Beyond the mundane: reconciling breadth and depth in futures enquiry

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Abstract

For some time there has been a need within Futures Studies (FS) to develop methods which go beyond the dominant empirical tradition. For many years there has been a near-exclusive emphasis on understanding the external world 'out there'. But as time has gone by, so it has become clear that our ability to understand the world 'out there' crucially depends on an underlying world of reference that is 'in here'. Understanding the near-future environment calls for a combination of 'inner' and 'outer' views which, for example, give as much credence to judgment as to calculation. This paper considers a way of considering these very different 'ways of knowing'. Overall, the aim is to go beyond what might be termed 'mundane' analysis, i.e. that which is preoccupied with surfaces, and to open out a broader arena for futures enquiry. © 2002 Richard A. Slaughter. Published by Elsevier Science Ltd. All rights reserved.

1. Analytical framework

In earlier papers I set out a layered approach to futures work and posed some simple questions that can be used to explore the forward view. Inayatullah [1] took the notion of 'layered futures thinking' further in a piece on 'causal layered analysis' [2]. This paper carries the process of methodological development forward by introducing a 'breadth' dimension to the 'depth' one. There are many ways of achieving this. Here a simple matrix is produced by running six key questions about the forward

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view against the three main layers, or levels, of causal analysis (see Fig. 1). The method could be called 'structural mapping' because it deals in broad, foundational categories and opens out the possibility of more inclusive, methods within FS. But it should not be confused with the more quantitative and elaborate 'structural analysis' of the French school [3]. My purpose here is two-fold. First, to open out a wider canvas for futures enquiry beyond what might be termed the 'empirical' and 'social' traditions. Second, to show that interpretative methods add a whole new layer of capability to futures work.

The matrix presented in Fig. 1 is simply constructed. There are six lines corresponding to the following questions.

- What stays the same?
- What are the key trends?
- What are the main change processes?
- What are the most important problems?
- What are the new items 'in the pipeline'?
- What are the sources of inspiration and hope? [4]

Although such questions appear to be very straightforward on the surface, the

	Pop Futurism (The litany)	Problem-Oriented (Social sciences)	Critical & Epistemological (Discourse, metaphor, myth & worldview)
What stays the same?	Seldom asked. Social relations not in picture	Existing social relations institutions, rules etc	Nothing, all structures are provisional and can be problematised
What are the key trends?	Main dynamic created by obvious external trends, strong emphasis on technology	Empirical and social dimensions, laws, rules, regs., responses	Empirical, social etc all depend on deeper cultural commitments, values, metaphors and presuppositions
Change processes?	Restricted overviews, snapshots of change, ahistorical	Appreciation of complexity of social change. Insights into specific areas	Highly contested. Revealing of social interests, power and civilisational factors. A major area of interest
Problems?	Outrageous, shock value. Or restricted to litany. Naively optimistic	Major focus of enquiry. Detailed analysis of problems and possible solutions, social innovations	Problems are problematic without a deeper view. All such socio-cultural constructions can be deconstructed and re-negotiated
Items in pipeline?	Mainly new gadgets	Use of environ. scanning and foresight methods to anticipate developments	Highly problematic. Questions notions of inevitability. Vastly more choices than ever seriously explored
Sources of inspiration and hope?	Wealth, power, technical development. Continued 'progress'	Creating well-grounded social and institutional responses. New agendas, taking charge, etc.	Cultural critique, reconstruction, and renewal of worldviews. Civilisational concerns. Transcendence of existing patterns. New stages of civilised life envisaged. Transpersonal energies engaged

Fig. 1. Structural mapping matrix.

answers they give rise to are not. The higher-quality the answers, the better our insights into the near-future context can be. There are three columns, as follows.

