

Foresight Practice in Australia: A meta-scan of practitioners and organisations



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'Creating and Sustaining Social Foresight', which is supported by the Pratt Foundation.

ABOUT THE AUSTRALIAN FORESIGHT INSTITUTE

The Australian Foresight Institute (AFI) is situated in Swinburne University of Technology, Melbourne, Australia. AFI is a specialised research and postgraduate teaching unit. It was established in 1999 to develop an innovative set of postgraduate programs and research in the area of applied foresight. Apart from supporting the University in developing its own forward-looking strategies, its main aims are to:

- provide a global resource centre for strategic foresight
- create and deliver world class professional programs
- carry out original research into the nature and uses of foresight
- focus on the implementation of foresight in organisations
- work toward the emergence of social foresight in Australia.

AFI is intensively networked around the world with leading futures/foresight organisations and practitioners. These include World Future Society and the World Futures Studies Federation.

AFI offers a nested suite of postgraduate programs. Based on coursework, the programs are offered through the Australian Graduate School of Entrepreneurship at the University.

Overall, AFI aims to set new standards internationally and to facilitate the emergence of a new generation of foresight practitioners in Australia. It offers a challenging, stimulating and innovative work environment and exceptionally productive programs for its students who come from many different types of organisations.

ABOUT THE AUTHOR

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José Maria Ramos was born in Oakland, California from Mexican ancestry. He studied comparative literature at the University of California at Irvine, specialising in Spanish, Japanese and Chinese literature and philosophy, receiving his B.A. in 1995. Between 1995–2000 he lived in Japan, Europe and Taiwan and this awakened his interest in world politics, cultures and Futures Studies. He has undertaken Futures Studies courses in Houston, Taipei and Melbourne and, for the past few years, has conducted research for the Australia Foresight Institute. José's commitment is to help in the transition toward a more sustainable, equitable society and foresight-fully creative culture. He feels this can be achieved through the advancement of Futures Studies, and in particular the emerging practice of anticipatory action learning. He now lives with his wife, DeChantal, in the state of Victoria, Australia.

COVER ART

Dr Cameron Jones

Title: InFractal Cycles We Go Round

Cover image designed by Dr. Cameron Jones, Chancellery Research Fellow, School of Mathematical Sciences. These images were generated as part of *The Molecular Media Project* that is concerned with science-driven art and design. This work is a meditation on space and time, and how events are partitioned across many different scales: real, imaginary and complex.

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CONTENTS

About the author	iv
List of Figures and Tables	viii
Acknowledgements	ix
Abbreviations	x
Executive Summary	xii
Introduction	1
The Metascanning Framework	2
Organisation of the report	4
Section One: Findings	7
Analysis and Interpretation	7
Analysis of social interests	8
Analysis of methods used by developmental stage	10
Analysis of focal domains	12
Analysis of capacitating focus	18
Analysis by organisational type	19
Analysis of foresight practices by region	23
Structural Overview	25
Section Two: Conclusions, suggestions and recommendations	29
Conclusions from the meta-scan	29
Definitions and dimensions of national foresight	30
Advancing methods and approaches	34
Building capacity in the field toward national foresight	35
Communication and diffusion of foresight	41
Conclusion	45
Appendix A: Research design and methodology	47
Interests in the practice of foresight	49
Stage theory in futures methods	51
Analysis of capacitating focus in the development of social foresight	58
Foresight by organisational type	60
Foresight by region	60
Conclusion	60

Appendix B: Survey and scanning results

Research institutes	62
University education	64
Firms/Consultancies	67
Individual practices	71
Networks	75
Not-for-profits	75
University Services	77

Notes 79**List of Figures**

Figure One: The metascanning framework	8
Figure Two: Futures methods by Wilber's Integral map	12
Figure Three: Senge and Scharmer model adapted to foresight in Australia	38
Figure Four: Three networks toward national foresight capacity	42
Figure Five: A summary of social interests in foresight work	50
Figure Six: Summary of methodological stages in foresight methods	56

List of Tables

Table One: Practices by social interest	8
Table Two: Practices by methodology	10
Table Three: Capacitating focus of practices	18
Table Four: Foresight practice by organisational type	19
Table Five: Foresight practices by region	23

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ABBREVIATIONS

AFI	Australian Foresight Institute
CLA	Causal Layered Analysis
CoF	Communities of Foresight
CSIRO	Commonwealth Scientific and Industrial Research Organisation
EIA	Emerging Issues Analysis
ES	Environmental Scanning
ICT	Information and Communication Technologies
INGO	International Non-Governmental Organisation
IoF	Institute of Foresight
NFS	National Foresight Strategy
NGO	Non-Governmental Organisation
OPEC	Organisation of Petroleum Exporting Countries
PROUT	Progressive Utilisation Theory
SME	Small and medium-sized enterprises
STEEP	Social, Technological, Economic, Environmental and Political
SWOT	Strengths, Weaknesses, Opportunities and Threats



Executive Summary

How the possible, probable, or preferred futures of Australia will unfold is a grand and encompassing question, yet a personal and important one for many. Will Australia find itself mired in regional conflicts, or forge lasting and peaceful futures globally? Will Australia ignore the limits of its environment, or find practical solutions that create conditions for long-term environmental sustainability? How will the economic system evolve to reflect issues of inequality and sustainability? These are difficult questions that are far bigger than any one person or institution, yet ignored at great peril. Who asks these kinds of questions?

There exists a discipline in Australia, and worldwide, known as Futures Studies or foresight which asks these very questions, taking a long-term view on social futures. This scan of the foresight field uncovered over fifty practitioners or organisations in Australia committed to looking into the future in a professional and rigorous way. Of these, some are marginally involved in Futures Studies or foresight, but most are deeply involved. The number, diversity, and quality of foresight practice in Australia should be a cause for optimism, but represents a largely untapped source of knowledge, wisdom and vision.

This study fits within a multi-year research project (supported by the Pratt Foundation), aimed at creating and sustaining social foresight in Australia. Facilitating the emergence of social foresight in Australia requires identifying the ‘foresight services’ that organisations provide, and to whom. If we are to lay the foundations for national foresight capacity, oriented toward common goals and better social futures, developing a deeper understanding of its practice in the Australian context is necessary. This critical review of foresight practitioners and organisations in Australia, and the methods and approaches they use, should provide a starting point for a first stage design of a National Foresight Strategy (NFS).

METHODOLOGY

Integrally informed theories and frameworks, developed by Ken Wilber, were used to analyse profiles collected through administered surveys and environmental scanning activities. In this specific application, the factors considered relevant were: the social interests behind foresight, how ‘thinking systems’ correlate with foresight methods used, the focal domain of foresight work, the capacitating focus of foresight work, how organisational type influences foresight work, and regional-spatial analysis of where foresight work is being done. From this position frameworks and theories were used based on their evaluative potentials. The broad context for interpretation is normative, with the intention of laying the basis for a robust NFS along socially progressive lines. (The method used is fully explained in *Appendix A*)

CENTRES OF GRAVITY

This scan revealed certain ‘centres of gravity’ within the field in Australia. The majority of practitioners are ‘progressive’ in their interests. That is, they are involved in research or advocacy aimed at systemic improvement, not just the narrow interests of clients. Further, the majority of practitioners use methods and approaches far beyond naïve forecasting and trend extrapolation, incorporating an understanding of systems thinking, social complexity, and in many cases, how worldviews and belief systems shape social futures. Foresight practitioners in Australia have a broad array of approaches and methods, focused primarily on structural issues (economy, technology, environment, and public policy) and to a lesser extent on cultural issues (social justice, collective images of the future, worldviews and value systems). The majority of work is done by small consultancies and private practices, but a tapestry of organisations exists and adds to the depth in the field. Finally, most practitioners and organisations are located in or around the four urban centres in Australia’s southeast: Sydney, Melbourne, Canberra and Brisbane. (Each is profiled in *Appendix B*)

CHALLENGES AND OPPORTUNITIES

This review holds as a fundamental assumption the need for Australia to develop a NFS to guide the nation and its peoples through an uncertain and potentially turbulent twenty-first century, and to help Australia be a more progressive force in the global community of nations. In this context, various challenges, whose reverse side are opportunities, were identified through this meta-scan.

1. Public understanding and knowledge of the field, in particular progressive and depth work, remains marginalised. There needs to be greater understanding of the ‘communication of foresight’, and the role of the media in promoting depth futures work.
2. There is a lack of methods and approaches which explore the role of consciousness and how socially oriented foresight develops in the individual. More energy needs to go into developing an understanding of approaches that facilitate the foresight, awareness, responsibility taking and leadership of individuals.
3. Theory and practice in the field have often developed and proceeded in isolation, impoverishing both. Drawing together the theory and practice of foresight is a precondition for strengthening the field.
4. While there is growing maturity in the use of methods, there remains a lack of understanding in institutional capacity building through larger projects, processes and structures. Greater focus needs to be put on how foresight practice is effectively institutionalised and its social legitimisation.
5. Funding progressive and ‘dis-interested’ foresight remains a challenge, due to political and economic factors. Therefore work needs to be done linking foresight with philanthropy.
6. There has only been disparate dialogue and activity concerning the development of a NFS, its meaning and scope. Hence, greater networking, coordination and collaboration needs to take place between foresight practitioners, opinion leaders and the public around the meanings, aims and process of developing national foresight capabilities.



Introduction

This review looks the practice of foresight and Futures Studies in Australia, across various domains: universities, business and industry, government, consultancies, networks and NGOs. The report aims at providing an analysis that situates practices within their social and institutional contexts, which can provide a basis for the renewal of futures tools, methods and approaches in Australia, and inform the development of a National Foresight Strategy (NFS).

This study fits within a multi-year research project, supported by the Pratt Foundation, aimed at creating and sustaining social foresight in Australia. Facilitating the emergence of social foresight in Australia requires identifying the ‘foresight services’ that organisations provide, and to whom. If we are to lay the foundations for national foresight capacity, oriented toward common goals and better social futures, developing a deeper understanding of its practice in the Australian context is necessary. This critical review of foresight practitioners and organisations in Australia, and the methods and approaches they use, should provide a starting point for a first stage design of a NFS.

THE METASCANNING FRAMEWORK

A renewed perspective on the practice of foresight in Australia isn't possible without first providing a 'map' of the practice of foresight in Australia. Therefore, the first aspect of meta-scanning is the process of scanning itself. Based on such a map, the practice of foresight in various domains can be evaluated. 'Meta' refers to context, usually 'as much context as you can imagine.'¹ In this case three broad 'meta' principles directed the research:

1. to find as many examples of foresight practice as possible
2. to use an integrally informed perspective to evaluate the findings
3. the normative aim of developing social foresight in Australia through a NFS.

The concept for 'metascanning' was initially developed by Richard Slaughter, to describe a critical and encompassing overview of available literature, resources, processes and institutions in aspects of the futures field. 'Looking for the real mega-trends', published in *Futures* in 1993, identified some of the factors included in a depth analysis of a given subject, including: personal, institutional, professional, methodological, cultural, ideological, spatial and levels of practice (pop, problem oriented, critical, and epistemological).²

In the *Foresight Principle*, published in 1995, metascanning took the form of an overview of seven prominent Institutes of Foresight (IoFs) around the world, whereby the critical perspective extended toward a more encompassing look at the institutions in the field and their practices.³

In 1999, 'A new framework for environmental scanning', saw the convergence of the work of Ken Wilber's meta-perspective toward its application in environmental scanning, a process frequently used in the futures field.⁴ Joseph Voros further developed this Integral scanning methodology in 2003 in *Reframing Environmental Scanning*.⁵ Slaughter has continued to develop the concept of metascanning in 'The rise of metascanning: methodological renewal in Futures Studies and applied foresight'.⁶

Following diffusion research methods, this scan makes the distinction between agents or disseminators of foresight as opposed to adopters of foresight.⁷ A detailed survey and analysis of the use and adoption of foresight tools and methods within the Australian Public Service, covering 120 agencies, has been conducted by Luke Naismith.⁸ Many of these users/adopters of foresight methods and approaches rely upon professional agents and disseminators of foresight, which promote the use of futures concepts, methods, projects, processes and structures, and/or its broader social legitimation and diffusion. This study focused on these change agents and pioneers in the area of foresight.

Profiles of the various practitioners and/or organisations have been constructed based on the survey or based on a scanning of websites and other literature, with a view toward developing such a map (see *Appendix B*). To address gaps in the research findings because of limited resources and the newness of the research conducted, liberal data collecting methods were used. A survey questionnaire was sent out to a variety of organisations and associations however the incompleteness of this information led to the use of web sites and other literature to fill gaps.⁹

The developmental and social theories used in this meta-scan are thus employed on a context specific basis, to provide a comprehensive analysis and understanding of the practice of foresight in Australia.¹⁰ This meta-framework looks at:

1. The social interests behind foresight work using Slaughter's distinction of pragmatic, progressive and civilisational foresight.
2. How 'thinking systems' correlate with foresight methods used, based on Don Beck's model.
3. The focal domain of foresight work using Wilber's four quadrant model.
4. The 'capacitating' quality of foresight work based on Slaughter's stage model of the development of social foresight.
5. Organisational types, and how this mediates foresight work
6. Regional-spatial analysis of where foresight work is being done and its meaning.

Integrally informed theories and frameworks were used to analyse the profiles collected. Ken Wilber is credited with first developing Integral Theory, but variations exist which have led to debate. This particular variant evolved toward the specific application of meta-scanning foresight practice in Australia with a view toward developing a NFS. In this specific application, the factors considered relevant were: the social interests behind foresight; how 'thinking systems' correlate with foresight methods used; the focal domain of foresight work; the capacitating focus of foresight work; how organisational type influences foresight work; and regional-spatial analysis of where foresight work is being done. From this position frameworks and theories were used based on their evaluative potentials.

The broad context for interpretation is normative, with the intention of laying the basis for a robust NFS along socially progressive lines. Value neutrality was not considered a valid position to work from, and such value neutrality has been critiqued by a number of writers. Because Australia faces a number of emerging issues and unprecedented

FORESIGHT PRACTICE IN AUSTRALIA

challenges in the twenty-first century, it is taken as given that there is a need for the development of socially progressive foresight in various social contexts. Wendell Bell's argument that facts and values should both be taken into account, but kept as distinct as possible and not confused, is accepted.¹¹

This scan therefore rests upon various value propositions. There are different models of evaluation, such as critical futures, Integral Futures, and critical realism, which may be more or less appropriate in different contexts. Generally, however, foresight practice should be toward the betterment of all.¹² It is noted that visions and images of the future have both winners and losers, making values in all futures work problematic.¹³ Despite this, there are values that are conducive to a more sustainable and humane futures than others, which should be critically examined and promoted.¹⁴ Contemporary values which are not sustainable, the dysfunctional 'basic assumptions of the age', should be put into question in a broader socio-historical analysis of values.¹⁵ While moral certainty is not possible, unhealthy moral relativism is not maintainable and we should articulate basic or fundamental human values.¹⁶ Values inclusivity and the appreciation of all approaches to foresight must be balanced with critically informed perspectives on co-existence and the common good.¹⁷ Overall, foresight practitioners, including the author, need to question the values of their audience and clients and should be open to having their values challenged by others.¹⁸

ORGANISATION OF THE REPORT

This report has been divided into four main sections:

- Section 1.** The findings of the report organised using the various metascanning categories, distilled through analysis and interpretation of profiles, based on survey responses and scanning.
- Section 2.** The conclusions of the report, inclusive of suggestions and recommendations in:
 - Part 1.** developing definitions and dimensions of national foresight
 - Part 2.** advancing methods and approaches
 - Part 3.** building capacity in the foresight field
 - Part 4.** enabling communication and diffusion toward social foresight capacity in Australia.

Appendix A. The research design and methodology of the report

Appendix B. Survey and scanning results compiled into a database of abstracts of:
Research institutes, University Education, Firms/Consultancies,
Independent Practitioners, Networks, Not for profits, University services

Different parts of this report will be of interest to different types of readers. For those interested in the detailed analysis of the futures field in Australia, Section One is recommended. For those interested in the conclusions drawn, their implications and associated recommendations, Section Two is recommended. For those interested in the research design and methodology, see *Appendix A*. For those who want to view the comprehensive list of organisations and practitioners included in this scan, see *Appendix B*.



Section One: Findings

ANALYSIS AND INTERPRETATION

This section aims to give a descriptive account of the results of the analysis that can lead to useful generalisations about foresight in the Australian context, and intelligently inform the development of a NFS. A total of 54 profiles were constructed, which became the basis for analysis (see *Appendix B*). These were based on the 25 survey responses received and an additional 29 practices that were identified. Figure One provides a model overview of the various analytic categories used. Generalisations made are considered provisional in nature, due to an assumed incomplete account of foresight practice in Australia and the relative newness of the analytic framework. In some cases practices could not be evaluated according to the criteria of the categories, creating variations in totals.

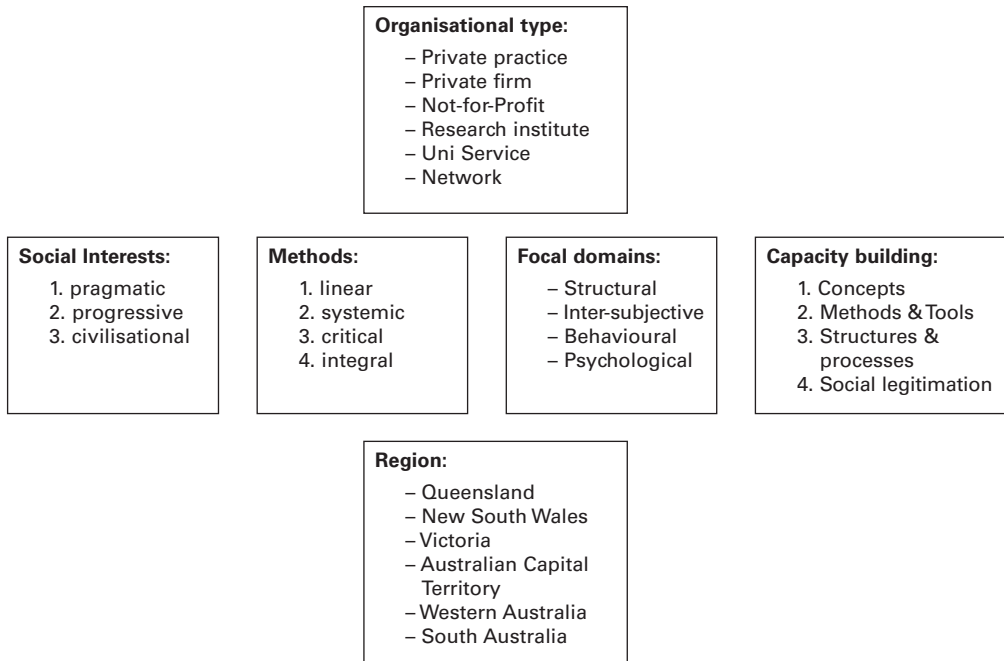


Figure One: The metascanning framework

ANALYSIS OF SOCIAL INTERESTS

‘Social interests’ is used to denote the primary interests for which practitioners work. Pragmatic interests serve to promote the futures of a specific organisation or business. Progressive interests aim at society wide improvement. While civilisational interests are inclusive of global considerations and questions surrounding the futures of humankind. (see *Appendix A*)

	Pragmatic	Progressive	Civilisational
Total	17	29	7

Table One: Practices by social interest

Table One shows a total of 17 practitioners or organisations in Australia were identified with doing pragmatic futures work. Of these 11 were firms. There was a very strong overlap with the use of systems methods (16). In addition most pragmatic practitioners

focused on the promotion of methods (14), as opposed to capacitating through broader structural foresight processes (capacity building at an institutional level), or the promotion of the foresight society wide.

