

The Knowledge Base of Futures Studies as an Evolving Process

Richard A Slaughter

Abstract

The knowledge base of futures studies (FS) was developed in the mid-1990s. It emerged in response to a need for greater clarity about what might constitute the core concerns and features of FS. The article considers a rationale for the development of a knowledge base, the evolution of the present model and some of the ways that the model will be further altered through critique, innovation, synthesis and the emergence of new voices. It is suggested that far from being a monolithic entity driven by 'Western' interests, the knowledge base is a dynamic process that will evolve over time. In so doing it will become less 'Western' and more truly global.

Why a knowledge base?

The study of futures advanced significantly during the late 20th and early 21st centuries. The steady development of a futures discourse, the increasing sophistication of methodologies, the growing literature and the emergence of Institutions of Foresight (IOFs) which sprung up all over the world attest to the strength of this emerging area of teaching, study and research. But in the wider world, the outlook remained stubbornly bleak. With the late industrial system, classical economics, international trade, 'trickle-down' development, the mechanistic worldview and a deteriorating global environment (to name several aspects of the global problematique) undergoing turbulent change, there is a clear need to critique past practice, to institutionalise foresight, reconceptualise cultural and political assumptions and to 'steer' into the future with much great care. In this context futures study (FS) is a *necessary* enterprise. While we unquestionably remain caught up in an extensive web of institutional and learning lags, it is clear that the problems addressed by futurists and others will not disappear. Rather, they will become more urgent and pressing as time passes. This can be stated with confidence because we have sufficient insight into the underlying *structure* of the coming decades - regardless of detailed events - to know with confidence that this will be a most challenging and difficult period for humanity. ¹

Yet along with a growing confidence about the role of futures studies a certain modesty in the face of limitations on our knowledge, our inability to foresee the full results of our actions and an undeniable future uncertainty is appropriate. The future is most certainly open and in many respects unpredictable. (Indeed, most informed observers agree that futurists should not even *try* to predict. It is a contradictory aspiration which, if fulfilled, would logically cancel out the active role of humans in shaping history.) What futurists can do, however, is to facilitate the development and application of individual, organisational and collective foresight. I take the latter to be founded upon a widely shared human capacity that is augmented by futures concepts, curricula and discourse, and supported by professional organisations and techniques. ² One result of good foresight work is a well-developed decision context embracing aspects of past, present and possible futures. This context has many implications for policy formulation, decision-making and the nature of strategic intent in organisations. Whether or not FS can be called a discipline is of less significance than its capacity to produce useful knowledge and support disciplined enquiry. Another term for this is scholarship.

Why, then, is it necessary to have a Knowledge Base of Futures Studies (KBFS)? There are several reasons. First, as Norwegian futurist Kjell Dahle pointed out at the World Futures Studies Federation conference in Barcelona in September 1991, the lack of a common knowledge base greatly complicated the work of those preparing courses, planning research, teaching and developing FS projects. The field is well known for its breadth, geographical scope and range of disciplinary paradigms. Where, in all this diversity, should newcomers, particularly intending students, begin? This was not an easy question to answer. The result was that a wide range of offerings were presented to students and others which foregrounded only those aspects of the field with which instructors were most familiar. For example in US schools, the tools and techniques of FS were emphasised to the near exclusion of futures concepts. Yet in a wider view, both have a place.³ So the development of a knowledge base provides a frame of reference, a meta-map, by which to organise core elements of the field.

Second, the emergence of a knowledge base assists the field in terms of its own self-understanding and development. By identifying commonly regarded aspects of FS and assembling them into a coherent structure, we can clearly see a *disciplinary environment* emerging. This is an environment in which the whole is much greater than the sum of its parts because the synergies between, and cross-fertilisation of, various components (eg. literature, organisations, practitioners, techniques) permit the emergence of new social capacities and functions. For example, I have argued that social foresight, which is a distinctively futures-oriented mode of understanding and social application, can emerge through several distinct 'layers of capability' - not, it should be noted, through merely one or two of them.⁴ As new social phenomena such as national 21st century studies, the active recognition of obligations to future generations and applied social foresight emerge from organised futures-related activity, so futures workers will be able to locate themselves more clearly in a productive disciplinary matrix. Equally, access to a wider pattern of futures work makes it easier to grasp the strengths and deficiencies of the field. This will facilitate critique and further developments (see below).