- *Pop futurism*. This is mostly trite, superficial work. It is media-friendly and can often seen in weekend newspaper supplements, popular books and on brief tv features. It is summed up by statements such as: 'how science and technology are improving our lives and creating the future.' This is the world of the fleeing image and the transient sound-bite. It is eminently marketable, but largely bereft of theory or insight.
- *Problem-oriented futures work*. This is more serious and well-grounded work. It looks at the ways that societies and organisations are responding, or should respond, to the challenges of the near-term future. So it is largely about practical matters such as social rules and regulations. It emerges most typically in, e.g. environmental legislation and organisational innovations, particularly in business. By far the greater part of mainstream futures work takes place here.
- *Critical and epistemological futures studies*. Critical work attempts to 'probe beneath the surface' of social life and to discern some of the deeper processes of meaning-making, paradigm formation and the active influence of obscured world-view commitments (e.g. 'growth is good'; 'nature is merely a set of resources', etc). It utilises tools and insights that have emerged within certain of the humanities and which allow us to 'interrogate', question and critique the symbolic foundations of social life and—this is the real point—hence to discern the grounds of new, or renewed, options. Properly understood, the deconstructive and reconstructive aspects of high quality futures work balance each other in a productive fusion of methods. Epistemological futures work goes deeper still. Here FS merges into the foundational areas that feed into the futures enterprise and provide part of its substantive basis. Hence philosophy, ontology, macrohistory, the study of time, cosmology etc are all relevant at this deep level. It is here that the deepest and, perhaps, the most powerful forms of futures enquiry can take place.

Fig. 1 runs the six questions against the three modes of enquiry outlined above. The result is *a pattern of interpretations* which tells us much about what can be gained from any particular approach and, more importantly, from a combination of approaches. Let us now look more closely at each of the columns.

2. The pop futures world

Taking pop futurism first, the matrix suggests that continuities are largely overlooked. The question 'what stays the same?' is seldom asked, let alone answered. Expressions of futures work here tend to take the world as uni-dimensional, existing social relations as given and the global maldistribution of wealth as normal. The key trends are mainly those revealed by received wisdom, entertainment media, marketing and obvious empirical evidence. The main dynamic so created is that of fairly obvious external trends, with a strong emphasis on science and technology. In this

realm, 'change' is a problematic concept which is both over-stated and under-concep-
tualised. It is restricted to taken-for-granted overviews and snapshots. It tends to be
acultural and ahistorical.

Within pop futurism, 'problems' correspond to the familiar 'litany' which is con-
tinuously reproduced in the global media, eg., population, resources, pollution, crime
etc. It tends to swing between the extremes of wild optimism and deep despair. Items
in the pipeline are mainly the current crop of market-ready gadgets that are suppos-
edly intended to give our lives greater functionality and meaning. The main sources
of inspiration and hope are therefore derived from a continuation of the consumerist
dream: wealth, power and freedom through technical development. Overall, this per-
spective supports highly conservative views of 'continuing progress', albeit with a
host of 'futuristic' innovations in machines and lifestyles. Here are some examples.

2.1. Fake futures and bureaucratic dead ends

Two earlier examples of pop futurism are Toffler's 'Future shock' and Naisbitt's
Megatrends books [5]. Since I have dealt with them elsewhere I will not repeat my
comments here, except to say that this type of work continues to flourish. It is seen,
for example, in the Nostradamus industry and in the flood of marketing hype that
surrounds the millennium. However, it also can be seen in recent works such as
Broderick's 'The last mortal generation' and Kurzwiel's 'The age of spiritual
machines' [6].

2.1.1. The age of spiritual machines
Both of these books anticipate how 'science will change our lives in the 21st
century'. But whereas Broderick reports on a range of developments and some of
their implications, Kurzweil is more focused and provocative. The author is steeped
in the language, culture and environment of computers. He believes that Moor's Law
(that computer memory doubles every two years) and what he calls the 'law of
accelerating returns' will lead us to a point where artificial intelligence will become
a reality. He writes with convincing detail and no little passion about the develop-
ments that will, he believes, in a very short time lead to computers of such power
that they will not only out-rank human minds but come to contain them! In this
view, human consciousness can be reduced to complex algorithms. Human brains
will be scanned and the contents transferred either to new bodies or to banks of
computer memories.

It is astounding to think that anyone in their right minds would contemplate futures
of this kind without considering some very basic questions about context, desirability,
need or value. The apparent inevitability of this kind of scenario is remarkably com-
mon. But some time ago John Searle wrote about the crucial distinction between
syntax (a set of rules) and semantics (a structure of meanings) [7]. It's clear that
when a computer program defeated Gary Kasparov at chess it was working on the
basis of massive number-crunching according to a set of pre-determined rules. So
from this limited point of view computers far exceed human capacity. But attributing
meaning to this type of capacity is a category error.

