From Critique to Cultural Recovery

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• 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.

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ABOUT THE AUTHOR

José Maria Ramos was born in Oakland, California in 1971 from Mexican ancestry. As a child he grew up in Los Angeles and was deeply influenced by the city's profound multiculturalism and eclectic philosophies, while as the same time deeply disillusioned with its materialism and unsustainability. 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. Living in Japan, Europe and Taiwan between 1995–2000 awakened his interest in world politics, cultures and futures studies. He has studied futures in Houston, Taipei and Melbourne, and has recently conducted research for the Australia Foresight Institute. He is committed to creating local and global communities of foresight through participatory action research and 'action foresight'. He now lives with his wife, DeChantal, in Melbourne Australia.

From Critique to Cultural Recovery:
Critical futures studies and Causal Layered Analysis

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TWO PORTRAITS OF CRITICAL FUTURES IN ACTION

The 'emancipatory tradition' in futures studies, if broadly defined, spans the work of many scholars, writers and peace minded individuals the world over. To name a few would do insult to the many that have made contributions. Critical futures studies, as an intellectual practice that aims to critique reified and oppressive social structures and destructive cultural traits, also fits within this emancipatory tradition. Again, the list of those who call themselves critical futurists is long, and naming a few would mean ignoring the rest. At any rate, critical futures and the emancipatory tradition has never been about names, but rather about the nameless, those many whose voices and visions have been ignored at the point of a gun, drowned out by the sound of falling bombs and otherwise dehumanised by 'modernising' forces and structural violence. Critical futures is not about the careers of a few scholars, rather it is about projects that transcend the narrow boundaries of the self. These projects range from creating a sustainable society and sustainable world for future generations, to creating futures of gender equality, to addressing the 'civilisational challenge', envisioning a peaceful 'Gaia of civilisations', and otherwise opening up spaces for popular participation in creating alternative futures.

The following monograph examines two such projects, those of Richard Slaughter and Sohail Inayatullah, and their respective contributions to critical futures studies. And while they represent the work of only two in the rich emancipatory tradition in futures, their contributions are particularly important. The reader may detect a tone of admiration throughout this monograph, which some academics might find embarrassing. Instead of apologising, however, there is a justification. The 'devotion' expressed here is not to these men specifically, but to what they represent, a rich world beyond the narrow confines of instrumental rationality and the biased assumptions of the West. While there is un-apologetic admiration of both men, they have also made foundational contributions to understanding the social construction of the future; and they have laid new ground for a generation of futures thinkers. It would be dishonest to say that this is an objective account of their work, but 'objective' no longer holds up under scrutiny anymore, given our understanding of how the 'object' of our examination changes according to our vantage point in the socio-political spectrum. A claim to objectivity would be presumptuous. The author shares their emancipatory ethos.

This monograph is by necessity biographical. We live within contextual fields of consciousness and action, and are expressions of our time and place. To deny these structures is to somehow make ourselves omniscient observers above the influence of the world. People and their ideas are naturally expressions of their context: the culture and era they

live in. To make the claim that a writer's ideas are somehow separate from their historical and cultural environment is to intimate the universality and everlasting truth of their claims. Far from this, the position taken here is much humbler. The work of these men will some day be looked at as products of their time, critiqued, and with different and unforeseen futures thinking emerging – 'transcending and including'. This is an attempt to 'situate' the ideas of these two men in the context of their life journey, to weave a narrative of individual exploration and social innovation. Far from muddying the waters with anecdotal facts, a 'contextual analysis' highlights the relevance of their ideas to their historical situation and their experiences as actors in the making of history.

The true objective of this monograph is two-fold. Firstly, to highlight and explore the ideas and methods these individuals innovated; thus, the background and core ideas of many of the thinkers that influenced Slaughter and Inayatullah are unearthed and characterised. And, secondly, to situate the ideas and methodology in their cultural and historical contexts, or in the words of Inayatullah, to 'locate methodology in epistemology – focused on the person, the situation and the episteme'.[1] By extension, there is complicity on the part of the writer, with one's personal values and interests expressed through this text. This monograph is thus not the true story of critical futures, but rather a labour of interpretation with emancipatory intent.

1 | The emergence of critical futures

INTRODUCTION

This is the story of the emergence of critical futures studies, as developed by Richard Slaughter. Critical futures studies can be understood as studies of futures that take as a primary consideration the analysis and reformulation of the way we know our world (epistemology), worldview and the social construction of reality. To put this in another context, however, critical futures arose as a response to the tremendous 20th century crisis that has come to face human civilisation. This crisis arose out of the Western industrial worldview that 'put our civilisation in peril from its own expansion and success'.[2] Thus, this story reflects the commitment of many in creating 'futures beyond dystopia' and moving past 'limited prevailing cultural assumptions' – primarily the assumptions of the West. It relates directly to the quality of our shared futures, a race for survival in which humans will either: inhabit a world compromised by over-consumption, atomic warfare, and dysfunctional social systems; or open up brighter futures by re-examining the 'inner' dimension of the world – perception and worldview assumptions – and act in qualitatively new ways. In his words:

> the central point is this: we face a civilisational challenge. The challenge is to grasp our destiny on this small planet and to work toward consciously chosen futures, rather than drift further into crisis and devastation.[3]

Slaughter spent some twenty-five years taking critical futures studies from an idea he had as a student, researcher and professor, to a focus practiced by many in the field. As such, critical futures studies can be seen as a particular social innovation, and has experienced and undergone many of the various stages, challenges and obstacles in the innovation process. Richard Slaughter's own 'transformation cycle' (T-cycle), an ideational (consciousness based) framework for understanding social innovation and legitimation processes, helps explain his development of critical futures studies.[4] Slaughter's development of critical futures goes through four general stages:

1. **Breakdown of meaning** – From Slaughter's travels and readings, he realised that prevailing assumptions within the Western worldview (and American futures studies in particular) no longer worked in the face of prevailing future-oriented challenges. These challenges compelled Slaughter to search for new and innovative responses; this brought him into deep inquiry and research.

2. **Re-conceptualisation** – Slaughter created the conceptual framework for critical futures studies and critical futures education as a response to this 'breakdown of meaning', this is encapsulated in his 1982 PhD dissertation.

3. **Conflict and negotiation** – Slaughter tried to work within the English system to make critical futures studies a social reality. Although he met with some success, Slaughter was repeatedly stymied in his efforts to implement it. *Negotiation* came when he intuited better conditions for critical futures in Australia, and moved there upon an invitation. This coincided with linking up and networking with other scholars and writers around the world who had similar orientations; a community of practice was born.

4. **Selective legitimation** – Efforts to implement critical futures fared better in Australia. Publications also went well, and teaching opportunities open up; Slaughter was finally given an opportunity to found the Australian Foresight Institute at Swinburne University of Technology, Melbourne.

BEGINNINGS

Richard Slaughter grew up in a working class terrace in Southsea, Portsmouth, England. His parents had experienced the Second World War, and married toward its end. Since his father worked such long hours, his mother ran the household. Although money was always short, it was a peaceful home. His mother would take him on outings and treated him well. Despite the fact that they weren't educated in a bookish, academic sense his parents did not accept the limitations of working class life and did much to give Slaughter a broad base of experiences. They took him on numerous local excursions and to exhibitions and other events in London.[5] Encouraged to join the library as soon as he was old enough, he had developed a taste for fiction, in particular science/future fiction.

By the time he was a teenager his interest in the future was firmly established. But it was accompanied by a slowly dawning realisation that something was wrong. Disastrous futures, dystopias, the predominance of technology, and de-humanised characters disturbed him, and created the beginnings of a profound uncertainty about the future. Notable many years later was Brian Stableford's statement that 'the future was a disaster that had already happened'.[6] The cultural shift toward dystopian visions, noted by many scholars throughout the 20th century, would later inform his understanding of what he would call 'the civilisational challenge'. He would not, however, take these dark futures at face value. By contrast, there were also sources of optimism. For example, Frank Hampson's *Dan Dare* series in the 1950s boy's comic, *The Eagle*, depicted a world of danger in the shape of the evil Mekon, a small green figure with an overgrown head and an army of Phants and war machines. Yet somehow humane characters, both male and female, always defeated the Mekon and his forces. Hampson created a world of fascination and possibility, with optimistic and human values, where well rounded characters responded to the challenges they faced.