Third, a knowledge base is vital in terms of the wider legitimisation of FS as a scholarly and applied activity. All disciplines and fields require some such shared understanding of their territory in relation to other such entities. In the case of fs, the identification of a knowledge/practice core is relatively straightforward (see next section) and it forms a systematic basis for teaching, learning, research etc. Decision-makers and academic gate-keepers need only look openly at what is being achieved in the whole field to understand more clearly how it fits on the contemporary map of knowledge. However, attempting to establish the boundaries of FS is less straightforward and may, in fact, be unnecessary. To help resolve this question it is useful to ask: where are the boundaries of Geography? Where are the boundaries of History? So far as I can tell, neither of these well-established fields can be said to exhibit clear boundaries for one simple reason: they interpenetrate each other and countless other areas and fields as well. I don't know any geographer or historian who agonises over the boundaries of their discipline, so maybe futurists should not do so either. The point is surely to identify a core of well-established knowledge, understanding and technique that is understood and shared by an interacting and mutually supportive group of practitioners. The point is this: can you teach FS? Can it be studied? Can it be productively applied to pressing problems in the real world? If the answers are 'yes, yes and yes', then I do not think we should worry too much about boundaries.⁵

Finally, a knowledge base can serve to make the work of futurists world wide more accessible, more clearly understood and more useful in many contexts. I saw a clear example of this in the context of a new school subject called *Futures: Personal, Social, Global* that was developed by

the Board of Senior Secondary Studies in Queensland, Australia, and, at the time of writing, was under trial there. It was quite clear that if FS had been perceived as just a ‘bunch of good ideas’ or merely ‘a perspective’ the school subject would never have been started. It was the strength of the *idea* of a knowledge base and its existence as a disciplinary entity that persuaded the various committees of the Board that they were on firm ground in proceeding with the innovation.⁶ I saw this as an ‘early signal’ of a wider process of adoption and take-up of futures approaches - both in education and elsewhere. Thus, I expect the KBFS to have a facilitative role as more people become aware of its existence, begin to appreciate the quality of thinking within it and begin to use the applications that emerge from it.

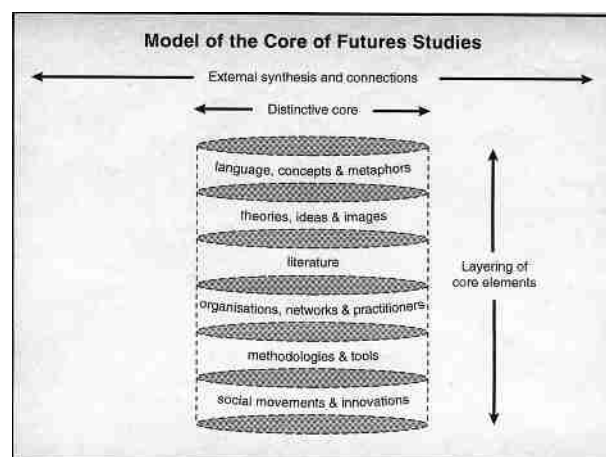
In summary, the concept of a knowledge base provides us with a way of helping the various elements of FS cohere and of making them more widely available to students, non-specialists and wider constituencies. This arguably provides FS, and those who work in it, with greater symbolic and applied power. In other words, the KBFS is a further step in the legitimisation process.

What is the Knowledge Base of Futures Studies?

A special issue of *Futures* published in 1993 provided a first attempt to articulate aspects of the KBFS. Figure 1 shows the main elements of a simple model that were suggested for this purpose. The model is made up of several identifiable overlapping layers or elements. For analytic purposes it is convenient to separate them. However, in reality they are interconnected and functionally inseparable. In this approach it is the ‘layering’ of core elements in a coherent relationship that identifies the field. As noted, many of these elements are shared with many other fields and enterprises. Where they overlap, an *internal* synthesis can be identified (indicated by the vertical arrows). An *external* synthesis takes place (horizontal arrows) through lateral connections with other fields such as long-range planning, policy-studies, development studies and so on.