Some years ago EF Schumacher wrote in his last book, 'A guide for the perplexed', about the need for what he called 'adequateo' [8]. That is, there must be some capacity in the knower that is adequate to that which he/she wishes to know. What is clear from reading Kurzweil's book is that the world of reference from which it emerged is that of the compulsive, disconnected, world of hi-tech innovation. The writer knows a great deal about that world. But not the inner one. He shows much less understanding about how human beings work, how societies function and, indeed, how ecologies underpin both. The provocation in the title is empty and unsubstantiated. Search though one might in this long book for any hint of 'the spiritual' and you will not find it. Well, at least, I didn't. The claim is fundamentally mistaken and the world it anticipates is a late-industrial fantasy—albeit a dangerous one in which threats to our common humanity are concealed beneath a layer of technophilic optimism.

2.1.2. The QSE 2010 project

Another example was mounted early in 1999 by the government of Queensland, Australia, and dubbed the QSE 2010 project. The project attempt to create a 'snapshot' of life in the state in 2010 to guide the development and delivery of education over the intervening years. The documents speak of 'developing a vision' and 'painting a picture' of education in 2010 [9]. And, indeed, there is value in drawing together appropriate material for this purpose. But since such 'snapshots' are only part of occasional 'strategic' exercises they miss the deeper point. It does not take much digging to see that this is another exercise about the future *of* education, not the much larger and more productive role of futures *in* education. As such it is an extrapolative exercise which misconceives the central role of FS as a vital and continuing component within education.

Education systems are rapidly becoming dysfunctional, in part because they lack the means to create and implement viable forward views. If they are to deliver the right kind of services to young people, teachers and schools, they need much more than 'snapshots' and low-level emulations of corporate strategies (which were developed for other purposes). Since the social, economic, environmental and global context in which all education systems are embedded are all in rapid change, they need to create *a permanent capability* to create viable forward views, interpret their significance and use the resulting information as regular inputs to planning, decision-making and operational procedures across the board. At present such work is not being done, or it is being attempted by people with no training or formal capacity in high-quality futures work. Hence the result is a half-hearted emulation of what is actually possible.

The research outlined in existing documents is derived from pre-given topics and is thus constrained by existing thinking and capabilities. Some strategic thinking is visible in the documents but there is no futures thinking in them at all. Overall, this comes across as a dull and bureaucratic exercise which is constrained by the guiding assumptions that are operative in QSE thinking and is thus not open to, or aware of, the many richer options available.

In both of these very different examples, the characteristics of 'pop futurist' think-

ing are clear: a lack of attention to underlying assumptions, a complete lack of critique, a strongly instrumentalist outlook and a very thin and unproductive view of the future.

3. Problem-oriented futures work

This is the central arena of mainstream futures activity. In terms of 'what stays the same' there are strong assumptions of continuity in existing social relations, institutions and the rules, laws etc governing them. The key trends are those that can readily be seen impacting upon the social and economic worlds. The main purpose of this type of work is to create incremental changes in the regime of checks and balances that allow institutions to adapt to a changing world. A great deal of emphasis is paid to the tools of rational analysis, which are supported by unregarded worldview assumptions about the ability of humans to regulate and control the world. Hence a great deal of attention is paid to the framing of new laws, rules, regulations and so on.

High quality work in this mode employs a deep appreciation of the complexity of societies and of social change. It involves the careful and sustained study of social or economic phenomena and the framing of proposals to ameliorate perceived problems. Problems are, indeed, a central focus. It is not unusual to have a detailed analysis of problem area and a broad-ranging exploration of possible solutions, including social innovations. But the problem/solution dichotomy is seldom critiqued or alternatives to it explored.

Here the forward view is generated by using the appropriate methodologies such as environmental scanning and the analysis of trends. These are used to explore possible new 'items in the pipeline' by: detecting signals, tracking the development of emerging issues and then working out implications. Sources of inspiration and hope lie in the creation of well-founded responses to well-studied problems, e.g. creating new agenda items, re-directing policies and creating social or organisational innovations.