There were 29 practices identified with mainly engaging in progressive futures work. These were a very broad mix of all categories, non-profits, research institutes, university education and independents alike. These also revealed a mix between the use of systems approaches and critical. They also displayed a tendency toward promoting foresight structures and processes (13), as opposed to promotion of methods (9) and concepts (5).

Finally, there were 7 practices doing civilisational level work. These were predominantly independents or small firms and used a mix between critical and Integral methods and approaches, and highly aligned with promoting social foresight capacity (3) or at least foresight processes and structures (2).

Interpretations

Disconfirming previous assumptions about the field being dominated by pragmatic interests, most foresight work seemed to be progressive in nature, with over two-thirds reflecting progressive to civilisational interests. On the one hand this might indicate the centrality of a ‘shared futures’ ethos in the field. On the other hand it might indicate why most Futures Studies and foresight has been marginalised from public view.¹⁹ This poses a fundamental dilemma: a field dominated by progressive social interests inclusive of an ‘explicit commitment to systemic improvement’ has largely failed to penetrate mainstream media and communication channels. It would seem straight-forward that work with the public good in mind would reach the public *en masse*. And yet this group of progressive futures work in Australia has yet to find such mainstream success.

The very small make-up of civilisational work in Australia would seem to indicate isolation from global issues. Seen in the light of accelerating globalisation, and the perpetuity of a range of global challenges, this small number doing civilisational work appears too small, and indicates a greater need for this type of work, and the need to link civilisational futures with national policy.

ANALYSIS OF METHODS USED BY DEVELOPMENTAL STAGE

Integral theory poses the existence of stages in cognitive and social development, which are reflected in the forty-plus year development of Futures Studies. The development of futures methods has unfolded through four identified stages: linear, systemic, critical and Integral.

Linear methods assume continuity, and are often associated with trend extrapolation, forecasting and planning – typical of the birth of Futures Studies. Systems methods incorporate more complex causal factors, non-linearity, and hence see the emergence of alternative futures thinking. Critical methods take into account the role of ideology, worldview, and paradigmatic differences in how futures are socially constructed. Finally, Integral methods aim toward transpersonal development as well as incorporating the aforementioned three stages, see Table Two.

Methodology	No. of practices
Linear	1
Systems	24
Critical	19
Integral	4

Table Two: Practices by methodology

Of the individual practitioners or organisations counted in this part of the analysis, 1 used linear methods only, 24 used systemic, 19 used critical, and 4 employed an Integral methodological approach.

Interpretations

The first question that emerges is why the one example of linear futures work accounts for a disproportionate visibility in the public eye. Linear work still is appropriate to the task of forecasting, planning and trend analysis. While this type of work remains valuable, the world has become infinitely more complex, demanding in tandem more developed approaches, such as systems and critical work. In this sense the disproportionate visibility of linear here amounts to a type of arrested development and ‘dumbing down’ of the public image of futures.

An off-hand comparison with the United States might show Australia to have a strong pool of practitioners using critical-epistemic tools and approaches, indeed as being an

innovator in this area. Assuming that the quantity and quality of futures approaches should be reflected in its social diffusion, that the nineteen or so practitioners using critical are overshadowed in public by one organisation using linear methods appears anomalous. The relative dissociation or distance of critical work from the mainstream might be due to its gravitating toward academic centres. But it still raises questions about the Australian media, or other more explanatory reasons for why such a gap exists. The critical to Integral level of work also seemed to reflect a greater overall autonomy, via individual practitioners, perhaps reflecting individuals emancipated from the demands of business survival, or who have transcended survivalist and competitive mindsets.

The predominance of firms and individual practitioners using systems methods confirmed assumptions about the correlation between private businesses and the strategic type of foresight work they provide. Based on the author's experience of foresight work, businesses largely require foresight for its strategic attributes, understanding a company's position in relation to competitors, strategic innovation, changing policy dynamics, technology, and how they are situated in a shifting industrial-economic landscape. Today's companies in emerging, yet to mature, de-regulating or transforming industries have a strong intrinsic demand for 'alternative futures' thinking. The firm is in some respects wedded to providing this type of service to companies, due to their distance from policy circles, and the need to generate income through the business and private sector. An exception to this might be firms and practitioners in Canberra, whose foresight practices are often provided to the public service. Providing systemic approaches would seem to be the centre of gravity for private firms and practitioners, and for the field as a whole.

ANALYSIS OF FOCAL DOMAINS

The following represents the methods or approaches which are being used in Australia in respect to what the methods or tools look at, i.e. ‘focal domains’ as seen through Wilber’s four quadrant matrix. No method, however, can so neatly be fitted into a taxonomy using the quadrant analysis, as nearly all methods cross boundaries. This analysis attempts to make generalisations about the predominant focal domain(s) of methods used. The results are summarised in Figure Two.

<p style="text-align: center;">Psychological</p> <p>Guided visualisation – 1 Self-assessments – 1 Images of the future – 1 Cognitive Mapping – 1 200 year present – 1 Transformational leadership – 1</p>	<p style="text-align: center;">Behavioural</p> <p>Delphi expert polling – 3</p>
<p style="text-align: center;">Inter-subjective</p> <p>CLA – 11 Visioning – 11 Participatory processes – 10 Educational methods – 5 Value systems frameworks – 3 Futures landscapes – 2 Futures wheels/concept maps – 2 Hermeneutic futures – 1 Consensus groups – 1 Focus group research – 1 Surveys – 1 Knowledge design – 1</p>	<p style="text-align: center;">Structural</p> <p>Scenarios – 21 Systems – 9 Environmental Scanning – 8 Strategic planning – 5 Trend analysis – 4 Competitive intelligence – 3 Economic/S&T forecasting – 3 Risk analysis – 2 Time lines – 2 Wind-tunneling – 1 Wildcards – 1 Cross-impact – 1</p>

Figure Two: Futures methods by Wilber’s Integral map

Structural methods

Scenarios are by far the most popular method. Over twenty practitioners or organisations cited the use of scenarios, scenario planning, writing, learning, workshopping and systems based. The reason why scenarios would be considered ‘structural’ is their traditional use of observable systemic trends, drivers and uncertainties in the formulation of alternative futures. There has also been a recent use of systems theory for scenario development,

which grew out of empirically oriented systems dynamics, although it has evolved to include value systems.²⁰ Some scenario approaches include looking at ideational shifts, scenarios based on different worldviews, or scenarios that distinguish between normative and extrapolative, which can be said to have inter-subjective qualities.²¹

Systems modelling was another popular structural futures method with nine practitioners/organisations using it. Again, although much systems thinking is based in empirical analysis and structural modelling, process modelling and simulations, soft systems, particularly that of Peter Checkland, is inclusive of worldview factors. In addition, some complex systems modelling also takes into account memetic shifts.

Environmental scanning (ES) was cited by eight practitioners/organisations. ES can be seen as a structural method because it predominantly takes into account STEEP factors (social, technological, economic, environmental, and political) and their interactions within social systems. ‘Horizon scanning’ and ‘strategic scanning’ are two possible variants on ES. Voros has posited ‘Integral scanning’, which is an all-quadrant Integral approach to exploring emerging issues.²²

Strategic planning of one sort or another was cited by five practitioners or organisations. This included resource planning, strategic thinking and strategy development. Some strategic thinking, such as the ‘mental model’ analysis relies on reflective practices within the inter-subjective domain, but most seem to be located in structural analysis and SWOT types of approaches.

Trend analysis was only cited four times. Trends would tend to be located in empirical-structural domains, as they derive from visible continuities, via statistics and analysis that aggregates, unlike emerging issues analysis which would seem to be less tied to what is observable, continuous and often uses isolated and ‘un-aggregated’ phenomena as a precursor.

Three examples of competitive intelligence, such as the use of Porter’s five forces and growth vector analysis, were found. These would seem to be structurally oriented, aimed at understanding industries and markets. In addition, three examples of economic forecasting and science and technology foresight were found. These are also predominantly empirically oriented.

Risk analysis, cited by two, would also seem to be situated within structural methods but may try to challenge assumptions (inter-subjective processes) to strengthen risk assessment.

Timelines, cited by two, because of their use of historical events, would also seem to be oriented toward objective exploration. Some, however, may use timelines as a way of challenging narratives or opening inter-generational meaning.²³

Wind tunnelling, cited by one, based on probabilities would also seem to be based on structural determinants (and could as well be seen as a simulation/modelling method).

Brainstorming discontinuities via wildcards, cited by one, by contrast, would use structural in-determinants, although this might verge into ideational in-determinants for formulating discontinuities.

Cross-impact matrix, cited by one, tries to assess the consequences of events, normally of a structural nature, but interdependencies can include behavioural and ideational shifts.

Inter-subjective methods

Eleven practitioners/organisations cited the use of Causal Layered Analysis (CLA), although there is the possibility that this has been biased by AFI's close connection with the critical futures community.²⁴ CLA's main focus as a method is to surface worldviews, culturally bound assumptions, and civilisational 'epistemes', but it incorporates policy and litany level explorations to achieve this. So it employs the observable 'litany' and structural 'policy' as a way of interrogating the inter-subjective 'worldview/myth' level.

Visioning was cited by eleven practitioners or organisations. Visioning can be situated as an inter-subjective method in that it accessed people's hopes, dreams, desires, values and principles. This may lead toward objectively oriented visions. Key as well is how visioning is framed through the facilitation process – is what is envisioned just the same cultural predispositions and assumptions rehashed? Without reflective visioning, that makes participants aware of their own values and cultural assumptions, visioning is an unconscious projection of the inter-subjective.

Participatory processes were cited by ten practitioners or organisations, and can be seen as inter-subjective in so far as they privilege communicative and meaning building processes. These included participatory action research, Open Space, strategic conversation, anticipatory action learning, search conference, future search, co-discovery conference, dialoguing and conversations, and appreciative inquiry. In addition, these processes often move outward from the inter-subjective, toward exploration of structural issues.²⁵

Educational methods were also commonly present among practitioners, although not explained in-depth. Futures education can be situated as inter-subjective insofar as it

aims to develop students' conceptual and analytical capacity to understand and be empowered in the face of futures issues and challenges, as a meaning building process.

Value Systems Frameworks was cited only three times, once as 'values clarification'. The importance of values in the conception of futures would seem to make these three examples that much more important.

Futures landscape was cited by two; it is inter-subjective in so far as it elicits purpose/mission/vision in an organisation.

Finally, futures wheels/concept maps, creative techniques (story telling, physical modelling), hermeneutic futures, consensus groups, focus group research, surveys and knowledge design also seemed to be inter-subjective futures methods.

Behavioural

The Delphi method, cited by three, can be considered behavioural insofar as it is applied to forecasting around specific events, either the consequences of a particular event (then cascading into structural level analysis) or the likelihood of an event.

Psychological

Six futures methods, each cited just once, seemed to deal with the subjective and psychological experience: guided visualisation, self-assessments, images of the future, cognitive mapping, 200 year present, and transformational leadership. Yet three of these (images of the future, cognitive mapping, 200 year present) can also be considered group processes dealing with inter-subjective dimensions of foresight.

Cross-domain methods

While most methods could be generalised into a particular focal domain, some methods could not be placed in a particular epistemological domain, and were considered methods that cross domains.

Backcasting, originally conceived as 'Apollo visioning', was cited by at least nine practitioners or organisations. It is usually used following a visioning process, to move from the new future vision back to the present to determine pathways to success. It is a method which crosses focal domains in that the pathways can entail cultural shifts, structural developments, and individuals as pioneers and leaders.

Emerging issues analysis (EIA) was cited by seven practitioners or organisations. The term, however, is a catch all phrase for a variety of types of analysis aimed at identifying emerging issues. EIA may have begun with more structurally oriented analysis, including S-curve technology tracking, and behaviourally oriented innovation-diffusion-adoption research. EIA has evolved considerably, however, to include emerging ideational shifts in artistic communities, artistic artefacts, and anomalous youth-generational shifts, for example. EIA, as previously mentioned, is not as wedded to the observable, aggregate-able, and continuous – in many instances looking across many focal domains.²⁶

Both futures triangles and macro-history seemed to be used by only a few. Futures triangle, cited by four, also combines various domains: the pull (image) of the future, the push (structural drivers) and the weight of history (tradition/cultural continuity), so it is one of the more synthetic methods. Macro-history was cited for use by four. It includes deep time analysis of ideological shifts, macro-logical resource shifts, and is inclusive of agency-structure analysis: taking into account the role of individuals in the processes of history making. It is therefore also a highly synthetic method. It requires a high level of skill; practitioners need deep cultural, historical and scientific understanding.

Progress or quality of life indicators were cited by two. These represent a re-defining and measuring of ‘progress’ to include psychological, social, cultural, and economic wellbeing. This methodology is an important emerging area of work for a period in which notions of progress are being questioned and re-evaluated.

Four other methods cited – ‘deep futures’, ‘futures management’, ‘transition facilitation’ and ‘futures cone’ – either did not fit into a particular area, or this author did not have enough information to fairly locate them.

Interpretations

‘Collective’ oriented (structural and inter-subjective) futures methods greatly outweigh individually oriented futures methods. Structural methods were the most dominant, followed by inter-subjective oriented methods, which appear newer, followed by a small group dealing with the individual psychology of foresight, and the almost total absence of methods for the behavioural domain.

New research at the AFI by Peter Hayward suggests that an individual’s psychological condition is a key determinant in foresight.²⁷ From this vantage point the psychological domain of the individual is greatly overlooked. Methods using creative visualisation and problem solving are well established.²⁸ Yet the study and focus on consciousness

in foresight remains ignored. Hayward argues that this may be because of the difficulty posed in developing a reliable measurement instrument, and the challenge of adequate interpretation.²⁹

A glance at the interplay between the futures organisation and the individuals who pioneer them reveals the organisation as an extension of the individual – foresight has emerged and been diffused via the ideational leadership of individuals. This may have implications for the diffusion and development of social foresight, as it may be inspired individuals that pave new futures, rather than its adoption by organisations and communities. In this context, the application of methods may be at an imbalance by focussing only on helping groups, organisations and communities with their collective (structural/inter-subjective) issues, rather than empowering dynamic individuals to become leaders.

The almost total absence of methods aimed at the behavioural domain could be significant. There are a number of basic skills that might complement what has been termed ‘futures fluency’. This might link the development of foresight consciousness with their behavioural correlates (skills/practices), giving individuals personal pathways to embody through practice foresight in their own lives. This challenges the assumption that foresight is for groups, organisations and communities, and that methods should focus on exploration rather than empowerment.

ANALYSIS OF CAPACITATING FOCUS

Capacitating focus describes the level at which practices work to build foresight capacity, using Slaughter's framework for the emergence and diffusion of foresight society wide (see *Appendix A*). Some practices, traditionally speakers and advisers, promote ideas and concepts about the future. At another level consultants and facilitators use tools and methods to explore and empower, enabling the use of new methods of prospecting. At yet another level some aim at institutionalising foresight through broader structures, projects and processes. Finally, a few promote the adoption of foresight society wide.

Capacitating Focus	No. of practices
Concepts, ideas and views	8
Methods and tools	23
Structures, projects, processes	15
Society wide capacity	4

Table Three: Capacitating focus of practices

As seen in Table Three, only a handful of practitioners or organizations can be said to be aiming to promote social capacity for foresight across Australia. The focus of 15 was promoting and developing the structures, projects and processes embodied in a variety of applications. This includes futures education, foresight communication, community development processes and networking. Of these only 2 are firms, 3 are not for profit, 4 are independent and 4 are universities. Promotion of the use of methods was done by 23, of these 14 were firms. Finally, there were 8 that mainly promote concepts, ideas and views on the future, rather than methods, either as technological optimists or social critics. Of these, 6 had critical approaches, using futures methods and literature for the production of reports, essays and articles.

Interpretations

Overall there seems to be a predominance of practitioners or organisations promoting futures methods, but perhaps overlooking the bigger picture of developing social capacity for foresight. Firms might predominate here in their pre-disposition toward using methods to help organisations at a strategic level. Only a very small number are working toward the bigger picture of system wide foresight capacity. The few with very socially critical perspectives use futures methods for analytic or narrative purposes for writing and with clients, yet also are not intimately engaged in building the futures field.

Less than twenty are engaged in developing the processes and structures needed to embed foresight capacity socially, through education, business and government. Moreover, it might be said that of this group, there seems to be relatively little coordinated effort toward the bigger picture goal of developing social foresight. While this small group might have similar values and socially progressive intentions, the way in which these processes are developed appears disparate. While a pool of talent and intentions toward developing social foresight exist, its implementation seems to have been *ad hoc* up until now.

ANALYSIS BY ORGANISATIONAL TYPE

Organisational type influences the kind of foresight work being done, based on the differences in social circumstances various organisations exist in, their different histories, and the group dynamics embodied in types of organisations. A quick reflection on the differences between government, universities, firms, networks and NGOs, individual practitioners and academically affiliated research institutes makes obvious the differences in their operations and contexts. See Table Four for organisational type listing.

Organisational Type	Number
Firms/Consultancies	20
Independent Practices	12
University Education	10
Research Institutes	5
University Services	3
Not-for-profit	3
Networks	3

Table Four: Foresight practice by organisational type

Firms and private practices

Consultancies and private practices which, at a minimum, promote the use of foresight methods far outnumbered the rest of the group (18 only including firms, and 25 including firms and individual practices). Most firms lean toward pragmatic work, while the individual practices leaned toward progressive. Together they were mostly mixed between displaying pragmatic and progressive interests. While the few larger firms represent the pragmatic end of the spectrum with their more econometric and

competitive intelligence driven approaches, a few smaller firms represent attempts at catalysing transformational-civilisational change, and seemed to require academic credentials and notoriety to help achieve this.

University Education

There are various universities across Australia which specifically teach Futures Studies or foresight, and hence futures techniques and methods. Education is particularly significant because it constitutes platforms for the innovation and transmission of new futures methods, and their corresponding influence on the community. So while the bulk of applied futures work will be done by firms and institutes in the here and now, education might represent the capacity for long term development and renewal of the application of foresight methods. Ten were counted on this basis. Being educational bodies, and given that foresight is comprised of numerous methods, these programs generally offer broad methodological training. We can, however, see how the different programs differ by approach and academic discourse. As a group they leaned toward progressive futures work, used a mix between strategic, critical and Integral methods, and were balanced in their aim at promoting methods and developing and promoting structures, projects and processes.

