Universities as Institutions of Foresight

Richard A. Slaughter*
Futures Study Centre, Australia

One way to reconceive of universities is to see them as potential Institutions of Foresight (IOFs). For this to occur they will need to draw on the field of Futures Studies (FS) as a substantive realm of enquiry. The paper outlines a rationale for this development, considers the foundations of critical futures studies. It then considers how critical futures studies were implemented at one Australian university and suggests that the methodologies of environmental scanning and strategic foresight will be applied more widely. The paper concludes with a brief account of practical strategies that universities could employ to move in this direction.

Keywords: institutions of foresight, critical futures, environmental scanning, strategic foresight, implementation strategies

* Futures Study Centre, PO Box 2390, Kew, Victoria 3101, Australia.Tel: 03 9853 4757 Fax: 03 9853 6380 Email: fsc@alexia.net.au, Web site: http://www.futures.austbus.com

Introduction

The model of the hierarchical, exclusive, place-based university which flourished for several hundred years is in decline. While this model successfully resisted many past challenges and assaults, the present range of deconstructive and reconstructive forces flowing around and through it are historically unprecedented. These forces are undermining the 'classical' university and will re-shape it in unpredictable ways. This paper explores the notion that any or all of the new models can embody new options, one of which is to reconceive universities as Institutions of Foresight (IOFs).[1]

Historically, universities were repositories of past knowledge which had emerged from the monasteries and the long age of medieval scholasticism. They continued as repositories, knowledge banks, even as successive scientific and industrial revolutions transformed them into research institutions seeking new knowledge and understanding. So their libraries became great storehouses of the accumulated work of generations. But at no point did the university engage with the future as a substantive field of enquiry. While, from the mid-20th century on, a number of centres and departments of Futures Studies (FS) were created, those in charge of the universities continued to operate them very much on the traditional basis of the 'push' of the past and the demands of the short-term present.

This paper suggests that universities of the 3rd millennium, however conceived, and whatever their cultural identities and missions, can discard the 'temporal chauvinism' of the past and re-focus their efforts *as institutions* on creating and implementing the forward view. The pattern of the paper is therefore as follows. First, I suggest that 'the future' is a highly significant realm of human understanding, knowledge and action. I then outline aspects of critical futures studies and research, and show how they were taken up and implemented in one university. Next I describe two specific ways that the knowledge created within an advanced futures discourse is made practical and applied to real-world concerns - environmental scanning and strategic foresight. The penultimate section attempts to bring the whole argument to closure by re-conceiving future universities as IOFs. Finally, I consider some of the specific strategies that can be used to bring this about. Overall, the paper suggests that there are powerful historical imperatives that can be engaged to enable a shift of emphasis from the past and toward the emerging future. It is here that universities can make new and substantial contributions to economic reform, social harmony and well-being.

Futures Studies as Substantive Enquiry

To most people 'the future' is an abstraction, an empty box. Standing unconsciously within an empiricist frame, even highly educated people will ask questions like 'if it doesn't exist, how can you study it?'; or 'can Futurists predict the future?' Such questions are more revealing of the questioner than of FS because they display common unexamined assumptions. The fact is that, yes, the future does exist: it is a profoundly vital component of the present (however defined) or, more fundamentally, a principle of present action, present being. But, no, the future cannot be predicted other than in trivial ways. It can be understood, explored, mapped and created, but not predicted. This is because human beings are agents of history and their freedom of action means that the future cannot, in principle, ever be pre-determined.

It is not difficult to show in theory, practice and also experientially that this domain that we call 'the future' is not an abstraction, not an 'empty box' and not without a host of immediate implications and applications across the board. The future is important to people because it serves to support and enable the entire spectrum of their hopes and fears, their plans, purposes, goals and intentions throughout their lives. Remove these and you don't have people, you have robots. The future is important to organisations because if they don't take it into account the powerful forces it contains will undermine them and consign them to history. The future is important to human cultures and societies because the success of the industrial period has progressively undermined the capacity of the planet to support life and thrown up historically new realities and dilemmas that cannot be resolved by fatalistic 'wait and see' responses. The future is important to universities not least because it provides principles and practices that are largely absent from present systems and structures, but which hold out numerous options for development and renewal.

Far from being a fad, a fallacy or a mere perspective, FS actually represents an historic and paradigmatic turning point in the production and use of knowledge. It provides the tools, the symbolic and organisational 'software', for human beings to grasp their historical predicament, respond to it and to move on to new stages of civilised life. In other words, it is a *sine qua non* of a livable future. While not everyone will need to become an official paid-up Futurist, everyone does need, and will need, the understandings, skills and competencies that emerge from the field. Properly understood, FS provides an evolving view of the 'big picture' from a number of viewpoints and at a number of levels of analysis. In my view, mastering the forward view - that is, creating it, sustaining it and using it effectively - is perhaps the most significant goal that any organisation can pursue.

