat in 1944, with among others present both Sturgeon and L. Ron Hubbard. Sturgeon got to sleep in his flat, Heinlein recalls, while Hubbard had to walk down the street to a friend's place:

In retrospect that seems like a wrong decision; Hubbard should not have been asked to walk, as both his feet had been broken (drumhead-type injuries) when his last ship was bombed. Ron had had a busy war – sunk four times and wounded again and again ...

Heinlein should have known by the 1980s that none of this was true. Hubbard had never been wounded or seen combat service. (For a reasonably factual biography of Hubbard, see Miller 1988). The smirky knowingness of 'drumhead-type injuries' suggests a certain ready collaboration on Heinlein's part in the original falsehood. For the truth is that while Heinlein (and even more Hubbard) affected the pose of combat veterans, neither of them was. Both were, in fact, 'wannabes'.² And it is the wannabe phenomenon in post-Vietnam America that has gone on to shape considerable elements of its popular and science-fictional culture.

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Heinlein did not, as it happens, get away entirely with his sentimentalised portrait of a citizen military, and, characteristically, his bluff was called by a wartime veteran, and NCO, the author Harry Harrison.³ Harrison's satire *Bill the Galactic Hero*, published originally in the British magazine *New Worlds*, in 1964, takes wicked delight in contrasting the Heinlein image of military service with a much more recognisable and less expurgated one, based above all (to use Paul Fussell's term) on 'chickenshit': a term defined by Fussell at some length, but including 'petty harassment' and (see Private Kendrick above) 'sadism thinly disguised as necessary discipline' (Fussell 1989: 80). In the course of

- ² Heinlein was a 'wannabe' in an unusually literal way. He had in fact joined and been commissioned in the peacetime US Navy, when his career was cut short, in 1934, by TB. 'He has never stopped thinking of himself as a United States naval officer', writes Franklin (1980: 13). Nevertheless, he was barred from any combat role in the Second World War. Hubbard had also held a commission in the US Navy, but his career was inglorious, as pointed out by Miller (1988).
- ³ Harrison was a sergeant and machine-gun instructor in the US Army Air Corps, 1943–6.

his satire Harrison makes many 'insider' references to the history of science fiction, from Karel Capek and *R.U.R.* (in Harrison, not 'Rossum's Universal Robots' but 'the Robot Underground Resistance'), to Isaac Asimov and the metal-surfaced Imperial planet of Trantor (but, asks Harrison, where does the carbon dioxide go?). However, the main target is certainly Heinlein. In a late scene (Part III, chapter 3), a perfectly recognisable member of Heinlein's Mobile Infantry comes bounding over the surface of the marsh planet Veniola – or rather hopping over, as his rockets are running out of fuel. As he hits the marsh he appeals for help, 'Give a buddy a hand will you ...'. They tell him to 'get outta the monkey suit and we'll pull you in', to which he replies, 'It takes an hour to get into and outta this thing ... Help me, you bastards! What's this, bowb your buddy week ...'. As the infantryman sinks in the marsh, a watching corporal remarks, 'It's always bowb your buddy week ... Them suits weigh 3000 pounds. Go down like a rock'.

However, the true centre of Harrison's attack is not Heinlein's 'fabril' element, but his curious and often-remarked dualism over authority and over father figures.⁴ The obvious case, in Starship Troopers, is Sergeant Zim, a character who seems to have become, whether through Heinlein's influence or not, an archetype in much later film and fiction. Zim first appears in chapter 3 of Heinlein's novel, as the NCO in charge of Rico's training. He dominates the next five chapters, up to the scene when Zim catches Rico cheating – by using eyesight rather than radar on an exercise – and hands him over for trial and flogging. Characteristically, as Rico is marched out, Zim then hands him a rubber mouthpiece and says, 'Bite on that. It helps. I know'. The point being made is that the flogging involves no personal hostility, indeed includes an element of fellow-feeling. And Zim then disappears, until, almost at the end of the novel, by which time his pupil Rico is an officer, he carries out the feat of capturing a 'brain Bug' (not one of the workers or warriors encountered already); and is also revealed as having been for some time Rico's platoon sergeant. Zim's silent return to the novel some forty pages before is one of Heinlein's finesses (for which, see Spark 1991: 139-40), comparable to the long concealment of the fact that the hero Juan Rico is black. It again makes a point about solidarity, the subsuming of grievances in the military profession – and, of course, may contain more than a hint of coming to 'love Big Brother'.