Research Institutes

Research institutes may have been created through government or university foundations grants, but have independence and latitude as to the course they follow within the parameters of their charter. This group comprised approximately five in total. Of these, two are addressing issues related to business strategy and competition in addition to matters of national interest. Most have significant interest in progressive social futures. These are generally less concerned with strategy, as firms are, and more policy oriented at the national and international level. Rather than methodological development, these were more focused on publications and focussed on developing futures at the ‘concept’ level.

University services

In addition to university education and institutes affiliated with universities, three university departments also use futures methods, either for internal strategic development, or for profit making consulting services. All seemed to be doing pragmatic work, focused on the application of strategic level methods toward enterprise or policy issues.

Community based non-profit organisations

Three small not-for-profit organisations were identified. Lacking connections with universities or government, these are relatively independent social ventures. They share similarities to small firms, but work more on the progressive and advocacy end of futures work, whose purpose leans toward progressive social change and development.

Networks

Networks have formed the basis for much of the futures community in Australia over the years. The Commission for the Future might be regarded as one of the first important networks; however its overall scope went beyond networking. While three could be considered networks (creating numerical overlap), six do networking in addition to existing work. These might also be divided into two camps, those that exist to promote individuals and their practices, and those that exist to promote the use of foresight and future oriented research in general. While overlaps between these distinctions exist, the former primarily serve dynamic individuals as a source of consulting work and remain generally focused on the consulting domain, strategy and business, although not limited to these. The latter aims to promote Futures Studies and other future oriented work in Australia.

Interpretations

The importance of a charter (the established organisational purpose) which surrounds the organisational type may have an overwhelming influence on an organisation's behaviours, gearing them for civilisational, socially progressive futures work, or for pragmatic and/or business focused work, or other kinds.

For example, research institutions being connected with academia generally are focused on methods that translate to publications, as opposed to consulting tools that help organisational strategy. They aim to influence policy in a progressive way, based on new knowledge and research. This contrasts significantly with small firms and private practices, which are more experimental and adaptive in nature. Because of the relatively small size of most firms, many which might only include the founder and perhaps a few associates, their capacity to find niche domains may be greater.

One might correlate their size and main interests with their market penetration. The more established firms which do pragmatic work seemed larger, servicing organisational strategy needs rather than dealing with more complex social issues. The more

unconventional or ‘radical’ a firm is, the smaller the operation seemed to be, built around an individual’s personal leadership, personality, ideas and advocacy – with generally less market penetration. Not having to cater to the pragmatic end of the market seems to be a strong point for many of the small firms and individual practices. Unlike research institutes which aim at policy level influence, the consumers cannot be so easily determined for firms. Most seem to do work with a wide variety of clients, including government, corporate, non-profits, education and communities.

University departments that offer foresight services seem to have coincided with the shift toward entrepreneurialism in Australian universities, part of the Howard government’s policy agenda, and which follows US educational trends.³⁰

Networks and networking practice have been generally underrated in importance. In fact networks, both their technical and social aspects, are the basis for higher forms of social organisation in the Knowledge Economy. They can be nurtured and used or exploited and abused. Exploitation often occurs when networks are used for the self-promotion of narrow interests, individuals or sponsors. On the other hand they can be of benefit to the practicing community and general public if they are managed for the common good. Creating social foresight capacity in Australia may need to take into account the importance and potential of networks, as well as the need to put social interests in front of individual interests in their development.

The high number of University education programs and courses established is probably a positive sign for the future of foresight in Australia; as such structures expose students to thinking and methods that they then can bring into the world in various ways. By comparison, Futures Studies programs in the US only number three at the most.³¹

Overall organisational type would appear to be an important consideration in the development of a NFS. While organisational type does not definitively determine organisational behaviour, an organisation’s interests, processes, outputs, and focus will differ and be influenced by this.

ANALYSIS OF FORESIGHT PRACTICES BY REGION

Looking at the geographical location of foresight practices in Australia can help paint a visual picture, show where work is clustered and show regional variations. As Table Five shows, there were no practices in the Northern Territory and Tasmania. The location of several could not be identified. Almost without exception foresight practices were located in or near major cities. Over ninety per cent of practitioners clustered around the four main cities of Sydney, Melbourne, Canberra and Brisbane reflecting the distribution of Australia's population in general: more than eighty of the population is clustered around less than twenty per cent of the south-eastern part of the continent.³²

Region	No. of Practices
VIC	16
NSW	12
QLD	11
ACT	7
WA	3
SA	1

Table Five: Foresight practices by region

Victoria

Practice in Victoria was mostly progressive with some pragmatic work. Methods spanned from linear to Integral with the bulk centred on systemic and critical. Organisations were mostly university affiliated education, research and services along with small to medium firms. Many here were focused on promoting capacity through structures, processes and projects.

New South Wales

Practice in NSW seems the most mixed in every respect, between pragmatic/progressive/civilisational work; conceptual/methodological/structural development; and a mix of strategic/critical. In addition, organisational type was mixed.

Queensland

Practice in QLD was progressive to civilisational, mainly small firms and private practices using critical to Integral level methods with strong emphasis on structural and social capacity building.

Australian Capital Territory

Foresight practice in the ACT was mostly pragmatic with some progressive work. There are mostly small firms and larger research institutes, with some tertiary education. Concepts and methods are the main area of capacity development, which are strategic in nature.

Western Australia

This was probably too small a group to evaluate properly. Generalising however would see practice here focused on capacity building methods, which are strategic in nature, with progressive social interests.

Interpretations

Australia is the only country which is also a continent. This fact is compounded by a relatively small population by world standards. This geographic expansiveness, as well as the relative geographical isolation from other centres of futures activity, is a distinctive feature that has influenced foresight here. The clustering of foresight practice in urban areas is a reflection of the population, but also could indicate an affective and psychological distance between rural and ‘outback’ issues and futures. Few nations are stewards of entire continents; this gives Australians a special responsibility.

Generally speaking, a greater field of practitioners, which can interact in a more dynamic fashion, with the capacity to share ideas, would seem to be a precondition for the development of the field. That no such comprehensive institutional and methodological review has been conducted, apart from extensive networking through some professional networks, indicates a gap in reflective and organisational capacity in the context of developing a NFS.

Experience suggests that ‘communities of foresight’ (CoF) have emerged in urban centres among professionals over the past decade. These CoF to some degree follow different discourses and traditions.³³ But while CoFs may have emerged in regional centres, questions remain as to whether this can be said about Australia as a whole. In order to facilitate the emergence of more rigorous, valuable and deeper futures work, a national system of review and critique is needed to create a *national* CoF. Such a community would include multiple foresight perspectives and traditions – finding synergies between practices. The facilitation of the emergence of such a national CoF would require an approach capable of integrating multiple perspectives on foresight, value systems, interests and commitments, all harnessed for the greatest good.

STRUCTURAL OVERVIEW

Slaughter's 'six questions for a structural overview' proves useful in helping to frame a dynamic picture of foresight practice in Australia.³⁴

What are the main continuities?

The practice of foresight in Australia is very new. In some respects it cannot be said to have existed to a significant degree just a few decades ago. The demand for foresight, however, seems to be continuing and increasing based on the economic, social and ecological uncertainties and challenges we all face. If we cannot take for granted the world as it is today, this will be even less so tomorrow. The truism that the only constant is change is increasingly applicable to the modern world, which will likely make the need for rigorous and valuable prospection even greater into the new century.

What are the major trends?

As described in the methodology of this review (see *Appendix A*), we can see how foresight has moved from taken for granted ways of knowing to more complex pictures. Given the challenges we face, we can probably expect the further development of more powerful and integrating foresight methods and approaches. For example, new approaches and methods that include inter-subjective exploration such as CLA and values analysis might be considered a sub-trend. Sustainable futures thinking, despite having become an over-used and appropriated term, underpins many of the conceptual shifts in the field. This in particular will also likely continue to be developed so long as we live in conditions of un-sustainability.

Given the challenges we face, we can probably expect the further development of more powerful and integrating foresight methods and approaches.

Action learning/research practice toward applied foresight with groups and organisations parallels shifts in education and consulting practices generally, toward learning and capacity building. Finally, social foresight has continued to be institutionalised through Institutes for Foresight (IOFs) such as the Australian Foresight Institute, Institute for Sustainable Futures and (arguably) the Australia Institute, despite the demise of the Commission for the Future.

What are the most important change processes?

The social legitimisation of foresight practice is probably one of the key change processes that can lead to greater social foresight capacity. There are questions, therefore, regarding the quality of work being done, and whether that leaves a relatively good impression through providing value, or whether this discredits the field due to its misrepresentation or just poor work. Closely linked with issues of quality and legitimacy is futures education taught at universities, which can claim influence toward higher standards and broader acceptance.

In terms of the efficacy of foresight on provoking debate, policy shifts and public awareness, the media plays a central role in whether and what messages get to policy makers and the public in the first place. Communication processes of many types would seem to be central in creating awareness and deepening understanding of foresight and future related issues. As an aspect of communication processes, networks are a way of coordinating and organising and can have an impact on the community of foresight practitioners and how foresight diffuses society wide, via opinion leaders.

Naïve foresight is often over-represented by the mass media to the exclusion of higher quality work.

Finally, leaders and pioneers make up a large part of the change process, as most of the practices have dynamic leaders or advocates of one form or another behind them. This has implications for how to develop and diffuse social foresight. This contrast can be seen, for example, in a strategy of aiming to create pioneers in the field as opposed to a strategy toward the mass diffusion of futures thinking.

What are the most serious problems?

There are a number of problems or challenges facing foresight practice in Australia. In a complex and globalised world facing numerous challenges and uncertainties, we would expect the need for progressive, civilisational, critical and Integral futures work to help inform national policy. Yet funding such foresight remains difficult as there is no mature 'market' for this kind of work. This is compounded by the media's communicative marginalisation of progressive and depth futures thinking and the over-representation of linear and pop approaches. Naïve foresight is often over-represented by the mass media to the exclusion of higher quality work. When depth foresight work is achieved, it doesn't seem to have been linked strategically with communicative processes.

Generally, there seems to be a lack of methods that focus on or aim to develop the foresight of individuals, in terms of an individual's consciousness. They further lack the ability to examine and develop an individual's foresight skills and behaviours. Finally,

there may be an imbalance between practices promoting the use of foresight methods as opposed to projects aimed at improving the social capacity for foresight.

What are the new factors in the pipeline?

There are a number of emerging innovations that hold promise. Work is being done linking foresight and philanthropy, to develop the funding base for more ambitious work. Integral futures is being developed which opens futures inquiry and methodological development to greater breadth and depth, as evidenced by this report. Important work is also being done on the connection between individual consciousness and foresight.

Action learning/research approaches are more closely linking foresight and action through heuristic, recursive and iterative processes, with practitioners increasingly drawing together theory and practice. Concurrently, the emerging number of tertiary futures education sites in Australia would generally be considered a pre-cursor to innovation in the field, given academia's commitment to knowledge development. In this case, more attention should be paid to how students are developing the field conceptually and methodologically.

What are the main sources of inspiration and hope?

From the global perspective, we have seen a doubling in the number of universities teaching futures, with Australia part of this trend. Futures education has blossomed and this has implications for its legitimacy, the quality of the work, innovation in the field, and the number of practitioners and advocates. In Australia, the high number of practitioners doing progressive futures work shows that many of the actors in the field value societal improvement, and have been able to carve out a market and social niche doing this type of work. The (relatively) high number of practitioners using critical approaches reflects a high level of methodological development and renewal. Finally, national foresight strategies and programs have a number of precedents in various parts of the world, which serve as examples and guides for the development of a NFS in Australia.



Section Two:

Conclusions, suggestions and recommendations

CONCLUSIONS FROM THE META-SCAN

This report has applied a meta-scanning analytic framework for evaluating foresight practice in Australia that takes into account: social interests, methodology, epistemological focal domains, capacitating focus, geography and organisational type. This however, forms only one part of the more ambitious aim of promoting the emergence of social foresight in Australia through a NFS.

This next section aims to discuss, in a preliminary way, the meaning of a NFS in the context of the meta-scanning research findings.

While the development of a NFS should be collaborative, inclusive of participation from a range of stakeholders, four broad agenda are suggested to stimulate debate:

1. The definitions and dimensions of national foresight
2. Advancing methods and approaches
3. Building capacity in the foresight field
4. Communication and diffusion toward social foresight capacity in Australia.

PART ONE

DEFINITIONS AND DIMENSIONS OF NATIONAL FORESIGHT

In drawing a broad outline of what national foresight means, its articulation here is propositional, a way of provoking wider dialogue. In terms of the dimensions of national foresight, four sectors are examined: business, government, education and the civic or ‘third’ sector. In conjunction with this study, research is also being conducted on examples of national foresight strategies in different parts of the world. Finally we need to ask the difficult question regarding who should play roles in a NFS – what types of organisations, practitioners and approaches?

What is ‘national foresight’?

Before addressing the need for a ‘NFS’ we need to ask: what is national foresight? Traditionally the nation state is a politically bound unit, which has within it a notion of a core cultural essence, but in many respects is also a socially constructed ‘imagined community’.³⁵ Nations have distinct histories in their emergence which culminate in territorial sovereignty, which on the one hand subsume more regional distinctions

or, arguably cultural distinctions, and which on the other hand individuates this new state as a member of a community of nations globally. Therefore, if *national* foresight is the prime objective, it sits within the dual context that is bound to the more partial interests of particular communities (states, cities, shires, and various communities of interest) and in the context of participation in an inter-national order.

National foresight, in this sense, should aim to address futures issues and challenges as they relate both to the common good (and future generational goods) of Australians, and the global good of our planet’s peoples, ecosystems and common civilisational futures.

National foresight, in this sense, should aim to address futures issues and challenges as they relate both to the common good (and future generational goods) of Australians, and the global good of our

planet’s peoples, ecosystems and common civilisational futures. This would seem to require both progressive foresight aimed at societal progress which transcends partisan (corporate/identity group/or party) interests, and a civilisational foresight that can play a role in global progress in the context of the challenges faced by all. From this perspective, national foresight would require an intelligent synergy between progressive foresight and civilisational foresight.

Problems arising from salinity, for example, are in the national interest, and all future generations in Australia would assume a stake in the issue, regardless of party lines.

Yet, at the present moment, tackling the problem seems to be obstructed by partisan and parochial interests. A nationally oriented foresight strategy would seek to transcend the narrow interests of a few groups toward the interests of the public good into the twenty-first century and beyond. Thus such progressive foresight would be in great demand in formulating the NFS.

In terms of playing a role in the global good, a NFS would seem to be a way to marshal resources to make a focused and significant contribution to emerging global challenges. Australian inventiveness and leadership can offset Australia's comparatively smaller population and economy. When a country can marshal resources collectively it can often have a profound impact on the world, for example in Denmark's pioneering of green industry and industrial ecology, or Sweden's efforts in human rights. A nationally organised foresight strategy aimed at contributing to the global good could see Australia take the lead on any one of challenges faced on a global scale. In effect, this requires a civilisational type of foresight that has a longer time horizon than progressive foresight, and likewise requires foresight practitioners enabled to deal with greater time horizons, global complexity and cultural differences.

In general then, a NFS should take into account both the local and the global. On the one hand, insuring the future needs of the multitude of communities that comprise Australia toward the notion of common goods for future generations, and on the other hand playing a role in facing the common challenges in a global community of interdependent nations: a shared bio-sphere and noosphere. Writing almost ten years ago, Richard Slaughter conceived of the need for a NFS:

A national foresight strategy is needed to give Australia a sense of purpose and direction. It is needed to provide a necessary warning function as well as a positive framework in which a host of wealth-creating and problem-solving activities can be located. It is needed to give people – particularly young people – hope that the world can be better, even though it faces some very major challenges.³⁶

Sectors in a National Foresight Strategy

Slaughter argues that short term thinking permeates three key areas of society: education, business and government. By implication, if we are to build social capacity for foresight, the strategy will have to address these three areas.³⁷ The civic or 'third' sector is added to these three.

First he argues that education has up until now only focused on the 'future *of* education', meaning the latest technology and fads, but building no critical thinking capacity within students' thinking about the future. By contrast, 'futures *in* education' would focus

on new educational approaches that give students concepts, ideas, tools and techniques for thinking about the future in empowering ways.³⁸ He argues that rhetoric about preparing our children for the twenty-first century is hollow if we do not actually give emphasis to preparing children *to think* about and research twenty-first century challenges, in an empowering way.

A variety of strategies could address this need for a diffusion of futures education into Australian educational systems. First would be to identify best practice education futures and case studies. This review provides a starting point with a number of profiles of practitioners that focus on futures education. A resource base for educational futures (funding, networks, training bodies and textbooks) could be created. Efforts to lobby and advocate for its adoption at various institutional levels may be needed. Finally, bringing together top futures educators to draft a national ‘futures in education’ strategy could see the development of a vision or blueprint for what this might look like.

Some businesses, by contrast, have to some degree adopted forward exploration. Yet by and large most businesses are caught in short term operationally focused thinking and quarterly profit reports. The short-termism perpetuated by business is in fact a regressive force for the social good, perpetuating consumerist mindsets and discounting social futures.³⁹ In this respect what is needed here is the development of ‘progressive’ futures work that can link organisational purposes with multiple values goals such as the Triple Bottom Line – social, environmental and economic progress.

A first step might be to identify a body of effective progressive futurists in the corporate arena, which this research makes clear is in abundance, and to pool successful case studies where progressive futures has made contributions to a company’s future while simultaneously making significant contributions to social futures. Advocacy and lobbying within socially conservative but conscientious business councils and associations may be another strategy. A longer term campaign to gradually win over the business establishment toward the adoption of ‘progressive’ corporate futures has already started. Perhaps such an effort can yoke together a ‘vanguard’ of organisations employing progressive futures.

Government, which in theory should be a sphere where the entire society’s future is authentically considered, all too often fails to extend its gaze into the future. This stems either from the demands of dealing with day-to-day governance issues, or else because political manoeuvring and winning the next election takes precedence over long term thinking. Too often politicians are willing to appease voter interests and special interests, through ‘pork barrelling’, favourable legislation, and the like. These appear as short term gains for politicians and some voters, but can have severe consequences in a longer

time frame. Because government is in a favourable position to lead the wider community, both symbolically and through mandate, the quality of thinking and decision making has duplicating effects on society in general.

One other category that might be added to Slaughter's three aforementioned domains (education, business, government), is civil society or the 'third sector'. The role and influence of non-government-organisations, not-for-profits, charities, trusts, foundations, advocacy and activist groups has risen exponentially over the past fifty years, and now constitutes an alternative, though heterogeneously diffused, power base. In addition, social movements embodying mainstream values such as human rights, ecological protection and stewardship, peace and social justice have played important roles in reshaping the social landscape in the Twentieth Century. The values which infuse the rationale of many third sector

The values which infuse the rationale of many third sector organisations are often aligned with social progress, and as such are consistent with many of the goals and values that are a part of social foresight.

organisations are often aligned with social progress, albeit defined in myriad ways, and as such are consistent with many of the goals and values that are a part of social foresight. A strong connection and opportunity exists between the need to develop social foresight and many of the aims implicit in the third sector, in particular charities and philanthropy, and needs to be explored more extensively.