In some ways universities are uniquely suited to embrace FS and the latter is grounded in ways that make it far stronger, more useful and more durable than is yet widely realised. As such it is clearly an emerging discipline.[2] The next quarter century will see it permeate all relevant fields and support the development of a wide range of emerging futures professions.

Foundations of Critical Futures Studies

It is useful to begin with an overview of this emerging tradition within the wider arena of advanced futures work because it is exactly the kind of enterprise that (a) by its nature 'belongs' in university contexts and (b) as is made clear below, will, over time, have profound impacts.

The term 'critical' is often misunderstood, particularly in the USA. However, it does not simply mean 'to criticise'. Nor does it signify a negative or derivative stance. Rather, it signifies a range of methods and tools through which we may look 'beneath the surface' of social reality in order to realise the full potential of futures work.[3] Critical Futures Study (CFS) recognises the *partiality* of traditions, cognitive frameworks and ways of knowing. It is therefore possible to problematise aspects of the existing social and economic order and to explore some of their contradictions. Why is this is a constructive enterprise?

An unproblematic status quo is one which is accepted without question; one which embodies certain quasi-transcendental goals which are to be progressively realised now and in the future. Such goals could include 'health, wealth and prosperity for all humankind.' Others might be 'racial equality', 'steady growth of GNP' and 'peaceful international relations.' These all sound very attractive. But, given the real substantive character of ideologies, assumptions, systems of exploitation, repression and destruction now in place, they are not realisable. Like advertisements for women's fashions or impossibly perfect holidays they have little substance.

Regardless of its very many impressive technical achievements, it is an unfortunate fact that late industrial civilisation has become the most rapacious, the most narrowly anthropocentric, humanly and environmentally destructive system yet seen upon the earth. It presides over numerous wars, the repressive exploitation of many Third World populations (and their underprivileged equivalents in Western countries) and the implacable destruction of the world's life-support systems. Given this context, conventional sanguine views of the future have a flat, unconvincing and, indeed, blatantly spurious quality. In contrast to the common default assumptions of mainstream business and commerce,

the standard Western worldview, far from leading to universal peace and prosperity, actually leads directly toward the abyss. It holds out no possibility whatever of sustainable human futures. Hence, in the extraordinary conditions of the late 20th century, business-as-usual outlooks should not be passively followed. It is vital to problematise and question them at the most profound levels. Such uncomfortable truths are overlooked and defocussed within the bureaucratic and administrative discourses of dominant institutions - including universities - which, on the whole, are locked into short-term thinking and commonly preoccupied with industrial-era priorities such as those of status, power and control.

Hence it is vital to look in depth at this culture and ask some penetrating questions. This is exactly what Critical Futures Study attempts to do. Calling the bluff of anodyne views of futures (or overly negative ones) helps us to isolate aspects of our present culture and way of life which urgently require critical attention. No one should doubt that this is a responsible and constructive task.

The point is so central it is worth emphasising: if it were *not* possible to interrogate the received wisdom of industrialised cultures, then we would most certainly be set on an irreversible path toward global catastrophe. If we were *not* able to understand our situation and act with informed foresight to avert the worst dangers, we would be committed to social learning by the crudest of experiences. We would have to experience catastrophe in order to prevent it! This is clearly unacceptable. The price of crisis learning becomes too great in an over-stressed and endangered world.[4] Critical futures study therefore aligns with other critical/interpretive initiatives to explore the possibility of productive discourse about the character, assumptions and likely directions embedded within the dominant culture, as well as some lying beyond it.[5] Some key propositions of this approach are given below.

1. Discourse is not neutral. It is grounded in particular traditions and speech communities which cannot, by definition, be 'objective'. Intersubjectivity is universal but only partly rational.
2. It is helpful to adopt a reflexive posture; that is, one in which the observer does not simply observe (speak, act etc.) but is aware of the active, shaping character of these processes.
3. A presumption is made in favour of what Habermas called 'the human emancipatory interest;' or, simply, the fundamental interest of all persons in freedom, self-constitution and unconstrained conditions of life.
4. It is suggested that 'progress' is no longer a term which can be used without irony. It has much less to do with tools, techniques and the external conditions of life than with (a) understanding the breakdown of the 'industrial'

synthesis at the epistemological level and (b) recovering the ability to discern a basis for qualitatively different futures.

