

tions are so confused. Here are machines which have had human qualities illegitimately "read upon" them. Here too there are humans, and humanoid monsters which exhibit sub-human and machine-like regressions: compulsive destructiveness, fear, narrow and reactive responses. Here death masquerades as life, and life as death. Even the magic has no coherence. It is both mightier than machines (rationality) and weaker than them (pre-rationality). It is basically a manifestation of simple wish-fulfilment.

Hence the cosmology of these stories is deranged. Their reality-principles are incoherent. Of the examples considered, only the gentle ironies of Theobald and his machine provide sufficient imaginative latitude for the construction of useful responses and meanings. As frameworks for deriving understandings about human dilemmas the others are worse than useless because they fail to bring atavisms to full consciousness where they could be worked through and transcended. Instead they drive the young back toward the dark and primitive past.

These "futuristic" fantasies are, in fact, archaic.

PART TWO

TECHNOTOPIA UNLIMITED

1. Living in the Future⁹

Living in the Future is the name of a book and a children's TV series aired in the UK in 1981. The main theme can be summarised as "how microcomputers will improve our lives." This proposition is repeated many times. Both the series and the book present a succession of bright and superficially attractive images: wrist TVs, a space shuttle (before the Challenger disaster), a futuristic house, a pleasure dome, and so on.

Perhaps the most useful image is that which compares 17th and 20th century landscapes. It usefully invites speculation about how processes of development might continue or change. However, the crucial theme of humankind's relations with nature are not explored, not seen as a possible future-shaping issue or concern.

The most unhelpful and biased image is that of the technologist doctor examining a patient with the aid of remotely controlled machines. To equate future health with technology in this way is to misrepresent both, particularly if one believes that the latter is at best marginally supportive of health. If a comparison had been made with convivial or decentralist alternatives, some useful contrasts could have been drawn. However, the emphasis throughout the series and the book is upon the external construction of the future through technology. There is no hint of the

personal and institutional changes which many others see as crucial to any livable future.¹⁰

These productions are overwhelmingly optimistic in tone and presentation. The future they portray is basically safe, affluent, northern, white and anthropocentric. Far from dealing with future alternatives in the plural, it represents an illustration of a high-tech energy and resource intensive scenario for Western societies.¹¹ Unconsciously biased material of this kind is unsuitable for general use since it conceals interests, assumptions and commitments and makes one particular view of futures seem "natural". It may therefore reduce options by reinforcing taken-for-granted understandings. The result may be educational in intent but it is mystificatory in effect.

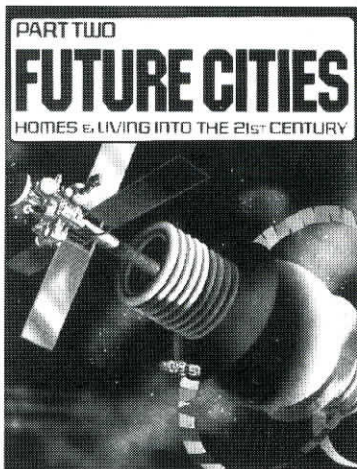
2. The Usborne Book of the Future¹²

This book is comprised of three separately published segments. One features **ROBOTS**, and adds almost as an afterthought "Science and Medicine into the 21st Century". A second highlights **FUTURE CITIES**, while a third concentrates on **STAR TRAVEL**. The three segments are profusely illustrated and most of the illustrations are of bigger and better machines. Here are robot-controlled aircraft, nuclear powered asteroids, star probes, floating cities, fully mechanised farms and so on. The ostensible subject is "the future" but the real subject is technophilia, or love of machines.

The images in this production have

been clearly designed to appeal to children. Like those discussed above, they are bright, eye-catching, often dramatic. But thumbing through the pages it is obvious that people and nature are residual categories in this world. They have become subordinated to the thrust of technical imperatives which are here writ large upon the face of the universe. Here is confidence indeed, along with plenty of hubris.

The contrast between the under-dimensioned humans and the vast cityscapes and technologies is very marked. By comparison humans look puny and small. Very little is said or pictured about human development as such. When ESP appears it is not deployed for any humanly useful purpose. It is part of the armament of an ESPER battlecruiser!



Productions of this kind are presented as if they were neutral and value-free. But they speak eloquently of a culture in which the apotheosis of the ma-

chine has, at least temporarily, smothered and displaced a more balanced concern for human welfare and development. Hiding behind the shining sleek surfaces of the machines is a profound insecurity and fear, alienation from the body, the self and the natural world.