Aligning interests

From the perspective of social interests, a NFS would appear to require the services of those with the social good in mind as well as those with the global good – progressive and civilisational interests respectively. Pragmatic work representing partisan communities of interests, cut off from broader social and global issues and concerns would probably be as much a detriment to the implementation of such a NFS as an aid. As seen from the meta-scan results, the centre of gravity in the field of practitioners in Australia embodies progressive interests, but civilisational level practitioners are probably lacking in quantity. Varying interests may be intrinsic to certain organisational types and those organisations with charters and experience in progressive and civilisational futures work would be appropriate to the aims of a NFS.

PART TWO

ADVANCING METHODS AND APPROACHES

In the context of developing a NFS, a healthy integration of various types of methods and approaches would make national foresight stronger and more dynamic. An ‘Integral’ approach to national foresight would be inclusive of various stages in the foresight methodology proposed, as well as informed by diverse ways of knowing. Taking the best of statistically driven demographics, and depth understanding of trends and drivers (i.e. ‘linear’ methods) and eco-social metrics, combined with systems informed alternative futures thinking with mature complexity, plus the ‘critical’ and multi-cultural perspective and approaches that allow us to see our cultural and institutional blind spots, and then integrating and drawing together the best of various levels of work in an overall synergy, would seem to be an effective strategy.

The new realities of a global century and the multi-fold challenges of globalisation make futures in Australia appear parochial.

Approaches to futures work that focused on the foresight of the individual were found to be almost totally lacking in this review. Given that it appears the diffusion of foresight is highly dependent on energised and motivated pioneers, attempts to mass produce foresight in organisations may be less appropriate than futures work that aims to improve an individual’s foresight, through development and expansion of consciousness and/or new skills and behaviours.

While progressive futures seems to be the gravitational centre of work in Australia, it seems much of this work has been overshadowed. Harnessing and empowering the ‘progressives’ would seem to be an important leverage point within the context of a NFS. Given the alignment of interests between the ‘progressives’ and the goals of a NFS toward systemic social improvement, this group appears to offer hope. By contrast, civilisational futures in Australia is only being done by a small handful. The new realities of a global century and the multi-fold challenges of globalisation make futures in Australia appear parochial. Developing civilisational futures in an Australian context would seem an important step in closing this gap and addressing the more global and long term issues within national foresight. As a corollary to this, linking foresight practice in Australia with the best of what is happening in other countries would be a sound way of informing local practice.

PART THREE

BUILDING CAPACITY IN THE FIELD TOWARD NATIONAL FORESIGHT

Without the prerequisite base of well resourced and quality futures work – a mature field – the goal of a NFS and program cannot be achieved. Therefore a number of capacity building measures aimed at addressing the strength of the field in general are offered. Recommendations here include:

1. developing more ambitious structures, projects and processes for embedding foresight capacity
2. drawing synergy from linking philanthropy and foresight
3. developing greater feedback between theory and practice
4. creating greater collaboration among foresight researchers
5. fostering leadership in the field
6. creating greater safeguards against the appropriation of futures language and methods
7. addressing and enhancing the social legitimation and institutionalisation of foresight.

Stage Four 'gap' analysis

A greater understanding of what *processes, projects, and structures* (stage four in Slaughter's model for the development of social foresight) is needed to form the basis for a national foresight program. This meta-scan has shown that less than twenty organisations or practitioners are engaged at this level of capacity building, which in addition seemed *ad hoc* in its implementation. Most practice appeared focused at the level of promoting the use of futures tools and methods, which shows a healthy level of development, but not sufficient for more ambitious aims. This level of analysis would seem useful, with questions such as 'What are the critical *processes, projects, and structures*, and how are they successfully implemented?', 'Who are the practitioners or organisations capable of playing a part in their implementation?', and 'How do we foster collaboration and coordinated work on such *processes, projects, and structures* which can lead to social foresight capacity?'

The role of philanthropy in a National Foresight Strategy

The interests in developing social foresight show parallels with the interests in the third sector. The not-for-profit institutes and organisations examined in this study, for example, tend toward socially progressive foresight work. Despite suspected funding

constraints, these bodies seem to focus in the main on areas of research that contribute to the development of the field (structures and processes), civilisational foresight, and emerging social issues. This generally corresponds with the interests associated with philanthropy, connections which are being researched at AFI.⁴⁰ ‘Progressive philanthropy’ for example, aims to contribute to social change and social innovation, and address ‘root causes and establishing the basis for sustained new behaviours and capabilities’, community capacity building, and experimenting with new innovative approaches to solving problems that mainstream institutions would shy away from.⁴¹ In addition, various key synergies link foresight and philanthropy:

- the ultimate goal to improve the well being of society
- the respect for the wellbeing of future generations
- the drive for sustainable solutions that incorporate restorative practices
- thinking and action applied in long term contexts
- interior subjective and inter-subjective truths and needs are valued as highly as exterior objective truths and needs⁴²

Philanthropic thinking generally has shifted from an ‘aid to trade’ model, from giving to enabling, from dealing with symptoms to prevention, or from solving problems to solving root causes. The emerging field of health promotion, often linked with third sector advocacy, exemplifies this preventative approach.⁴³ Likewise, Futures Studies/foresight has increasingly relied on detailed systems thinking, analysis of root causes and exploration of the ‘trim tabs’ and leverage points within social systems that if addressed, would have multiplying benefits.

There needs to be a systematic attempt to link the development of national foresight capacity with philanthropic support. Small consultancies are often drawn into pragmatic work because of the day-to-day pressures of serving clients on a for-profit basis, to the exclusion of broader interests. Government, on the other hand, is often locked into partisan battles determined by the special interests of the day. As within many organisations, expediency drowns out precedent and prescience. In addition, many NGOs, while working for community interests, are often locked into a type of single issue campaigning and *identity politics* that make them unsuitable for addressing national issues that live within complex, divergent and interlocking value systems. Philanthropic funding can therefore fund foresight work that transcends the limitations of small consultancies and the partisan battles of government and the *identity politics* of single issue campaigns – addressing a time horizon and social breadth that the majority of organisations are not suited to address within the existential constraints they find themselves in.

Such funding would need to ensure a high degree of quality foresight work, employing various layers of work, from the statistical linear to the systemic and critical, yet without specifying the *outcome* of the research. This might seem like a strange and obvious suggestion but much of government funded, as well as NGO driven research, is undertaken with foundational assumption and embedded interests that confirm existing worldviews and presuppositions, making research a reflection of institutional interests rather than depth exploration. Effective research would have to be rigorous and have a certain level of disinterest, or at least be explicit and honest about the interests and values that inform the research advocacy.

De Simone recommends philanthropic funding be provided for additional foresight research and education and the development of a number of Institutions of Foresight. Collaboration should be extended toward an understanding of the ‘complex dimensions in which philanthropy operates’, new frameworks for exploring alternative solutions to existing problems between the two fields, and agreeing upon an aligned strategy in ‘shaping desired sustainable future outcomes’.⁴⁴

‘... a close association between philanthropy and foresight will see acceleration in the achievement of each sector’s goal of improving the well-being of society’.

Building upon the common ideological foundations Philanthropy and Foresight share... a successful collaboration between these two sectors is seen as a self-fulfilling loop where a close association between philanthropy and foresight will see acceleration in the achievement of each sector’s goal of improving the well-being of society.⁴⁵

Developing foresight praxis

Part of the development of a NFS should also examine precedents for how dissociation between the domains of theory, methods, and practice have been successfully bridged. Senge and Scharmer’s community action research has shown how the gaps between the theory and knowledge centres (primarily academic or research institutes), methods (usually employed by consultants) and practice (how organisations adopt, reject or modify new theory/knowledge and methods), impoverish all three domains.⁴⁶ In isolation, knowledge centres create theoretical constructs without relevance to the practice of people and organisations, consultants apply dated methods or approaches un-informed by new research and local contexts, and organisations lose new knowledge that can inform new theory and the development of better methods. Using their generative community action research approach, they show how association and integration is achieved.

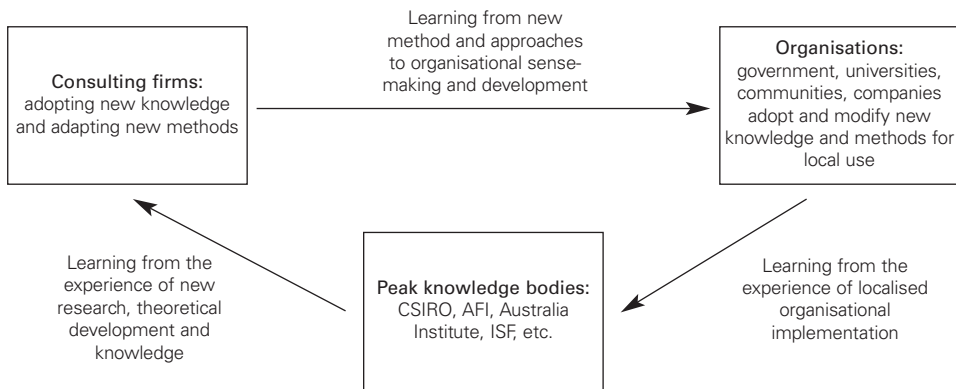


Figure Three: Senge and Scharmer model adapted to foresight in Australia

This model does not privilege peak knowledge institutes over small consulting firms, or small consulting firms over organisations with no knowledge of futures methods. Rather, collaboration can take place between the various types of organisations and practices based on their dispositions (theory, method and practice) in the context of the overall strategy of developing national foresight capacity. In this virtuous cycle, new foresight theory is informed by the needs of organisations, their respective challenges in implementing foresight and the knowledge and institutional memory of successful and failed implementation approaches. New methods are informed by new theory in how foresight is successfully implemented and used in the context of specific types of organisations. The implementation of foresight in organisations, their overall practice in using approaches to foresight, can be informed by methods which in turn have been enriched by a larger domain of knowledge. This could be applied to, and be modified by, the four key sectors previously alluded to: education, business, government and civil.

Linking and collaborating on research

The relatively large field of futures at universities, almost exclusively post-graduate, forms a potential pool of new future-oriented research, and a potential community of foresight. While post-graduate work will vary from the exploratory and idiosyncratic to the professional and socially relevant, most might be said to live on the 'bottom of the S-curve', that is, part of the development of new thinking, emerging approaches and exploration of emerging issues. So far, however, there is little feedback between major schools and their students. An appreciative attitude toward students, highlighting

their capacity to contribute, can help the development of the field, as these ‘students’ (many are mid-career professionals) represent the emerging conceptual and theoretical base of the field, as well as its application through practice. In this light a useful strategy might be to develop a platform by which students of foresight can link together, form relationships, and share their emerging research, which might then be a resource professional bodies draw upon.

Visionaries and leadership

A problematic relationship emerged in this study between an organisation and the individual which either founded it or manages it. With boutique firms, which are often a personal operation in the first place, we would expect that the operation would succeed or fail on the dynamics and charisma of the individual. But this seems to be true across most organisations as well; they exist in a tight coupling with a dynamic personality in the field. This is apparent from a glance at the profiles of various foresight organisations and their coupling with the individual which leads it.

...it seems that practice in Australia is built on the exceptional foresight, talent, personality, skill and leadership of individuals ...

From this vantage point it seems that practice in Australia is built on the exceptional foresight, talent, personality, skill and leadership of individuals who have been able to become ideational leaders and carve out a market and/or institutional niche. Their organisations are then an extension of their own agendas, personalities and visions, even if this is progressive and civilisational in nature; in a worst case scenario their organisations are merely platforms and vehicles for their idiosyncratic perspectives, goals and interests.

Usually individuals are subsumed by their organisations, either because charisma factors little in stewarding their organisations, or because the institution provides shelter and a repository for the power of privileged elites.⁴⁷ In the case of these foresight organisations, however, it seems that the institution may be as dependent on the dynamic personality as the person is dependent on the institution. Using Wilber’s four-quadrant framework, foresight practice in Australia would seem to be heavily dependent on individuals, for their ideational capacity and consciousness, their personal and interpersonal skills, and their behaviours. This may signify that futures is essentially a pioneering effort driven by ideational leaders, rather than a practice readily used and adopted society-wide. This may also signify that such practice has not been socially accepted, or that the nature of the field is disruptive altogether, as futurists try to disturb existing social categories as standard practice, veering toward the ‘post-conventional’. This may also

mean that the facilitation of national foresight is in fact the facilitation of pioneers, leaders, and champions of foresight. Such a strategy would focus on developing foresight in dynamic individuals, who then will energise change across the wider system.

The appropriation of 'futures'

Another important issue to raise is the use and exploitation of the language of Futures Studies or foresight. This has become more fashionable recently, in order to gain research funding or consulting work, yet done without a substantive understanding of the foresight discourse and its history in Australia and abroad. It's now common to hear of this or that department or institute conducting various projects on the 'futures of x' or the 'futures of y', yet having little understanding of what futures research really is.

Examples exist where certain institutions try to pass off completely un-informed research as futures research, with little in the way of substantive prospective exploration, a proper literature review, and lacking the deep insights provided by an 'unbounded' exploration. This is not to say this kind of pseudo-futures work isn't rigorous by its own definitions. But it's often detailed compendiums of metrics and statistics which show recent and current trends, re-badged as 'futures'. Should this even be considered futures research?

A line should be drawn between the occasional government funded research on the 'futures of x' done with little respect to an established body of futures research, and futures research done with an understanding of the problematics of forward exploration. Such ill-informed research has the capacity to distort people's understanding of the field, as either trite 'pop' research or flat econometrics. But such research should not be ignored. The presence of such 'futures of x' reports shows that there is a social need for forward exploration, even if its execution is done un-reflectively. Thus such work needs to be included, but critiqued, in the hope that this kind of work can be brought into a reflective and informed practice.

Social legitimation and institutionalising foresight

The promotion of social foresight across various domains of Australian life will to a large extent depend on its social legitimation, and on the success or failure in institutionalising it. This process might be said to move through four stages:

1. Identification of challenges – a perceptual process
2. Exploring options and alternatives – an epistemological process
3. Championing and pioneering an alternative – a negotiation process
4. Institutionalising the alternative – a symbolic and structural process

In the case of a NFS, success will require that all four stages are addressed. In the first stage, a case will need to be made that Australia faces significant enough challenges to warrant a NFS. In the second stage, an exploration of options and alternatives informed by different ‘ways of knowing’ is needed to develop a vision for a NFS that goes beyond previous ‘band-aid’ solutions. Third, a group of highly motivated and committed individuals inspired by the vision will need to be drawn together, forming a team that will champion it in the social context it is meant to serve. Finally, if the vision wins backing from the key constituents/partners, the vision will need to be both institutionalised symbolically (offered a position of high respect) and structurally (given sustainable resources to operate effectively).⁴⁸

PART FOUR

COMMUNICATION AND DIFFUSION OF FORESIGHT

Much futures work has become dissociated from larger mainstream popular debates within Australia. Relatively idiosyncratic and outdated work is often amplified and over represented through popular media, while other more valuable futures oriented research is marginalised. Despite years of painstaking, detailed and rigorous futures research, some project are under-resourced in their capacity to diffuse and communicate the results of their work. Such futures work, which has valuable insights which that be diffused more broadly, remains cut off from further avenues of expression and the capacity to influence change.

Futures research, therefore, should not *end* with research, new knowledge and theory formation, but rather *begin* there. Without a coordinated and intelligent communications strategy, such foresight ends up collecting dust in library archives. Therefore, the success or failure of the design of a NFS for Australia may hinge on how well the ‘communication of foresight’ is integrated into the overall architecture of various initiatives.

This last section aims to address some key issues in developing a foresight communication strategy, including:

1. the role of networks
2. the importance of the media
3. consciousness and value systems
4. diffusion processes
5. the need for further work linking foresight and communications
6. the importance of collaboration.

Networks in national foresight

Networking is an increasingly valuable method of organisation. An examination of existing networks in Australia, their histories, successes and failures, might be conducted to elicit deeper understanding of the role they played in diffusing futures work, informing a networking strategy that fits within the aims of a NFS. While networks usually emerge and evolve organically, three types of interlocking networks are put forward as a model in the development of national foresight capacity.

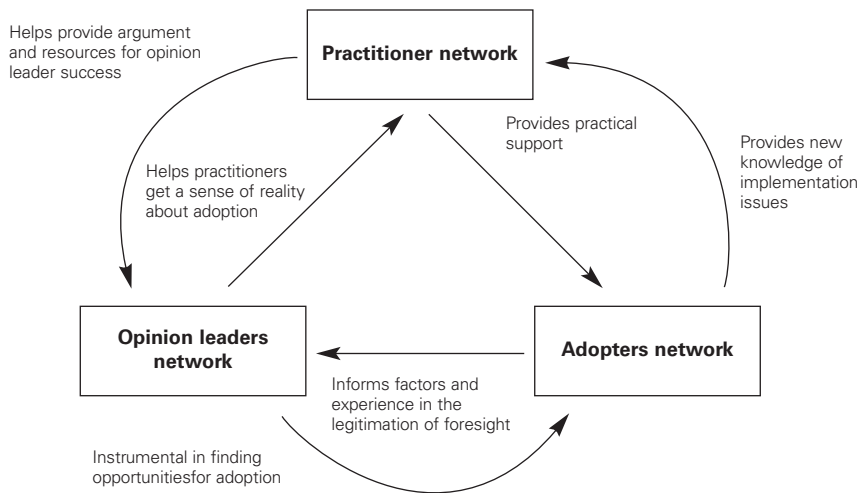


Figure Four: Three interlocking networks

Figure Four shows how three types of networks could interact creating a virtuous cycle. A national foresight practitioner network could facilitate better communication, cooperation, faster learning, and field/discipline building strategies. The guiding principle might be to combat unhealthy competitiveness between practitioners, and foster cooperation aimed at building the field. While this group of foresight practitioners would already be convinced of the need for foresight in organisations and society wide, there exists a need to jointly articulate and promote the field Australia-wide. While networks have existed in pockets, there has not been a nation wide effort to comprehensively draw together a practitioner community of foresight.

Opinion leadership is one of the key factors in diffusion.⁴⁹ A wider foresight network aimed at bringing together non-practitioner opinion leaders, would help foster effective

leadership and diffusion in various domains that foresight needs to be applied: government (local, state, federal), business (small, SME, multi-national), education (primary, secondary, tertiary), and the civil sector (community based or INGO). Such a network would overlap with the practitioner network to draw insight and inspiration, while practitioners would need to learn from the challenges opinion leaders face in presenting the case for foresight in their particular contexts.

An even broader group, a network of foresight adopting organisations, could be established in turn. This network would help support the operation of foresight practices and processes in various organisations and contexts.

The role of the media in foresight

The popular media is the modern gatekeeper of what the public sees and how issues are publicly framed and addressed. Up until now ‘pragmatic’, ‘linear’ and ‘pop’ futures have overshadowed more dynamic futures research within the popular media, a gross misrepresentation of the field given the findings of this meta-scan. Therefore work needs to be done on the role of the popular media in the diffusion of futures research, and also in the promotion of the field. One example of emerging inquiry into this dilemma is work on creating ‘sticky foresight’ which can create a bridge between more substantial and rigorous futures work and the general public.⁵⁰

Consciousness and value systems

From the assumption that people act and make decisions rationally, it follows that knowledge about the future changes the behaviour of individuals today. If we understand the long term implications of creeping salinity across Australia’s landmass, for example, we would expect individuals to respond to this challenge effectively. Yet it isn’t this simple. A contrasting view is that rationality is bounded within a field of consciousness that includes particular value systems, worldviews and perspectives. We cannot assume, therefore, that people will respond in a ‘rational’ way, when ‘rationality’ for one is ‘irrationality’ for another.