5. Technologies are not regarded merely as neutral tools but as cultural processes embodying specific ideological and social interests. The most notable features of technologies are often invisible and intangible (which is why they are overlooked by empiricist approaches).
6. Stories are regarded as powerful explanatory devices. They are not 'mere fiction' because they model human reality in novel and useful ways. They can therefore be used to explore some aspects of human futures in ways not accessible to reason, analysis or the techniques of futures research (such as forecasting).
7. There is an explicit focus on *the negotiation of meanings* (such as work, leisure, defence, health etc.). This gives access to some of the most important shaping processes involved in social and cultural change, including those associated with cultural editing.[6]

The origins of these propositions lie in a number of related fields. They include the following.

1. The interpretative perspective, itself emerging from critical practice, hermeneutics, the analysis of discourse and semiotics.
2. The sociology of science and technology: science as a social product, technology as cultural text.
3. The critical theory of society: cognitive interests, Habermas' theory of communicative action etc. Foucault's analysis of power.
4. Speculative writing: stories which comment with awareness on past, present and a wide range of futures.
5. Environmental scanning and strategic planning: techniques of futures research applied in organisations.
6. The emerging perspective of post-postmodernism: some forms of rational knowledge are over-valued; there are deeper, multicultural and perennial sources available which provide access to 'other ways of knowing'. [7]

This brief account only covers one of the contemporary lines of development within FS. It should also be seen in the context of others. For example, a masterly essay by Jay Ogilvy called 'Futures Studies and the human sciences: the case for normative scenarios' elaborates the perspective upon which some of the above account is based. [8] He demonstrates with great skill and clarity how FS should not be 'knocking on the door' seeking academic approval, so much as be seen as the fulfilment and culmination of certain key developments across the entire humanities. A different, but equally well-grounded, approach is provided by Wendell Bell in his two-volume opus, *The Foundations of Futures Studies*. Here he sets out a detailed account of the origins and purposes of FS,

its assumptions, methods and an epistemology based on 'critical realism'. For Bell, FS is a social science with a great deal to offer. Volume Two considers questions of values and the search for the 'good society'. Overall, it is a welcome contribution to the grounding of FS in durable theories, perspectives and practices. [9] Beyond this are a number of writers such as Nandy, Sardar and Inayatullah who add a range of multicultural perspectives, thus greatly enriching the discipline and the applications that flow from it. [10] These cultural and symbolic resources provide futures study and research with the kind of foundations necessary for any viable discipline.

Critical Futures Study and Research at the Tertiary Level

FS has been taught successfully in a number of universities around the world for over 25 years. But most universities have been very slow to take it up and apply it. My own experience in three universities in the UK and Australia suggests that students find it a very attractive option, but that university administrations remain largely unaware either of its academic standing or its many applications in, for example, business and industry. Within education systems I have seen a vast, but latent, demand on the part of practitioners everywhere. The demand is latent due to a 'threshold problem'. That is, in order to find out what FS offers, people need to reach the threshold of the discipline and begin to explore for themselves what lies beyond it. Unfortunately, there are too few places where tertiary courses are available, so too few people get the opportunity.

However, the failure of universities to foster and develop FS does have real consequences because the means to do so are now flowing around them and taking other forms. They are springing into life across the internet which will soon support a range of distance offerings that may out-flank built institutions entirely. Still, the experience gained from teaching FS in conventional universities will certainly help to inform what is attempted in other media and in other contexts. The following is derived mainly from the five years I spent at the University of Melbourne, Australia, teaching a number of graduate FS units within an Institute of Education. [11]

Critical futures study can be defined as *the application of critical futures concepts, ideas, theories to futures problems*. Teaching it is first and foremost a matter of providing an induction into the conceptual and methodological aspects of a futures discourse. It is about helping students to learn the language, engage with the literature, clarify understandings and join a global conversation with peers. The outline syllabus for an introductory post-graduate course I offered

on critical futures studies included elements such as: an introduction to the futures field, building blocks of the approach, case studies, analysis of the industrial worldview, cultural innovation and the recovery of meaning, imaging futures, and futures study in education.

Specific foci for critical futures study are many and varied. The courses I offered touched on themes such as the following:

* critical analysis of discourse and ideological interests;
* the critique of worldview assumptions and practices;
* the reconceptualisation of 'world problems';
* analysis of person/person, person/nature and person/machine relations;
* dealing with fears and concerns about futures; and
* the design and implementation of futures curricula.

From even this brief outline, Critical Futures Study is clearly seen as *a scholarly and applied activity*. In my view it is not standard social science (which I take to be past and present oriented) and it certainly does not search for laws (which are inapplicable in the futures domain). As noted, it is certainly not concerned with prediction, nor even forecasting (though it may use, or refer to, forecasts, trends and the like). It has nothing to do with the so-called 'futures market', and nothing whatsoever to do with crystal balls and the latest commentaries on Nostradamus. Such activities belong to vastly different traditions.