The metaphor of a set of ‘core’ contents provides a basis for a second metaphor, that of the knowledge ‘base’ itself. It should be clear that I am not using ‘core’ and ‘base’ in the sense of settled and unproblematic agreements about ‘the way things are’ that serve as foundations in the

Figure 1



old monolithic sense. Rather, the elements of both are clusters of conceptual, methodological, social and cultural phenomena, all of which are socially constructed. All are continuously being created, critiqued, deconstructed, reconceptualised and reformulated. It follows that the knowledge base outlined here represents a series of snapshots of dynamic processes. Hence the title of this paper. I now want to outline the elements of the original model and then to show how this framework evolved into the first three volumes of the KBFS series. In so doing, I highlight a small part of this evolving process. Continued on the wider scene, it will give rise to different versions of the knowledge base in due course.

1. Language, Concepts and Metaphors

The language, concepts and metaphors of the futures field can be regarded as primary intellectual and symbolic resources. Concepts such as those of 'alternatives', 'options', 'agenda for the 21st Century' and 'sustainability' provide the symbolic resources that make it possible to consider futures. Metaphorically speaking, they are 'springboards' or 'building blocks' for understanding which, when developed and explored, permit otherwise vague and provisional notions about the future to take on greater clarity and form.⁷ Metaphors have particular applicability in futures, in part through the *active* ways in which they organise and shape our conceptual structures. While their power to shape discourse tends to take place invisibly, they can also be used deliberately to further conscious intentions.⁸

2. Theories, Ideas and Images

The symbolic building blocks outlined above can be assembled into structures of great power and insight. For example the idea of 'worldview design' or that of a 'wise culture' bring with them a whole series of propositions that can be used to clarify important aspects of contemporary, or future options. The future can be explored through many avenues, and not least through theories about evolution, progress, chaos, stability, sustainability, permanence and new forms of society. Some are best approached through visual or literary images.

Images of futures are both ubiquitous and yet under-studied. They are being continuously negotiated at all levels of society. Images of futures in the late 20th Century tend to be either technophilic or dystopian. Both can be usefully explored, critiqued and compared with, eg., those emerging from speculative fiction (SF), art and non-Western cultures.⁹ As noted below, such sources are ignored at our peril because they foreshadow the often-eclipsed possibility of a wider range of futures traditions based on other cultures, other epistemologies and other 'ways of knowing'.

3. Literature

Futures studies has a very rich literature. Familiarity with it provides access to the history, lines of enquiry, the intellectual and applied substance of the field. So teaching and research is heavily indebted to the literature. There are two main branches. The core of the professional futures literature resides primarily in some 250 key books by authors from around the world.¹⁰ Journals also play a key role in promoting discourse and new ideas, in sharing critiques and in providing part of a disciplinary support network. They include *Futures*, *Futures Research Quarterly*, *Long-Range Planning* and *Technological Forecasting and Social Change*. The other branch is that of speculative writing, or SF. Whereas much futures work is based on rationality, logic, extrapolation and scholarship, SF draws on different sources - primarily imagination,

game-playing (such as 'what if...?' games or alternative histories) and creativity. I. F. Clarke, among others, has demonstrated how speculative literature has affected social, cultural and technological processes over a very long period. For all its limitations, it remains an important resource for those looking beyond the near-term future.¹¹

4. Organisations, Networks and Practitioners

There are a number of core organisations and networks in the futures field. Two are centrally placed. The US-based World Future Society (WFS) and the World Futures Studies Federation (WFSF). Both have members throughout the world. Together, these two organisations cater for the broad interests of most practicing futurists through publications, projects and meetings. In addition, there are a number of more specialised organisations which fall under the heading of 'institutions of foresight'. There are probably a hundred or more worldwide supporting a wide range of more focussed activities. They tend to be pioneers, or 'leading-edge' organisations that act as seed-beds for social and disciplinary innovation.¹² Overlapping these near-core contexts are a diverse range of futures-related organisations including NGOs, consultancies, government bodies and other international groups, some of them associated with UNESCO or the OECD. In recent years a bewildering variety of networks have sprung up via the Internet covering every conceivable aspect of futures-related issues and concerns.