Harrison guys these sentiments mercilessly. Chapter 2 of *Bill* parodies the training sequences of *Troopers*, with the name of the camp changed

⁴ For which, see Panshin 1968: 129, 165–9; Franklin 1980: 88; and, again, item 14, above.

from Camp Arthur Currie (after another American war hero) to Camp Leon Trotsky. Bill's ship, 'the grand old lady of the fleet', is not the *Rodger Young* but the *Fanny Hill.*⁵ Meanwhile, Zim's counterpart is 'Petty Chief Officer' (not, note, Chief Petty Officer, a real rank) 'Deathwish Drang'. He:

was a specialist from the tips of the angry spikes of his hair to the corrugated mirror-like soles of his stamping boots ... It was impossible to look at this detestable form and imagine that it ever issued from the tender womb of a woman. He could never have been born; he must have been built to order by the government. Most terrible of all was the head... A nose, broken and crushed, squatted above the mouth that was like a knife slash in the taut belly of the corpse, while from between the lips issued the great, white fangs of the canine teeth, at least two inches long, that rested in grooves on the lower lip.

Drang, in Zim-like style, teaches the recruits their main lesson, which is not (as in Heinlein) that rights have to be earned, and discipline endured, but that soldiers have no rights anyway, and have to be taught this by endless 'chickenshit'. He reappears several times in Bill as Bill's nemesis, but Heinlein's 'learning-to-love-your-sergeant' motif becomes a comic scene in which Deathwish explains to Bill that he is a college major in 'Military Discipline, Spirit-Breaking and Method Acting', while his fangs are expensive, vat-grown and surgically implanted, a necessity for his image (Part I, chap. 5). In the end, Bill, on the marsh planet Veniola, after watching the Mobile Infantryman drown, watches Deathwish die, and instantly forges a will leaving the expensive fangs to him for transplantation. A quick self-inflicted wound, and Bill completes his career by becoming in his turn a recruiting sergeant, fangs and all, and recruiting his own baby brother to take his place in the ranks of the oppressed - an Orwellian conclusion with no attempt at concealment, as also a further mockery of Heinlein's 'happy ending', in which Rico senior is transmuted from stooge into his son's second-in command. Harrison's points are straightforward: utter derision of Heinlein's oligarchic views, total disbelief in the military virtues, utter contempt for the organisational rationalisations

⁵ She was the *Christine Keeler* in Harry's first version, written for the British magazine *New Worlds*, and alluding to the political and sexual scandal of 1963, but the editors took fright and Harry was forced to mention an earlier notorious female.

offered,⁶ complete conviction that beneath Heinlein's surface of sadistic hazing there is only a wish to haze sadistically. As Paul Fussell says, 'Chickenshit can be recognised instantly because it never has anything to do with winning the war' (Fussell 1989: 80).

Harrison's was not the only direct response to *Starship Troopers*, a more complex (because less conscious) case being Joe Haldeman's post-Vietnam novel *The Forever War* (1974). As the relationship between the two works has been discussed in detail by Alastair Spark (1991), I pass over consideration of it here, remarking only that if Heinlein responded to Korea, and in a sense foresaw aspects of Vietnam, the whole Vietnam experience created both the kind of disillusionment transmuted into science fiction terms by Haldeman and a kind of *revanchisme* which once again recalls much of the chauvinistically anxious literature of the late nineteenth and early twentieth centuries uncovered by Professor Clarke. A critical alteration away from Heinlein in post-Vietnam military science fiction is, however, rejection of the idea of the state, exaltation of the figure of the 'mercenary'.