Richard Slaughter's immersion in future-oriented literature was an important catalyst. For example, the appealing future that Hampson created, with its emotive, spiritual or aesthetic power could have been that 'Other' transcendent world that Fred Polak spoke of as a dynamic force in influencing behaviour.[7] The tension between this utopian literature, and the dystopian catastrophe literature are among the beginnings of 'foresight'. Research has shown that when a desired future is juxtaposed with impending reality, a commitment to act may ensue.[8] Slaughter began to see that the future was not an abstraction, but that there were many alternatives and challenges, perhaps the beginnings of Polak's 'influence-optimism', an outlook suggesting that the future is not pre-determined, and that we do have influence. This imaginative world of futuristic literature provided an inspirational foundation for later life. As William Law once wrote, 'perpetual inspiration is as necessary to the life of goodness, holiness and happiness as perpetual respiration is necessary to animal life'.[9]

So while Slaughter was unexceptional in school, with report cards coming home to his family saying 'could do better', 'talks too much', and even 'disgraceful result',[10] his inner world was rich in colour and life and his fascination with the world, and the future, was steadily growing.

A BREAKDOWN OF MEANING

What Slaughter began to unmask in the following years, was a deep pathology lying at the heart of Western Civilisation. It was out of this realisation of the extensive dysfunction in the Western worldview, and the subsequent breakdown in the legitimacy

and validity of Western ways, that his concept of critical futures studies emerged. While the nature of this breakdown is still a matter of fierce debate today, Slaughter uncovered a long list of indicators. These led to a process of steady disillusionment and a progressive unmasking of the status quo.

Science fiction may have laid a foundation for foresight, and inculcated the openness of the many alternative futures humans can choose, with subsequent transcendent visions. However, it was his discovery of the history of the Southsea Common, in the area where he grew up, and the awakening of his historical awareness that created the beginnings of a sense of crisis.

Slaughter became aware that Portsmouth and the Southsea Common had been much different in the past, in fact filled with ecological richness. He saw the contrast around him, its sterility through human development, and realised that what was around him did not exist in static continuity, but had come to be through a long process of change. The fate of the Southsea Common would be put into context by his subsequent experiences and reading. He would find that it was simply one part of a larger phenomenon.

While studying to be a teacher in college in the 1960's, he came across Edmund Leach's, *A Runaway World*.[11] It described irreversible environmental damage on a planetary scale and showed societies heading toward anarchy, war, starvation and ecocide. Slaughter found that his own education as a teacher in training did little to address these issues. He began to wonder why the educational curriculum was so static, given that most of the children he was being trained to teach would spend at least half their lives in the twenty-first century.[12]

If Slaughter's understanding of the global challenges facing humankind was gradually awakening in England, his experience living in Bermuda between 1969–1975 became a catalysing force and a major turning point in his life. He and his wife moved to the island of Bermuda so he could begin work as a teacher. He was at first impressed by the beautiful sub tropical chain of islands a complete change from the cloudy skies of Britain. Slaughter had a strong desire to be close to nature, and in fact wrote (and photographed) his first book there called *Birds in Bermuda*.[13] But, looking below the surface, a tragic story began to emerge. Like Portsmouth, what was once an ecologically rich environment had been decimated by human development. The colonies of seabirds famous in earlier times; mentioned, for example, in Shakespeare's Tempest, were all but gone. The thick cedar and palmetto forests had been cut back or had died of imported cedar blight. To have such a strong love of nature, and to see it being compromised, was heartbreaking. The six years Slaughter and his family spent in Bermuda had a powerful effect on him. Distinctions between layers of reality, life as a process of historical change, and the gulf between image and substance were highlighted and became increasingly real. On the surface, Bermuda appeared to be a tropical paradise. But below the surface were underlying socio-economic

conditions that suggested a very different reality: one that was excessively materialistic, overdeveloped, and hostage to a 'diminished ethic of consumerism'.

Slaughter saw that the very things that made the island interesting and unique were being destroyed by what he termed 'a cynical economic machine'.[14] The underlying dysfunction of the place and the contradictions in the conventional wisdom of a materialistic consumer culture, were all too clear. Bermuda existed for most as a fantasy island. The reality below the illusion suggested that it was 'one version of dystopia'.[15] In substance, the tourist dream had already shown itself to be breaking down, socially, ecologically and spiritually unsustainable.[16]

An encounter with Rachel Carson's Silent Spring, illustrated even more concretely the destructive effects of the commercial-industrial system on every aspect of the environment.[17] In her book, she showed how industrially created chemicals were systematically wiping out whole species of wildlife and degrading the quality of human life – often inducing sickness and premature death. Carson highlighted the interrelated nature of the ecological system humans were part of, and pointed towards the need for human sensitivity and new knowledge about ecosystems and the environment.[18]

> Man has lost the ability to foresee and forestall. He will end by destroying the earth.[19]

In the face of such widespread ecological challenges, Slaughter began to see more clearly the contradictions and obsolescence that characterised the British educational system. Upon returning to university in England, and with Bermuda still very much in mind, it was apparent that current education practice was out of touch with the new realities that he had recently read about and experienced first hand. Instead of preparing students to deal with the challenges facing their society and future generations, education was backward looking, working one-sidedly from knowledge of the past.

This was highlighted in a geography course that presented the subject without an understanding of how the land had changed, without any historical awareness, as though the landscape was merely a 'static' feature of reality. He realised that in England and elsewhere 'schooling assumes a broadly static frame of reference. That is partly why it finds it hard to look ahead'.[20] The educational establishment's claim to 'objective' and 'value-free' knowledge also became suspect.[21] This led to a greater understanding of his dissatisfaction with his own education as a youth and teacher in training: there was a very wide gap between a static education assuming an unchanging world and the need for a dynamic education incorporating a futures context.

Slaughter began to question the style of teaching that was being offered. Everywhere he looked education was prescriptive, students had no opportunity to decide their learning

path and objectives. From this point on, as a student and educator, he would take a facilitative approach to education.

> Living in Bermuda was more instructive than many years spent in formal education because while the latter exists to promulgate the dominant myths and stories of a culture, the former showed that such myths and stories (about progress, standards of living, growth) often serve limited or irrational interests which do not readily yield up their secrets and hidden agendas.[22]

Slaughter decided to study at the University of Lancaster, in a new School of Independent Studies (SIS) in which he developed a program called 'Science, Technology and the Human Future'. SIS welcomed mature aged students who had focussed ideas on what they wanted to study. Here, he began to explore many of the areas that had become urgent, and which would inform his later work: environmental studies, alternative futures and the sociology of science. The freedom to design his own course of study, and degree program, was another breakthrough in his education. Indeed, the intimacy he gained with his subject matter would be a light of inspiration for many years to come.

During the Bermuda years, American historian Lewis Mumford had started to inform Slaughter's understanding of the crisis facing modern societies. In *The Pentagon of Power*, Mumford uncovered the dehumanising effects of large scale technologically driven societies, from as far back as ancient Egypt to the modern 'megamachine' of the US military-industrial-technological complex. Mumford showed how the centralisation of power in modern society, accompanied by absolutism, militarism and mechanisation, gives rise to technological obsession, giantism, the return of Divine Kingship (hero worship) and the immortalisation of idols. This system, the 'automation of automation', is kept in place by an autocratic technocracy that alienates large numbers of people. The end result is frequently homicide, biocide and even genocide.[23] Mumford also revealed the technological bias and obsession in our language and conception of history showing how our conceptions of historical eras have highlighted technological factors: be that in an agrarian era, an industrial era or a so-called information era. Modern societies continue to be biased towards framing much of social reality in technological and/or economic terms. By extension, notions of progress couched in absolute technological terms, become problematic if one accepts that technology is not the only measure of change or progress. In fact, Mumford showed that technology is not a neutral force, but is used for particular ends by political and social interest groups.[24]

After achieving a first class Bachelor of Arts Honours degree, he took a scholarship in the Department of Educational Research at Lancaster. His supervisor, John Reynolds, became a mentor and tutor who taught him the meaning of 'critical' and led him through the social, psychological, and epistemological frameworks and theories he would need to develop the

notion of 'critical futures'. Slaughter relates that without Reynold's help, he would never have been able to develop critical futures studies, and all that has stemmed from it.[25] Thus aided by a 'critical' perspective and with a newfound interest in, and commitment to futures studies, Slaughter began to review and critique the wide body of available futures work. While working on his PhD, from 1978 to 1982, Slaughter began to see futures studies as a mixed bag of elements and ideological interests, many of which were non-reflexive; that is, epistemologically blind to their own grounding and their own framing assumptions. Futures work emerging from the US seemed particularly blinkered by its own way of seeing the world and its 'situated-ness'. In short, despite their frequent grounding in empirical observations, he found that futures researchers' ways of knowing were largely assumed and had not been examined from other cultural or epistemological viewpoints.