Futures practitioners create, refine and use the formal knowledge that finds its way into the futures literature. If it is language, concepts and metaphors that provide the symbolic foundation of FS, it is the practitioners who supply the human, intellectual and applied power. They use the field to pursue numerous projects and possibilities. The outcomes of futures work affect social processes in countless ways, but most importantly through projects, enabling structures and social innovations.

5. Methodologies and Tools

The core of *applied* futures work is methodology. Just as theories create new structures from underlying concepts etc., so methodologies increase the intellectual and applied power of ideas and theories. Empirical methodologies include: environmental scanning, scenario analysis, cross-impact matrices, the Delphic survey method, forecasting and strategic management, national and global modelling. Interpretive methodologies include: positive critique, analysis of discourse, layered analysis and social construction work. Certain elements may be combined in useful sequences to create a more sustained and penetrating methodology. Such approaches arguably include Godet's 'Prospective', Coates' 'Issues Management' and the 'QUEST' technique developed by Enzer and Nanus. Methodologies of this extended type are in wide use in some government and corporate contexts, but unfortunately, seldom in education.¹³ Futures tools are simple versions of some of the methodologies or practical applications drawn from futures ideas and concepts. They include time-lines, futures wheels, space/time grids, simple technology assessment, strategies for responding to fears and so on. Such tools have been developed and applied over 30 years since the first courses in futures were taught in, or around, 1966.¹⁴

6. Social Movements and Innovations

The extent to which the peace, women's, environmental and other movements are part of the futures field is a matter for debate. I have, however, always seen them as closely related to futures work in that they have attempted not merely to discuss and theorise about future societies, they have *acted* in the present to bring about change. Hence, they align with one of the

core purposes of futures work. Social innovations are ubiquitous and easy to study. The process of creating them can be taught and learned.¹⁵

Development of the Knowledge Base Series

I will now sketch in how the special issue of *Futures* developed into the series, since this sheds light on the current status of FS in the academic and publishing community.

The feedback from the special issue was encouraging. *Future Survey* called it ‘the best intermediate-level orientation to Futures’.¹⁶ Clearly the notion of a knowledge base had struck a positive note within the futures community. But outside it was a different matter. At first I had hoped to develop the notion through a small specialist publisher. However that route proved unproductive. I next took the project to a mainstream social science publisher with whom I had worked before, and submitted a proposal.¹⁷ This was seriously considered, but was rejected due to a perceived lack of market demand. I understood the point. If one was not aware of the rising tide of interest in FS, and the growing range of applications for it, it was reasonable. But I felt I *was* aware of them. I knew how graduate students had responded to the area, had workshoped futures concepts and techniques with many organisations, and felt clear that whatever the future held, FS had a role within it.

So I fulfilled my contractual obligations to the mainstream publisher which, as part of a *Futures and Education* series, subsequently brought out a single-volume anthology called *New Thinking for a New Millennium*.¹⁸ Some of the papers that would have gone into the KBFS were used there and hence created problems for the KBFS series. However, each of the authors concerned actively cooperated to keep the project on track by, for example, offering fresh, relevant material. So, while *New Thinking ...* was under way, I undertook a long process of consultation with colleagues in many countries to assemble a number of high-quality papers which covered the ground, as it were, in terms of the evolving KBFS. All cooperated in a generous and very open way such that the project became a truly collaborative one.

The central aim was to build upon the special issue of *Futures* and to create a more comprehensive knowledge base. I also felt it important not to make this another North American or European collection. So I searched far and wide to find scholarly work from a range of different cultures. What I ended up with still had a predominance of Western scholars simply because they have been active for longer than those, say, in Eastern countries. But the collection did begin to reflect the rise of other traditions, other voices. When the exercise is repeated over time I fully expect those other traditions and voices to out-weigh the purely Western ones. This will be a very positive development because the more authentic voices there are in futures work, the richer the conversation will be.