Because knowledge about the future is not value neutral, when brought forth into the public it will bump up against social interests, their perspectives and a complex configuration of value systems. Communication necessarily lives within a field of human consciousness. From this perspective the communication of foresight begins from how people perceive the world – not the particular perspective brought forth through the work of a futures researcher. A greater understanding of human consciousness is therefore an integral aspect of the communication of foresight.

Diffusion processes

In the diffusion of Futures Studies or foresight, there are different levels at which adoption or acceptance occurs. At a basic level people's response to futures research is an acceptance or rejection of ideas – propositions about the future. This can be seen

An authentic and effective approach to developing a NFS can only emerge through the communication and collaboration of different stakeholders nation-wide.

in the debate on global climate change. Another level is the adoption of futures methods by groups or organisations, the challenge that a consultant or facilitator faces when introducing a new way of exploring issues to an organisation. Institutionalising foresight process in discrete locations is yet another level, and touches on the overarching level of adoption, the social legitimisation of the field itself.

Diffusion processes at various levels of communication and with different clients cannot be reduced to a set formula. A complex set of factors mediates how individuals

and groups adopt innovations in particular circumstances. That said, there needs to be greater understanding of the variables and the process by which foresight is diffused, particularly in the context of developing a NFS.

The need for further research

The overlap of communications and foresight is an important connection. To simply develop a view and knowledge about change and futures is not enough. For foresight to raise public awareness, inform wise social change, improve policy and set the context for bold innovations, there needs to be a connection with communications. This short section has only outlined some key issues. More in-depth research and activity is necessary to draw together foresight and communication.

Collaboration

So far this report has taken the liberty to put forward a number of suggestions in the development of a NFS without nation-wide collaboration. An authentic and effective approach to developing a NFS can only emerge through the communication and collaboration of different stakeholders nation-wide. So long as this effort is isolated and idiosyncratic, it will be treated with suspicion. Only through pooling the experience of a large and diverse group of people, gathering their insights and intentions, can such a NFS be designed and implemented. One particular process that could be of use is the search conference, which allows for large group participation in the mutual development of solutions and innovations around particular issues. A search conference on developing a NFS for Australia might be a useful first step.

PART FIVE

CONCLUSION

Why hasn't a thorough review been conducted in Australia up until now, to map and understand the overall field in Australia? Without this kind of preliminary knowledge a community cannot have an accurate self-understanding, and develop the self-knowledge needed for further growth. It is hoped, therefore, that this study will be followed up with others aimed at furthering self awareness in the community of foresight in Australia. Part of national foresight capacity building stems from detailed studies that lead to deeper analysis, then insight, which then form the basis for ambitious aims. An invitation is extended to the reader to critique, rethink and improve upon this example of metascanning, its methodology and implementation, and to try it in one's respective region or country.

From a broad perspective informed by history we can see the emergence of Futures Studies and foresight as a response to new challenges and uncertainties faced by individuals, institutions, and societies. With a litany of pressing issues facing humankind, we have made the consequential turn, where the future is a principle of present action. The concrete challenges we face, such as globalisation, environmental sustainability, poverty, global security, new technologies and scientific discoveries, provide a core rationale for developing national foresight strategies everywhere that can inform action today. We must draw upon the resources and wisdom of foresight practitioners, researchers, and citizens and rise to the challenge of collaboratively developing such foresight capacity, to inform the development of a more humane, secure, and sustainable world.



Appendix A: Research design and methodology

This section provides a detailed description of the methodology used in this research effort, in particular of the research process and background on the analytic frameworks employed.

A renewed perspective on the practice of foresight in Australia isn't possible without first providing a 'map' of the practice of foresight in Australia. Therefore, the first aspect of meta-scanning is the process of scanning itself. Based on such a map, the practice of foresight in various domains can be evaluated. 'Meta' refers to context, usually 'as much context as you can imagine'.⁵¹ In this case three broad meta-principles directed the research:

1. to find as many examples of foresight practice as possible
2. use an integrally informed perspective to evaluate the findings
3. the normative aim of developing social foresight in Australia through a NFS.

Following diffusion research methods, this scan makes the distinction between agents or disseminators of foresight as opposed to adopters of foresight.⁵² A detailed survey and analysis of the use and adoption of foresight tools and methods within the Australian Public Service, covering 120 agencies, has been conducted by Luke Naismith.⁵³ Many

of these users/adopters of foresight methods and approaches rely upon professional agents and disseminators of foresight, which promote the use of futures concepts, methods, projects, processes and structures, and/or its broader social legitimation and diffusion. This study focused on these change agents and pioneers in the area of foresight.

Profiles of the various practitioners and/or organisations have been constructed based on the survey or based on a scan of websites and other literature, with a view toward developing such a map (see *Appendix B*). To address gaps in the research findings because of limited resources and the newness of the research conducted, liberal data collecting methods were used. A survey questionnaire was sent out to a variety of organisations and associations asking:

- What particular foresight tools and methods have you used?
- What is the general domain in which the futures tools and methods have been employed? (i.e. education, transport, a particular industry, water, aging, etc)
- Where, and with whom have you conducted such futures exercises?
- What is the purpose of your organisation? (i.e. why are you using futures tools and methods?)

The incompleteness of the information returned from the survey was ameliorated by AFI's existing knowledge of practitioners in Australia, and this led to the use of web sites and other literature to fill gaps.⁵⁴

Integrally informed theories and frameworks were used to analyse the profiles collected. Ken Wilber is credited with first developing Integral Theory, but variations exist which have led to debate. Therefore there are genealogies of 'Integral' with distinct (but related) histories and applications; piling them together into a monolithic heap creates confusion. This particular variant evolved toward the specific application of meta-scanning foresight practice in Australia with a view toward developing a NFS. In this specific application, the factors considered relevant were: the social interests behind foresight; how 'thinking systems' correlate with foresight methods used; the focal domain of foresight work; the capacitating focus of foresight work; how organisational type influences foresight work; and regional-spatial analysis of where foresight work is being done. From this position frameworks and theories were used based on their evaluative potentials.

The broad context for interpretation is normative, with the intention of laying the basis for a robust NFS along socially progressive lines. Value neutrality was not considered a valid position to work from, and such value neutrality has been critiqued by a number

of writers. Because Australia faces a number of emerging issues and unprecedented challenges in the twenty-first century, it is taken as given that there is a need for the development of socially progressive foresight in various social contexts. Wendell Bell's argument that facts and values should both be taken into account, but kept as distinct as possible and not confused, is accepted.⁵⁵

This scan therefore rests upon various value propositions. There are different models of evaluation, such as critical futures, Integral Futures and critical realism, which may be more or less appropriate in different contexts. Generally, however, foresight practice should be toward the betterment of all.⁵⁶ It is noted that visions and images of the future have both winners and losers, making values in all futures work problematic.⁵⁷ Despite this, there are values that are conducive to more sustainable and humane futures than others, and these should be critically examined and promoted.⁵⁸ Contemporary values which are not sustainable, the dysfunctional 'basic assumptions of the age', should be put into question in a broader socio-historical analysis of values.⁵⁹ While moral certainty is not possible, unhealthy moral relativism is not maintainable and we can articulate basic or fundamental human values.⁶⁰ Values inclusivity and the appreciation of all approaches to foresight needs to be balanced with critically informed perspectives on co-existence and the common good.⁶¹ Overall foresight practitioners (including this author) need to question the values of their audience and clients and should be open to having their values challenged by others.⁶²

INTERESTS IN THE PRACTICE OF FORESIGHT

In futures work, and across the futures field, many varying interests can be said to be at play. To properly evaluate the role of futures research in organisations with a view to developing a NFS for Australia, it is important to make distinctions on how these interests operate across the field.

Futures work, more than in other fields, faces the question of the validity of value judgements.⁶³ Foresight work can no longer be considered value neutral, as developing preferred futures entail assessments of the 'good society' or 'good organisation', whether this be explicit or unspoken. Despite the problems inherent in establishing what is in the wider social and public interest, futures work undertaken explicitly for this interest should be valued over work done for narrower and partisan interests.

A long history of institutions created to mediate varying interests on the basis of the public good, including regulatory authorities, shows that institutionalised processes backed by philosophical traditions need to operate to promote the contested space of the social. That globalisation correlated influences are helping to put pressure on the legitimacy and functioning of some of these institutions, processes and traditions

is not an excuse for their dismissal, but rather re-enforces the need to critically assess the social interests within foresight work in this time of rapid and global change.

Slaughter's distinction of pragmatic, progressive, and civilisational foresight is therefore useful in analysing the social interests within futures work. The three following definitions by Slaughter serve as a basis for this aspect of the analysis.⁶⁴

Social Interests in Foresight

- **Pragmatic foresight** is the most common. It is simply about carrying out today's business better and, indeed, there are a number of fairly straightforward means by which foresight can be used to improve and extend current practice in a wide range of organisations. The fact that it is paradigmatically naïve does not reduce its usefulness in a taken-for-granted way. Most organisations can benefit from some use of pragmatic foresight and there are many consultants and consulting organisations that can supply it.
- **Progressive foresight** contains some sort of explicit commitment to systemic improvement. Foresight in this mode can readily be linked with genuine attempts to reform business and organisational practices in the light of wider social and environmental concerns. There is a strong link with what has been called Triple Bottom Line accounting, Factor 4, Factor 10, and many other such innovations. This work is about going beyond conventional thinking and practices to reinventing processes, products and services using quite different assumptions.
- **Civilisational foresight** takes yet another leap into the future. This seeks to understand the possible characteristics of the next level of civilisation – that which lies beyond the current impasse, the prevailing hegemony of techno/industrial/capitalist interests. Civilisational foresight is perhaps the most fascinating and demanding domain of futures enquiry. It seeks to clarify just what might be involved in long term shifts towards a more balanced and sustainable world. By definition it draws on countless fields of culture and enquiry and employs notions of 'design forward'. Such work allows us to speculate openly about such questions as: worldview design, underlying assumptions, civilisational myths and so on, as well as more down-to-earth matters such as infrastructure, governance and economic relations.

– From: Slaughter, R 'Foresight in a social context' (2002)

Figure Five: A summary of social interests in foresight work

In addition, these distinctions also imply interests in different time horizons. For example, pragmatic work that often has as its basic unit an organisation, can be seen to have the shortest time horizon, perhaps five to fifteen years, as any longer is often functionally irrelevant to profit minded businesses. Progressive work that aims at improvement of aspects of social system has a longer time horizon, perhaps ten to fifty years, as such projects have longer implementation times and the implications of policy shifts measured in decades.⁶⁵ Finally, civilisational work lives in a macro-historical and ‘macro-prospective’ context, with the whole world and civilisational sub-divisions as units of analysis, a time horizon running from fifty years to centuries. Current debates over ‘globalisation’ can be seen as having progressive to civilisational dimensions, which include analysis of global ecological challenges, economic growth and Western developmentalism, and projects toward long term planetary peace and stewardship, yet often framed in the context of local and grassroots issues.

STAGE THEORY IN FUTURES METHODS

An integrally informed stage theory helps to explain the development of futures methods in the field in Australia. This Integral perspective, however, should be seen as a model or framework capable of shedding light on the growth of methods in the field, not as the *defining perspective* and only available history. In fact there are many histories of Futures Studies, each which give valuable insights into the development of futures methodology.⁶⁶

An Integral history of futures methods might first distinguish between pre-rational, rational and post-rational futures orientation. Fred Polak was probably one of the first futures theorists to distinguished between the pre-rational ‘eschatological’ and rational ‘eutopian’ images of the future. The rational, in Polak’s conception, sees the emergence of a position of agency in relation to the future, where societies are able to envision and direct their future in this world, as opposed to a conception of other-worldly determinancy, as characterized by an eschatological view of time.⁶⁷ The awakening of the rational mind coincides with the awakening of human agency, within a broader acknowledgement of social structures and traditions, which helped give rise to Futures Studies.⁶⁸ So Futures Studies is a particularly post-eschatological mode of futures sense. Using the Integral Theory of Ken Wilber as a broad developmental framework, and the developmental framework of Don Beck to link futures methods with modes of cognition, this post-eschatological, rational mode of futures thinking can be seen to have moved across four stages through the latter half of the twentieth century: from ‘linear’, to ‘systemic’, to ‘critical’, and then ‘Integral’.

Linear and predictive methods

In 1928, Bertrand de Jouvenel called for a planned economic development, one of the first instances of the emergence of rational intentionality.⁶⁹ Of course, many experiments and theorists had envisioned a better society along rational lines, but not explicitly for rational processes of forward planning. The 1940-50s saw operations research in the US lead to the development of planning, employing math, statistics and economics. This would later be applied to develop cross impact assessment, the input-output matrix of W Leontieff, statistical methods of time, series analysis, statistical regression, which have been used for technological forecasting, economic analysis and forecasting economic and military potential.⁷⁰

In the 1950s, strategic planning emerged out of World War Two from the need for planned economies and planned development. As planning blossomed everywhere, forecasting became part of the planning and decision making process. The 1950s also saw a new future orientation having a key role in nation building in the soviet-communist block and non-west and ex-colonial states. The policy sciences were founded, emphasising the discipline's capacity to help governments control their future by reducing uncertainty. Hand in hand with 'evaluation research' there was an emphasis to 'assess the consequences of various organised social actions' for this purpose of control.⁷¹ Generally speaking, before the 1970s, the field was dominated by two camps, technological optimists and humanistic pessimists.⁷² Both reflected a simplification of a much more problematic and complex reality.

Future oriented research began through planning, forecasting, statistics, econometrics and policy sciences. These approaches were usually based on quantitative/empirical approaches, in particular because many of these methods were developed in the United States, the home of empirical research. Time appeared stable, with linear projections establishing the predominance of continuity. Essentially, there was assumed to be one future, which could be predicted. This type of determinism gave very little latitude to dramatic changes or possibilities. The importance of 'expert knowledge [before 1970]... was an expression of the belief in a relatively stable situation'.⁷³

Systemic and strategic methods

It was partly the emergence of a 'global problematique', given clarity by the Club of Rome, founded in 1968, along with the OPEC crisis and the failure of 'linear' methods such as forecasting, that showed the limitations of a linear and predictive approach to understanding the future. There was a growing acknowledgment of complex and global inter-relationships, which in turn saw the ascendance of more global and systems methods, a new respect for in-determinacy and uncertainty leading to the use of systems based approaches.⁷⁴ In 1970, the RAND Corporation emerged as a

key innovator in the futures field, focusing on policy alternatives, design, advising, issuing warnings, long range planning, predictions, and developing the use of scenario writing, computer simulations, technological forecasting, Delphi, program budgeting, and systems analysis – mostly narrowly focused on military and economic issues.

Through 1968–1973, there was a dialectical response to the use of Futures Studies for military strategy, industrial goals and narrow economic ends that culminated in the birth of the World Futures Studies Federation. Participatory futures, at least in theory (it would take years for it to emerge in wider practice) also emerged as a response to technocratic expert driven futures work. Examples include participatory projects under the direction of Professor James Dator at the Manoa School of Futures Studies and the Honolulu Electronic Town Meeting (ETM),⁷⁵ the Norwegian Alternative Futures Project, and Robert Jungk’s Future Workshops.⁷⁶ To this, can be added the early work through the Oslo Futures Conference and Mankind 2000⁷⁷ as well as the work of Clem Bezold⁷⁸ and the later work of Wendy Schultz.⁷⁹ Wendell Bell also uses participatory action research (PAR), one of the biggest ‘schools’ in the action research field, as a prime example of this ‘participatory futures praxis’.⁸⁰

The use of ‘systems dynamics’ by *Limits to Growth* in 1972, a large-scale computer modelling method which used many of the same techniques as the technology think tanks, resulted in a wholesale critique of industrial society and Western led growth.⁸¹ Global modelling became popular after *Limits* within the United Nations and in multinationals alongside the growth of systems sciences and environmental movements, which also influence Futures Studies.⁸² Despite the use of systems theory and modelling, there still existed in the field a linear and predictive bias,⁸³ although this kind of determinism was being challenged and beginning to lose credibility.

In short, the 1970s saw breakthroughs occur in future orientation, in the United States, Europe and elsewhere, whereby ‘the future’ became plural, ‘alternative futures’. Low quality linear extrapolation and forecasting, exposed in the OPEC crisis and rebuttal of modelling techniques in *Limits* led to wholesale critique and to the development of newer methods – the emergence of scenarios and sensitivity to trend breaks and other modes of exploration.⁸⁴ Overall a critique of the limitations of forecasting led to the adoption of new methods, which transcended a deterministic vision of the future to include normative visioning, possibilities and probabilities – embracing multiple interconnecting factors and forces, and a more complex acknowledgement of the interaction between structure and agency.⁸⁵ The new employment of alternative futures incorporated previous knowledge of trend tracking, forecasting, demographics, and emerging issues. Since this period, a proliferation of scenario development/building and normative visioning methods have been devised on the basis of ‘alternative futures.’

The 1980s continued to see the unfolding of alternative futures thinking, such as the scenario planning used by Shell Oil during the OPEC crisis, some based on systems thinking and incorporating complexity theory and evolutionary theory, others based on radical discontinuities such as John Peterson's 'Wildcards'. In fact complexity theory/complex adaptive systems emerged as the mature expression of systems thinking, a framework capable of explaining both continuity and trend breaks, in human, biological and evolutionary systems. A relatively stable systems thinking via systems dynamics evolved into more complex models incorporating biological and evolutionary metaphors from a variety of perspectives: the Santa Fe Institute, Club of Budapest, and others. This development has been central in the proliferation a number of futures approaches around the world.⁸⁶

Critical and interpretive approaches

Through a third stage of development critical futures emerged, which again opened the scope of alternatives even wider. Much of this work was based on post-modern and critical academic traditions. From the mid-1980s onward critical futures began to critique the way that culturally derived worldviews, cosmologies, and communities of practice shape perceptions and images of the future, and how embedded social interests mediate futures work.⁸⁷ Alternative futures that were framed from the same cultural viewpoint, community of practice, or 'cognitive interest', were seen to be variations on the same theme – often a form of hegemony. Hence for there to be truly authentic alternatives, it was acknowledged that there was a need to move to critique cultural pre-dispositions, unconscious ways of knowing, current paradigmatic boundaries and the interests that lie behind the propagation of various images of the future. It was a further opening of alternatives which correlated with the development of Slaughter's layered critique of futures work and Inayatullah's Causal Layered Analysis, as well as Hazel Henderson's efforts at re-defining progress indicators. This was also reflected in multi-cultural Futures Studies and critiques of Western modernism, which embraced the need for and legitimacy of non-Western futures.