At the top of this list were hyper-optimists, researchers and writers such as Herman Kahn and others from the Hudson Institute in the US who took a 'technocratic/managerial' approach. Kahn's, The Year 2000, set out roughly deterministic 'multi-fold trends' projecting:

- continuous economic growth
- the adoption of Western economic system by the developing world
- the continuous rise of a bourgeois/bureaucratic/meritocratic elite
- continuous increases in scientific and technical knowledge
- continuous institutionalisation of technological change
- steadily increasing military capacity
- continuous Westernisation/modernisation/industrialisation of the world
- increasing affluence and urbanisation
- the emergence of a 'knowledge industry'
- increasingly rationalistic, innovative and manipulative social/cultural/political engineering
- population growth
- the increasing centralisation/concentration of economic and political power
- the universalisation and increasing tempo of all of these changes.[26]

In short, this vision forecast the universal maintenance of the status quo. Problems with this projection of the future, according to Slaughter, included its naïve assumptions regarding:

- the capacity of the world's environment to sustain such growth
- the desirability of the Western model of development and 'progress' from the perspective of the non-West
- its under-valuation and systematic distortion of 'counter-culture' social movements

- its elitist approach
- its failure 'to deal with the ideological aspects of innovation or its inherent ambiguities'.[27]

In some respects, the optimistic 'The Year 2000' mirrored Mumford's pessimistic 'The Pentagon of Power' in content but with a positive, albeit dehumanised, face.

In Slaughter's view technology, like education, could no longer be viewed as 'value free' and neutral. World War One, which saw millions needlessly killed through such innovations in technology as biological warfare, the machine gun, and accurate long range artillery, transformed writers such as H.G. Wells from optimists to pessimists who now saw human history as 'more a race between education and catastrophe'.[28] In 1909, E.M. Forster wrote a fictional satire *The Machine Stops*, depicting a dark future in which human societies had become so dependent on technology that people had deteriorated mentally and physically. When the technological systems that sustain them break down, only those that are outside the system survive.[29] While technology had once been seen as a liberating force, with the dropping of the bomb on Hiroshima and Nagasaki, 'technology had the power to end civilisation'.[30] It also became increasingly clear how technical power was outstripping people's sense of meaning and purpose.[31] 'This contrast between destructive power and liberating potential altered the whole aspect of the future'.[32]

According to Barry Commoner in *The Closing Circle*,[33] the very success of technology, its proliferation and efficiency, coupled with widespread ecological ignorance, was what underlay the widespread environmental destruction of the twentieth century. But instead of abandoning technology, Commoner advocated a view that technology should be brought into a closer balance with ecological principles. In examining environmentalist perspectives on the future, Slaughter found that Commoner failed 'to develop a proper critique of science and technology'. 'What Commoner was struggling to say cannot be properly articulated from within the positivistic tradition in which most of his work was carried out'.[34]

Work such as Jay Forrester's systems dynamics, Dennis and Donella Meadows and the Club of Rome's *Limits to Growth* articulation of a 'global problematique', made the breakdown of human technological advance and the assumptions of endless growth, in future oriented terms, even more absurd. They concluded, through their computer models, that no finite system could sustain exponential growth and that the current trajectory of industrial growth and population growth would lead to an ecological breakdown of global scale. By challenging the 'expansionary ethos of the technological civilisation', systems theory, computer modelling and simulation, helped to articulate the need for 'limits'. Again Slaughter found, that systems theory had its own limits by way of its dependence on over generalisations, aggregated data, its legitimacy partly derived from

the prestige of using computers (veiled scientism), and reliance on quantitative data that can obscure underlying assumptions.

In his PhD work, Slaughter also examined the Interfutures study, *Facing the Future*, which looked at aspects of the world economic system through the lens of a futures oriented approach. The study showed the dysfunctional nature of the modern economic system. World economic and developmental perspectives and future outlooks were becoming problematic, as decades of post-World War Two aid to the 'Third World', saw the number of people in poverty around the world increase. It depicted a world moving into 'a radically new stage of history, with its institutions, governing elites and populations ill prepared for the stresses and strains of the transitions'.[35]

It became clear to Slaughter, that the world economic system was maintaining extreme inequalities and might well be headed for political and economic disaster. Yet while he found a development-focused approach to futures valuable, with its emphasis on the inter-connectedness of phenomena from local to global, much of this work in his view was reliant on partial economic frameworks that again ignored social, political and geographic contexts. Further factors included the use of statistics that obscure human welfare; confusion around models of economic growth, and the way the framework 'accepted as unproblematic, a neutral screen through which to view the world'.[36]

Ecological and decentralist movements, as portrayed in books like *Blueprint for Survival*,[37] offered visions of sustainable futures often involving 'small self reliant communities based on agriculture and craft industries…interlinked in global awareness'.[38] While these movements emphasised the breakdown of large dehumanising state systems, and critiqued current social structures and relations, 'implicit in their view was is the belief that society can be regarded as a collection of "things", that can be re-arranged at will. In addition, "power relationships", ideologies and "social life-worlds" are either reified or ignored'.[39]

On a very personal note, his father's death from an industrially induced disease only re-enforced his disillusionment with the industrial system.[40] His father had neither smoked, nor drank, and had led a hardworking life. To see his life taken away prematurely was sad, disturbing and Slaughter was filled with a sense of outrage.

RE-CONCEPTUALISATION: THE RAW MATERIAL

Futures studies, in the broader sense of the discipline, had begun to deal with the challenges of the modern world in ways that most other disciplines were not prepared or willing to do, and that the industrial age educational system could not even begin to

comprehend. It seemed to be a discipline particularly willing to deal with the very rupture in people's faith in the future and to respond to this. Indeed, the emergence of futures studies may have marked the obsolescence of spatial and temporal provincialism – the belief in a static and uniform reality – calling upon a new need for 'an unprecedented extension of human concern and imagination'.[41]

Yet, Slaughter found the field rife with contradictions, distortions and confusion. In much of the futures literature he found mystification, an un-necessary complication of meaning, the 'obscuring [of] questions of power, value and purpose'.[42] Likewise he found the distortion of meaning emanating from covert or non-reflexive interests and ideologies.[43] Much American work was 'marred by exaggeration' and an 'over-optimism about the potential for social change'[44] both emanating from an instrumental mode of communication for 'transmitting messages at a distance for the purpose of control'.[45] Much of the work made grand claims about 'THE' future and 'THE' state of the world, but was ignorant of context and 'out of sync' with perceptions and worldviews from other cultures. Furthermore, claims of objective and value free knowledge in the field, counter-intuitively, undermined the very credibility of this 'knowledge'.[46]

> Phenomena not amenable to direct observation gain their meaning only in relation to other theories, making such a claim about the future that much more dependent on a theoretical and inter-subjective context.[47]

Through gradual familiarisation with the field, Slaughter began to see how knowledge about the future was particularly 'situated' in cultural contexts. Most were not consciously situated, but 'operating out of unexamined worldviews'. Furthermore he found that 'far from imagining a universe of alternatives, futurism in general – and forecasting in particular – has in the past appeared to play a significant part in the support of the status quo'. This rendered much futures work ineffective.[48] The bulk of futures literature came out of the US and was shaped by American culture, and reflected the ideological interests of the knowledge communities there.

This pointed to problems associated with standard notions of scientific knowledge, especially in dealing with the new challenges associated with technology, society and the future. In this respect, sociology of knowledge and science was another key element that became a keystone in the formulation of critical futures.