At the same time as attending to the editorial work, I still had to find a publisher. Having left the University of Melbourne in late 1994 to work full-time in the Futures Study Centre, I joined forces with a local media group. To cut a long story short, I had the editorial process in hand while the latter had an established publishing capacity. So in joining forces, the two organisations began to gear up to publish the KBFS. We engaged an expert copy-editor and set to work. The task was to turn 50 varied scripts from all parts of the world into a coherent series without extinguishing the unique ‘voice’ of each author. This took many months of careful, painstaking work. However, the job was completed early in May 1996. When this paper was

first written, the first print-run was under way. The entire project reverted to the Futures Study Centre thereafter - which is why early editions carry the media group imprint and later ones the FSC one. (The FSC itself was replaced by Foresight International in 2000.)

What is the significance of this account? Well, in the first place, it suggests that futurists world wide do see themselves as a community and cooperate very readily on projects that make sense to them. The single most significant reason why the KBFS project was able to proceed was that many people saw the point and supported it wholeheartedly. Second, from the time of the *Futures* special issue on I never doubted that the project would happen. It was just a case of finding appropriate ways forward at each stage. While I would not want to overlook the difficulties involved (and there were many) the fact is that the project flowed from idea to reality on the basis of strong belief and commitment on the part of all concerned. In such circumstances problems are simply met and solved; the end was never in doubt. Third, the KBFS is perhaps a prime example of the 'bootstraps' phenomenon. That is, a way of drawing a new and original manifestation of futures work out of collective effort, the better to promote and present FS in the wider world. The success of the KBFS will be measured in the way it contributes to futures courses, encourages and supports futures students, helps more universities to teach FS and to carry out better futures research, stimulate the emergence of more IOFs around the world and assists in the development of social innovations.

The Knowledge Base as an Evolving Process

As stated above, the KBFS is not a monolithic entity; rather, it is a continuous process. Over time some elements will become redundant, others will grow more central and new elements will be added.¹⁹ There are at least four ways that this process may occur; that is, through: critique, innovation, new voices and synthesis.

Critique

Critique is vital for a growing field such as FS. Without it FS becomes a kind of 'cosy club' of friends and associates, the main purpose of which is to promote personal interests, to soothe egos and perpetuate the status quo. So for me critique is a vital part of FS and a methodology in its own right. In my view, there is little that is more counter-productive than some of the early futures-related books which boldly diagnosed global maladies and then proclaimed 'solutions' on the basis of wholly unexamined social, economic, technical and cultural interests. It was the very taken-for-grantedness of such work that stimulated my own critique. Significantly enough, this led in time to the development of a perspective that I called 'critical futures studies'.²⁰ Hence critique is *a necessary stage* which, properly understood and used, leads on to further developments. This is a crucial point. Critique should not be seen as unwelcome, or as a necessary evil, but as part of the *modus operandi* of any intelligent approach to futures, and part of its own internal provision for quality control.

I refer to critique as a methodology because, in a critical futures approach, several levels of futures work can be distinguished. I call the levels: pop futurism, problem-oriented, critical and epistemological.²¹ Following this suggestion, Inayatullah has developed an approach termed 'layered causal analysis' which considers phenomena in breadth and depth according to different approaches to knowledge and different cultural and epistemological assumptions.²² Thus critical futures study is not concerned merely to criticise; rather it is about the ability to understand problems, issues, phenomena in depth. I regard this capacity to work and to seek understanding

on a number of levels as part of the growing sophistication of FS, and part of the grounds for a confident, but modest reflexivity for those working within it.