Rather, CFS seeks to provide a critical purchase on our historical predicament. It attempts to develop and refine tools of understanding that, on the one hand, reveal processes of cultural formation, cultural editing and, on the other, reveal options for intervention and choice. It seems to me that when this work is successful it has a number of outcomes: a new (or renewed) ability to diagnose 'where we are' historically, to clarify what is at stake, to reconceptualise the 'global problematique' and to re-direct human effort through self-constitution and cultural innovation. In educational contexts these outcomes mean that the most significant defects in existing systems can be overcome: teaching and learning can be re-connected to 'the big picture', the wider world, the actual social and personal prospects with which the young are faced.

In this view, CFS is not 'owned' by a professional elite, though it is certainly aided by practitioners and futures organisations. It is, both a cultural formation (because it incorporates some elements of the futures-related social innovation movements) and an academic discipline. However, the academic 'backbone' is essential: if FS could not satisfy the very necessary criteria of substance and quality that apply at the highest levels of enquiry we could not

expect it to be taken seriously elsewhere. Hence, CFS flourishes where it has access to the skills and other resources (such as libraries, researchers and communications systems) that constitute the normal infrastructure of scholarship - in other words within universities. As a new discipline which questions existing paradigms and historically-validated knowledge formations, it also requires political and organisational skills within organisations. In addition, a range of humanistic competencies are expressed in futures workshops and other facilitative milieux where people are actively engaged in futures visioning, or the design and implementation of social and organisational innovations. [12]

In summary, Critical Futures Study combines rational intelligence with intuitive and visionary abilities to provide a forward-looking context in which some of the 'big questions' can be posed and answered. 'Where are we going? How do we get there? What problems need to be solved? And why take this path rather than another?' As noted, such questions tend to be obscured in most fields of enquiry, but they are central to FS and vital to the well-being of society. They go well beyond the questions asked in related fields such as history, environmental studies, cultural studies and sociology. So the emergence of FS can be seen as a widely-felt response to the deepest human and cultural needs of our time.

Critical Futures Research emerges from the above. A working definition would perhaps see it as *the attempt to generate new knowledge about the constitution of human futures*. Obviously, such knowledge cannot be limited to particular domains or cultures. It will routinely cross existing disciplinary boundaries and often challenge settled norms and procedures. Like critical futures studies, this approach to research differs from futures research *per se* in that it is not primarily concerned with using and applying the standard methodologies (such as scenarios, matrices, Delphi and the like). Rather, these are utilised sparingly and more commonly seen as part of the subject matter. Critical futures research has a number of characteristic foci which include the following:

* research into the social construction of temporality;
* the formation, negotiation and significance of images of futures;
* the clarification of social learning processes and the application of social inventions;
* the evolution of post-postmodern outlooks and worldviews;
* the re-formulation and re-presentation of knowledge for global and futures-oriented uses;
* the development of an ethical basis for acknowledging responsibilities to future generations; and
* the study and implementation of foresight.

While, as noted, critical futures studies and research cannot be completely separated, it can be seen that the latter assumes a mastery of the former and is applied to more extended and demanding areas. For example, while critical futures studies may merely survey and/or critique young peoples' fears about futures, critical futures research moves on to consider *the grounds of systemic solutions within a renewed worldview and culture.* These are demanding areas and they require a high level of intellectual and applied capacity. So it is as well that the methodologies involved in critical futures research are thoroughly grounded in the critical/hermeneutic skills and metatheoretical perspectives outlined above. [13] They include the study of different types of futures discourses, of paradigm phenomena, of foresight contexts and the conscious design of post-postmodern worldviews. [14]

From Theory to Implementation

If the claim made above that FS is not just a minor theoretical development but a broad-spectrum and paradigmatic one with a strong role within revisioned universities, then it must be capable of being applied in ubiquitous ways. Two examples of this are environmental scanning and strategic foresight. Both illuminate some of the powerful links between academic enquiry and practical applications in other contexts such as government policy, business and consulting.

1. Environmental scanning

The global environment is constantly emitting an infinite number of 'signals' about many, many processes. No individual, no organisation, can pay attention to more than a tiny fraction of them. In addition, the early signals of potentially influential phenomena are usually small, indistinct and hard to separate from the background 'noise'. Yet the earlier they can be detected, the longer is the lead-time available to respond. So the central task of environmental scanning (ES) is to reconcile sensitivity to new and significant information with careful, systematic selection criteria. Given the turbulence of the early 21st century environment, the dysfunctions embedded in social, economic and some technical systems, and the rapid pace of change, ES promises to be one of the most widespread industries of the near future. It is quintessentially an information-, and knowledge-based activity. It will become ubiquitously necessary as organisations at all levels struggle to 'find their feet' amidst the turbulence and create viable strategies for moving forward.