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The appearance of the mercenary cult has been chronicled in James William Gibson's Warrior Dreams: Paramilitary Culture in Post-Vietnam America (1994), a work which deserves to be read in tandem with Fussell 1990 and Franklin 1993, already mentioned. Gibson's thesis is in brief that post-Vietnam traumas, combined with other threats to traditional white-male dominance such as feminism, created a climate of insecurity from the 1970s in America, which was made worse by the developing distrust for a government which in some theories had recoiled from victory in Vietnam, had betrayed the troops, had continued to sabotage attempts to rescue the (mythical) deserted prisoners, etc. The Heinlein option of a 'new model' army still under state control was accordingly abandoned for the figure of the mercenary, the 'soldier of fortune', the vigilante, the 'independent warrior [who] must step in to fill the dangerous void created by the American failure in Vietnam' (Gibson

⁶ Harrison picks up Heinlein's point about the need to keep officer numbers down, and guys it by having one character ('the Laundry Officer') reappear in multiple guises. He also proleptically mocks Pournelle's later rationalisation of the need for hereditary aristocracies by presenting the Captain of the *Fanny Hill* as 'a ten-year old moron wearing a bib and captain's uniform' – 'even a large nobility gets stretched damn thin over a galactic empire' (Part I, chap. 8).

1994: 7). Like the 'Missing in Action' myth studied by Franklin, the 'mercenary/vigilante' myth was created largely by films such as *Dirty Harry* (1971), *Death Wish* (1974), *The Deer Hunter* (1978), *First Blood* (the first of the 'Rambo' movies (1982)). Gibson sees in the 1980s 'the emergence of a highly energised culture of war and the warrior' (1994: 9), expressing itself in such ways as the growing popularity of the *Soldier of Fortune* magazine, founded in 1975, the rise of paintball games and combat pistol ranges, and the conventions and demonstrations put on by *Soldier of Fortune*, including the one with which Gibson's book opens: a 'recreation' near Las Vegas in 1986 of the way the Vietnam war had been supposed to go, with a Communist enemy obligingly staging mass charges against overwhelming firepower – all these phenomena, as Gibson points out, created for and supported by, not the veteran 'professional adventurers' of the image, but almost entirely by self-disguising 'wannabes' of one kind or another.

Gibson ignores science fiction throughout his book, but his case could be made in a sense more powerfully, because more intellectually, from science fiction than from anything else. Science fiction authors, like Heinlein, can be just as sentimental or as mistaken as anyone else, but the conventions of their genre oblige them to look relatively far afield. One of the differences between Wells and Chesney is the former's use of the quasi-allegorical figures 'the Curate' and 'the Artilleryman'. In a similar way military science fiction from the 1970s, while subscribing largely to the 'mercenary myth', was obliged to provide some scenario to bring this into being. The dominant figure in the sub-genre is (increasingly backed by several collaborators) Jerry Pournelle.

Pournelle's mercenary corpus began with a series of stories printed in Analog magazine between 1971 and 1973, eventually collected as The Mercenary (1977). The sequence was continued with West of Honor (1976), after which Pournelle began to publish a series of anthologies under the title There Will be War (vol. 1 (1983)). This had reached volume 9 by 1990, when it was answered by a Harry Harrison anthology, There Won't be War (1991). Pournelle, meanwhile, became heavily involved in collaborations with Larry Niven and Steven Barnes, and also started a second 'mercenary' sequence with Janissaries (1979), but returned to the universe of The Mercenary with Prince of Mercenaries (1989), and then, in collaboration with S.M. Stirling, Go Tell the Spartans (1991) and Prince of Sparta (1993). Pournelle in some ways deserves the strictures of Professor Clarke rather more than Heinlein. The 'fabril' element is considerably lower - no waldoes or jet-propelled suits, little more than 1980s military technology. He is also even more Kiplingesque than Heinlein, quoting Kipling's poems repeatedly in his novels and anthologies, and

significantly basing a whole scene in *The Mercenary* – Private Wiszorik laying out his kit – from one in 'The Army of a Dream'.