3. Future World¹³

Future World is a big book which manages to avoid the shrill technophilia of the above work. It covers design for living, communications, energy, transport, space, food and medicine and is profusely illustrated throughout. It attempts to strike a more credible balance but still gives the impression that the future is basically about technology in one form or another. Apart from the usual rockets and civil engineering projects there is a photo of a "modern" Asian farmer spraying pesticide on his crops and a mock-up of a "futuristic" bed. The latter has a "master control panel [which] can be used to select love, wake, sleep, and peace mood programmes, all of which can be preset".¹⁴ One wonders what has happened to the nervous systems of the inhabitants. Have they been pre-set too?

Again doctors peer at patients through sophisticated screens and men and women lie passively beneath the revealing gaze of enormous scanners. Only one picture of an acupuncturist reveals that other, less mechanised, options exist. There is no need to catalogue the rest of the book for it is much like the others in general content. Despite its more moderate tone it remains firmly within the

depersonalised world of the machine. This impression is heightened by the end-papers which each display stylised computer games. At an unconscious level, then, the book is literally wrapped in mechanised imagery.

4. Australian Study Topic: The Future¹⁵

This booklet is a serious attempt to stimulate questions and enquiries about futures issues. It was funded by commercial donation, published privately and distributed free of charge. It begins with a short piece on "The Road Ahead". Here we learn that "those who reject the evidence of the gradual improvement of humankind's progress over the centuries... sometimes choose to scorn present achievements and generate an unnecessary fear of the future." The writer then ascribes our contemporary "nightmare scenarios" to these unnamed persons and argues for "the necessity of keeping an open mind". He wants students to "explore the scientific basis for some of our beliefs" and suggests that "the challenges of tomorrow will be no more troubling than the seemingly-insuperable challenges of the past."¹⁶

This is not a promising start. It is hard to see how one can keep an open mind if one mislocates the source of "nightmare scenarios" within unnamed groups which one disapproves of. Neither is it clear how, or which, beliefs have a "scientific basis". That looks a lot like scientism. The last assertion I have quoted simply does not hold up at all. Anyone who believes that past and future can be

equated in this simplistic way ought not to be writing for school children.

The booklet does not improve as it continues. There is a piece on "Predicting the Future" which unhelpfully reinforces the spurious and frequently-asserted assumption that futures study can be equated with prediction. Next there is a blatant "straw man" section which summarises the very reasonable thesis of Birch's book **Confronting the Future**, takes one aspect of his argument (resources) and proceeds to "demolish" it by drawing on Simon's tendentious book **The Resourceful Earth** (1984). Through this and other sources, the writer finally reaches the core of his concern. "Economic freedom," he declares, "has been the key to progress in the past and . . . it is the key to progress in the future".¹⁷ From this political and econometric position he concludes that "the debate between the pessimists and the optimists is reduced to a fundamental difference in understanding about the nature of the world's resources".¹⁸ This is complete nonsense, as anyone who has looked at the origins of Dystopia would know. Population, scenarios and risk-assessment are covered with equal incompetence and barely-concealed bias.

The cover of the booklet depicts five brightly smiling faces, but in this case the cover is not to be believed. The content is less attractive. Its origins, preferred sources, leaden and contrived argument make it unsuitable for use by any but the ideologically sophisticated reader. The booklet is scientific, pro-technology and clearly

inspired by the limited agendas pursued by corporate entities. It reads like a mini-manual from the Hudson Institute which, in a way, it is. As a way of understanding future alternatives and choices it has too many hidden traps to justify its use in schools.

Discussion

The four items considered above were all produced exclusively for children or young people and the world they portray is surprisingly consistent. It is one in which capital accumulation and technical dynamism have become *the* primary motive forces within culture. Existing political patterns and technical trends are simply assumed to continue. In other words, this material portrays a particular narrow view of the future and by so doing actually *conceals* credible alternatives.

However, the major purpose of futures study is not to predict or even to forecast. It is rather to distinguish a spectrum of alternatives in any field which re-enter the present as considered actions and choices.¹⁹ Where alternatives are concealed or obscured a radical narrowing occurs and human autonomy is thereby impaired. The explanation for the apparent unanimity of these materials is simply that they spring from, or are heavily indebted to, a dominant ideology. Hence, far from being "futuristic" they are deeply conservative, harking back to an epistemology in decline and insensitive to the sources of cultural vitality which imply wholly different futures.