Michael Mulkay, an English philosopher, and one of the leading historians of knowledge, considered how the notion of knowledge and science had been defined and redefined through time. Mulkay's work critiqued 'standard science', the notion of empirical, objective and value free knowledge, showing in essence how much of what we call scientific is actually a product of a social life-world (a particular 'inter-subjective' cultural domain),

influenced by a knowledge producing community's political, economic and cultural context and interests.[49] Mulkay uncovered assumptions of a 'standard science' within the scientific communities that appeared to be false. While scientific communities assumed:

- a uniformity of nature (that universal laws could be derived), Mulkay found disjuncture between the various scientific disciplines and their incommensurability (for example the paradigmatic differences between the physical, biological and social sciences)
- a separation of fact and theory (that speculation is independent of language and observation), Mulkay found that facts take on significance only in relation to an observer and his or her intentions/perception
- that observation is independent from the creation of meaning (that cultural resources are not used), Mulkay found that scientific observation is an extension of cultural resources
- that the scientific enterprise is uniform, what is called scientific (and is broadly defined across many domains), he found to be different from knowledge community to knowledge community.[50]

John Goldthorpe, in a seminal article called 'Theories of Industrial Society: Reflection on the Recrudescence of Historicism and the Future of Futurology', unmasked what he terms 'crypto-historicist' characteristics in futures studies, long thought vanquished by Karl Popper's masterpiece *The Poverty of Historicism*.[51] In reference to historicism Popper stated:

> It will be enough, if I say here that I mean by "historicism" an approach to the social science which assumes that historical prediction is their principle aim, and which assumes that this aim is attainable by discovering the "rhythms" or the "patterns" the "laws" or the "trends" that underlie the evolution of history.[52]

Objections to historicism included:

- the ethnocentric and 'deliberate restriction of the imagination'
- the negation and invalidation of alternative futures
- poor and incomplete explanations of causal mechanisms in history, and
- assumptions regarding the ability to extrapolate from past to future (the ability to see the future as a simple extension of the past).[53]

The 'technocratic historicism' Goldthorpe detected in some futures research at that time, instead of 'envisaging what the future could be', attempted to forecast 'what the future will be' and made 'talk of 'alternative futures' and of 'enlarging the range of choice' empty rhetoric'.[54] Not only did this work against the spirit of democratising the future by making

futures studies about a determinable future with an evolutionary trajectory, it also undermined the legitimacy of the discipline.

> Already claims are to be heard that future studies are merely an instrument whereby powerful groups, states or nations seek to impose their own image of the future, to create self fulfilling predictions in their own interests, and to undermine the hopes and confidence of those attracted to different visions of what the world might be.[55]

Ian Miles carried this argument further, accusing futures studies of ethnocentrism, scientism, technological determinism, mystification and elitism. He saw futures studies as being in danger of ideologically supporting powerful political and economic interests through the propagation of ethnocentric images of the future.

> Futures researchers have so far largely failed to challenge the dominant interpretation of world economic relationships as being mutually rewarding to rich and poor countries alike…The scale of human misery involved in underdevelopment is so vast that any contribution, material or ideological, made to it by futurology requires careful scrutiny.[56]

These 'dominant interpretations' (serving powerful interests and bureaucracies) were supported by 'scientism', the use of science through systems analysis, computer modelling, mathematics, or the 'mystique of flow charts and complex arguments', in order to give added weight and legitimacy to the research. Often the outcome of futures research would lead, by extension, to recommendations for technological development. This technological development, would serve the interests of existing vested interests, rather than a consideration for the 'mass of people whose lives are to be reshuffled in this [technological] change'.[57] Finally, Miles found that much of futures research discouraged popular participation and sometimes created the false impression of open-ness through pseudo-participation.[58]

In Slaughter's view, it was the 'critical and eclectic' futures research that began to show the way out of this trap by revealing assumptions within the Western worldview that underpinned much of how empirical, developmental, environmental and other futures work was framed. The 'critical/eclectic' strand of futures work revealed the larger historical patterns at work, as well as the inter-subjective conditions that shape our perceptions of and action upon the observable world. For example, in *Small is Beautiful*, E.F. Schumacher[59] pointed to the impoverishment of the Western view of reality and aspects of Western culture such as: 'materialism, scientific reductionism, dualism, organisational gigantism and prevailing conceptions of economic rationality'.[60] Hazel Henderson, in contrast, revealed a Western civilisation in transition through a growing

counter-culture movement challenging assumptions regarding gender, ethnicity, economics, ecology and science.[61]

Dissonances in cultural assumptions, disciplinary understanding and conflicting perspectives regarding the future (the various types of alternative futures research covered in the PhD) and the problematic nature of much of this work, represented a core source of a 'breakdown of meaning' within future studies itself. An integrated perspective regarding the human future was simply unavailable. On the other hand, critical futures studies held out the possibility of navigating through this sea of contentions and claims. Yet Slaughter also recognised that this wide range of eclectic influences in the alternative futures debate pointed to 'implicit or explicit criticisms of aspects Western industrial culture'.[62]

> Western people have, on the whole, become alienated from the Earth which supports them, to the waste and destruction associated with the expansion of the industrial system and to alternative values, ideas, and ideologies regarding what may be considered 'desirable', 'good', or 'progressive'…[eclectic influences] challenges prevailing notions of 'progress', and rescues the debate from ethnocentricity and technological determinism…By challenging cultural assumptions and paradigms it also helps to shift discussion toward the metatheoretical level and thus serves to link it with other approaches – critical theory and hermeneutics…[63]

CULTURAL RECOVERY: NEW PHILOSOPHIC GROUND

During this time Slaughter and his wife were also raising two children. As leaving the workforce and returning to study made money scarcer, it was a challenging period. He felt so overwhelmed at times that his studies would stall for long periods. Over a summer, as Slaughter recalls, his wife took the children to Bermuda for several months during which time he was able to finish a whole section of his PhD. The rest of the time, he would simply have to put in time here and there, just trying to keep the research and the PhD moving forward little by little and piece by piece, though it often seemed to crawl forward at a snail's pace. However, over time the ideas began to take shape.

The renewal of educational curricula was a centrepiece in Slaughter's own attempts at re-conceptualisation. In his mind the implications for education were clear. Education had to begin to embrace the futures dimension, not as a simple continuation of the past, but as 'a dynamic field of potentials compounded of chance, existing structures and human intentionality'.[64] Education needed to move from short term, instrumental modes of education to a longer view in which people's intentions and decisions could be put in a broader context. Education should not treat technology as if it were 'value free, inevitable or necessarily desirable' and education should actively help open up a wider range of

futures than the dominant 'technological optimism' then prevalent.[65]

While much education focussed on enabling technical competence in dealing with isolated problems, new understandings of the interrelationships between man and nature, local and global, and the complexity and interconnectedness of modern problems and pathologies necessitated education that 'move[s] away from considering problems in isolation, to a more global, holistic emphasis'.[66] The increasing alienation of the public in decision making, meant participation in the debate on the future of society also needed to be widened to a greater number of people, and futures education could help do this. Finally education, currently dominated by empirically oriented study, needed 'to shift emphasis away from dramatic external events to a more critical appraisal of belief systems, values and paradigm assumptions that underlie them'.[67]

Like John Goldthorpe, Slaughter saw how an overemphasis on technical futures methods such as systems modelling and forecasting in the field had tended to obscure underlying biases and presuppositions. The need for data, and an obsession for quantifying through numerical and statistical approaches, ignored a good part of what was worth looking at and overlooked much of the potential for cultural renewal. This would begin a life long process of evaluating and developing a wide range of foresight methods. It began with 'speculative story telling', 'the Transformation cycle' and Boulding's '200 year present'. It continued with *Futures Tools and Techniques*[68] and other methods through to the present with 'Integral Mapping' and a new approach to environmental scanning based on Ken Wilber's four-quadrant model.

The West's impoverished view of reality needed to be enriched, and Slaughter would later proclaim; 'We need grounded visions, designs, if you will, of a world that has experienced a recovery of vision, meaning and purpose'.[69] Speculative imagination, not reductive science, would help individuals in 'imaginative constructions [to] take the human mind out beyond the boundaries of currently constituted reality – beyond trends, forecasts and the like – and feed our capacities for speculation, imagination and social innovation'.[70]

Slaughter found that the need for an epistemology for foresight dovetailed with the critical theory of Jurgen Habermas. Habermas, a German philosopher and a second-generation member of the Frankfurt school of critical theory, was a student of Max Horkheimer and Theodor Adorno. While grounded in a Marxist tradition of critique, he broke away from strict empirical notion of knowledge and incorporated wide-ranging influences from modernity and antiquity. The theory of cognitive interests is one of Habermas' most enduring contributions, and a central piece in Slaughter's conception of critical futures. Habermas, like others before him from the Frankfurt school, critiqued positivism, instrumental rationality and industrial society's one dimensionality.[71] He did not,

however, entirely reject instrumental rationality, but rather located it in the broader production of knowledge that arises through different types of rationality, or 'cognitive interests'. He identified three, a technical interest, a practical interest, and an emancipatory interest, each necessary for human well being.

The technical interest, which is the first and most basic, creates a 'capacity for purposive – rational control of the conditions of existence' and is 'acquired and exercised in a cumulative learning process'.[72] Habermas was basically situating the technically oriented sciences that allow for large-scale capacities for control and production, and also any scale of production and control capacities within a given group as a necessary precursor for survival. Empirical-analytic knowledge formation processes are systematically exploited for their 'technical control over objectified processes'. Habermas argued, however, that this form of knowledge was only one of three.[73] In fact, he argued that the technical interest relied upon a more fundamental form of cognition – the practical interest, i.e. intersubjective meaning making and sense making through communication.