The employment of Pournelle's dream-army is, however, dominated by a clear post-Vietnam scenario. His hero, Colonel Falkenberg, is dismissed from the armed forces of the CoDominium (an American/ Russian confederation), and takes his demobilised battalion of Marines with him, for hired service on human-settled planets.⁷ The wars on these planets are always in a sense three-way. On one side there will be the original settlers, who represent traditional American pioneering values. On the other, there are the enormous numbers of forced immigrants poured into settled planets from the urban slums, or 'Welfare Islands'. of Earth by the 'Bureau of Relocation', desperate to export its crimeand-overpopulation problems to somewhere else. Behind these idle and useless masses, unfortunately, stands the government of Earth, with its space navy and ultimately irresistible power of bombardment. And the mercenary problem is to save the settlers by defeating the immigrants (not too difficult in itself), but without antagonising the hostile bureaucracy of Earth. The obvious post-Vietnam element is the conviction that government is on the other side, at least to the extent of keeping a thumb permanently in the scales. An extension of it is the deep hostility to popular demonstrations, the children of the rich playing irresponsibly at revolution, welfare culture, drug-dealing tacitly tolerated and even fomented by the government, and other facts or allegations of the Vietnam era. Or, if one chose to put the matter in Toynbeean terms (and Toynbee had considerable influence at some remove on many science fiction writers; see item 4 above), then what Pournelle did in effect was to convert a war against an empire's 'external proletariat' (the Viet Cong) into one against its 'internal proletariat' (radicals, criminals, the disenfranchised), and then to move this 'off-world'.

By the late stages of the series, the two novels co-authored with Stirling, the enemy has become the non-citizen Helots of the planet Sparta, continually reinforced by the 'underclass' immigrants from Earth, and led by a coalition including 'technoninjas', an upper-class Englishman from Earth, and Skilly Thibodeau, a woman marked by distinctive Caribbean dialect. When the Spartan citizen-settlers and Falkenberg's mercenaries persist in winning despite all odds, a critical

⁷ It is a minor indication of Pournelle's view of history that Falkenberg's battalion is the 42nd. In the old British army numbering, the 42nd was the Black Watch, a unit which began, in effect, as a mercenary formation of Highlanders recruited by the Hanoverian government to police the Highlands.

moment comes when the government sends the CoDominium Marines (from which the mercenaries were originally recruited) into battle against them, only for the Marines to change sides in disgust. The scenario needs very little glossing. Pournelle seems to have decided, in eventual agreement with Heinlein, that the way forward is through a restriction of franchise - on Sparta, as in Starship Troopers, 'Citizen' is a term of honour, while on Earth it means 'member of the underclass' as opposed to 'Taxpayer'. The franchise has to be earned, by military service, among other conditions, and even Helots can earn it (so far, democracy is accepted). But the enemies the citizen-class has to face are: state bureaucracy (BuReloc on earth), its underclass clients (the immigrants), blacks (Skilly Thibodeau), Asians (the technoninjas), and upper-class WASPs (the Englishman Geoffrey Niles). The plot's nuances only demonstrate further their basis in American white, middle-class feeling - the Englishman, for instance, is eventually cleared of total complicity in the atrocities the Helots commit, indicating perhaps a feeling that the upper classes could be saved for the American cause, if only they were better informed: as the military could be, if only it had the sense to turn against its masters. But the future to which the final volume Prince of Sparta looks forward (very similar to the one in the background of Starship Troopers) is one of governmental breakdown leading to takeover by neo-feudal forces.