The bright world of space travel, massive artefacts and instantaneous global communication reinforces a scenario which is by no means universally accepted or desirable. It also runs counter to the intuitions of writers and artists who have widely perceived that the mere *extension* of present trends leads toward a range of technocratic nightmares.²⁰ A profound contradiction therefore arises between the upbeat rationalistic views of futures and technology widely disseminated to children through TV, film and print and the far more pessimistic views which are widely held within the culture. It is not surprising that children become confused and fearful. The structural dissonances between incommensurable views cannot be readily resolved, even by adults.

It is far easier to regress into wish-fulfilment and magic than to make sense of a world which has become chronically incoherent.

PART THREE

BEYOND THE WORLD MACHINE

The machine at the heart of the world has not always been there. It was inserted at the time of the scientific revolution and steadily became universalised over subsequent centuries. The machine metaphor derives from a particular world view which brought with it a number of assumptions and prescriptions; assumptions about people and their relations with nature; about knowledge and how to obtain it; about progress, growth, and

most of all about the pre-eminence of instrumental rationality.²¹

The mechanised world view succeeded for one major reason: it gave access to hitherto untapped power. But three centuries of human experience have also revealed the costs of this type of power and the weaknesses in the assumptions that were made. Nature is not infinitely forgiving, people are not machines, knowledge for power (after Bacon) is not the only, or even the most important form of knowledge. Furthermore, a mechanised world creates new risks and new dependencies. This is not a particularly recent insight. It was understood at the very beginning of the 20th century by E.M. Forster who in 1909 wrote **The Machine Stops** precisely in order to counter technocratic assumptions found in the writings of people such as H.G. Wells.²²

Yet the mere critique of the mechanised world view was not sufficient to change it. As the century progressed so new discoveries and inventions permitted the dynamic expansion of techno/economic systems and permitted new displays of virtuosity and destruction. So as we near the end of the century there is indeed a schizophrenic-like quality to our private and public life. While the proponents of technical development continue to propagandise on behalf of the benefits of continued expansion and growth, the over-arching crisis of unsolved global problems (the "global problematique" or "metaproblem") looms steadily larger.²³ It is into this historically-unprecedented context that children are born, grow, are so-

cialised, educated and entertained. Yet this survey suggests that many of the messages contained in young people's media are radically defective.

Such a conclusion could be regarded as cause for despair. So it becomes important to locate works and approaches which point in a different direction; that is away from confusion, dependence, mystification and de-personalisation toward more humanly viable concerns and ends

1. The Magic of Le Guin

Two works merit consideration in this context: the Earthsea trilogy and **Always Coming Home**²⁴. The former presents us with a world in which magic works, but it works only in a rigorous and systematic way. Like the best fantasies, Le Guin's Earthsea is internally coherent and consistent. Power is not gained lightly and the notion of balance has been elevated to a structural principle in the narrative. The main character is Sparrowhawk and his growth to maturity as a magician provides the backbone of the three linked stories. It's clear that even magical power requires dedication, patience and hard work.

However, Earthsea is not a parable about the Protestant work ethic. Rather it draws more deeply on Taoist notions such as the mutual necessity of duality:

*Only in silence is the word,
only in dark the light,
only in dying life:
bright the hawk's flight
on the empty sky.*²⁵

This theme runs through each of the books. For example in **The Tombs of Atuan** (vol. 2) it's clear that darkness is not evil since it alone can give meaning to light. Similarly, in **The Farthest Shore** (vol. 3), the discovery of a partial immortality means that the whole balance of nature is threatened. If death becomes meaningless, life too is drained of its vitality.



Naming is important in Earthsea. To know the true name of any person or beast is to have access to enormous power. Consequently true names are closely guarded and the balance is maintained. There is not space to explore the many rich aspects of Earthsea. However, many themes of great importance to the young are explored without a trace of didacticism: responsibility, vulnerability, coming of age and so on. Le Guin has

provided a very rich tapestry of associations and meanings which offer the young many opportunities to understand and reflect upon the "real" world.