The practical interest is distinguished from the technical interest because it involves the 'interpretation of intentions and meanings, goals, values and reason', and is not concerned with knowledge created through 'empirical-analytic inquiry'.[74] In other words, the life context in which we all live in can be understood through 'cultural sciences', and cannot simply be reduced to instrumental action. This domain is primarily linguistic, hermeneutic, and phenomenological – semiotic interpretation and communication – even including the meanings of peoples' actions, facial expressions, intonations etc. This involves an examination of the symbols and their meanings that populate our lives.

> The cultural disciplines did not develop out of the crafts and other professions in which technical knowledge is required but rather out of the professionalised realms of action that require practical wisdom.[75]

Finally Habermas articulated a third interest – an emancipatory cognitive interest. This can also be termed 'critical' consciousness, a consciousness that strives for self-formation through stages of reflection, energised by historical self-understanding, and generating new attitudes through insight. Central here is the reflection upon, and repudiation of, dogmatism and the 'form of false consciousness and reified social relations' that inhibits us from a fuller realisation of a good society.[76] Critique is a vital tool in challenging the dogmatism expressed through ideology. Thus Habermas, drawing on Freud's concept of illusion (religion, worldviews, ideals, art, ideology and value systems that uphold existing orders that create suffering, dysfunction, oppression and inequality), saw systematic distortions that required critique.

> In the interest in the independence of the ego, reason realises itself in the same measure as the act of reason as such produces freedom. Self-reflection is at once intuition and emancipation, comprehension and liberation from dogmatic dependence. The dogmatism that reason undoes both analytically and practically is false consciousness: error and unfree existence.[77]

Slaughter had recognised, of course, that although futures research was good at outlooks on the future, it was very poor at 'inlooks' on the future, i.e. approaches that examined both the intersubjective/communicative aspects of foresight, and the need to critique existing reified social arrangements. In fact futures studies, as an interdisciplinary domain with Time as a guiding theme (history, evolution, macrohistory, development, progress, and other temporal notions), provided a fine disciplinary platform for historical self-awareness and the critique of reified social relations. In *Towards a Rational Society*[78], as Slaughter discovered, Habermas even 'specifically argues for an interdisciplinary, future-oriented research capable of looking beyond the status quo'.[79] Applied to foresight Habermas' three cognitive interests might read:

- Instrumental – what is a future oriented problem, and how can we solve it?
- Practical – how can we achieve communication and understanding regarding the future(s)?
- Emancipatory – how has our future(s) been colonized, communication systematically distorted and how can we liberate ourselves?[80]

Becoming 'critical' therefore suggested a pathway toward emancipatory futures thinking. In general, 'critical' would come to work in two ways. First, it would be used as critique in the generic sense of the word providing a way of, in Slaughter's words, 'clearing the fog'. That is, a 'ground clearing, diagnostic phase, a prelude to the exploration of new territory…[it is] also about standards and quality control, both of which are vital to an emerging discipline'.[81]

Second, 'critical' would be understood in terms of critical theory – a way out of the trap of a 'monological' and 'technical-instrumental' approach to the future – one capable of breaking people out of the perpetual slumber of the status quo. Critical was a way of renegotiating meaning at a deep philosophic level, opening to the possibility of exploring other paradigms, epistemes, and culturally situated ways of knowing. Critique could be seen as the praxis of problematising existing social arrangements and assumptions regarding the future. 'Critical' would be a way of breaking the mould of historically reified ways of being, to open up alternatives futures otherwise obscured.

In short it would be the basis for emancipatory social innovations and creativity for cultural renewal.

> The best (i.e. most positively useful) critique operates self-consciously out of these deeper layers of Critical Futures work. That is, the writer or speaker functions as a human agent who is fully conscious of his/her immersion in, and debt to, particular sets of cultural resources. Embedded cultural assumptions cannot be objective, are not provable and never final. We are all and always complicit in non-objective ways of knowing. Moreover, different ways of knowing reveal different inner worlds. One conclusion is that there is never any final interpretation. Radical uncertainty lies at the heart of everything because everything is socially constructed.[82]

The early stages of this work ultimately culminated in Slaughter's PhD dissertation on critical futures education. It was an exhausting process, but Slaughter felt he had expressed something significant. In terms of critical futures, he had articulated a vision of futures studies that could be self critical in examining embedded ideologies, worldviews and other commitments. The same vision might also bring self-reflective futures thinking into education, where students would be enabled to deal critically about the images and statements being thrown at them about the future, as well as articulate their own views and participate in worthwhile conversations about the future. Working out a basis for critical futures studies, its implementation in education, and being awarded a PhD for it, was a consummate accomplishment for Slaughter. He had articulated a vision for transforming education to meet the needs of the future, and future generations. He had developed a vision for critical futures studies that would support human emancipation from dehumanising and reified social forms. These, in turn, would support social innovation and wider participation in creating viable futures.

CONFLICT AND NEGOTIATION: FROM ENGLAND TO AUSTRALIA

While Slaughter was the first to articulate an outline for critical futures, there were already many at work in varying capacities on this project. Ashis Nandy, Zia Sardar, Johan Galtung and the Manoa School of Futures in Hawaii, to name a few, were all in the process of developing their varied aspects and approaches to critical futures. This simultaneity of perspective, an intellectual-historical wave, and the historical context that all of these thinkers and writers shared, would help carry critical futures studies forward. But before Slaughter could experience this, he would have to endure more challenging times, including intellectual isolation, and undertake the move from England to Australia.

The next few years were difficult. Even with his PhD, he found it impossible to find work in Britain and even went on the dole for a while. It was a bitter pill to swallow. He and his family had sacrificed for some years, and now he found being on the dole demeaning. There was little reward for his hard work and there were no jobs for 'futurists' available

anywhere. But a strong sense of purpose had steadily developed over the years, particularly after Bermuda and during the latter period of study.

> Though some see a PhD as a purely academic exercise, for me it was also intensely personal. For it had allowed me to discover why my own experience of schooling had been so unsatisfactory and, furthermore, to sketch out a program which opened out new options.[83]

Thus he continued to work at it, despite feeling a real sense of isolation. One bright spot was the publication of an extract from his PhD dissertation entitled 'An Outline of Critical Futures Studies'.[84] This twenty-five-page paper encapsulated many of the core ideas that emerged from the PhD. Its publication in the World Futures Society Bulletin gave a glimmer of hope that these ideas might gain wider attention.

> The low point for me was when I had finished all this foundational work and felt this tremendous sense of relief, delight in having actually explained why I had found my schooling so arid, and knew I'd done something significant – and was unemployed, because there was no work. That was a major contrast, feeling so good, so satisfied, productively pleased with what I'd done – and then having no-where to go with it. Just completely stymied at the level of work, jobs, income. And my family, I wouldn't say suffered, but we certainly didn't have a lot of money at the time. It had been pretty damn hard, and having finished it, to get no answering recognition or income was really hard, and going on the dole: it was not exactly what I had planned. So that was really tough. But like other tough experiences, you find that that is when you learn what you need to know. Out of the suffering of being on the dole, with a newly minted PhD in critical futures studies, I really started to learn some of the practical applications of what Huxley and Wilber and others had been writing about – which was that you had to adopt some practices your our own life to cope with and transcend the living circumstances in which you found yourself. That was incredibly powerful. So it was really tough going, but it led to a very productive outcome.[85]

It was during this time that one of the most profound spiritual experiences of his life occurred. At a personal development retreat he had a healing experience that cannot really be related through words. Suffice to say that the experience changed the course of his life, and opened up a new dimension of understanding for him. The experience could not be explained by anything he knew at that time, and so he began a search.

It was after Slaughter came across Ken Wilber's book, *No Boundary*, that the penny dropped. In this book, Wilber explored the nature of consciousness, including the kind

of experience that Slaughter had undergone. The book dealt with identity and the boundaries that constitute our identities – including the dualistic thinking involved in such consciousness. It also articulated a path for human development focussed on expanded consciousness.[86] It was important for Slaughter, in that Wilber showed that an inner journey and inner growth was a vital but neglected aspect of modern life. While the futures Slaughter had critiqued focussed almost exclusively on the outer dimension of reality, brain enhancing drugs, the technological society, next wave infrastructure and so on, the inner dimension of the individual – consciousness – had been treated as something to be ignored, repressed or looked down upon. But Slaughter saw that an individual's sense of self/other, moral training, ethical learning, meaning/purpose, perception, unconscious desires, and the individual's need for an expansion of consciousness were of no less importance in the search to create a better society and world.