There are human and technical aspects to high-quality ES. The human side is primary because the skills involved demand high-order cognitive skills.

This is where futures work based on humanistic, critical and cultural sources comes into its own. From this perspective it is understood that all cultures contain non-rational elements, that values, institutions and traditions are socially-constructed, and that language and meaning are far more subtle and open-ended than earlier scientific and empiricist views allowed. So to carry out ES well requires an in-depth immersion in cultural understanding and the humanities. In this view, *the most productive insights about the emerging future are less available through standard methodologies such as trend analysis and forecasting than from immersion in a high-quality futures discourse and the subsequent development of reflexivity, judgement and discrimination.*

That said, the technical side of ES plays a significant supporting role. One of the earliest tasks for an organisation setting up an ES system is to create its own particular 'scanning frame'. This is a device for paring away 99.99% of reality in order to focus on the signals, the processes, that have a direct bearing on the present and future functioning of the organisation. The scanning frame acts as a dynamic filter to screen out unwanted material. But, in so doing, it may also miss new and significant information. Hence the frame must be constantly re-assessed and revised to take account of the new, the novel, the 'lone signal' that may herald entirely novel phenomena. Entire books have been written on 'how to set up an ES system' within an organisation.[15] They contain all the basic knowledge needed: the key purposes, the operational requirements, the information systems needed and the uses to which the products of ES may be put by decision-makers. These technical and organisational issues must be resolved on a case-by-case basis. There is no one 'right' way to set up an effective ES system.

Overall, it seems to me that high-quality environmental scanning will necessarily become a core competence within a wide range of organisations. The informal, CEO-led, ES of the past which depended solely on a personal, idiosyncratic, reading of the external environment is now as useful as a paper hat in a hurricane. The torrent of change we are all immersed in will certainly overturn many industrial era assumptions and the organisations based upon them. We can already see this happening with schools, government departments and many, many businesses. In each case the imperatives operating within organisations are increasingly 'out of sync' with those of the wider world. So, like the human capacity for foresight in general, ES is a necessary innovation which serves to protect from anticipated dangers and also alert us to whole new areas of opportunity.

2. Strategic foresight

Strategic foresight (SF) is the ability to create and maintain a high-quality,

coherent and functional forward view and to use the insights arising in organisationally useful ways; for example: to detect adverse conditions, guide policy, shape strategy; to explore new markets, products and services. It represents a fusion of futures methods with those of strategic management. As indicated above, most organisations operate primarily on the basis of priorities and principles laid down in the past, within a taken-for-granted worldview. They modify their underlying past-orientation with inputs from the current environment such as market information, economic signals and government regulations. But few attempt to bring these factors from the past and present into a coherent relationship with the forward view.

Strategic foresight is needed for a number of reasons. At the broadest, or 'macro' level, SF provides a number of ways of coming to grips with what I term the 'civilisational challenge'. That is, the exhaustion of aspects of the Western worldview and the industrial ideology that went with it. Though essentially superseded, this ideology remains strong. It includes such elements such as: the denial of limits, the single-minded pursuit of material (economic) growth, the commodification of human needs, the reduction of natural entities to the status of mere 'resources', exploitive trade practices and future-discounting. Such elements have contributed to what has been termed the industrial 'flatland' which, in essence, is an overly empirical, hence 'thin' and eventually self-defeating, view of the world. [16] As noted above, my own reading of the forward view suggests that the continuation of 'flatland' leads inexorably to a world that no sane person would want to live in, much less pass on to their children. It is a world that is impoverished, mined-out, polluted, stripped of (non-human) life and overwhelmed by increasingly powerful technologies. [17] Strategic foresight provides a way out of this cultural trap. It does so by helping organisations to grasp some of the major 'big picture' concerns about human purposes, cultural evolution and sustainability. Since the wider implications of such concerns lie 'in the future', they have been glossed over by mainstream economists and de-focused by conventional empiricist, short-term, bottom-line thinking. But SF brings them directly into the decision-making arena.

Second, strategic foresight is useful to organisational policy and practice on a day-to-day basis. As noted, environmental scanning can alert an organisation to 'signals' in its operating environment that herald challenges to its business, new opportunities and the identification of new products and services. Beyond this, the use of futures methods such as Delphic surveys, visioning and scenario planning can provide a range of high quality insights into the near-future environment. Armed with this 'foreknowledge' a variety of strategies can be explored under different assumptions and conditions. Hence,

reaction time is reduced. Decisions can be made in a broader context and with greater confidence. The near-term future becomes integrated into the immediate operating environment.