If *Earthsea* is a children's work which is rich enough to be appreciated by adults, then *Always Coming Home* is an adult work which also speaks eloquently to the young. It is not a story or a novel as such but a diverse tapestry of songs, stories, poems, asides, etc. depicting a people and their culture in an imaginatively distant future time. The key to this civilisation is the way that technologies and machines have been marginalised, while song, dance, poetry and ritual have taken centre stage. The result is a powerful and moving account of a people who "might be going to have lived" some time in our future. It is a very different future, but one which resonates powerfully with our present.

There is a City of Mind which retains the capacity to re-create all the horrors of the past. But this never happens because, for one thing, the "worldwide technological web", the fossil fuels and other abundant resources of the Industrial Age no longer exist. In their place is "an almost ethereal technology. . . of nerve and gossamer." But, more importantly, the people of the valley no longer want that kind of power. For them "the question concerning the Condor's failure to build an empire with its advanced weapons is not why did they fail, but why did they try?" They cannot answer this question but suspect that the attempt was, in some



very major way self-defeating — "very sick people die of their sickness".²⁶

The natural environment and its web of living creatures is of great significance, an endless palimpsest to be lived in, celebrated and revered. A teaching rubric on "Praising the Oaks" ends with these words: "nine noble and pleasant oaks, vigorous trees, sweet in the male and female flower, towns of many birds and small animal and insect people, giving much shade, giving much food, great wealthy ones worthy of praise."²⁷ In this context people and the environment interpenetrate; they are not separate.

The story of *Flicker* illustrates another important dimension of this narrative. Since childhood she has seen more than others: "I had a big argument with my cousin once when

she said there was nobody in the washhouse, and I had seen a whole group of people there passing things from hand to hand and laughing silently. . . ."²⁸ Later she sees through the eyes of the hawk and has direct perception of the universal dance of energy and form. But the totality is beyond her: "no mind or mirror can hold it without breaking," she realises. Moreover,

*we make use of such visions, make meanings out of them, find images in them, live on them, but they are not for us or about us, any more than the world is. We are part of them.*²⁹

Such a view has two very important consequences. It helps to re-establish a vertically-differentiated "hierarchy of being" which was obscured by the mechanical world picture. It also extends the spatial/temporal view beyond the concerns of individuals and single generations. This shift out of a narrow and self-centred here-and-now toward a broader, extended present is perhaps one of the main keys to cultural development beyond the industrial era. It re-connects us with the wider world of which we are a part, past, present and future.

This extension of view is expressed most directly in a poem entitled *From the People of the Houses of Earth in the Valley to the Other People Who Were on Earth Before Them*. (Figure 6)³⁰ The poem was written in our past, by a writer of our generation on behalf of a distant generation, those who will follow. Through this device, those silent voices speak across the otherwise all-but-unbridgeable

Figure 6

FROM THE PEOPLE OF THE HOUSES OF EARTH IN THE VALLEY TO THE OTHER PEOPLE WHO WERE ON EARTH BEFORE THEM.

In the beginning when the word was spoken,
in the beginning when the fire was lighted,
in the beginning when the house was built,
 we were among you.
Silent, like a word not spoken,
dark, like a fire not lighted,
formless, like a house not built,
 we were among you:
 the sold woman,
 the enslaved enemy.
 We were among you, coming closer,
 coming closer to the world.
In your time when all the words were written,
in your time when everything was fuel,
in your time when houses hid the ground,
 we were among you.
Quiet, like a word whispered,
dim, like a coal under ashes,
insubstantial, like the idea of a house,
 we were among you:
 the hungry,
 the powerless,
 in your world, coming closer,
 coming closer to our world.
In your ending when the words were forgotten,
in your ending when the fires burned out,
in your ending when the walls fell down,
 we were among you:
 the children,
 your children,
 dying your dying to come closer,
 to come into our world, to be born.
We were the sands of your sea-coasts,
the stones of your hearths. You did not know us.
We were the words you had no language for.
O our mothers and fathers!
We were always your children.
From the beginning, from the beginning,
 we are your children.

gulf and remind us that the very existence of all later generations depends upon those who precede them. It therefore places our lives in their wider context and highlights the responsibility we have for the continuity and survival of human and non-human life in the world.