3.1. Perils of 'breadth' American-style

3.1.1. The Millennium Project
The Millennium Project (MP) is an ambitious and, one would have thought, timely attempt to study global change and to uncover the 'opportunities' that can be found within global 'problems'. It draws on a number of teams, or 'nodes' in several countries and issues an annual State of the Future report. It stands firmly and unashamedly within the dominant American empiricist tradition and bears the characteristic hallmarks of that approach: a US-centred view of the world; a painfully literal use of language; a near-complete lack of awareness of metaphor, power and embedded social interests. It demonstrates a conceptual superficiality which provides wide coverage of 'issues' but overlooks the rich worlds of epistemology and critique—according to which all such 'issues' flourish or die. In the simplified empiricist world, words just mean 'what they say', cultures are all-but invisible; and technologies are

powerful, but neutral, means to pre-given ends. Futures work in this tradition still lacks the tools, the self-understanding, the depth of insight to do more than rehearse surfaces and re-hash the conventional (Western) wisdom. So it is no surprise that there are many confident 'shoulds', but remarkably little original thinking in the second MP report, published in 1998 [10].

Perhaps the best part of the book is an excellent discussion about the use of models in explanatory scenarios (p. 111–112). Here some of the difficult methodological choices are succinctly canvassed. The scenarios themselves (p. 121–149) are well worth a look: four are exploratory; two are normative. These provide a satisfactory way to integrate and present much of the data gathered. The section on lessons from history, while worth attempting, seemed to me to merely reach banal conclusions, e.g. 'things turn out differently than intended', 'war is part of the global prospect', 'history may not be useful in forecasting' etc. (p. 105–106).

I was similarly underwhelmed by the comments associated with five general themes or observations that emerge from all this work. These are *sustainability* ('there is little agreement about what it means'); *economic growth* ('implementation of policies that promote economic growth should be a priority of all nations. (Yet) policy makers believed this more strongly than scholars'); *education* ('it is time to identify the most cost/effective educational materials, curricula, and distribution media for global education and institutional arrangements to accelerate learning'); *technology* (which 'may have its problems, but the introduction of new technology is essential if some of the world's major problems are to be solved and some of the major opportunities ... are to be captured'); and globalisation ('a trend affecting all issues and opportunities; it is rapidly evolving and an improved global legal framework is needed'). Comments at this level add nothing to existing knowledge. And that, really, is the fundamental weakness of the MP so far.

The most useful part of the book is the executive summary (p. 9–21). It will save readers wading through many pages of mind-numbing point-by-point text. Given the range of material presented in the book, and the sheer bulk of reading it presents, an index would have been very useful. But for the second year running an index is lacking. This is a serious oversight. Overall, Michael Marien's comment in 'Future survey' that this project is 'out of control' seems well-founded [11].

For something aspiring to be an annual 'State of the future' report there is an inevitable comparison to be made with the series edited for some years by Lester Brown of the Worldwatch Institute on the 'State of the world' [12]. The fact that they both originate in Washington DC only sharpens the contrast since, year after year, Brown and his colleagues have assembled a selection of sharp, penetrating, critical—and yet always positive—essays covering many aspects of the global problematique. On the whole they are well-researched, trenchantly argued and frequently innovative. The two annual MP books have so far fallen short of these standards.

Two main suggestions emerge. First, the work carried out so far is prepatory in nature. It serves to sketch out the territory, establish the networks, get the project under way. The next step is to go for a deeper analysis—one that will begin to produce insights and recommendations of the quality desperately needed by a world in stress and in peril. Second, in order to do this, I believe it important for the chief

architects of the work to venture beyond familiar, stereotypical, approaches (surveys, cross-impact matrices and scenarios) and begin to draw on interpretative sources that would permit a rigorous interrogation of worldview defects/assumptions as vital inputs to their work (see below).