More generally, FS has been critiqued in a number of ways that are essential to its development and growth. For example, Bertrand de Jouvenel critiqued its use by those who wanted to ‘colonise’ the future for their own interests, ie., manipulate aspects of it for their own ends.²³ This view remains pertinent decades later as futurist expertise continues to cluster around the honeypot provided by corporate sponsors. Nicholson, among others, also pointed out how children and young people were excluded from the futures discourse, leading to what he called a ‘communication backlash’, from which he sought to free them.²⁴ Others have made the same point with regard to women and disadvantaged minorities.²⁵ However, some of the most powerful critiques in recent years have been made on the basis of the overwhelmingly Western character of most FS work and literature. Critiques by Sardar and Kim, for example, have highlighted some of the deficiencies of purely Western approaches and also drawn attention to the wealth of underutilised insight from other cultures and civilisations.²⁶ Work by Inayatullah has taken up this critique and woven it into a multi-civilisational view of what FS can be.²⁷

Innovation

Robert Jungk once told me in a taped interview how he regarded FS as essentially a ‘seed bed’ for social and methodological innovations. He certainly proved that with, for example, his grass roots approach to futures workshops and the establishment of a futures library in Salzburg, Austria.²⁸ Indeed, this is a basic pattern for successful futures work. As I described some years ago in my outline of the ‘transformative cycle’ (itself a minor methodological innovation), futurists are not, by and large, interested in describing problems, but in exploring solutions.²⁹ This is such a central feature of the field that I have come to believe that long-term, systemic, solutions to most world problems are prefigured somewhere in recent futures literature. One example would be Paul Hawken’s book *The Ecology of Commerce* which outlines the essentials of a different way of doing business such as to sustain the earth’s ecology, rather than imperil it further.³⁰ Such works may not be taken seriously by present-day opinion leaders for some time, but they help to initiate and sustain changes in paradigms, outlooks and eventually worldviews. Hence conceptual innovations are constantly springing up within a futures context. As some of these gather momentum they can be expected to create new foci for innovative work. For example, Hazel Henderson’s critique of economics has led to better and more comprehensive economic indicators.³¹

Methodological innovations continue to arise at all levels. At the level of pop futurism, Faith Popcorn distilled a simple trend-reading method which can usefully be employed to guide the marketing strategies of retail businesses.³² At the problem-oriented level, Michel Godet and his colleagues in France, and Peter Schwartz and his colleagues in the Global Business Network pioneered new and effective approaches to scenarios and strategic management.³³ At the critical level Duane Elgin provided us with an elegant new paradigm for possible stages of future social development.³⁴ Finally, at the epistemological level, Ken Wilber offers a new way of looking at ourselves and our world (see below). Most of these contributions, however, are from within a Western framework. Perhaps some of the most fruitful futures work to come lies in the emergence of new voices.

New Voices

To some extent, new voices have been heard from marginalised groups within Western cultures: women, young people, the disadvantaged. They have also emerged from the growing ‘techo-elite’: those who thrive on the Internet, the World Wide Web and the sub-cultures of ‘cyberspace’. While not wanting to dismiss these categories and groups, I believe it likely that still more original voices will emerge from a different source, that is, from non-Western cultures. The global spread of English, of Western values and lifestyles, has cast a homogenising spell over the cultural diversity of the world. Yet, as Elmandjra has suggested, cultural diversity is one of the main keys to survival.³⁵ It follows that new and substantive innovations in FS will tend to occur through the emergence of new thinkers, scholars, artists and others from non-Western backgrounds. As more new and original voices emerge, each imbued with a particular cultural ethos, so the global futures ‘conversation’ will be enormously enriched. Indeed, the present knowledge base shows that this process is already under way.

Sardar’s work on the future of Muslim civilisation marks a turning point away from Western preoccupations to more universal ones based on a variety of other cultures. As Sardar notes, ‘if we can have similar, indeed better, studies from the perspective of other civilisations we would then have a critical mass to build a truly diverse knowledge base for futures studies’.³⁶ From such work we can expect to see the emergence of non-Western thinking, concepts and sensibilities all impacting on FS and in so doing modifying its ethos and knowledge base. This can already be seen in the work of Inayatullah who has explored the work of the Indian mystic P. R. Sarkar and used this as a springboard to other civilisational approaches.³⁷ A parallel process can also be seen in the work of the Kyoto-based Future Generations Alliance Foundation (FGAF) and one of its leaders, Tae-Chang Kim, who outlined some of the implications of a distinctively Korean perspective based on Han philosophy.³⁸ Similarly, the FGAF was inspired by Zen Buddhist insights. It not only sought to establish a universal ‘future generations’ perspective, but carried out original work on the design of future generations universities.³⁹ Such developments may alter the ‘map’ of FS, diversify the sources of understanding impacting upon it and enrich the emerging global futures discourse.