One central conclusion can be drawn from these works. It is that the world view which we have inherited from the scientific and industrial revolution is destructive, narrow and alienating. But unlike the sometimes shrill voices of committed activists, Le Guin is not didactic. She is not telling us to

mend our ways. Rather, she is exploring aspects of the wider world which lie beyond the purview of industrial ideology. Her magic is the magic which flows not from simple fantasy and wish-fulfilment but from re-establishing the perennial grounds of knowing and being.³¹

2. Rubinstein: Beyond the Labyrinth³²

Brenton Trethowan is a fourteen-year-old, the middle child of three. His bedroom walls are covered with pictures of nuclear nightmares. He plays fantasy D & D games and makes decisions according to the fall of dice. Twelve-year-old Victoria comes to stay and they meet Cal, a mysterious anthropologist. From these simple elements, Rubinstein has woven a fascinating story about many things. The cruel partiality of family life is one theme. Family conflicts are depicted in all their gritty realism. Yet this is not social documentary. The author knows how the world looks at the onset of puberty: the awkwardness, violent emotions, being frustrated at (and by) adults.

Cal, it seems, is not from Earth. In a neat gender-reversal, it turns out that she is from elsewhere and elsewhere. From her cultural viewpoint, life on earth died out. She came to study an Aboriginal culture but arrived too late and discovered a later one which had flourished only briefly. Brenton's sense of threat and uncertainty is therefore reinforced. But this is only touched on lightly. The book takes a more subtle path toward an ambiguous ending by way of many adoles-

cent concerns: dating, friendship, conflict and death (to name but four). Yet it is also hard-hitting. Some of the language used is entirely "realistic" in the sense of being derived from street cultures.

In short, this is a book which is both original and entertaining. Most importantly, it constructs the world through the experience of the young and yet does not provide facile answers. Two contrasting conclusions are given. One basically says there is no hope, the other leaves open a wide range of undefined possibilities. This is a book which the young will enjoy because it reflects the world they live in and provides many opportunities to reflect upon issues of concern to them. As such, it deepens an engagement with the world, makes things clearer, opens out options and choices. Basically it says "the future is open, you are responsible for the choices you make." By extension, it links the notion of human agency with cultural survival. Within such a suggestion may lie some of the most potent antidotes to the poison of technocratic nightmares.

3. Calder: *Living Tomorrow*³³

As suggested above, many young people's books which attempt to deal with futures fail for two major reasons: they take the existing world view as given and they lack a critical dimension. Yet Calder's booklet, first published in 1970, pointed in a different direction entirely. It gives the lie to later work which constructed "the future" largely from extensions of taken-for-granted technical trends.

The author begins with an important disclaimer: "Most books are written by people who know a lot of facts about their subjects. I know nothing about the future, no facts that is. There is no such thing as a fact about the future." Later he adds,

*... technical changes are not the only ones that matter. . . . The reason (for looking ahead) is to try to shape the world of the future as we want it to be, instead of the ruin that politicians and experts could make of it if we don't keep a careful watch.*³⁴

The book is graphically varied, balanced and deliberately understated. Nor is it merely a compendium of the usual issues. It also touches on more important areas such as values, means and ends and participation in decision-making. In a section entitled "Could and Should . . . the Need to Choose" Calder asks a very important question:

*Inventions crop up all over the place and alter our lives in all sorts of different ways. . . . But if we just accept them, without thinking, the world of our future is shaped more or less by chance. **Should** we do things merely because they **could** be done?*³⁵ (Emphasis in original)

There is even an outline of a workshop called Invent Your Own Future which sets out a simple procedure for actively creating and exploring future options. Here, again, the author makes explicit what is too frequently missing from the field: the recognition that "inventing the future is, above all, a matter of questioning present

interests."³⁶ In short, this is a fine example of how futures study can be introduced and made accessible to young people. It does not preach, talk down or mystify. Unfortunately it stood virtually alone in its imaginative grasp of the field for more than ten years.

4. Gough: *Project IF*

Project IF (Inventing the Future) took shape out of a B.Ed. elective unit entitled *Educating for the Future*, taught at Victoria College since 1975.³⁷ Essentially it involves the design of curriculum materials and the implementation of teaching strategies for futures study in a range of educational settings. The main tangible products are a series of worksheets (Figure 7) and associated workshops. The key assumptions of this work are set out very clearly. They are as follows:

1. the use of a range of futures and forecasting methods;
2. the encouragement of optimism and empowerment;
3. attention to a variety of problems, topics and issues;
4. the playful rehearsal of surprise through "mind games";
5. an important role is given to speculation, fantasy and sf; and
6. a deliberate eclecticism with respect to scholarly sources.