Third, strategic foresight can be developed to the point where it opens out what Hamil and Prahalad call 'future competitive space'. [18] This means that organisations do not have to wait for the promptings of competitors or the mythical call of 'market demand'. Instead they can decide what they want to do and then put in place the means to achieve it. This sounds unexceptional until it is realised that the forward view contains many novel and unconventional possibilities. It is only by giving that view due attention that the latter can be understood or recognised. Here are insights into new industries, new ways of solving old problems, new sources of impact-free wealth-creation, the grounds of new business and civil cultures. Clearly, the forward view is a significant resource which can contribute to management and strategy in a number of ways.

In both of these cases the focus is clearly not just on technical issues. Rather, *these examples are representative of the wide range of emerging futures-oriented knowledge-based professions that require the development of high level human cognitive capacity, ethical judgement, discrimination, insight and in-depth understanding of complex issues and systems.*

The development of these high-level human abilities should be an urgent priority within universities. They constitute a new disciplinary platform and opportunity for futures practitioners who are themselves willing to put in the time and effort to master new forms of theory, discourse and practice. In other words, the skills of Critical Futures Studies and Critical Futures Research have ceased to be esoteric and have finally become practical. As such they will be increasingly sought not only in schools and universities but also in government departments, businesses and, indeed, all organisations that wish to weather the turbulence that so clearly lies ahead. [19]

Universities as Institutions of Foresight

Institutions of foresight (IOFs) are purpose-built organisations that focus on some aspect of the near-future environment. Depending on how they are defined, there are several hundred of them around the world. They include futures research organisations, think-tanks, strategic planning units, public policy bodies and a wide variety of NGOs. In a survey of IOFs I found that they carried out tasks such as the following.

1. *Raising issues of common concern* that may be overlooked in the conventional

short-term view. EG., peace, environmental stability, inter-generational ethics, implications of new, and expected, technical developments.

2. *Highlighting dangers, alternatives and choices* that need to be considered before they become urgent.
3. *Publicising the emerging picture of the near-term future* in order to involve the public and contribute to present-day decision-making.
4. *Contributing to a body of knowledge* about foresight and the macro-processes of continuity and change that frame the future.
5. *Identifying the dynamics and policy implications of the transition to sustainability.*
6. *Helping to identify aspects of a new world order* so as to place these on the global political agenda.
7. *Facilitating the development and application of social innovations.*
8. *Helping people to deal with fears and become genuinely empowered* to participate in creating the future.
9. *Helping organisations to evolve* in appropriate ways.
10. *Providing institutional shelters* for innovative futures work which, perhaps, could not easily be carried out elsewhere. [20]

These contributions help in many practical ways to initiate and support the crucial shifts of perception, policy and practice which, in no small way, form the pivot upon which this over-heated and over-extended global 'megaculture' now turns. As such they are directly relevant to the work, the mission and the self-understanding of universities.

As noted, at present most universities are preoccupied with the demands of the present - particularly issues of funding, equity and technology. They are subject to government regulations, to budgetary restrictions, to developments in communications technologies and to numerous demands from many groups including students and business. I do not want to suggest that these difficulties are easily resolved. However, this chapter has advanced two key propositions. The first is that humankind faces an unprecedented civilisational challenge. The second is that universities are one of the main places where that challenge needs to be understood and dealt with. Such priorities and concerns are not common in academia. Yet the connection was clearly established in a rare 1997 statement by the Vice Chancellor of the University of Canberra, Australia. In part, he wrote that:

> *It seems to me that humanity may have only two generations left in which to sort out how to modify the impact of the human species on the planet. If it does not learn how to do that, then the world is likely to experience a catastrophe even more severe than that which followed the collapse of the Roman Empire. Compared with 1500 years ago, we do know in some detail what is happening*

and we know at last some of what needs to be done. Moreover, we understand that where we do not know something, we can set about finding it out.

He then added:

The principal institution in humanity's race to save itself, if we set aside enlightened governments, is the modern university. [21]

Within the university sector, such statements can be likened to the 'shadow unconscious' of human psychology in that they represent repressed knowledge, knowledge that powerfully affects day-to-day life, but which remains hidden. On the other hand, it also shows that the suggestions put forward here are not beyond the grasp of some university leaders.

Most universities have mission statements which speak in generalities about their wider role. For example, one of the University of Melbourne's guiding values is that of a 'mission of leadership in the development of the community.'[22] Properly understood, and along with the pursuit of scholarship, research and teaching, this is a long-term project stretching over many decades. It is not limited by short-term economic thinking and myopic electoral horizons. However the expression of such values means very little unless the intellectual and applied disciplines of FS as discussed here are fully employed in pursuit of the task.