Coinciding with critical futures was the re-emergence of participatory and innovation/action oriented futures methods. This development was similar to critical futures in that it attempted to challenge the hegemony of certain expert driven futures, but different in that it reconstituted the very process by which exploration would take place, through citizen centered, participatory and democratic processes. The intention was also not simply to explore and envision, but to facilitate grassroots/community leadership in innovating better futures. As mentioned previously, the late 1960s and 1970s saw the development of participatory futures such as 'anticipatory democracy', subsequently the 1990s saw a turn toward action research and action learning-based futures work.

The late 1970s and 1980s saw the development of anticipatory democracy experiments in the United States. Robert Jungk's 'Futures Workshops' saw the beginnings of citizen empowerment oriented foresight through participatory and action/innovation facilitating processes in Europe.⁸⁸ Janoff and Weisbord developed a whole systems future oriented community facilitation process, which eventually become an international network of practitioners.⁸⁹ Michael Carley and Ian Christie envisioned action centred networks and action learning to investigate and act upon complex future oriented dilemmas.

The 1990s saw the emergence of communicative and participatory futures processes and workshops.⁹⁰ By 1998, action research and action learning began to play a more significant role in the development of futures methods, particularly as a way of capacity building among groups. By 2000, a combination of complexity based, action-oriented heuristics and worldview critical methods begin to emerge.⁹¹ The participatory and action-oriented variant of futures is a bridge between critical methods and Integral, in the sense that such futures processes not only use critical approaches that challenge expert driven and orthodox visions, but integrate a variety of stakeholder perspectives and value systems into social change processes.⁹²

'Integral' methods

Integral futures work has begun to emerge from teaching and research conducted at the Australian Foresight Institute and elsewhere. The particular Integral approach put forward here is that each stage in the development of futures methods has value in its proper context. Linear and predictive has value in clarifying trends and probabilities. Systemic and strategic methods allow a contouring of possible futures based on trends and drivers, and the multi-systemic complexity in the exploration, opening to discontinuities. Critical and episteme-reflective approaches expose how such systemic and strategic methods are expressions of particular cultural and community assumptions and their practices – opening the way to multi-cultural and civilisational futures. And participatory and action oriented futures methods can help break out of the expert driven and extrapolative approaches, to apply futures methods in creating outcomes based on the needs of stakeholders toward capacity building. Finally, Integral Futures aims for epistemological 'inclusivity' without confusing ways of knowing, as well as transpersonal development; foresight as an expression of expanded consciousness.⁹³

Linear – Characterised by absolutistic or binary right/wrong thinking and correlates with predictive methods focused on control, including forecasting, econometrics, planning with little latitude for alternatives.

Systemic – Characterised by scientific, rational, opportunistic and achievement-oriented thinking which generally correlates with strategy and systems methods, using more complex understandings of change via modelling, wildcards, normative visions, possible, probable, and scenarios. Alternative futures thinking emerges but is still limited by un-critical ways of knowing and cultural assumptions.

Critical – Characterised by pluralistic, relativistic and communitarian thinking, and generally correlates with futures which include multi-cultural possibilities, paradigmatically diverse stakeholder categories, uses layered methodologies toward critical, participatory and action orientated social innovations.

Integral – Characterised by multi-modal and epistemologically-inclusive thinking which generally correlates with approaches that responsibly integrate all of the above, limiting, opening, closing and using each according to circumstance and the overall health of the system, and facilitating transpersonal and ‘spiritual’ development.

Figure Six: Summary of methodological stages in foresight methods

The four methodological modalities described generally correspond to the schema developed by Don Beck and Ken Wilber, as explained by Voros.⁹⁴ In the development from linear to critical futures methods, alternatives open wider and wider, from stage to stage, until they reach Integral, whereupon openness of futures methods is mediated depending on the context and situation. It is the *opening and scope* of alternatives that indicates where a methodology might sit in this schematic. Each stage, in theory, should transcend and include previous stages. For example, systems level methods used previous techniques in forecasting, but applied them using new models of interaction. Instead of dispensing with trends, they came to form the basis for alternative futures, as with scenario building methods. Critical alternatives as well emerged out of existing methods, challenging techno determinism and expert driven futures, yet were extended to challenge cultural assumptions.

Focal domains of foresight work

Richard Slaughter and now other researchers, teachers and practitioners at the AFI have worked at developing various foresight applications of Ken Wilber's four-quadrant model, which distinguishes between various epistemological domains.⁹⁵ This model is useful in expanding an understanding of the use of foresight tools in Australia, in particular their *focal domains*; that is, in what epistemological domain the methods are applied. In addition to situating methods according to stage theory, Integral Theory distinguishes between epistemological domains of thinking in a broader meta-perspective. The four main domains are:

- Individual subjective 'psychological'
- Individual objective 'behavioural'
- Collective subjective 'cultural'
- Collective objective 'structural'

Wilber has offered a balanced critique of modernist 'flatland' and post-modernist movements alike. He shows that the three main human value spheres of art, morals and science were differentiated through modernity, allowing for the development of modern democracies, human rights, rigorous science, new forms of artistic expression and philosophy; what he refers to as the 'dignity of modernity'. The unrivalled success of science, and its technical-empirical mode of inquiry, colonised the other value spheres in effect invalidating inquiry into art and morals, the psychological and inter-subjective respectively; this is the 'disaster of modernity.'⁹⁶ He argues post-modernists have successfully critiqued modernism's shortcomings but have failed to acknowledge the 'dignity of modernity', nor have they re-conceptualised a new 'paradigm' without falling into the same 'flatland'. Wilber's Integral Theory aims at integrating *value spheres*, without falling into the trap of solipsism that denies anything outside of the socially constructed, or of empirical 'flatland', which denies anything outside of the materially observable.

Analysis of the futures methods or approaches used in the Australian context according to value spheres and epistemological domain allows us to see what is focused on and explored, or ignored. While the role of economic systems, technology, environmental factors, social behaviour, and political systems (broadly defined 'STEEP' categories) have been emphasised; 'interior' factors such as changing social values, deep collective myths and assumptions, ethics, art and the psychological development of individuals has seen only token development in the field. Yet much of the potential for the development of foresight lies in the 'interior' individual and collective domains. The underlying rationale for using a four-quadrant analysis has been to allow a bigger picture to emerge of their use in various contexts, to validate and critique their use without negating or marginalizing a particular method or approach.

While some methods are loosely bound to an epistemological domain, i.e. economic forecasting is focused on structural ‘collective-objective’ analysis, other methods are not necessarily bound to a particular space. Environmental scanning, which has normally been used in the collective-objective space (STEEP factors), can be expanded to include scanning on individual/behavioural emerging issues, and inclusive of the scanners own perceptual filters, as developed by Voros.⁹⁷ Anticipatory action learning, emerging issues analysis, futures landscape, futures triangle and backcasting are other examples.

This four-quadrant analysis is meant as a critique and corrective lens on what current futures tools and methods generally look at, their *focal domains*. Commentary on the futures of X or the futures of Y, without an analysis or acknowledgment of the perceptual filters, personal or institutional interests, individual psychological factors and culturally bound assumptions or myths from which this commentary derives, distorts and colours the very object of analysis. Yet far from demeaning empirically oriented futures work, which may be a ‘post-modern’ bias identified by Wilber, a four-quadrant analysis attempts to situate the empirical, to show what is left out, and what could be included to make futures methods more complete. This should validate good and rigorous empirical futures work, while simultaneously calling for more complete futures work that includes cultural-moral explorations on futures, self critical of the psychological ground of being of the individual who produce futures work, and open to aesthetic contemplation and artistic expression.

ANALYSIS OF CAPACITATING FOCUS IN THE DEVELOPMENT OF SOCIAL FORESIGHT

One of the overall aims of this meta-scanning process was to develop a reflective capacity that helps to facilitate the emergence of social foresight across Australia through a NFS. Toward this purpose, Richard Slaughter’s stage model for the development of social foresight is particularly useful as a way of situating the current activity of futures in Australia within a larger framework. This model shows how foresight evolves from raw capacities and perceptions, toward the development of futures concepts and ideas, then to futures tools and methods, and on to futures processes, projects and structures, and finally toward an embedded social capacity for foresight.⁹⁸ This model allows distinctions to be made on the practice of foresight among individual practitioners and organisations, in particular at what level of capacity they aim to build.

In order to analyse how the various practitioners/organisations fit within the context of developing social foresight in Australia, this study asked:

- Does the practitioner/organisation promote concepts? (particular views on the future that others adopt)
- Does the practitioner/organisation promote methods? (particular futures methods that other adopt)

- Does the practitioner/organisation promote process/projects/structures? (particular approaches that particular systems can adopt)
- Does the practitioner/organisation promote social capacity for foresight in general? (particular approaches that whole social systems can adopt)

Different practitioners and organisations address different levels of capacity.

At a *primary* level some practitioners may have strong innate foresight, yet used un-reflexively and without a literature review, thus impoverishing their conceptual development.

At the *conceptual* level focus is on disseminating concepts and ideas, writing and publishing, without the use of formal futures methods. Much academic research is conceptual in nature, ideas and theories are given more attention than methods.

At the *methodological* level some use futures methods with little concern for their conceptual and theoretical grounding. Consulting work, often using group processes, relies on the use of futures methods, such as scenario building workshops, but may take as given the conceptual context of forward exploration. A referenced literature search may not be a necessity, and perhaps dismissed as irrelevant in business cultures under intense competitive pressure. Such work can be impoverished or enriched depending on the depth of understanding of futures and foresight related literature, concepts and ideas.

At the level of *processes, projects and structures*, practitioners promote innovations that whole systems can adopt. An example is educational futures, which in order to aid the conceptual development of foresight in youth, must first develop educational futures theory (concepts), educational futures pedagogy (methods), as well develop institution level systems for their implementation.

Finally, at the level of *social capacity*, practitioners and individuals aim to develop foresight society wide. The establishment of IoFs might be said to be an example of this, which often have the power to promote futures thinking, methods, projects more ambitiously and society wide, and advance the social legitimation of the field. One level of capacity building is not better than another. The development of social foresight depends on the development of each stage. An analysis of such can allow us to see the partiality of practices, and help to facilitate an understanding of capacitating requirements in the context of a NFS.

FORESIGHT BY ORGANISATIONAL TYPE

This particular meta-scanning approach analyses organisational type toward a greater understanding of how organisational type might influence and mediate futures work, and its implications within a NFS. A variety of organisations are involved in foresight related work. Organisational types can be divided into: universities, consultancies, networks and NGOs, individual practitioners and academically affiliated research institutes.

What is the significance of organisational type? Organisational type can influence a variety of things, including funding sources, clients, the purpose of the organisation, resources available, the sustainability of its operation, the moral-intentional context its foresight work will cater to, foresight methods used and their efficacy. So understanding organisational type can not only shed light on strategic considerations of an organisation, but also on how life conditions can shape the values by which an organisation operates, and how the tools they use relate with their overall purpose and mission.

FORESIGHT BY REGION

Basic data on where the foresight practitioners and organisations are physically located is used to provide a spatial picture. While this type of information might be considered anecdotal, such information is useful in confirming or disconfirming assumptions on regional issues related to geography.

CONCLUSION

Metascanning is a new type of research endeavour particularly suited to a complex world inundated by information. It allows for breadth exploration of research subjects, while providing an analytical basis for depth. It is a relatively new development that draws upon the insights and processes of other research traditions. Because of this newness it is also incomplete, and will require critique and re-conceptualisation to reach its full potential. It has, however, the potential to help shed new light and direction in a complex world.



Appendix B:

Survey and scanning results

This appendix provides the results of the survey and scan, and formed the basis for the analysis undertaken in the main text. The information provided comes from survey responses, as well as publicly available web sites and literature. Several practitioners and/or organisations declined to have their results published. In some rare cases, information came from the experiences of those at AFI. All sources are cited.

For convenience, abstracts are organised by organisational type, then alphabetically:

1. Research institutes
2. University Education
3. Firms/Consultancies
4. Independent Practitioners
5. Networks
6. Not-for-profits
7. University services

RESEARCH INSTITUTES

Australian Centre for Innovation and International Competition

(Ron Johnson)

The ACIIC aims to assist public and private sector organisations to better address the challenges of the future through innovation. They primarily work with national and overseas government departments and agencies, some corporations, international agencies and educational institutions. They work within a wide variety of domains and research priorities, including education, water, irrigation, emerging technologies, urban development, health care, transport, and other areas. Futures methods include scenario planning, environmental scanning, Delphi polling, technology road-mapping, anticipatory intelligence, and visioning.⁹⁹

The Australia Institute

(Clive Hamilton)

Launched in 1994 to develop and conduct research and policy analysis and to participate forcefully in public debates. The purpose of the Institute is to help create a vision of a more just, sustainable and peaceful Australian society and to develop and promote that vision in a pragmatic and effective way. It conducts research for government, business, unions and community organisations on a variety of topics: climate change, population aging, consumerism, intellectual property, international trade, pornography, demographics, social behaviour, healthcare, tax, education, land care, sustainability, indigenous affairs, employment, economics, privatisation, logging and forestry. Futures tools include scenarios and progress indicators.¹⁰⁰

Australian Foresight Institute

(Richard Slaughter, Joseph Voros and Peter Hayward)

AFI was established in 1999, at Swinburne University of Technology in Melbourne, to develop an innovative set of postgraduate programs and research in the area of applied foresight. Apart from supporting the University in developing its own forward-looking strategies, its main aims are to: to provide a global resource centre for strategic foresight; create and deliver world class professional programs; carry out original research into the nature and uses of foresight; focus on the implementation of foresight in organisations; and work toward the emergence of social foresight in Australia. Overall, AFI aims to set new standards internationally and to facilitate the emergence of a new generation of foresight practitioners in Australia. Activities also include education (see *Swinburne University of Technology*), networking, research and consulting. It is the home and pioneer of 'Integral Futures' and the basis for this Pratt Foundation funded review of the field.¹⁰¹

CSIRO

While not an organisation which focuses on futures per se, foresight work there continues to be significant. Recently CSIRO Sustainable Ecosystems Resource Futures produced the groundbreaking report by Barney Foran and Franzi Poldy *'Dilemmas Distilled'*, examining various scenarios for Australia in relation to population growth, using extrapolative, complex adaptive systems and modelling methods.¹⁰² Tom Beer, through CSIRO atmospheric research, has done research on environmental risk assessment, geophysical risk and sustainability, air quality, greenhouse gas emissions, bio-security, alternative transport systems, and many other topics using modelling, forecasting and systems methods.¹⁰³ Doug Cocks has done research on technological change, economic planning, ecosystems, rural planning, sustainability and the future of Australia.¹⁰⁴ There are certainly others at CSIRO which this author overlooked due to insufficient resources, contacts and time.

Institute for Sustainable Futures

Established in 1996 by the University of Technology, Sydney to work with industry, government and the community to develop sustainable futures through research, consultancy and training. The focus on the future is expressed through its name and mission, which has led towards using futures methods and tools. Sustainability is based on an assumption that current practices are unsustainable, only revealed by exploring the implications of current trends and drivers. Further, sustainability requires an imagining of what a sustainable future might look like, in order to move towards that future. Futures methods and tools are vital for both these purposes. ISF works across many domains and disciplines, focusing broadly on sustainable futures. Currently they are concentrating on sustainable water futures, sustainable energy and greenhouse reduction, sustainable transport and urban form, sustainable buildings and design, sustainable consumption and the social aspects of sustainability. ISF uses futures methods in an educational context, usually within particular organisations (particularly in the water industry). Also does integrated resource planning across Australia with water utilities in most states. ISF has used backcasting methods with water utilities in NSW and Victoria, and with catchment management groups. Other projects are for a mix of clients, from water utilities, to developers, to state and federal government agencies, to non-government organisations, to educational institutions. Routinely uses backcasting and visioning processes on many projects, and uses forecasting in the context of integrated resource planning, i.e. projecting future energy and water consumption with end-use analysis. Other methods used include scenario building and risk analysis, participatory and deliberative processes (including dialoguing and conversations) on some projects (these projects have not had a specific futures focus, but proposals are in the pipeline to apply these methods to futures work.) They are also beginning to employ Integral Futures approaches that also include elements of Causal Layered Analysis.¹⁰⁵

UNIVERSITY EDUCATION

Australian Catholic University's PhD option in futures education

(Caroline Smith)

Based in Melbourne, the aim of the futures education at ACU is to address the missing dimension of Futures Studies in education from classroom practice to curriculum and policy. Faculty there have worked with undergraduate and post graduate primary and secondary teachers and other education professionals such as consultants and school principals. Some futures methods used include: possible, probable and preferable futures, images of the future, futures wheels/concept maps, 200 year present, scenario describing, backcasting, and causal layered analysis.¹⁰⁶ Caroline Smith and Debra Bateman also recently carried out a mapping survey of current principles and practices of futures education in Australia, titled 'Futures Education in Australian Primary and Secondary Schools' which has been published as an AFI monograph.