Synthesis

The potential for new synthesis emerges from all the above and, out of this, new options for understanding and action. Jay Ogilvy has done much to articulate a new type of metatheory for FS. His account of how the latter can be related to developments within the humanities is, I believe, a significant step forward. Essentially it means that FS is more central, more necessary, to contemporary scholarship and social action than has yet been widely realised.⁴⁰ The *Encyclopedia of the Future* is another act of synthesis for FS. While too American in focus and perspective, it placed a new tool in the hands of those wanting to explore the area and tap some of its many resources. Wendell Bell’s two-volume opus, *The Foundations of Futures Studies* was another significant development that clarified the area and made it more accessible to students.⁴¹ Like the KBFS, these are essential tools for an emerging discipline. However, some of the most powerful works of synthesis impacting upon FS comes from another direction entirely.

For some 20 years Ken Wilber has been carrying out an increasingly impressive epistemological rescue operation that, properly understood, has the capacity to help us move beyond the breakdown of the Western industrial worldview, and the relativism of post-modernism, to an outlook that vastly improves our prospects for a livable future. Wilber is not a futurist. Rather,

he is a seeker after spiritual insight and a grand synthesist. His work ranges widely over science, psychology, sociology, spirituality and religion. In 1995 Wilber published a grand opus *Sex, Ecology and Spirituality* which lays out the full perspective in great and compelling detail. Unfortunately only the most dedicated of scholars are likely to read its 600+ pages. So his *Brief History of Everything* provided an elegant solution: an accessible 'map' of the larger work which is clear, concise and profound.

Wilber's cosmic 'map' is based on the notion that there are four 'quadrants' of development. One covers the interior development of the individual; each person's own unique inner world of feeling, emotion, thought and vision. A second covers the external, or physical, development of the individual. Here is the familiar story of science, biology, body and brain function. Next is the interior development of collective social entities from the earliest stages, through the present 'rational' period and beyond. Finally there is the stream of external collective development, the physical/social process which leads from the 'big bang' through to the various stages of social evolution. Put thus it may sound abstract; but the triumph of Wilber's work is that he has searched so widely and so thoroughly that what stood before as a confusing tapestry of contending ideas and perspectives now stands revealed in a near-universal perspective. In other words, he gives due credit to those saints and sages, innovators and authorities in many fields and cultures, each of whom strove to bring forth particular insights, and weaves these into a greater whole.

From this viewpoint Wilber suggests that a viable path to the future cannot be found through the further development and evolution of rationalist thought, nor through a one-sided and over-powerful system of science and technology. Rather, it lies in escaping from - or rather, transcending - the 'flatland' imposed on us by three hundred years of reductionism and epistemological ignorance. It lies in *acts of recovery* in each and every domain: the recovery of a deeper sense of self, of higher, transcendent, ways of knowing, of states of social being that go beyond the merely rational, and so on. These are social innovations *par excellence* because they operate at the deeper (critical and epistemological) levels of futures understanding and action. In Wilber's words: 'we cannot build tomorrow on the bruises of yesterday ... This means a new form of society will have to evolve that integrates consciousness, culture and nature, and thus finds room for art, morals, and science - for personal values, the collective wisdom, and for technical knowledge'.⁴²

I have referred to this work at some length because over several years Wilber's developing account has re-framed my own thinking about present and future options, both personal and collective. Such a framework integrates insights from a very wide field and provides FS with powerful new understandings and tools which go beyond one-dimensional thinking (eg. rationality, technique, forecasting) and a single privileged culture (Western culture). Here, then, is an emerging basis for big-picture thinking and action into the new millennium and beyond. Here too is where some of the most substantial developments in the KBFS are likely to occur.