Perhaps, in the university context, the most productive interpretation of 'leadership' is not one that seeks institutional advantage over others. Rather, it can be taken to imply the adoption of a strategic and forward-looking view. Moreover, many of the individuals who are at 'the cutting edge' of their professions work in universities. They participate in professional and cultural networks which span the planet and though whose channels flow the most contemporary, up-to-date information and knowledge. This knowledge, expertise and organisation represents a very significant cultural resource which can and should be employed in elaborating the forward view and responding to it. In other words, when the appropriate organisational adjustments are made, universities will be well-placed to engage in foresight work.

At present the impediments include:

* misunderstandings and myths about the nature and status of futures as a field of enquiry;
* lack of awareness of the structural necessity of foresight;
* a 'frozen' map of knowledge with exclusive specialisations and strong boundary-maintenance between some disciplines;
* lack of interest in, and support for inter-disciplinary work; and

* a declining capacity to innovate in a stressed, highly-competitive economic climate;

How can these impediments be overcome?

Practical Arrangements for University Foresight

Developing foresight within universities is not primarily a question of finding new resources. Rather, it depends upon *shifts of perception* and, following this, a fairly straightforward re-direction of human effort into well-understood environmental scanning and strategic planning procedures. One of the latter is the Futurescan method which has been taken up in several countries and applied to tertiary institutions in Australia. (Table 1) [23] Secondly, it is not reasonable to expect universities to carry all the burdens of innovation on their own. A useful strategy is to seek outside support from government, business and industry for the establishment of foresight contexts and for the further development of specialised information networks. There is sound empirical evidence that a major element in Japan's earlier economic success partly stemmed precisely this type of arrangement.[24] The point was also re-iterated at a colloquium on *Futures for Australia and the Pacific* held during late 1989. [25]

Table 1

Main Stages of the Futurescan Process

1. Preparation
2. Environmental scanning workshop
3. Cross impact analysis and report
4. Strategic options workshop
5. Conclusions and follow-up work

Models of good institutional foresight work certainly exist around the world. They need to be studied so that optimum institutional arrangements can be designed and implemented. So it is vital to ensure that the necessary R&D is undertaken through developmental research projects. Finally, it should not be forgotten that there is a need to carry the debate about foresight into the public arena. In part this means stating, and stating clearly, that many of our cultural assumptions, and the activities they give rise to, are unsustainable in the long term. They need to be continuously re-assessed and revised in the light of new knowledge and understanding.[26]

Here, in summary, are some of the strategies that can be used by universi-

ties to help transform them into IOFs.

Re-framing institutional vision and mission

Vision-building within universities can usefully switch the focus from past to future and help enable them to take on new purposes and functions. Within this broader context, elements of the mission can be re-defined so as to include some of the issues and themes mentioned above. Among the many alternatives open to them, universities can choose to be socially innovative and culturally progressive.

Using foresight methods

Universities should be primary locations for further developing, evaluating and revising all the main foresight methodologies. Some, such as Delphi, scenarios, forecasting have been in use for some time. Others such as environmental scanning, strategic foresight and layered causal analysis are relatively new. Those using such methods commercially seldom have the time or opportunity to move beyond accepted models and formulations.

Infusing futures concepts, tools and methods throughout university curricula

More free-standing departments of foresight and futures studies are needed. They are the seedbeds of the profession, without which it would wither and die. There is a parallel need and value in encouraging the use of futures concepts, tools and methods across the entire range of university departments and courses. Since FS and foresight constitute a true meta-discipline, each has applications in nearly every field of knowledge and enquiry. The university is an appropriate place within which to facilitate this rapprochement and to provide support for teachers and scholars in all fields.

Developing networks of capability

As noted above, universities now contain, and will continue to contain, globally-connected scholars, researchers, teachers, critics etc. with leading-edge insights about every field of endeavour. In some ways, one of the greatest challenges to universities of the 3rd millennium is to find ways to harness this human resource for new purposes. To consciously and purposefully develop 'networks of capability' around some of the great questions and dilemmas of our time would be a very significant step forward in the application of academic knowledge to real human needs.

Making the forward view accessible to the wider public

Finally, developing the various aspects of the forward view should not be seen as an isolated and esoteric exercise. The insights so gleaned should be used to actively inform existing debates and to communicate with the wider public. For example, the debate on the human genome project is well started. But that on the social and ecological implications of nanotechnology has barely touched public awareness. The work carried out within universities should be both accessible to the general public and available for their further use.

If strategies such as these are pursued with energy and determination then I think it likely that the newly future-focused universities would not only thrive academically, they would also discover new sources of social legitimation and support.

Conclusion

This paper has argued that universities can and should be regarded as potential Institutions of Foresight. As part of that process Futures Studies in general, and Critical Futures Studies in particular, are true disciplines with multiple uses and applications. Futures work of the kind outlined here belongs in universities in part because it taps deeper sources of insight and knowledge than the still-dominant empiricist American tradition and, in so doing, provides access to a range of powerful new tools and options. If this is correct then we will witness the further emergence of FS onto the world stage in both practical and applied ways. This would clearly enhance the prospects for humankind to weather the storms ahead and move on to a truly post-post industrial, or post-postmodern, civilisation.