Canberra Institute of Technology

(Ian Ferguson)

Offered a Graduate Certificate in Qualitative Futures Analysis. The six month course at the Bruce campus includes face-to-face workshops undertaking research and completing assessment items. Requires the completion of four units: Cognitive processes, Futures planning and situational awareness, Exploratory methods and normative futures, and a Workplace project.¹⁰⁷

Centre for Defence and Strategic Studies

(Bronwynne Jones)

The Centre for Defence and Strategic Studies in Canberra offers a Masters of Strategic Studies (through Deakin University). The program has within it a Future Strategic Settings Module delivered to approximately fifty senior military and government officials from Australia and overseas. Futures methods include: Scenario planning, strategic conversation, Integral Futures, strategic interviewing, environmental scanning, storytelling, strategic navigation, futures wheels, implication diagrams, scenario matrices, scenario timelines, visioning, trend analysis, wildcard spotting, assumption surfacing and systems thinking.¹⁰⁸

Central Queensland University applied professional PhD

Offers a professional doctorate with a transdisciplinary and applied approach, incorporating several futures courses, including 'Critical futures' aimed at developing basic futures literacy with concepts and perspectives, metaphors, scenario building and other methods, as well as 'Futuring?', which aims to provide theoretical frameworks for the analysis contemporary conditions, trends and potential futures.¹⁰⁹

Curtin University of Technology

(Anita Kelleher)

Located in Perth and offers a Master of Futures Studies. It is a multi-disciplinary course, both experiential and theoretical. The program is part of the Graduate School of Business. Graduates get tools to help them assist companies, governments and individuals with strategic issues, exploring alternative futures, and managing organisational and societal change. There are six course work units plus a research project and report. The program is part of the Graduate School of Business. The program can be part time or full time. It is an applied learning course using systems and complexity based approaches.¹¹⁰

Deakin University

(Noel Gough)

Located in Melbourne with one undergraduate course in futures education in the School of Social and Cultural Studies in Education taught by Professor Noel Gough. The elective study provides an introduction to key concepts and issues in futures study and a range of methods for anticipating alternative futures in education, society and culture. Workshops and readings include critical appraisals of images of futures in speculative literature and popular media, including comics, film, television, video and computer games, and the internet. Particular emphasis is placed on futures perspectives as aspects of everyday social and cultural life, their relevance to all levels of education and all key learning areas, and the variety of resources and educational strategies through which a futures orientation can be integrated into professional practices in fields such as the arts, communications, media, and education.¹¹¹

International Management Centres

(Robert Burke)

An international business education association offering several accredited courses in action learning futures. The programs take a holistic approach focusing on community futures, ecological literacy, and eco-centric leadership – creating a new model of inclusiveness for the facilitation of community/organisation re-invention. Graduates get frameworks to help them understand new hierarchies of global leadership, global governance, deep democracy, managing complexity, and pluralistic foresight skills. The degrees have been offered since 2000.¹¹²

University of Sunshine Coast's MA and PhD

(Sohail Inayatullah)

Queensland based university offering an Executive Certificate in Futures Studies. To obtain it, students attend a month long course (covering the content of the future, methodology and epistemology, and action learning) followed by a major research paper. The program emphasises applying futures to the organisation that the student works in. The group organises its own meeting once per month. The University also offers Master and PhD students from the Faculty of Arts and Social Sciences the option of specialising in Futures Studies, done entirely through research, and completed depending on the pace of the student.¹¹³

Swinburne University of Technology Masters in Science and PhD option

(Richard Slaughter, Joseph Voros, Peter Hayward)

Melbourne based offering a nested program in Strategic Foresight where students can progress from Graduate Certificate, Graduate Diploma, Masters, to a PhD. The program prepares students for a successful career in foresight and strategy within a range of organisations. A guiding assumption of the program is that strategic foresight will be a cornerstone of organisational success in the turbulent twenty-first century environment. Those who master knowledge and skills in this area will be well placed to become leaders in a wide range of fields. The program is part of the Australian Foresight Institute, established in 1999 to develop an innovative set of postgraduate programs and research in the area of applied foresight. 'Integral Futures' based course incorporating field-wide approaches and methods.¹¹⁴

Mt. Eliza College

(Robert Burke)

Melbourne based business college recently began offering week-long executive short courses in Futures Studies for corporate and government clients. It aims to improve organisational and individual effectiveness. It teaches a variety of methods including: Macrohistory, futures triangle, futures landscape, emerging issues analysis, casual layered analysis, scenarios and transformational leadership.¹¹⁵

FIRMS / CONSULTANCIES

Designer Futures

(Anita Kelleher)

The Perth based firm was established for the purpose of working with clients to enhance their prospects of longer-term success through broader, deeper and more integrated strategic thinking. Focus on work with non-profits, educational institutions and government. Methods and approaches used include, strategic thinking and strategy development, transition facilitation, Causal Layered Analysis, corporate intelligence, visioning, holistic risk assessment, simulations, scenario development, participatory action research and trend analysis. They use futures tools and methods to open up possibility space, stimulate creativity and inform the development of strategic options. They also use transition techniques to assist clients in the early stages of implementation thereby building the bridge between the future and the present.¹¹⁶

EcoSteps

(Julian Crawford)

A sustainability and Triple Bottom Line research think tank and consultancy based in Sydney. Works in education and strategy development across all sectors in Australia, especially with local government, environmental NGO's and with corporates. Primarily uses a backcasting method based on The Natural Step Framework.¹¹⁷

Futureware

(Robert Burke)

The Sydney based firm does consulting and education (see *Mt Eliza Business College*) with local and state government, organisations, corporations and environmental consultants. Aims to help organisational and individual effectiveness and to introduce other ways of knowing in those settings. Futures methods include: macrohistory, futures triangle, futures landscape, emerging issues analysis, casual layered analysis, scenarios and transformational leadership.¹¹⁸

GlobalForesight

(Nick Marsh, Mike McCallum and Dominique Purcell)

The strategy based firm from Sydney focuses on providing and facilitating 'strategic foresight' and its methods. Aims to develop clarity about the future to inspire current performance, using the future as the basis for strategic renewal. Develop processes which engage participants and stakeholders in the process of thinking about the future, how to move towards that future, and helping clients to successfully accomplish their visions. Use a convergence of new thinking from future studies, 'new' strategic planning, science and technology foresight, and organisational development.¹¹⁹

The Hames Group

(Richard Hames)

Melbourne based firm formed in 1995 out of disenchantment with current societal paradigms, envisaging a new kind of collaborative network focused on the creation of better, more informed, global futures. The consulting company focuses on researching alternative futures from a number of diverse, higher-level lenses and worldviews, advising corporations and governments on critical issues so that they are better able to prepare, respond and adapt to changing global conditions; and help influence individuals, communities and institutions come to terms with the implications of ‘future memories’ toward creating better futures together. Uses game, complexity and network theories together with methods such as Open Space Technology, the Hames & Oka’s knowledge designer heuristic, Peter Checkland’s soft systems Methodology, and appreciative inquiry.¹²⁰

Imaginative Futures

(formerly Ian Ferguson and Associates)

The Brisbane based consultancy aims to help organisations position themselves for an uncertain future by developing more resilient corporate/strategic plans, and to help examine a range of possible futures and the likely paths to each one. It has worked mostly with government – either at departmental level or at major project level. Futures methods include: Scenario generation; Delphi studies; business and process modelling; creative techniques (story telling, physical modelling). These are usually preceded by standard research and environmental scanning, and usually followed by more traditional corporate and strategic planning methods.¹²¹

IBISWorld

(Phil Ruthven)

Melbourne based company has its origin in the formation of IBIS Research Services in 1971 operating as a market research organisation. It later specialised in the long range forecasting of industries and the business environment at large, with an emphasis on providing information for strategic planning and research purposes. Provides forecasting and analysis from many (over 1000) industry, company, economic and demographic databases. Commercially oriented toward strategic and business intelligence.¹²²

Intelligent Futures

(Brett Pepler)

A Canberra-based consultancy specialising in scenario-based strategic planning. Does work in a variety of countries: US, UK, Germany, New Zealand and Singapore. Projects have been mainly in the public sector at both the Commonwealth and state levels, with particular emphasis on defence futures, intelligence and crime enforcement.¹²³

Delaney and Associates

(Kate Delaney)

Canberra based consultancy focused on strategy has worked in a variety of settings including, defence, government, ICT and other industries. A founding member of Australian public service futures forum, and Defence futures forum. Has set up environmental scanning groups with a variety of agencies, and done horizontal scanning with eighteen departments in New Zealand. Employs a wide variety of methods including futures cone, time line, scenarios, environmental scanning. She has taught strategy courses with CIT's graduate diploma in futures qualitative analysis.¹²⁴

LookOut Futuring Services and Network

(Bronwynne Jones)

Canberra based consulting practice works with government (for consulting and advice) as well as provides futures education for educational institutions and private sectors. Also has worked in natural resource management and the wool industry. Futures methods include: Scenario planning, strategic conversation, Integral Futures, strategic interviewing, environmental scanning, storytelling, strategic navigation, futures wheels, implication diagrams, scenario matrices, scenario timelines, visioning, trend analysis, wildcard spotting, assumption surfacing, and systems thinking.¹²⁵

Metafuture

(Sohail Inayatullah and Ivana Milojevic)

Queensland based practice uses broad Futures Studies frameworks and approaches: Macrohistory, the study of grand patterns of change, including evolution; anticipation and mapping – foresight and insight through methods such as futures scans, emerging issues analysis, age cohort analysis, the futures triangle; multiple epistemologies – decolonizing received futures, and exploring alternative ways of knowing the world, through methods such as Causal Layered Analysis and Integral analysis that focus on deepening our understanding of the future; creating alternatives – the exploration and creation of new futures (social and political design) using methods such as scenarios and nuts and bolts; and transformation – going beyond strategy to create desired futures through methods such as visioning, backcasting and action learning experiments. Employs critical and episteme reflective methods focused on civilisational issues, peace futures, health futures, multi-cultural futures and women's futures, as well as organisational strategy and development.¹²⁶

The Mindshifts Group

(Babette Bensoussan)

Sydney based consulting company that specialises in competitive intelligence – identifying what industries, markets and competitors are likely to do in the future. It works primarily with corporate, government, and educational institutions, doing consulting and training. It has used various futures tools for both training purposes and for consulting projects. It uses most competition and strategic management tools to identify likely future behaviour of industries, markets, and competitors. Such tools have included Porter's Five Forces, scenario analysis, growth vector analysis, and S-curve analysis.¹²⁷

Preferred Futures

(Peter Ellyard)

Melbourne based consultancy which advises governments, government departments, utilities, corporations, trans-national companies, unions, professional institutes for engineers, architects, designers, surgeons and teachers, community and environmental organisations, and educational institutions. It assists organisations to prepare themselves and their programmes for the foreseeable requirements of the twenty-first century, to develop their strategic thinking capabilities, and to be adaptable in order to meet unforeseeable demands. Clients are from more than a dozen governments including those of Malaysia, the Republic of Korea and Papua New Guinea.¹²⁸

Strategic Consulting Group

(Peter Saul)

Sydney based practice does most futures work as a member of The Futures Foundation, a not for profit organisation. Aims to help senior executives anticipate future opportunities and threats and move faster than competitors to take positions of advantage in their chosen markets. Has generally focused on work within the insurance industry, health industry, national (i.e. for a country) and regional communities. Has worked with multi-national and Australian insurance companies; a multi-national pharmaceutical company; the corporate services division of a NSW government agency, a community on the Central Coast of NSW, and a government in the Asia Pacific region. Has used a variety of methods, including: Scenario writing, emerging issue analysis, back casting, visioning (guided visualisation), trend analysis, and causal layered analysis.¹²⁹

Strategic Journeys

(Gary Saliba)

Canberra based consulting company aims to help shape beliefs systems so that people have a more expanded view of their external operating environment and so can make more informed decisions. Has worked across federal, state and local governments, Australian and multi-national corporations, non-profits, and educational institutions. Areas of work include: education, transport, aging, mining, pharmaceutical, health services, justice, law, human resources, indigenous people issues, regional development, and marketing. Futures methods include: Scenario planning, systems theory, complex adaptive systems, values systems.¹³⁰

Systemic development Institute

(Bruce McKenzie)

Sydney based consultancy has worked within a range of areas, federal government departments, multi-national and Australian based corporations, urban and rural community organisations. It aims to provide for the development of systems thinking and futuring capability in organisations and their senior management. Works within a range of domains: Strategic risk management, work culture change, and testing strategic robustness. In the financial services, transport, pharmaceutical, education, regional services, agriculture, beverage, armed services, clothing and health industries. It uses scenario learning – learning about plausible futures through scenario creation – trends analysis, brainstorming discontinuities, wind tunnelling present against plausible futures, strategic conversation on plausible future events and their impact.¹³¹

INDIVIDUAL PRACTICES

Marcus Bussey

An educator and futurist with articles and book chapters published in the areas of futures education, art history, spirituality, PROUT theory and futures. Also the Principal of Harmony Montessori School, Buderim, Queensland, Australia.¹³²

Bob Dick

Queensland based consultant with an action research and organisational development approach, employs a number of futures tools, including: Visioning, environmental scanning, and Delphi. Has used futures tools for education, community planning, and corporate planning for a variety of clients: in his own academic work at university as part of participative course design; with community groups (non-profits); with government sector organisations. Almost all of this has been done in the context of strategic planning. Does ‘whatever seems to be useful for a given client at the time’; ‘I don’t see how you can manage the present without giving some thought to possible futures.’¹³³

Richard Eckersley

Located in Canberra as part of the CSIRO Resource Futures program focused on measures of progress. Now with National Centre for Epidemiology and Population Health, he works on cultural correlates of well-being, measures of environmental sustainability, measures of progress, and quality of life, the relationships between economic growth, quality of life and ecological sustainability; the social determinants of health and well-being; happiness and life satisfaction; visions of the future, youth suicide and other issues. Projects include: developing a national index of subjective well-being; analysing the cultural correlates of well-being; measuring progress, the futures of Australia, quality of life indicators, research on young people's expected and preferred futures for Australia and Australian environmental challenges. Also associated with the Australia Institute. While he no longer considers himself a part of the futures field, his research and publications are futures related and significant enough to warrant his inclusion.¹³⁴

Merrill Findlay

Melbourne based and has been involved in a wide range of progressive social movements and has lived and worked in many different contexts. Works between Forbes, NSW and Melbourne, where she directs *Imagine the Future*, a small project-based cultural development and futures organisation she founded in the early 1990s; edits the e-journal *Re-dreaming the Plain*; and continues her research projects in the Environment and Planning Program, School of Social Science and Planning, Royal Melbourne Institute of Technology University.¹³⁵

Jennifer Gidley

Based in New South Wales, she has many years experience in psychology and education having worked as a psychologist, teacher and consultant in all educational levels and sectors. She also founded and developed a Rudolf Steiner school in rural Australia for over ten years. She works through her private consultancy, focuses on education futures and in 2004 facilitated AFI's new on-line Graduate Certificate in Strategic Foresight. Her main areas of futures work include educational transformation, holistic education, imagination and consciousness development, cultural renewal and youth visions of the future for empowerment.¹³⁶

Steve Gould

Queensland based community development futurist currently facilitating the Maroochy 2025 project. Focuses on local government planning, and aims to improve the application of futures orientated local government planning and policy making to support the creation of sustainable communities. The general context of the work has been local government planning and policymaking, community visioning, strategic planning.

Futures methods include: causal layered analysis, emerging issues analysis, futures triangle, scenarios, backcasting, macro-history, and visioning.¹³⁷

Louise Hogan

Melbourne based consultant aims to support organisations to develop sustainable business solutions. Facilitates the development of future orientation to enable groups to think about the problem from a range of perspectives including a future perspective. Has worked with a range of corporates, multinational organisations, NFPs, and government departments. Methods employed include systems mapping, environment scanning, scenario planning, CLA, and futures wheels.¹³⁸

Frank Hutchison

His main research and teaching interests relate to issues of peaceful pedagogies, future generation studies, and non-violent social change. Has been curriculum consultant at both the primary and secondary school levels in the areas of social literacy, human rights and alternatives to violence. Has written and published extensively on futures consciousness and futures education focused on peace research and future generations thinking. Based in New South Wales.¹³⁹

Dennis List

South Australia based researcher aims to enhance organisational foresight through his research/evaluation consultancy. His end-goal is to encourage democracy and open societies through developing participative methods of research, evaluation, and foresight. He has worked with various international broadcasting organisations in Australia and Asia, development co-operation agencies in Asia and Africa, as well as private companies in Australia. The general area of work has been mainly within the media and communications industry, as well as recent work with manufacturers, NGOs, industry organisations, local authorities, and other types of organisations. Foresight methodology is action research based, inclusive of a variety of foresight methods: Search conference, consensus groups, future search, vision development, values clarification, co-discovery conference, futures wheel, scenario planning, backcasting, environmental scanning. He is currently developing a new approach to scenario planning.¹⁴⁰

Ivana Milojevic

Post-doctoral Research Fellow at the University of Queensland's School of Education. Her focus is social research on peace futures, and women's futures, and women's visions of the futures of education. Author of *Educational Futures: Dominant and Contesting Visions*. Forthcoming books include: *Feminist Futures*, and *Neo-humanism and the Futures of Pedagogy*.¹⁴¹

Richard Neville

Sydney based speaker, publicist, activist and satirist. Takes a popular yet critical approach and focuses on speaking with some workshops.¹⁴² A co-founder of the Australian Futures Foundation, he offers an array of tools and techniques for surfing the waves of change. Commentator on cultural and consumer trends, corporate consultant on issues of ethics and social responsibility, co-founded the Futurist Network, a brainstorming centre for shaping the twenty-first century. Wrote with Julie Clark, scenario stories and scripted video clips for 'Alternative Futures: Scenarios for Business in Australia to the year 2015'. Recently authored *Footprints of the Future*, co-founder and director of The Neville Freeman Agency.¹⁴³

Susan Oliver

Melbourne based consultant, most of her futures work has been done as a consultant – both through her own consultancy and for Anderson Consulting. She has worked within public and private sectors, charitable, commercial and NGOs. The areas she has worked in include health, education, community learning, new materials, furniture and Textile Clothing and Footwear industries, aerospace, built environment, newspapers, media, new media, social welfare, crime, innovation, research and development in new sciences, arts and cultural industries, finance and banking, food industries, telecommunications, e-business, electronic banking. Futures tools and approaches include: Systems analysis, soft systems analysis, scenario workshops, scenario development through research and systems, normative scenarios and visioning, modelling, focus group research, among other methods. Her focus is especially on adapting futures methods to serve client needs.¹⁴⁴

Tony Stevenson

Former president of the World Futures Studies Federation, located in Queensland, Tony now works as a sole trader and offers services on request to clients, usually in cases where they wish to challenge and learn from the future. He has worked with government enterprises and agencies as well as small and large business. Conducted work in the area of regional planning; primary, secondary and tertiary education, and Futures Studies for business, and government community planning. Methods employed include discussion groups reviewing an organisation's change over the past twenty to fifty years, workshops to challenge executives and directors about futures, analysis of emerging issues, critical analysis of trends and issues, participatory (anticipatory action learning) processes for creating alternative scenarios and preferred visions, backcasting, action planning and evaluation.¹⁴⁵

David Wright

Main interests in futures thinking include communication futures, images of the future in arts and aesthetics, the futures of work, nation-building and self-identity. Extensive research on cultural transformation and futures of Japan, he is currently teaching futures at Mirai University in Hakodate, northern Japan.¹⁴⁶

NETWORKS

Futures Foundation

(Charles Brass)

A not-for-profit centre for learning about the future, founded by Jan Lee Martin from Sydney and now run by Charles Brass from Melbourne. Values based, at the crossroads of management and Futures Studies. Its two primary objectives are to promote the discipline of Futures Studies as a unique management tool, and to provide a forum for members and managers to engage with critically important emerging issues. Its network brings together some of Australia's top futurists, employing a number of futures methods: surveys and self-assessments, visioning processes and retreats, scenario development, timelines, backcasting and modelling, cross-impact matrices, Delphi, environmental scanning, and others.¹⁴⁷

The Neville Freeman Agency

(Oliver Freeman and Richard Neville)

The Neville Freeman Agency, based in Sydney, works with Australian businesses and organisations to help them clarify issues in the strategic management of their businesses. Frequently this work involves developing customised scenarios, although they also use a variety of other modes of strategic enquiry, such as critical conversations and systemic approaches to all aspects of organisational development.¹⁴⁸

NOT-FOR-PROFITS

Imagine the Future

(Merrill Findlay)

A very small project-based cultural development and futures organisation dedicated to the values of social justice, cultural pluralism and ecological sustainability. The organisation emerged from a series of gathering of like-minded people in 1989/90 in Melbourne, Australia, and was supported by the Australian Conservation Foundation in 1990/91. Formally incorporated as an independent not-for-profit association in Victoria, in February 1996. Projects include: 'eco-versity' and associated 'sustainability forums'; youth futures program 're-imagine your neighbourhood'; 'East Timorese Youth Ambassadors' program; and e-journal *Re-dreaming the Plain*.¹⁴⁹

Foresight International

(Richard Slaughter and Laurie Wheldon)

Outreach and publishing entity, serving a range of future needs by promoting the development of Futures Studies and applied Foresight work around the world. Among its non-commercial concerns are: the development and application of critical Futures Studies; understanding and extending the uses of foresight in everyday life; the use of Futures Studies in educational contexts: curriculum, professional development, leadership training and administration; the implementation of foresight in organisations across the board; the development and implementation of social foresight; the evaluation of foresight projects; the mentoring of young foresight professionals; the pursuit of quality in futures work; the further evolution of the *Knowledge Base of Futures Studies*; and the development of national foresight strategies.¹⁵⁰ Also aims to develop the theory and practice of Integral Futures, and produces the CD-Rom version of the *Knowledge Base of Futures Studies*, re-edited in 2005.