This began a long association with Wilber's work partly, through which Slaughter began to create practices that helped him deal with the challenging circumstances in his own life. In this way he began to seek a balance between the wisdom of the 'inner' world of the human heart and consciousness, essential to his own happiness and fulfilment through daily practice, and the more conventional outer forms of knowledge taught in all the schools throughout the West.

Aldous Huxley's *The Perennial Philosophy* would also be a major source of wisdom and insight that complemented this evolving and developing understanding of consciousness and an 'inner' dimension of life.[87] In this book, Huxley assembled the lessons and words from mystics of many traditions, Christian, Sufi, Buddhist, Hindu and other traditions. Huxley's book proved to him that there existed a deep source of collective wisdom that could provide part of the basis for inspiring futures beyond despair. Referring to the aforementioned experience he said:

> I realised that such experiences can yield new interpretations of personal and social futures. That is, *paths of development which lead up and away from the abyss: away from disaster, meaninglessness, and despair*. Here are the sources not merely of sustainable economies, but of truly wise cultures. That is, cultures which may be founded not on the instrumentalities of politics, economics or science and technology, but on the evolving perennial wisdom of humankind. From these sources I began to draw a deep stream of inspiration…[88] (emphasis added)

As Slaughter acknowledges, this was a turning point in his life and, as if to confirm his newly grounded sense of being, new opportunities began to appear. He would later reflect that he needed to undergo the hardship that he did, to learn the lessons that would allow him to move forward. Hence the post PhD hardships and explorations were catalytic

and brought him in contact with the 'perennial wisdom' that would later have many beneficial and lasting effects.[89]

Soon after this he received a three-year fellowship with the University of Lancaster in which he began to apply some of the conclusions in the Doctorate. He developed and taught a master's option their called 'Futures Studies and Curriculum Design', that received excellent feedback from students, proving that there was, and is, a 'latent' demand for this work. At the time, however, it was also looked at suspiciously by other staff members. He was able to publish materials that became foundational to his later work, design workshops and explore the practical implementation of other futures methods.[90]

In many respects, the three years Slaughter spent teaching at the University of Lancaster proved successful. He managed to publish several papers, 'What do we do now that the future is here?' and 'Future vision in the Nuclear Age'. In addition, he produced the first edition of *Futures Across the Curriculum: A Handbook of Tools and Techniques* (later called *Futures Tools and Techniques*). This was a compilation of simple futures tools embracing many areas including perennial wisdom and critical social and environmental issues. The beginnings, in fact, of pluralistic critical/social foresight methods, as had been called for earlier by Goldthorpe and Miles. With the years at Lancaster coming to a close however, Slaughter felt more and more that England would not be the place where critical futures studies would be adopted.[91]

It was on the way to Australia, during a 1986 stopover in Hawaii, that Slaughter first met Sohail Inayatullah. Up until that point, Slaughter had been languishing in near-obscurity, a classic intellectual outsider. The years had worn on him, but had not diminished his spirit.

What Slaughter found in Hawaii was in marked difference to the mainland USA. The faculty in the futures program were neo-Marxist or post-structuralist in orientation, and for a 'futurist' (not a term they universally admired) to make any money at all could almost be said to 'betray the cause'.[92] Perhaps because Hawaii remained a colonial outpost, or because of the geographic distance of several thousand kilometres, there was a marked difference from other centres of futures enquiry.[93] In brief, Slaughter's ideas resonated there. In fact, many at the Manoa School of Futures Studies had for some time been developing similar approaches. They included Wendy Shultz, Chris Jones, Rick Scarce, Phil McNally, Anna Wilson-Yue, Wayne Yasutomi, and others. Shultz had employed the work of Baudrillard to explore and move 'beyond orthodox and hererodox, i.e. the doxa'.[94] Inayatullah had been developing a typology for futures studies using three epistemological categories, *predictive, interpretive, and critical*, based on the work of Michael Foucault.

The positive response he got from Inayatullah, and others in Hawaii came after many years of feeling isolated from the academic community. It was a powerful confirmation of years of work.

> [the response] was very positive, it was like an answering echo from another milieu – that I had hit upon something that discriminating others also thought was valuable. It was really encouraging to me, because up to that time I'd worked pretty much in isolation. As H.G. Wells and others in the UK had complained before, 'there ain't much support for futures work in Britain'.[95]

Building a community and network of like-minded writers also proved to be a major step in the legitimation of critical futures studies. Slaughter would later reflect upon how it was essential for developing scholars and writers in critical futures to surround themselves with a community that could support innovative work and provide some of the peer critique necessary in an emerging way of thinking. The emergence of a community of critical futures was a key 'negotiation' step for the emergence and legitimation of its ideas and innovations.

Networks that contributed to a critical futures community had existed since the 1970's through the work of many of the original founders and pioneers associated with World Futures Studies Federation. This included such writers as Eleonora Masini, Ashis Nandy, Johan Galtung, Robert Jungk, Hazel Henderson and many others, who had for some time been developing 'emancipatory' approaches to futures thinking. A new wave of critical futures scholars, such as Sohail Inayatullah, Chris Jones, David Hicks and others, added to the former group of futures scholars and combined talents and resources to form a larger and more dynamic community of critical foresight. In this respect the World Futures Studies Federation, an International Non-Governmental Organisation of future-oriented academics and practitioners with affiliations with the UN/UNESCO, was an important catalyst. It brought together scholars and thinkers who were inclusive of the non-West, and also engendered an activist/socially critical orientation.

SELECTIVE LEGITIMATION

Slaughter's move to Australia was another step toward the legitimation and acceptance of critical futures studies. Australia, for many reasons, provided more opportunities to bring critical futures into the social world. For example, a 'Commission for the Future' had recently been created by the federal government in Australia to address emerging issues. In late 1986, Slaughter was invited to give a keynote address for its first conference on 'Futures in Education'. This provided a unique opportunity to work directly with the kind of social innovation he had envisioned for many years.[96]

Barry Jones, a prominent Australian scholar and political activist, had launched the Commission for the Future in 1985. It existed for 12 years before being privatised and vanishing into obscurity. Slaughter worked in various advisory roles with the Commission and its four directors over its lifetime. He viewed it as 'one expression of an increasingly universal attempt to come to grips with the near future context and to spread awareness of our many options and choices for the early 21st century'.[97] He believed that Institutions of Foresight (IOFs) such as the Commission, could play a critical role in helping people society wide deal with the 'tsunami's of change' facing societies in the twenty-first century. IOFs became even more critical if one considered the prevalence of short term thinking in governments, education systems and businesses. In his view, societies without the capacities provided by IOFs were more likely to be overwhelmed by the 'on-rushing waves of social, economic, technical and environmental change', and would have little chance of dealing adequately with the 'civilisational challenge'.[98]

The Commission for the Future was both successful and problematic. The most notable success was The Greenhouse Project, which made the concept of the greenhouse effect a household word. The Bicentennial Futures Education Project was able to create some awareness about futures education, but ran out of time, funding and support. The journal, *21C*, emerged as one of the 'most existing and original publications ever produced in Australia',[99] which filled the niche for high quality and culturally hip future oriented literature. In Slaughter's view, however, the Commission was poorly designed, inappropriately staffed and at times, mismanaged. It was a disappointment to see it shut down in 1997. But rather than seeing this as confirmation that IOFs were not viable, he would later make a detailed analysis of the Commission's strengths and weaknesses, successes and failures. In so doing, he attempted to help codify some of the institutional knowledge that would form the groundwork for a new generation of IOFs. Slaughter was convinced that, no matter how challenging IOFs were to get off the ground, they were nonetheless an idea whose time had come. This bit of foresight would eventually lead him to the founding and directorship of the Australian Foresight Institute.[100]

Slaughter met Frank Fisher in 1987, when they began working together at Monash University in a new Masters program in environmental science. The program had just recently been established, and sought to address the new and growing concern over environmental deterioration and ecological conservation. Fisher was an unorthodox teacher who essentially wanted to challenge his students in two ways. First, through living systems theory, to begin to challenge the view that the environment and the self live in isolation, rather than in a web of interconnection and interaction. Human separation from nature was a 'social construct' he challenged, and living systems theories helped explain how humans are 'nested' within Earth's ecological systems. Secondly, through his main contribution, to take on sustainability issues via an epistemological approach.