From these assumptions and sources

FIGURE 7

PROJECT ID: INVENTING THE FUTURE WORKSHEET SERIES

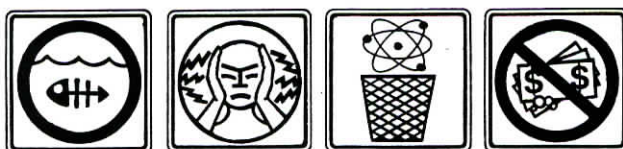
TOPIC SIGNS
INPUT

SHEET 1 of 1



The first four signs shown above mean SCHOOL CROSSING, NO U-TURN, SLIPPERY WHEN WET and NO LEFT TURN. The sign at far right warns swimmers of crocodile inhabited waters in Australia's Northern Territory. Such wordless signs have been commonplace for many years and are especially useful in parts of the world where many languages are spoken

OUTPUT 1 In the future we will probably require more wordless signs. Below are some signs that we might need in the near future, what do you think these signs mean?



2 Design wordless signs for the following messages (remember that a diagonal stripe is the usual way of indicating a forbidden activity):

DANGER: ULTRA-VIOLET ZONE	ELECTRIC AUTOMOBILES ONLY
CAUTION: POLLUTED AIR	ROBOT SERVICE STATION AHEAD
CAUTION: LASER CROSSING	NO-CLONE ZONE
REDUCED GRAVITY AREA	NO VERTICAL TURN
ANDROID SPOKEN HERE	GROKING BAY AHEAD

3 What other wordless messages might be important in the future? Draw a sign that might be needed in 20 years time and one that might be needed in 100 years time

arise a rich variety of teaching strategies. They include: looking at everyday phenomena in a new way; considering future alternatives; examining and using futures methods; and using contemporary materials to generate futures-oriented puzzles.³⁸

Another feature of this approach is that it is explicitly related to a view of the school curriculum and Schwab's notion of "the practical" which encourages "the anticipatory generation of alternatives." The links between curriculum theories and practices are explored, along with the role of futures concerns in both. Finally, some workshop strategies are given so that these approaches can be understood and explored by teachers, or teachers-in-training.

Overall, the package provides a fine introduction to teaching futures from a creative/humanist perspective. The extensive use of contemporary materials and of humour gives it an attractive lightness of touch. As the author comments "I can think of few more constructive ways of anticipating alternative futures than to look for *or to invent* humour in today's crises."³⁹ (Emphasis in original)

Discussion

The four examples considered in this section differ from most of the earlier ones in at least two major ways. First, they provide active and interrogative *commentaries* on themes of interest to young people (including technology, violence and futures). Second,

they explore or depict *strategies* for dealing actively with such themes. Works of this kind may therefore help to counteract the influence of less useful material.

So far as technology is concerned this group suggests that it is indeed of secondary importance in the scheme of things. While technologies can exert enormous instrumental power, this remains paltry in comparison with the transforming, symbolic powers available to human beings. This, perhaps, is the hidden theme of *Earthsea*. The idea is rendered explicit in *Always Coming Home*. Le Guin is clearly exploring an hierarchical world which is clearly differentiated into ontological layers or levels (machines can be dispensed with, but there are visions, or levels of reality, which lie beyond human apprehension). In so doing, she is helping to restore a quality and a breadth of vision which was all but lost in the world of the machine.⁴⁰ Similarly, technology is present in the work of the other writers, but it is never dominant, never determining.

A similar contrast can be seen with violence. Whereas in the earlier works it tended to be endemic and irresolvable, here it is muted and sporadic at best. In *Le Guin* and *Rubinstein* such violence as is depicted tends to be symbolic rather than overt (though in the latter case it is vividly expressed in family conflicts). In a richer world view, violence loses its role as supplier of the primary dynamic. It is kept tolerable by other cultural processes such as ritual, adventure and experience. By placing violence back

into this wider human context, these works avoid its chronic repetition and de-fuse the otherwise irresolvable problems which it creates.

Futures are treated explicitly in each of this final quartet. Le Guin extends our perception by depicting a possible future culture which "speaks" to us on a number of levels: through its struggle to transcend the major limitations our rapacious lifestyle imposed on the future; by addressing us directly through devices such as the poem mentioned above; and by setting up contrasts which de-familiarise our particular present reality, thereby permitting us to view it in a different light. It is in this sense, perhaps, that we are "always coming home." That is, always able to develop a clearer, more authentic vision than that offered by a technology-led world view.