3.1.2. The 'long boom' scenario

Peter Schwartz is one of the world's most well-known scenario-builders with an enviable reputation for delivering high-quality insights to many leading organis-ations. But an article on the Long Boom co-authored with Peter Leyden, a features editor of Wired magazine, demonstrates many of the problems that arise in the domi-nant American empirical tradition [13]. The Schwartz/Leydon account places a lot of weight on what they call 'two metatrends', i.e. 'fundamental technological change and a new ethos of openness'. The former involves 'five great waves of technology—personal computers, telecommunications, biotechnology, nanotechnology and alter-native energy.' These will 'rapidly grow the economy without destroying the environment' (p. 118). Much of their account is taken up with describing the positive benefits of these 'waves of technology'. The other main focus is geo-politics. Here, China is seen as ascendant, Europe becomes fully integrated and 'Russia emerges in about 2005 with the basic underpinnings of a solid economy' (p. 129).

The world economy grows rapidly: 'by 2005 it hits an astounding 6 percent. Con-tinued growth at this rate will double the size of the world economy in just 12 years, doubling it twice in just 25 years' (p. 168). The result? With the exception of Africa, which is still in deep trouble, 'almost every region of the planet, even in the under-developed world, participates in the bonanza' (p. 168). Back in the USA 'a spirit of generosity returns', 'immigrants are seen as valuable contributors who keep the econ-omy humming' and education 'goes through a complete overhaul' (p. 168–169). Private schools innovate rapidly, especially by making full use of the new infor-mation technology, and public schools spread the innovations more widely. Higher education becomes networked and 'by 2015 relatively complete virtual libraries are up and running' (p. 170). Multiculturalism thrives and 'women help spearhead many of the changes that help make the multicultural society work...(since)... the very skills most need to make the networked society really hum are those that women have long practised .. maintaining networks ... remaining inclusive (and) negotiating' (p. 170).

From all these innovations and shifts the authors suggest that 'we're forming a new civilisation, a global civilisation, distinct from those that arose on the planet before' (p. 171). Or again, 'we're building a framework where all the world's civilis-ations can exist side by side and thrive' (p. 171). The 'millennial generation' (i.e. those born in the 1980s and 1990s) inherit this reinvigorated world, take on some of the more intractable concerns (e.g. environmental restoration and governance) and will expect to live long, productive lives of 100 years or more. They may even begin to 'confront a new species of their own making: Homo superior' (p. 172).

Equally, however, a lot of things could go wrong. Russia may not achieve a suc-cessful market economy. China could implode—or explode in new wars. Terrorism could proliferate. The world may not get the leadership it needs: 'it's not technology

or economics that pose the biggest challenges to the long boom. It's political factors, the ones dependent on strong leadership' (p. 172).

The final section presents some reasons why the USA, 'regardless of the intentions of its leaders, will have a huge influence on any future scenario. 'First, 'the United States is the great innovator nation, the incubator of new ideas.' Second, 'the United States serves as the steward of the idea of an open society.' Third, 'Americans don't understand limits. They have boundless confidence in their ability to solve problems.' The upshot is that the United States is paving the way for other developed nations, and eventually, the rest of the nations of the world' (p. 173).

A critique of this example of problem-oriented futures work can be based on three considerations: the ideology involved, selective multiculturalism and the optimism/pessimism dichotomy.

1. Free market ideology

This 'optimistic' scenario foregrounds new technology and, to a lesser extent, geopolitical change. But nowhere does it begin to come to grips with paradigms (at the critical level) or worldviews (the epistemological level). It therefore lacks reflexivity, awareness, of its own guiding cultural and ideological assumptions. For example, take this passage about economic shifts: 'The end of the Cold War also saw the triumph of a set of ideas long championed by the United States: those of the free-market economy and, to some extent, liberal democracy. This cleared the way for the creation of a truly global economy, the integrated market' (p. 116).

Now while it is true that the 'free-market economy' has become globalised, this passage and others like it give no hint of some of the implications of the drawbacks and defects of the global economic hegemony so created. There is nothing here about the disenfranchised, no hint of the implications of the commodification of human needs, no understanding of the many deleterious (or at least questionable) effects of creating a single global capitalistic market place. In other words, the essay is permeated by conventional free-market ideology, which is presented as the only alternative, and a nearly 'value free' one at that.

2. Selective multiculturalism

While the USA becomes a multicultural society in this view, what happens on the wider scale is that some non-Western cultures are seen as impediments. In the Middle East, 'the fundamentalist Muslim mind-set is particularly unsuited to the fluid demands of the digital age.' Or again, the advent of hydrogen power undermines the place of oil; hence: 'the Middle Eastern crisis comes to a head. Some of the old monarchies and religious regimes begin to topple' (p. 168). In this world the main dynamics are those of technological innovation, free market economics and American leadership. It sounds a lot like the 20th century, but the scenario is supposedly about the early 21st. I would therefore have expected a strong leavening of purely Western-led approaches to technology, trade, development and global governance - to mention but a few themes.