The key institutions of a prudent and responsible society will develop a capacity to engage in foresight work because they understand that there are many futures-related choices to be made. Avoiding those choices simply cancels out the possibility of making well-grounded decisions or shifts the responsibility elsewhere. Hence for universities to begin to think of themselves as 'Institutions of Foresight' would be a significant and long overdue step forward. It would be a substantial contribution to the well-being of present and future generations.

Notes

1. The starting point for this chapter is a short essay: R. Slaughter, Universities as Institutions of Foresight, which was published in *Compass 90*, the Handbook of

Monash University Postgraduate Association, 1990, pp 23-26.

2. For an up-to-date summary see, W. Bell, Futures Studies Come of Age: Where are We Now and Where are We Going? *Futures Research Quarterly*, 13, 4, pp 37-50, Winter 1997.
3. R. Slaughter, Probing Beneath the Surface: Review of a decade's futures work, *Futures* 22, 5, 447-465, 1989.
4. L. Milbrath *Envisioning a Sustainable Society*, New York, SUNY Press, 1989.
5. J. Macy *World as Lover, World as Self*, Berkeley, California, Parallax Press, 1991.
6. Many of the concepts in this paper are explored in R. Slaughter, *Futures Concepts and Powerful Ideas*, Futures Study Centre, Melbourne, 1996. Also see, R. Slaughter, *Futures Tools and Techniques*, Futures Study Centre, Melbourne, 1995.
7. Inayatullah, Post-postmodernism, an incomplete outline. Unpublished essay.
8. J. Ogilvy, Futures studies and the human sciences: the case for normative scenarios, in R. Slaughter (ed) *New Thinking for a New Millennium*, Routledge, London, 1996, pp 26-83.
9. W. Bell, *Foundations of Futures Studies* Vols 1&2, Transaction Pubs., New Brunswick, 1997.
10. See Z. Sardar, Other Futures: Non-Western Futures in Futures Studies in R. Slaughter (ed) *The Knowledge Base of Futures Studies Vol 1: Foundations*, pp 217-133, FSC, Melbourne, 1996; S. Inayatullah, Methods and Epistemologies in Futures Studies in Ibid pp 187-204; also A. Nandy, Shamans, Savages and the Wilderness, On the Audibility of Dissent and the Future of Civilisations, *Ibid Volume 3: Directions and Outlooks*, pp 143-160.
11. See R. Slaughter, Critical futures study and research at the University of Melbourne, in R. Slaughter (ed) *Futures Research Quarterly*, 8, 4, 1992, special issue on Futures Studies and Higher Education, pp 61-82.
12. For an introduction see Zieglar, W. Envisioning the Future, *Futures* 23, 5, 516-527 1991.
13. Belsey, C. *Critical Practice*, London, Methuen, 1980 and Slaughter, R. 1989 op cit note 4.
14. Slaughter, R. *The Foresight Principle: cultural recovery in the 21st century*, Praeger (USA), Adamantine (UK), 1995.
15. See C. Choo, *Information Management for the Intelligent Organisation: the art of environmental scanning*, ASIS/Information Today, Medford NJ, 1995.
16. For a masterly critique of the 'flatland' concept, see K. Wilber, *A Brief History of Everything*, Hill of Content, Melbourne, 1996.
17. This future is powerfully evoked by D. Broderick, *The Spike: Accelerating into the Unimaginable Future*, Reed Books, Melbourne, 1997.
18. See G. Hamil & C.K. Prahalad, *Competing for the Future*, Harvard, 1994, especially chapter 4 on Competing for Industry Foresight.
19. J. Dator, *Surfing the Tsunamis of Change*, Proceedings of Futures of Construction Symposium, Espoo, Finland, 1995.
20. See R. Slaughter 1995 (note 14), chapter 7.
21. D. Aitkin, University Challenge, *The Australian* (newspaper) Weds. March 19th,

1997, p 33.
22. See the University of Melbourne Strategic Plan, 1989, p 7 (mission statement).
23. See J. Morrison, Establishing an Environmental Scanning/Forecasting System to Augment College Planning, *Planning for Higher Education*, 15, 1, 1987 pp 7-22.
24. See B. Bowonder, & T. Miyake, Technology Development and Japanese Industrial Competitiveness, *Futures* 22, 1, 1990 pp 21-45.
25. Published as Futures for Australia and the Pacific, special issue of *Futures*, 22, 3, 1990.
26. T. Barr, *Perspectives on Australia's Future*, Unpublished report to the Commission for the Future, Melbourne, 1988, p. 66.

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