Fisher examined how humans socially construct unsustainable worlds, putting in place 'structures' that systematically put the ecosystem on which we depend in peril. The social construction of reality was the meta-perspective that allowed him to challenge 'reified' social constructions that destroy the livelihood of future generations. For him, environmental science was meta-science that led to 'meta-responsibility'. Social constructions were not abstract things that could only be explored through intellectual work, but were simply the norms, standards and structures that we take for granted day to day. He would challenge his students to explore and understand these social constructions, taking them out to the middle of highway intersections to inhale some fumes and noise pollution from passing cars and trucks. He challenged his students to stop taking showers or stop using deodorant, to take public transport, to stop using cars, to unobtrusively clean up litter, to carry out a water usage inventory for one's sink, and to question other practices that put students face to face with the lifestyle/cultural context they existed in. In short, to consider environmental impacts, and to understand the 'meta-structures' that maintain these social constructions.[101]

> [Social constructions] constitute the intellectual and political air we breathe. They enable our very humanity. Once we are conscious of them, to the point of enabling action, they expose a new domain of responsibility we might call meta-responsibility.[102]

The social construction of reality also became an important theme in Richard Slaughter's critical futures thinking. Written in 1967 by Peter Berger and Thomas Luckman, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* explored how, rather than having a predisposed nature, humans construct their own natures. An understanding of human plasticity, how behaviour is habitualised and directed in activity toward the creation of social orders/institutions, and the legitimation of institutions through symbolic interaction, tradition and 'sedimentation', would provide Slaughter the intellectual tools to problematise the unquestioned 'natural-ness' of a social order. While the day-to-day world carries with it a reality that is almost impossible to resist, this seemingly natural existence is really a product of complex, hidden, forces and actors.

Whilst this naturalisation or 'sedimentation' is necessary for human interaction, role-playing and the development of society with its institutions, it is also constraining, limiting and largely unexamined. The social order may have been a product of social forces necessary at the time, but while it directs human action, it limits it as well. A social order may in fact be dissonant, destructive or harmful to its members, or others outside it, or in an unsustainable relationship with the environment and other cultures. If such is the case, renegotiating the social order becomes a vital key to creating a sustainable society. Such renegotiation will have to take place at a deep level, such as symbolic interaction/ intersubjective meaning making, tradition making/breaking, de-naturalising, at the level

of institutions and processes of legitimation. In contrast to modernist thinking, which places the modern at the end of history, Berger and Luckman might argue that 'modernity' is really a particular construction of social reality, one that is buttressed through ideology and institutions that can be re-negotiated.

> Reification is the apprehension of human phenomena as if they were things, that is, in non-human [facts/objects] or possible supra-human [divine/natural law] terms. Reification implies that man is capable of forgetting his own authorship of the human world.[103]

THE CONVERGENCE OF CRITICAL FUTURES PRACTICE

To describe part of the social order that Frank Fisher uncovered, he coined the term 'litany'. This refers to the endless steam of clichés, sound bites, media fragments, exaggerations, outlandish statements, disinformation, advertisement and other distortions that we live with every day. Because of its ubiquity, the litany is at first invisible. It overwhelms us with disconnected ideas and images that are usually accepted without thought. In this view, however, litany is simply the surface layer of a deeper, more substantial reality, which cannot be discerned as it stands, operating mainly as a distraction from deeper understanding. The concept was eventually taken up by Slaughter to describe the focus of pop futurism, and then passed on to Inayatullah where it became the first level in his Causal Layered Analysis, a methodological application of critical futures.

Slaughter would influence Inayatullah's development of Causal Layered Analysis in other ways. Prolonged exposure in the futures field, along with Slaughter's critically trained thinking, and his experience in Bermuda revealing image vs. substance, began to show him certain patterns within the field – 'hidden structures'. He began to see how futures work ranged from popular hype with very little substance, all the way to a deeper work where researchers looked at and evaluated the worldviews and epistemic ground from which images of the future, or statements about the future, derived. Slaughter maintained respect for the practically oriented futures work, but felt that this went too quickly 'from analysis to global predicament to solution, but speaking and acting out of un-regarded worldviews and with little understanding for the social constructions that had been naturalised in other cultures'.[104] So while much of the practical, later to be called 'problem-oriented', work sounded and worked fine in one cultural context, in another it might well appear inappropriate or absurd. He realised that there was trite work, full of empty clichés and wild statements which he would later term litany, and there was problem-oriented work, often quantitative and good at examining general trends and issues, with good intentioned yet lacking an understanding of cultural worldviews and assumptions. Finally, at the deepest level, there was futures work that took worldview and epistemic considerations into account. This last category he deemed the most fruitful area of research,

as it had not only been largely neglected by most researchers, but he saw many of the futures issues and activity we take for granted actually arising from worldview assumptions. Rethinking epistemic and cultural assumptions could lead to more fruitful answers to pressing problems, and open up new spaces for creativity and action.

It was at a World Futures Studies Federation conference in Budapest in 1990, during a session organised by Allan Tough called 'Cutting Edge Ideas', where Slaughter first presented his layered typology of futures studies and research. Abstracted from an earlier piece he had published in Futures called Probing Beneath the Surface, it was a short presentation, only ten or so minutes from Slaughter's recollection, but it essentially laid out a typology from the litany level to that of epistemology. The response was very positive.

By 1989, Slaughter had been hired full-time by the University of Melbourne's Institute of Education. This represented a good opportunity to integrate the critical futures approach into the curriculum of university students studying education. There he designed three course units for the Diploma of Education Program, and two for the Masters of Education. He began teaching these by 1990, and was pleased that most of the students found the focus on future studies in education valuable. While students tended to be a bit disoriented in the initial first weeks, by the middle and end of the unit they would feel more at home and would begin developing their own themes and interests. During these years he co-authored a book with Hedley Beare called *Education for the 21st Century*.[105] Yet, in spite of excellent evaluations and a growing reputation, he realised toward the end of his five-year contract that his time at Melbourne University was coming to an end. Those running the Institute for Education did not see the connections between future studies and education that Slaughter did. Despite his evident success, an attempt at promotion failed. It became clear that certain paradigmatic differences were simply too great to surmount.[106]

> Like most universities, [Melbourne] had a history department and some other innovative courses focusing on the present. But not only was there no department of FS (future studies), there was not even a research presence devoted to the area. In fact, I was the only individual on campus explicitly teaching FS. Later, when I left, these course units were discontinued. It is a familiar story: on the one hand clear evidence from students, colleagues and others that FS had 'come of age' and could contribute in many ways to personal and educational goals and, on the other hand, professional jealousy and bureaucratic indifference.[107]

Yet one of the insights he had during this time was that *futures concepts* were key building material with which to think about and teach futures. This provided the impetus for him to begin collecting and refining key futures concepts that he would also seek to amplify through graphic representation. He later put together a resource pack of these called *Futures Concepts and Powerful Ideas*,[108] so that this symbolic resource could have a lasting

and permanent influence. This resource pack became a companion volume to *Futures Tools and Techniques*, both of which ended up being widely used around the world. Both volumes carried forward humanistic understandings of the future and put into question many of the assumptions and contradictions we live with on a day to day basis. In their own ways they carried critical futures forward another step.

Despite the setback at Melbourne University, Slaughter found new ways to move the project forward. Around this time he revived a business name that he'd earlier set up called The Futures Studies Centre. Working in this capacity gave Slaughter new time and vigour to pursue writing and research. Several concerns in the future studies field came to his attention and he began to address them in his literature. Thus, after the demoralising experience at Melbourne University, came the publication of several books that further explored aspects of critical futures studies. This rebound and resilience comprised a definitive victory in the road to legitimation, as literature is one of the main forms that legitimation may be gained. Three publications stand out in particular: *The Foresight Principle, Futures for the Third Millennium and the Knowledge Base of Futures Studies.*

The Foresight Principle set forth core principles such as the innate human capacity for foresight, and the need for future-oriented wisdom in modern day institutions and society-wide. Slaughter examines tools, concepts, ideas and methods critical in developing this social foresight that not only makes clear the challenges ahead, but that it can help people take a more healthy and human route into the future. He also explores key aspects of the defective Western worldview, and the seeds of a renewed worldview that can lead to more sane futures.[109]

The *Knowledge Base of Futures Studies* (KBFS), which ultimately became a four-volume CD-ROM collection of essays by foresight practitioners and futurists from around the world, began as a special issue of *Futures* published in 1993. This issue provided the first attempt to bring together wide-ranging perspectives. Slaughter himself identified several core aspects of futures studies:

- concepts and metaphors
- theories and ideas
- images and imaging processes
- literature
- organisations and networks
- methodologies and tools
- social movements and innovations.[110]