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Both Heinlein and Pournelle can be seen as re-enacting, in their way, and *mutatis mutandis*, the kind of anxiety traumas that energised Chesney, Kipling or Wells: the Franco-Prussian War, the Boer War, the Korean War, the Vietnam War, all generated fear, thought and fictional reassurance, combined in different proportions. The question remains whether these fictional responses are part of a cure or part of a disease. Here Paul Fussell at least is in no doubt. The burden of his book *Wartime* is to say that in 'unbombed America especially' the meaning of the Second World War remained:

inaccessible. As experience, thus, the suffering was wasted ... America has not yet understood what the Second World War was like and has thus been unable to use such understanding to re-interpret and re-define the national reality and to arrive at something like public maturity. (Fussell 1989: 268)

There are strong suggestions that the same is even more true of Vietnam. Fussell cites one scene of troops emerging from combat and meeting a representative of the ignorant, glib, sentimental, professionally cheerful press that, in his view, systematically concealed the nature of war from the American public (286–7). The scene is curiously echoed in Michael Herr's Vietnam book *Dispatches* (first printed 1968), when American airborne troops stumble out of battle to be met by waving, smiling Red Cross girls offering coffee. The troops walk by:

One of them dropped out of line and said something to a loud, fat girl who wore a Peanuts sweatshirt under her fatigue blouse and she started to cry. The rest just walked past the girls and the large, olive-drab coffee urns. They had no idea of where they were. (Herr 1980: 179)

Warfare meets Peanuts, one might say, or, to cite Fussell again, 'the main tonality of the wartime advertising voice [homogeneous, shallow, and boring] has resonated for years now as the voice of society at large' (Fussell 1989: 195).⁸ Is modern military science fiction as bad as that? 'Barbarous' (as Clarke has said), ludicrous (as Harrison has said), the work of the 'wannabes' (as I have been suggesting above)?

My own feeling is that the 'fabril' element in science fiction, and the need to create new and plausible social scenarios, do keep even military science fiction the right side of respectable. The distinction can be made, for instance, by comparing Heinlein's novel, with all its faults, to the movie made from it in 1997. Whatever one may say against Heinlein, he would, surely, have been embarrassed on every level by the essentially suburban work perpetrated under his title. The film's failures of imagination are literally too long to list. They range from the disappearance of the 'fabril' element – why the film's 'Mobile Infantry' are so called is a mystery, as they have lost their suits and storm ashore? aground? on alien planets from what look for all the world like Second World War landing craft - to what seems a total unawareness of astronomy. The moviemakers appear to recognise no contradiction between the ideas that 'Bugs must be stupid' and 'Bugs have interstellar technology'. No irony is generated between the scenes of Bugs 'brainsucking' humans (horrific) and humans dissecting Bugs (merely nauseous). The climax of the film (Zim included, but much

⁸ It would be interesting to read Fussell's view of the 1998 Spielberg film *Saving Private Ryan*, praised by most American reviewers for its (supposed) authenticity, but viewed more doubtfully by British critics.

altered from Heinlein) is best passed over in silence. The hero's flogging scene naturally remains, but the offence is not cheating (which might not be understood) but the, to suburban minds, far more serious one, 'neglect of safety regulations'. Possibly the most revealing failures in it are the 'whitening' of Juan Rico to 'Johnnie Rico', the transmutation of the whole story into a romance of high-school lovers, the unstated assumption that everyone in the future will of course speak English (even in Buenos Aires), while high schools in Argentina (that bastion of football and rugby) will have learned to play American football.

The whole story has become, in a word, 'burbocentric': the world outside middle-class American suburbs is presumed not to exist, to exist without significant difference, or to exist only as irredeemably revolting and wrong. In their different ways, I feel sure that not only Harrison and Haldeman, but also Heinlein and Pournelle, would shake their heads over, if nothing else, the film's lack of intellectual ambition. But that is the level of science fiction outside science fiction, so to speak, science fiction as cultural background. There is no doubt that movies like *Starship Troopers* represent an advanced stage of the diseases of ignorance, dishonesty and myth-making identified by Fussell, Franklin and Gibson in the works already cited. While the novels discussed here (apart from Harrison's) all show some response to trauma, and include elements of self-reassurance or self-deception, they do attempt in a way to probe their own wounds: and for this they deserve appropriate credit.

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