As mentioned, Rubinstein's main character knows his world is under threat. It is confirmed by the alien visitor. So this future is indeed problematic. The reality of alternatives is therefore implicitly dramatised in the plot structure, as well as in the ending(s) which return choice back to the reader. The other writers both elaborate futures-related themes and responses. Together these works suggest a number of strategies for dealing with a world in transition. Some are considered briefly here under the headings of demystifying, engaging and responding.

Demystifying

These works show how the surfaces

which surround us can be misleading. The names by which things are called are not always their "true names." The world is not what it seems because cultures have interposed an opaque screen of linguistic signs and because reality has a much greater "amplitude" and "depth" than can be directly scanned by the senses. To understand the obscuring processes or those which lead deeper requires effort — the efforts of Ged to become a magician, of Flicker (in **Always Coming Home**) to understand her visions, or of Brenton to cope with a world under threat.

There are strong demystifying imperatives in Calder and in **Project IF**. Calder casts doubt on experts and wants people to think for themselves. Gough uses humour, imagination and the rehearsal of surprise to help students feel empowered to act creatively.

Engaging

The fictional and non-fictional fantasies in parts one and two seem to inhibit the attempt to understand the world and engage with it. However, the present works suggest various strategies of engagement. Le Guin considers work, ritual and the direct experience of intrinsic value in nature. The latter is a particularly powerful way of transcending the illusion of separateness fostered during the industrial era. For Rubinstein the engagement is on two levels: the perception of a world predicament and the daily involvement in relationships with family, friends and the alien. For Calder and Gough the

engagement is through a series of exploratory, creative and iterative processes which provide insight into different options and alternatives.

Responding

The whole thrust of Earthsea is toward maturity, growth and the responsible exercise of power. This provides the young with strategies and clues for actively responding to a world in change. Rubinstein's characters are clearly in the active mode and are shown to be capable, independent and able to take risks. Calder and Gough outline a range of responses accessible through humour, imagination, workshops, etc.

The collective significance of these works stands in clear and constructive opposition to those examined earlier. They suggest that coherence can be re-created, that the future is no mere abstraction (but a powerfully active principle within the moving present), and that people are not helpless. They have immense creative power to change the rules and renegotiate meanings and commitments which seemed to be lost within the nightmare of the megamachine.⁴¹ Thus, a different field of options opens out beyond those which are offered by most media productions. They go a long way beyond passivity, dependence and immaturity. They point, in fact, toward the constitution of humanness in a changing world. Since this is precisely what has been under threat for most of the last 300 years, these works collectively identify major life issues for the young and also suggest responses at at least three

levels: epistemological, symbolic and practical.

CONCLUSION

SCHIZOPHRENIA AS A WAY OF LIFE?

Most surveys of children's and young people's views of futures suggest that their fears derive from the prospect of undesirable events: unemployment, social conflict, nuclear war. There is clearly some truth in this although, as I have suggested elsewhere, negative possibilities are not invariably depressing.⁴² However, the evidence presented here suggests another explanation. If this analysis is correct, the future becomes fearful not simply because of perceived threats but, more profoundly, because it has been represented in ways which are disruptive and incoherent.

The chronic repetition of ontological confusions cannot but work against anyone's attempt to build up a systematic picture of the world. It is a fact that in much contemporary material basic human dilemmas are displayed in such a sparse and unhelpful way that they are stripped of human significance. The constant regression toward primitivism, violence and crude magic do not lead on to viable life strategies. They lead back towards partial and fragmented modes of consciousness which are, as I have noted, pre-, or sub-human. If we then add the misdirections of ideologically distorted discourse and the prejudgements of a culture obsessed with empiricism, marketing, technology, we begin to see some part of the

immense weight of negativity the young are expected to bear.⁴³

If schizophrenia in individuals is a result of irresolvable dissonances between inner and outer experience it would appear that, so far as young people's views of the world are concerned, there is a collectively induced schizophrenia-like assault taking place from early childhood. This is very different from the necessary simplifications of developmental stages, for the latter possess a high degree of order and inner coherence.⁴⁴ Again, much of the material discussed above stands in direct contrast to traditional fairy stories. As Bettelheim notes, the latter

*offer new dimensions to the child's imagination which would be impossible for him to discover as truly his own. Even more important, the form and structure of fairy tales suggest images to the child by which he can structure his daydreams and with them give better direction to his life.*⁴⁵

But "form and structure" is just what is denied in much contemporary media. The positive examples considered here must be weighed against the increasingly negative influence of commercially-motivated material. It is an unequal struggle. The ideologies which drive the marketing imperative are themselves reinforced by deeply embedded epistemologies and unspoken, unregarded commitments. It is here, at these deeper levels, that resolutions lie. Meanwhile, we have a serious problem.