What the scenario enshrines is a kind of selective, token multiculturalism. This is not the same as a genuine engagement with other cultures and the other sets of values and purposes that they embody. In fact, 'the Other' as a category is extinguished in

this essay. As such it is a continuation of existing cultural hegemonic tendencies within the USA, as elsewhere. The 'proof of the pudding', as it were, is that there are no 'Other voices' here, not even as background.

3. Optimistic vs pessimistic outlooks

The essay begins with an outline of 'a bad meme', that is, a downbeat view of the future, contrasted with 'a radically optimistic meme', which latter sets the tone for the entire piece. As mentioned above, it ends on the same note. The USA is a 'can do' place and its citizens are basically optimistic and capable; 'they don't understand limits' (p. 173). I would have thought that understanding limits would be essential to managing a stressed and crowded globe in the 21st century. Moreover, there are certainly benefits to be had from understanding the limits of optimism. As I've suggested elsewhere, the optimism/pessimism polarity is over-used and not very helpful for one simple reason: both are ambiguous [14]. The real question is that, despite one's starting disposition, what does one do next? It is simply not true that 'optimism = good' and 'pessimism = bad'. That, in a word (or two) is just simple-minded.

By putting up a strong case and calling it 'radically optimistic', the authors attempt to draw their readers into the false hope that, by following their scenario, everything will be fine. But, as mentioned above, the scenario is ideologically naive. A more well-grounded approach is to treat so-called 'negative' material with as much care and attention as the more positive. In this way, we can draw out the present implications of future dangers as well as inspire each other with the possibilities of the near-term future. The dangers mentioned here are substantial, but they are relegated to a short list of 'scenario spoilers.' In other words, the scenario lacks verisimilitude. It reads very much as a collection of 'possible good news' from a very restricted point of view.

The overall point of this critique is that the Schwartz/Leyden Long Boom scenario demonstrates the limitations of work carried out in a problem-oriented mode. In focusing on certain phenomena in certain limited ways, the authors miss what, from a deeper point of view, can be thought of as 'deeper shaping realities' at the critical and epistemological levels. Hence the future that they otherwise skilfully portray may not be as consistent or as viable as they would hope.

3.1.3. The encyclopedia of the future

The 'Encyclopedia of the future' was launched with full fanfare in 1996 [15]. It set out to provide a broad overview of issues, themes and topics within FS. But, despite the very considerable efforts involved, including the involvement of several highly-qualified editors, it fell a long way short of its lofty goals. One critic termed it a 'grotesquely mindless celebration of the Pax Americana' [16]. This seems like a harsh judgment, so what are the reasons for it?

The answer is straightforward: like so many other futures books and projects, these two substantial volumes grew out of, and are clear expressions of, a taken-for-granted American frame of reference. The latter can be surprisingly parochial. For example, the overwhelming majority of entries are by Americans. Most of the so-called '100 most influential futurists' are American. Most of the '100 most influential books'

are American. The representation of non-American and non-Western work is minimal. Hence the 'Encyclopedia of the future' falls into the same trap as the Millennium Project: American thinking is projected out upon the world. But the fact is that 'the world' contains many, many other futures perspectives; many other values and 'ways of knowing'; many other articulate members of the international futures community whose exclusion from the Encyclopedia robs it of depth and inter-cultural richness of conceptualisation and understanding [17].

3.2. *Limitations of problem-oriented futures work*

Problem-oriented futures work, American-style will, perhaps, continue to be with us for some time to come. But intellectual, cultural and paradigm limitations seriously inhibit its ability to deliver useful insights. Reasons for this include the following.

- The aspiration to engage in 'global thinking' is not matched by the capability to do so.
- The many ways that language and metaphor actively shape perception are not widely appreciated.
- The dependence of empirical and social analysis on underlying frameworks of meaning and value are seldom acknowledged.
- The centrality of interpretation, of the dynamic of deconstruction and reconstruction, of the social construction of reality are all overlooked.
- The integration of breadth with depth is not convincingly undertaken.
- The shallowness of much mainstream futures work means that its offerings cannot escape mundane representations of the world and are hence inadequate to the tasks at hand.