Conclusion

A danger in using the term knowledge *base* is that one can be trapped into a metaphorical assumption that this 'base' is a solid and settled one. But the purpose of this paper has been to suggest differently. The KBFS in 1996 is not what it was in 1986, nor what it will be in 2006 or 2056. The present synthesis is a personal and collegial process of searching, reflection, dialogue and winnowing. It is a provisional structure that emerges from a shared understanding of the

current state of development of FS. Naturally, it is also limited by the present state of our ignorance. Yet it brings a new level of definition and clarity to FS which, as noted, will facilitate further theoretical and applied developments.

I have tried to characterise some of the key components of the KBFS as they appear in the late 1990s and also to identify some of the processes that will bring about change and evolution in the future. In so doing I have depicted a young discipline searching for a necessary grounding and definition of its *raison d'être*, and also identified some of the gaps and inconsistencies. Following de Jouvenel, for me the field faces two major challenges. The first is its long-standing and arguably too-close association with the existing centres and instruments of social and technical power - namely large corporations, scientific research institutes and government departments, including the military. Such associations are not necessarily 'wrong' because the implementation of foresight is a structural necessity for all organisations. Yet critical futures study suggests that placing FS exclusively or predominantly at the service of dominant social and technical interests may be ethically and pragmatically unhelpful in the long run if it perpetuates a one-sided worldview and a continuing slide toward dystopian futures.⁴³ Thus mainstream futurists may need to explore the *transformative* possibilities of working with the already-powerful. Such work should also be balanced by more socially critical, empowering approaches, particularly with communities, the marginalised and mainstream education. The latter, on the whole, is still driven by the past toward problematic business-as-usual futures.⁴⁴

The other challenge is the continuing dynamic expansion of a shallow, but powerful, hegemonic Western influence throughout the world which all-too-often involves the stifling and extinction of non-Western ways of knowing and being. It is not mere 'political correctness' to draw attention to this trend, because the implications affect us all in the ways outlined. However, if the progressive trends that I have identified within FS continue to operate, then a combination of critique, innovation, the emergence of new voices and acts of grand synthesis will help to move FS toward a more universal and action-oriented phase.

Human societies developed out of a context that is genuinely and radically different from the world picture before us in the early 21st century. But they have not yet come to grips with the significance of the transformations in progress or those clearly in view. The continued attempt to move into this challenging future on the basis of ignorance, drift, fatalism and denial cannot but end in disaster on an unprecedented scale. It is this insight, perhaps, as well as the positive aspirations of many people all over the world, that has stimulated the emergence of futures studies. It now needs to become a much more widely accepted body of knowledge and be implemented in a thousand different ways in every culture.

If the *Knowledge Base of Futures Studies* can help to support and sustain this process it will have served its purpose. It is, after all, a means toward this end, not an end in itself.

Appendix

Summary of Main Sections of Volumes 1 - 3 of the Knowledge Base of Futures Studies, 1996

Volume 1: Foundations

Part 1: Origins

Part 2: Futures Concepts and Metaphors

Part 3: The Futures Literature
Part 4: The Foundations of Futures Studies

Volume 2: Organisations, Practices, Products

Part 1: Futures Organisations
Part 2: Futures Methods and Tools
Part 3: Images and Imaging Processes
Part 4: Social Innovations and Futures

Volume 3: Directions and Outlooks

Part 1: New Directions in Futures Thinking
Part 2: The Outlook for the New Millennium
Part 3: The Long View

Volumes 1 and 2 clearly bear a close resemblance to the original model given in Figure 1, above. However, 'origins' is a new element in volume 1, as is the section on 'foundations'. Volume 3 is clearly new in terms of components of the KBFS. It emerged as I saw how the work of many futures writers was oriented toward the themes of developments in FS itself, the views ahead produced by FS and, finally, the emergence of longer-term perspectives. Volume 4, edited by Sohail Inayatullah, emerged later. It provides some 110 profiles of Futures practitioners. It was first published by Foresight International on the CD-ROM of KBFS in 2000. The latter contains all four volumes which are fully revised and up-dated from the print original.

Notes and References

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Note

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