We may not have finally succeeded

in driving a whole generation mad. Yet if there is any truth in this analysis we are much closer to doing so than we may realise. For, many years ago, a machine was inserted at the heart of our world. But unlike Theobald's machine it does not, will not and cannot work.

NOTES

1. J. Wagner and J. Fisher, *The Machine at the Heart of the World*, Kestrel Books, Melbourne, 1983.
2. J. Grant, *Transformers*, Ladybird Books, UK, 1986.
3. *Zoids Special*, Collected Comics No. 4, Marvel Comics Ltd., London, April, 1987.
4. This theme is developed further in Chapter 6 of R. Slaughter, *Recovering the Future*, GSES, Monash University, Melbourne, 1988.
5. *Masters of the Universe Special* No. 1, Mattel Inc., London, 1987.
6. For a penetrating account of such atavisms see K. Wilber, *Up From Eden*, Routledge Kegan Paul, London, 1983.
7. *Thundercats* No. 4, Marvel Comics Ltd., London, April 11th, 1987.
8. See Slaughter, 1988, Chapter 7.
9. A. Radnor, *Living in the Future*, ITV/Macdonald, London, 1983.
10. See Schumacher, *Small is Beautiful*, Abacus, UK, 1977.
11. This corresponds to the "normal default assumption" of business-as-usual trends leading to a "surprise-free" future. However, such a scenario has little credibility due to the unsolved accumulation of global problems (sometimes known as "the global problematique") which imply very different futures.

12. K. Gatland and D. Jefferis, *The Usborne Book of the Future*, Usborne, UK, 1979.
13. P. Goodwin, *Future World*, Hamlyn, London, 1979.
14. Goodwin, 17.1.
15. P. McGregor, *Australian Study Topic: The Future*, Centre for Economic Education, Melbourne, 1986.
16. —, p. 3.
17. —, p. 7.
18. —, p. 7.
19. See Slaughter, 1988, Chapter 9.
20. See Slaughter, 1988, Chapter 6.
21. See M. Berman, *The Re-enchantment of the World*, Cornell Univ. Press, Ithica and London, 1981.
22. E. M. Forster, "The Machine Stops", in *The Eternal Moment and Other Stories*, Harcourt, Brace, Jovanovich, 1929.
23. See L. Brown (et al), *State of the World 1988*, Worldwatch Institute, Washington D.C.
24. U. Le Guin, *Always Coming Home*, Gollancz, London, 1986.
25. U. Le Guin, (Epigraph to) *A Wizard of Earthsea*, Gollancz, London, 1968.
26. —, 1986, p. 380.
27. —, 1986, p. 311.
28. —, 1986, p. 282.
29. —, 1986, p. 297.
30. —, 1986, p. 404-5.
31. See A. Huxley, *The Perennial Philosophy*, Chatto & Windus, London, 1945.
32. G. Rubenstein, *Beyond the Labyrinth*, Penguin Australia, Melbourne, 1990.
33. N. Calder, *Living Tomorrow*, Penguin, London, 1970.
34. —, p. 2.
35. —, p. 36.
36. —, p. 62.
37. N. Gough, *Some Australian Initiatives in Futures Education: Project IF and Other Stories*, Victoria College, Rusden, Melbourne, 1985 (re-printed 1990).
38. Ibid.
39. Gough, p. 22.
40. For a discussion of hierarchical levels, see R. Slaughter, "Cultural Reconstruction in the Post-Modern World", *Journal of Curriculum Studies*, 31, 3, 1989, pp. 255-270.
41. L. Mumford, *The Pentagon of Power*, Secker & Warburg, London, 1971.
42. See R. Slaughter, *Futures Tools and Techniques*, Futures Study Centre, Melbourne, 1987.
43. See Slaughter, 1988, Chapter 7.
44. For a concise account of developmental stages see K. Egan, *Educational Development*, Oxford University Press, UK, 1979.
45. B. Bettelheim, *The Uses of Enchantment*, Penguin, London, 1978, p.7.



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