I now turn to a more promising arena for futures work.

4. Critical and epistemological futures work

This mode of enquiry utilises the tools of post-modern analysis and critique to 'peel away' the layers of received opinion and discern the foundations of social life: the social construction of reality. From this point of view, nothing stays the same because everything is in movement. All structures are provisional. They can be problematised, re-framed, reconceptualised, deconstructed and, on the other hand, re-chosen, re-conceptualised, etc. The key trends at this level are not those of the outer world and are invisible to empirical/analytic ways of knowing. Rather, they are discerned, or 'teased out' by in-depth reflection on, and immersion in, the foundations of social contexts. Hence, the trends of interest here are those that take place at the level of underlying values, perceptions, traditions, etc.

Change processes are seen as highly volatile, contested and always powerfully revealing of underlying factors and motivations. These include social interests, power

relations, definitional power and a wide range of civilisational 'givens'. Problems are problematic in this arena! They always refer back to the social milieu in which they were framed, defined, formulated in ways that reflect the constitutive interests of particular groups. Problems, like perceptions and meanings, are inevitably 'situated' and hence bound up with a whole host of presuppositions that appear invisible until they are critically reflected upon by trained and alert human minds. 'Items in the pipeline' are also seen as being problematic. Following the tradition established by 'Science, Technology and Society' (or STS) studies, critical futures approaches do not see 'new technologies' only as tangible, reified, items 'out there' in the 'real world'. Rather, they are objectifications of various types of social relations. So both STS and CFS challenge the inevitability and the taken-for-grantedness of the novel and the new. They suggest that there are, at this level, vastly more choices than have been widely understood or canvassed among affluent populations.

Sources of inspiration and hope at this level stand in a powerful and stark contrast to the common view of pervasive meaninglessness that stalks much postmodern enquiry. In this context, the tools of postmodern analysis that reveal the provisionality of many of the foundations of social life also reveal many of the options for renewal and recovery. Thus, following acts of critique and deconstruction lie the grounds of recovery, the renewal of meaning and purpose. What transforms this otherwise cold methodology is that it is powered by transpersonal energies and inspiration. Hence, the ultimate purpose of futures work at this level is to open out productive mind-spaces, to design in-depth social innovations and to prefigure more advanced stages of civilised life. Inherent in this process are many powerful sources of inspiration and hope.

4.1. Ogilvy's defence of normative scenarios

As noted above, critical and epistemological futures work emerges from traditions of enquiry that question many of the assumptions and practices of the dominant (mainly US-oriented) empiricist view and offers a very different set of tools. For example, Ogilvy draws on anthropology, semiotics, literary criticism, psychology, critical theory and so on to outline an 'emerging paradigm' for futures enquiry which gives full weight to fundamental questions of meaning and purpose [18]. In this view, hermeneutics (the study of the determinations of meaning) is a core methodology, not forecasting. While Ogilvy is open to 'alternative scenarios', he invests little reliance in most of the standard (read empirical) futures methodologies. Rather, there are multiple options for deepening our understanding of cultural and organisational contexts and for negotiating meanings within them.

4.2. Critique, dissent and de-Westernising FS

Nandy and Inayatullah take this a step further. They begin from a notion of critique which is applied to the dominant Western culture. Ashis Nandy suggests that 'for me, futures studies is basically a game of dissenting visions. It is an attempt to widen human choices: by reconceptualising political, social and cultural ends; by

identifying emerging or previously ignored social pathologies that have to be understood, contained or transcended; and by linking up the fates of different polities and societies through envisioning their common fears and hopes' [19]. Again, Sohail Inayatullah writes, 'real futures ... are perhaps those that cause cognitive dissonance, that do not make sense to the immediate—not because they are nonsensical but because we do not have the epistemological frames to comprehend them' [20]. In other words, well-grounded multicultural futures work is partly about bringing new voices into the futures conversation. But more profoundly it is about exploring new (or maybe old) arenas of cultural and epistemological possibility. Thus, in such ways, the futures enterprise is both deepened and universalised.