Pacific Centre for Futures Innovation

(Paul Wildman)

This Queensland based not-for-profit aims to foster social innovation and a better world for future generations. Works within host organisation's offices, with colleagues from those organisations, in both not-for-profits and for-profits. Has used futures in child care, disability services, training, community economic development and public service, and publishing 'grey literature' (community oriented self-publishing). Futures tools include: deep futures, futures management, strategic planning, causal layered analysis, emerging issue analysis, trend watch, backcasting, hermeneutic futures, incasting, scenario development, integrating foresight, insight and hindsight.¹⁵¹

Renaissance Earth

(Marian Langkjar)

New Melbourne based not-for-profit foundation and media company aims to help communities nation-wide to explore, articulate and promote a new worldview of sustainable futures, making full use of available knowledge, technology and resources to create a multimedia platform. Its strategy is to unite, promote and support those who are leading the way in creating positive change within the community – individuals, organisations, business and government. So far has worked in Melbourne doing business seminars. The foundation and media platform will be used across all sectors of the community, locally and Australia wide. Their 'TOMORROW' initiative is intended to empower all Australians with an opportunity to communicate their hopes and visions for a better Australia and, in a practical sense, demonstrate how Australians can work together, using combined skills and resources to change the way people respond to the needs of the nation.¹⁵²

UNIVERSITY SERVICES

Curtin University of Technology's Scenario Planning and Research Unit (Trudi Lang)

Perth based unit works within a variety of government and industry settings (e.g. water, education, tourism, ports, financial services, minerals, oil and gas, aged services, local government, etc.) Main clients include industry, government and not for profit organisations. The purpose of the unit is for education, consultancy and doing contract research. Employs scenario building, environmental scanning, strategic dialogue and conversation, visioning, trend analysis and other methods.¹⁵³

Swinburne University of Technology Foresight and Planning and Review (Maree Conway and Marcus Barber)

Melbourne based University's unit for reviewing and coordinating strategy and planning activities. Its brief is to integrate foresight approaches into the University Planning Framework to strengthen current planning processes, and to provide the university with an enhanced capacity to understand its external environment and potential futures. Foresight processes are used both internally and externally with professional associations in the UK (Association of University Administrators), in New Zealand (Association for Tertiary Education Management), Australian and state government departments. Areas of focus include education within universities and corporate planning and strategy development. Futures tools use include: scenario planning, strategic scanning, casual layered analysis, wildcards and value systems frameworks.¹⁵⁴

University of Technology Sydney (Hugh Pattinson)

Futures thinking and methods are used by the e-business marketing program at UTS to identify new technologies, particularly in e-business, and for education (postgraduate business/marketing). The program also involves works with some private companies, and as part of some doctoral studies, as well as with new postgraduate business education curriculum. Courses are run out of faculty of business at UTS. Futures methods are applied toward software application development, new product development, and education. Futures methods include: scenario planning, cognitive mapping and visioning tools.¹⁵⁵

Note: This list should by no means be considered complete. There are bound to be more individuals and organisations doing valuable foresight work, which were overlooked due to time and resource constraints on the part of the author.



Notes:

- ¹ Fisher, F (2004) 'Ecoliteracy & Metaresponsibility: Steps to an ecology of mind', *Systems Practice and Action Research*, May p1
- ² Slaughter R (1999) *Futures for the Third Millennium*, Prospect, Sydney. p280.
- ³ Slaughter R (1995) *The foresight principle*, Adamantine Press, Westport, CT p96.
- ⁴ Slaughter R (1999) 'A new framework for environmental scanning', *Foresight*, vol.1, n.6, 387-397.
- ⁵ Voros, J (2003) *Re-framing environmental scanning*, Monograph Four, Australian Foresight Institute, Melbourne.
- ⁶ Slaughter, R (2003) The rise of metascanning: methodological renewal in Futures Studies and applied foresight. Unpublished.
- ⁷ Rogers E (1995), *Diffusion in Innovation*. 4th ed. Free Press. New York.
- ⁸ Naismith, L (2003) '2003 Australian Public Service Strategic Foresight Survey', Australian Foresight Institute, Swinburne University of Technology, accessed 9 Dec. 2003 www.swin.edu.au/afi
- ⁹ Twenty three surveys were received. Profiles are paraphrased from survey responses, web sites or related literature.
- ¹⁰ While this in some respect parallels Spiral Dynamics, which incorporates analysis of life-conditions: historical times, geographic place, human problems and social circumstance, to explain 'bio-psycho-social' dynamics of individuals, communities and societies, it developed largely from different influences toward different applications.
- ¹¹ Bell W (1997) *Foundations of Futures Studies Volume II*, Transaction Publishers, New Jersey, p38
- ¹² Slaughter, R (1999) 'Professional standards in futures work' *Futures*, vol.31, n.8, p485
- ¹³ Inayatullah, S (2002) *Questioning the future: Futures Studies, action learning and organisational development*, Tamkang University Press, Taiwan, p102

- ¹⁴ Bell, W (1997) p279-314
- ¹⁵ Singer, P, ed. (1986) 'All animals are equal' in *Applied Ethics*. Oxford University Press, New York, p225
- ¹⁶ Bell W. (1997) p171-227
- ¹⁷ 'Every human act takes place in language. Every act in language brings forth a world created with others in the act of co-existence which gives rise to what is human. Thus every human act has an ethical meaning because it is an act of constitution of the human world. This linkage of human to human is, in the final analysis, the groundwork of all ethics as a reflection on the legitimacy of the presence of others.' Maturana & Varela (1987) *The Tree of Knowledge*, Shambhala, Boston p247
- ¹⁸ 'Some futurists solve or perhaps, avoid the problem of making and justifying explicit value judgments simply by accepting the goals or values of their clients. If their clients want to make more powerful, economical, and appealing widgets in the future, then some futures researchers accept those goals. Accepting the goals of the client is attractive because it is an easy, uncomplicated thing to do (assuming that the client really knows what his or her goals are). But this obviously leaves the client's goals and values no more nor less justified than before the futurist arrived on the scene.' Bell W (1996b) 'Toward a futurist code of ethics', *Knowledge Base of Futures Studies*, Futures Studies Centre, Melbourne, p4
- ¹⁹ The field has only recently found legitimacy in education, business and policy.
- ²⁰ AFI lecture with Gary Saliba (2001)
- ²¹ CLA is an example of a process that leads to alternative scenarios based on analysis of inter-subjective assumptions.
- ²² Voros, J (2003)
- ²³ See Elise Boulding's '200 year present'
- ²⁴ A sharp contrast exists between the results of Luke Naismith's survey and this meta-scan's findings.
- ²⁵ Ramos J (2002) 'Action Research as Foresight Methodology', *Journal of Futures Studies*, August, Taiwan
- ²⁶ Graham Molitor is considered by some to be the founder of EIA.
- ²⁷ Peter Hayward at AFI is conducting research on correlations between psychology and foresight. see:
<http://www.swin.edu.au/afi/the%20uses%20of%20foresight%20in%20everyday%20life.pdf>
- ²⁸ See the work of Oliver Markley:
<http://www.owmarkley.org/inward/Docs/ABSVisionaryFutures.htm>
- ²⁹ Comment by Peter Hayward July 2004 at AFI
- ³⁰ Inayatullah S, Gidley J (2000) *The University in Transformation*, Westport, Conn., Praeger.
- ³¹ Ramos J (2003) 'International survey of University Futures Courses', Australian Foresight Institute, Swinburne University of Technology
- ³² See: <http://www.deh.gov.au/soe/2001/settlements/settlements01.html>
- ³³ Examples are the influence of CLA in Queensland, national policy in ACT, and Integral futures in Victoria.
- ³⁴ Slaughter R (1999) *Futures for the Third Millennium*, Prospect, Sydney, p252
- ³⁵ Anderson, B (1991) *Imagined Communities*, Verso, London.

- ³⁶ Slaughter R (2002) 'A national foresight strategy for Australia' Foresight International 1996, p2 accessed 20 March 2004, www.foresightinternational.com
- ³⁷ Slaughter R (1996, 2002) p1
- ³⁸ Slaughter R (1996, 2002) p1
- ³⁹ Slaughter R (1996, 2002) p1-2
- ⁴⁰ Such research has been conducted by Serafino de Simone, Chris Stewart and now Dr. Gio Braidotti
- ⁴¹ De Simone, S (2003) 'Philanthropy and foresight: a partnership for accelerating societal level well being?', Australian Foresight Institute, Swinburne University of Technology, p5 accessed 15 Dec. 2003, <http://www.swin.edu.au/afi/Best.htm>
- ⁴² De Simone, S (2003) p12
- ⁴³ Nutbeam D&HE (1999) *Theory in a nutshell: A guide to health promotion theory*, McGraw-Hill, Australia.
- ⁴⁴ De Simone, S (2003) p13
- ⁴⁵ De Simone, S (2003) p14
- ⁴⁶ Senge P & Scharmer O (2001) 'Community Action Research', *Handbook of Action Research*, Sage, London.
- ⁴⁷ Mills C.W. (1956) *The Power Elite*, Oxford University Press, New York,
- ⁴⁸ Synthesised from Galtung & Inayatullah (1997) *Macrohistory and Macrohistorians*, Praeger, Westport, CT
- ⁴⁹ Rogers E (1995) p281
- ⁵⁰ Rowe, R (2003) 'Sticky foresight: finding the futures tipping point', Australian Foresight Institute, Swinburne University of Technology, accessed 10 May 2004 <http://www.swin.edu.au/afi/Best.htm>
- ⁵¹ Fisher, F (2004) 'Ecoliteracy and Metaresponsibility: Steps to an ecology of mind', *Systems Practice and Action Research*, May p1
- ⁵² Rogers E (1995)
- ⁵³ Naismith, L (2003) '2003 Australian Public Service Strategic Foresight Survey', Australian Foresight Institute, Swinburne University of Technology, accessed 9 Dec. 2003 www.swin.edu.au/afi
- ⁵⁴ 23 surveys were received. Profiles are paraphrased from survey responses, web sites or related literature.
- ⁵⁵ Bell W (1997) *Foundations of Futures Studies Volume II*, Transaction Publishers, New Jersey, p38
- ⁵⁶ Slaughter, R (1999) 'Professional standards in futures work' *Futures*, Vol.31, n.8, p845
- ⁵⁷ Inayatullah, S (2002) *Questioning the future: Futures Studies, action learning and organisational development*, Tamkang University Press, Taiwan, p102
- ⁵⁸ Bell, W (1997) p279-314
- ⁵⁹ Singer, P, ed. (1986) p225
- ⁶⁰ Bell W. (1997) p171-227
- ⁶¹ Maturana & Varela (1987) *The Tree of Knowledge*, Shambhala, Boston p247

- ⁶² Bell W (1996b) 'Toward a futurist code of ethics', *Knowledge Base of Futures Studies*, Futures Studies Centre, Melbourne, p4
- ⁶³ Bell W (1997)
- ⁶⁴ Slaughter, R (2002) 'Foresight in a social context', Conference paper for 'Probing the future: developing organisational foresight in the knowledge economy'; Strathclyde p3, forthcoming
- ⁶⁵ Development of sustainable water use policy can be seen in this light, a long-term implementation effort which aims at societal level sustainability over decades.
- ⁶⁶ See for example: W. Bell; P. Moll; E. Cornish; R. Slaughter; S. Inayatullah; G. Molitor
- ⁶⁷ Polak F (1973) *The Image of the Future*, Joss-Bass, San-Francisco
- ⁶⁸ Bell W. (1996) 'Overview of Futures Studies.' Slaughter, R (ed) *Knowledge Base of Futures Studies*, Futures Studies Centre, Melbourne
- ⁶⁹ Bell W (1996) p5
- ⁷⁰ Moll P (1996) 'The thirst for certainty: Futures Studies in Europe and the United States' Slaughter, R (ed) *Knowledge Base of Futures Studies*, Futures Studies Centre, Melbourne, p2
- ⁷¹ Bell W (1996) p6-8
- ⁷² Moll P (1996) p3
- ⁷³ Moll P (1996) p5
- ⁷⁴ Moll P (1996) p5
- ⁷⁵ Bell W (1997) p94
- ⁷⁶ Bell W (1997) p300
- ⁷⁷ Email correspondence from Jim Dator, Sept 4th 2004
- ⁷⁸ Bezold C. (1978) *Anticipatory democracy: people in the politics of the future*. Random House
- ⁷⁹ Schultz, W. (1988) 'Silences, shadows, reflections on futures'. In: Dator J&RM, editor. *Who cares? And How? Futures of caring societies*. Honolulu: World Futures Studies Federation
- ⁸⁰ Bell W (1997) p299
- ⁸¹ Bell W (1996) p6-7
- ⁸² Moll P (1996) p3
- ⁸³ Bell W (1996) p7
- ⁸⁴ Moll P (1996) p3
- ⁸⁵ Schnaars S (1989) *Megamistakes: forecasting and the myth of rapid technological change*, The Free Press, New York.
- ⁸⁶ Hideg E (2002) 'Implications of two new paradigms for Futures Studies' *Futures*, 34, p3-4.
- ⁸⁷ See for example: Z. Sardar, R. Slaughter, S. Inayatullah, E. Masini, H. Henderson.
- ⁸⁸ Jungk R & Mullert N (1987) *Future Workshops*, Institute for Social Inventions, UK.
- ⁸⁹ Weisbord M ed. (1992) *Building common ground*, Berrett-Koehler, San Francisco.
- ⁹⁰ Moll P (1996) p5
- ⁹¹ See the work of: R. Hames, S. Inayatullah, P. Burke, P. Senge, R. Flood for work combining systems, complexity, worldview reflection, and action research
- ⁹² S. Inayatallah first charted the shift from predictive to critical futures in 'Deconstructing and Reconstructing the Future: Predictive, Cultural and Critical Epistemologies' (1990) *Futures*, Vol. 22, No. 2, March, p115-141 and predictive to participatory futures in 'Reductionism or layered complexity? The futures of Futures Studies' (2002) *Futures*,

Volume 34, Issues 3-4, April, p295-302, and most recently in *Questioning the future: Futures Studies, action learning and organisational development* (2002) Tamkang University Press, Taiwan

- ⁹³ Informed by Peter Hayward's explanations on Wilber's 'vision logic', Spiral Dynamic's 'second tier', Gebser's 'aperspectival' and 'integral'
- ⁹⁴ Voros J (2003) p47
- ⁹⁵ Slaughter, R (2004)
- ⁹⁶ Wilber K (1998) *Marriage of Sense and Soul*, Random House, New York, p50-55
- ⁹⁷ Voros J (2003)
- ⁹⁸ Slaughter R (2004) p173
- ⁹⁹ Paraphrased survey response
- ¹⁰⁰ taken from <http://www.tai.org.au> April 13 2004
- ¹⁰¹ taken from [http://www.swin.edu.au/afi/About The Australian Foresight Institute.htm](http://www.swin.edu.au/afi/About%20The%20Australian%20Foresight%20Institute.htm) April 13 2004
- ¹⁰² taken from <http://www.cse.csiro.au/research/Program5/futuredilemmas/#dd> April 13 2004
- ¹⁰³ taken from <http://www.dar.csiro.au/profile/beer.html> April 13 2004
- ¹⁰⁴ taken from <http://www.labshop.com.au/dougcocks/KDCPUBSLIST03.htm> April 13 2004
- ¹⁰⁵ paraphrased survey response
- ¹⁰⁶ Paraphrased survey response
- ¹⁰⁷ from email response April 19th 2004
- ¹⁰⁸ Paraphrased survey response
- ¹⁰⁹ promotional pamphlet
- ¹¹⁰ Ramos J (2003) p7
- ¹¹¹ Ramos J (2003) p36
- ¹¹² Ramos J (2003) p13
- ¹¹³ Ramos J (2003) p17
- ¹¹⁴ Ramos J (2003) p19
- ¹¹⁵ Paraphrased survey response
- ¹¹⁶ Paraphrased survey response
- ¹¹⁷ Paraphrased survey response
- ¹¹⁸ Paraphrased survey response
- ¹¹⁹ taken from <http://www.globalforesight.com/portal> accessed April 13 2004
- ¹²⁰ taken from <http://www.hamesgroup.com> accessed April 13 2004
- ¹²¹ paraphrased survey response
- ¹²² taken from <http://www.ibisworld.com.au/static/about.asp> accessed April 13 2004
- ¹²³ taken from <http://www.nevillefreeman.com/register/brettpepler.html> accessed April 13 2004
- ¹²⁴ from phone based survey
- ¹²⁵ Paraphrased survey response

- 126 taken from <http://www.metafuture.org/index.html> accessed April 20 2004
- 127 Paraphrased survey response
- 128 taken from <http://www.nevillefreeman.com/network/peterellyard.htm> accessed April 20 2004
- 129 Paraphrased survey response
- 130 Paraphrased survey response
- 131 Paraphrased survey response
- 132 taken from <http://www.metafuture.org/articlesbycolleagues/Marcusbio.htm> accessed April 20 2004
- 133 Paraphrased survey response
- 134 taken from http://www.metafuture.org/articlesbycolleagues/Eckersley/Richard_Eckersley_bio.htm accessed April 13 2004
- 135 taken from <http://users.tce.rmit.edu.au/e21811/merrillfindlay/author/profile.html> accessed April 20 2004
- 136 taken from <http://www.metafuture.org/articlesbycolleagues/Gidley%20bio.htm> accessed April 20 2004
- 137 Paraphrased survey response
- 138 Paraphrased survey response
- 139 taken from <http://www.metafuture.org/articlesbycolleagues/FrancisHutchinson/Frank%20bio.htm> accessed April 20 2004
- 140 Paraphrased survey response
- 141 taken from <http://www.metafuture.org/articlesbycolleagues/Ivanabio.htm> accessed April 20 2004
- 142 from conversations with colleagues
- 143 taken from <http://www.nevillefreeman.com/register/richardneville.htm> accessed April 20 2004
- 144 paraphrased survey response
- 145 paraphrased survey response
- 146 taken from <http://www.metafuture.org/articlesbycolleagues/Wright%20bio.htm> accessed April 20 2004
- 147 taken from <http://www.futurists.net.au/home.html> accessed April 13 2004
- 148 taken from <http://www.nevillefreeman.com/about.html> accessed April 20 2004
- 149 taken from <http://www.ecoversity.org.au/welcome.htm> accessed April 13 2004
- 150 taken from <http://www.foresightinternational.com.au/> accessed April 20 2004
- 151 Paraphrased survey response
- 152 Paraphrased survey response
- 153 Paraphrased survey response
- 154 Paraphrased survey response
- 155 Paraphrased survey response