These themes come together in Sardar's book 'Rescuing all our futures' and in a special issue of Futures on Dissenting Futures. In the former case, Sardar has assembled nearly 20 authors from diverse backgrounds to write about the future of FS from a more global, international and, in some cases, non-Western viewpoint. In the opening essay, Sardar argues that FS must be rescued 'from any disciplinary constraints and from the clutches of tame intellectuals and academic bureaucrats.' He adds:

> Futures studies must be openly incomplete, unpredictable and thus function as an intellectual movement rather than a closed discipline. It must work in opposition to the dominant politics and culture of our time, resist and critique science and technology (the most powerful agents of change and thought), globalisation (the most powerful process of homogenisation) and linear, deterministic projections (the official orthodoxy of the future) of the future itself [21].

These themes are echoed and amplified through the rest of the book. They are also more explicitly pursued in the Dissenting Futures special issue [22]. Here are pieces from Tibet, Aotearoa (New Zealand), the world of Islam, India, South Korea, Finland, Australia and the UK that explore a far wider world of reference and of possibility. As Goonatilake notes, 'the inevitable conclusion seems to be that there is a vast reservoir of non-Western knowledge to be tapped' [23].

4.3. Beyond the mundane—the value of depth in futures work

In summary, the value of 'going for a deeper analysis' of futures problems, and of futures approaches to problems, is as follows.

1. Pop futurism can be unmasked and shown to be compromised by the interests that pursue it, largely in pursuit of marketing and mystification.
2. The strengths and weaknesses of problem-oriented approaches can be identified and compensated for. It becomes apparent that the largely empirical world of reference that they appeal to is only part of the picture — the external part. Other aspects of reality are overlooked and dismissed. But the drawback for such approaches is that, in so doing, most of the sources of deeper understanding and more thoroughgoing responses are also overlooked.

3. Going deeper also means going wider because many of the deeper sources of understanding available to us in the world are non-Western. As the examples discussed above suggest, they have been largely overlooked in the American context. But within other cultures are many people, concepts, social arrangements, reconceptualisations, etc. that can only enrich and deepen FS as a viable field of enquiry and action.

4. Mainstream futures work is of ambiguous value insofar as it supports the operation and current success of dominant entities which are driving toward futures that are clearly unsustainable. Deeper approaches question the wisdom of so doing. More importantly, they bring to bear a range of tools from the arts and humanities that focus upon the creation and negotiation of meanings, values, worldview commitments and the like. Such tools allow us to re-negotiate aspects of social reality that are inaccessible to more empirically-based 'ways of knowing.'

5. To be successful, futures work should, ideally, have some of the features of each of the levels of enquiry I have examined. From pop futurism it can take the qualities of accessibility and appeal. From problem-oriented work it can take firm hold on contemporary needs and realities. From critical and epistemological work it can 'probe beneath the surface' for richer understandings and more innovative proposals. Thus, people who are grounded in one or other of these approaches should, perhaps, consciously attempt to move out of their comfort zones and bring something from each level into what they do.

5. Conclusion

To summarise: pop futurism will take a partial, often dramatic, but always superficial approach which overlooks the role of language and the social construction of reality, the operations of power and ideology, the role of interpretations and meanings etc. Taken alone, it arguably retards the progress of FS towards maturity and acceptance because it produces caricatures of the world and is invariably disappointing. In its popular media forms it is mainly froth, distraction. Problem-oriented futures work is the dominant mode of work now being undertaken around the world. It focuses on social problems and the creation of solutions to match them. It is a useful and widely applied approach in which the standard, empirically-grounded, futures methodologies are applied and used. But, at the end of the day, mainstream futures work lacks the depth and critical power to do much more than rehearse existing patterns and structures.

It is only when we engage with the territory that I have labelled 'critical and epistemological futures work' that we can really begin to engage the problematics of cultures in change and transformation. This work is deeper, more risky and more challenging. It admits of a much wider array of sources, influences, tools etc. It demands more of the practitioner but, by the same token, delivers much, much more than other approaches. It is here that we can clearly see the provisionality of 'that which is' and, equally, the vast potential for constructive intervention and change upon which our collective future now rests.

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