The feedback on this special issue was good, so he tried to get a larger compilation published through a mainstream publisher. While he wasn't able to get broad support for this, he

was able to get a single volume anthology published called New Thinking for a New Millennium, where some of the papers intended for a KBFS ended up. From this he embarked on a long consultation process with colleagues around the world to put together the foundations of what would become the KBFS. Finally, he linked up with a local media group. Fifty or so manuscripts were finally edited into a high quality and 'coherent series without extinguishing the unique voice of each author'.[111]

> First, its emphasis is more on FS (future studies) as a process of scholarly work which attempts to create 'interpretative' or 'surrogate' knowledge about the future, than on the methodologies through which part of this knowledge may be derived. Second, it contains within it a notion of critique and of the provisionality of all knowledge that is informed by, but not founded upon, post-modern insights. (It therefore lacks the overconfident prescriptive tendencies and culture-bound rhetoric that afflicted some earlier works). Third, it is truly multi-cultural in emphasis and content. Thus it aspires to be the first truly global statement about the state of FS in the early 21st century.[112]

Finally, in 1999, *Futures for the Third Millennium* laid out the basic elements of a critical futures studies and education. This book focused on case studies, such as Australia's Commission for the Future, The Futurescan process, a critique of Megatrends 2000, and examples of futures in education, futures images and popular literature. Outlines and frameworks of key critical futures theories are given, such as the Transformation Cycle, critical futures, environmental scanning, and individual to social foresight processes, as well as 'Transcending Flatland', his incorporation and adaptation to foresight of Ken Wilber's 'epistemological rescue operation'.[113]

Back in 1994 Slaughter had written an initial paper about the possibility of an 'Australian Foresight Institute'. Over the next several years he began meeting regularly with Adolph Hanich, then a consultant with Deloittes, discussing how foresight and strategy might be integrated. The two had proposed some seminars for the Australian Institute of Management, when it transpired that Swinburne University of Technology was seeking an innovative millennium project. The two were commissioned to write a 'feasibility study' for a foresight program or entity at the University. They spent a considerable part of 1998 working on the project.

In 1999, when Slaughter was emotionally finished with Melbourne and academia, and after a brief time in Brisbane, the Vice Chancellor of Swinburne offered Slaughter a 'professorial fellowship' to initiate an Australian Foresight Institute at the University. He couldn't pass up the opportunity to 'implement, embed, (and) institutionalise the foresight work I'd spent most of the last 20 years working on'.[114] So, despite the irony of having recently left Melbourne, he returned in July 1999 to begin work on creating the first

Australian Foresight Institute (AFI). A 'second generation Institute of Foresight' had emerged through vision and determination.

Slaughter had learned many lessons in his experience with the Commission for the Future and took these into the creation of AFI. The sweat and work to make AFI a world class Institution of Foresight, and to open up spaces for sustainable social paths continues to this day. In terms of the legitimation of critical futures studies, AFI, and what it may accomplish during the life of the institution, represents a capstone achievement, forming a platform for critical futures oriented education and research that can contribute and pioneer human and social foresight for many for years to come.

CONCLUSION

The contribution of literary criticism and 'post-Saussurean' writers,[115] the critical theory of Jurgen Habermas, the meta-theory of G. Radnitsky and the sociology of science/ knowledge from writers like Peter L. Berger, Thomas Luckman, and Michael Mulkay were major contextualising influences in the development of critical futures. Slaughter's PhD dissertation on critical futures in education drew on many of the ideas in this epistemological revolution. These writers would help provide the theoretical and philosophical foundations for Slaughter's later conception of critical futures. As Slaughter acknowledges, critical futures could not have been developed without the revolution in thinking that was already under way. Therefore, while his initiative in articulating a radical agenda for education was central, this took place in a intellectual-historical context. The latter may be said to be a post-World War Two nuclear age where technology not only was being used to overdevelop and systematically destroy nature, but could obliterate everything in a matter of minutes – an age out of balance and fundamentally unsustainable. The intellectual context might be said to be a wholesale/seismic critique of the Western worldview, logical positivism and the technical instrumentality that underpinned Western civilisation and its characteristic ways of knowing, which had given rise to this context. Furthermore, Slaughter saw how current education blindly furthered the same static thinking about the nature of the world and the status quo. Slaughter's experience in Bermuda, coupled with his realisation that he had experienced a kind of education that would not enable future generations to deal effectively with future oriented issues, fuelled him with a tremendous sense of urgency and vision for a critical and future oriented educational system.

Slaughter's critical futures is not about 'blueprints' for the future, but about opening up spaces to alternative epistemes, cultural worldviews, discourses and hence about opening up pathways to substantively alternative futures beyond what's currently offered through mainstream 'pop' and 'problem oriented' futures work, scenarios and the like. Critical

futures moves us away from 'the future of the world' – as a future narrowly defined, predictive and culturally reductive – to enabling 'world futures', an approach to foresight that is inclusive (and critical) of many futures, from many cultural contexts and perspectives.[116] Critical futures points away from reductive visions of futures, also away from predictive and epistemologically idiosyncratic and/or naïve approaches. It points toward holistic and integral visions that are interpretative, emancipatory, epistemologically pluralistic and inclusive – indeed a pathway to planetary thinking and planetary civilisation. Critical futures becomes meaningful in the context of creating world futures and planetary civilisation beyond the hegemony of an out-of-control economic, military and scientific order that threatens the very existence of human life. By incorporating traditions of human wisdom as the sustaining core of futures studies it opens the future to culturally diverse possibilities – a radical yet much needed human and social foresight – one more step toward a 'wisdom culture.'

2 | Transcendence of a method:
The story of Causal Layered Analysis

INTRODUCTION

Causal Layered Analysis, or CLA, is a future oriented methodology created by Sohail Inayatullah. This methodology is post-structural in so far as it seeks to problematise existing future oriented thinking; exploring the assumptions, ideologies, worldviews, epistemes, myths and metaphors that already are embedded in images, statements or policy oriented research about the future. It has also developed as a way of opening up spaces for alternative futures. These alternative futures are not based on extrapolating trends or tweaking the assumptions in a systems model, as is common in scenario building, but through deconstructing/reconstructing critical assumption about the way we constitute the world. The articulation of alternatives is a product of this method, not a primary focus of the method.

While the theoretical underpinning of CLA is based on post-structuralism, the approach is layered, that is, it is a method of analysis which is inclusive of accounting for various streams of causality operating in unison upon an issue. CLA is a way of 'integrating levels of reality, science, social science, philosophy and religion, if you will'.[117] Only then can we see and act beyond our idiosyncratic notions and traditions, creating truly alternative futures.

The development of CLA will be explored through a narrative, and in part as an example of intuitive *action research* – a heuristic approach to theory, experimentation and development. A basic sketch of the particular influences important in his conception of horizontal and vertical, and through each vertical layer, will allow us to gain a deeper understanding of contextualising influences.

Background

The son of a diplomat for the United Nations, Sohail Inayatullah was born in Lahore, Pakistan, yet was raised in places such as Bloomington, Indiana; Flushing, New York; and in Geneva, Switzerland. In addition, his mother is a Sufi, and his father a social scientist and human rights activist. Inayatullah himself has come to follow and champion the work of P.R. Sarkar, the late Indian mystic. Thus, from an early age and through adulthood, he never belonged to a category, be it nation, ethnicity, religion, caste or philosophy. As he writes in 'Why I hate passports and visas', he was always in the 'middle', between categories. For example, while applying for American citizenship while in Hawaii, the examiner did not accept his writing in the citizenship form that his complexion was brown. It had to be fair, medium or dark. Inayatullah did not consider his complexion medium – it was brown. They jostled for the categorical higher ground. In the category for his profession he had written 'political scientist' (he didn't bother writing *futurist*), but immigration didn't accept that either.[118] In short, he never fit well into a pre-existing category, a stereotype or classification people could easily identify with. Nor would he want to fit into the current systems of categories, given their often limiting and even dehumanising effects.

Having traversed the world of categories and never being comfortable in one, he has come to a 'vision of the future, as one might expect, committed to cultural diversity and civilisational integrity in the context of a creation of a planetary society'.[119] 'Transcending and including' the categories that have seemed so limiting, trivial or superficial to him these many years, the only thing left might be for him to receive an honorary planetary passport. In short, these categories are the outward expression, through institutional form, of the social construction of reality; reified social arrangements that, instead of leading to a future that he wants, leads to a world he abhors. For him then, these categories were not only problematic, but also temporary.[120]

Inayatullah's history, as one who could not and did not want to fit into what he deemed archaic categories and identities such as a particular nationalism or ethnicity, contributed to the development of his thinking, and may have influenced the development of his Causal Layered Analysis. He was always his own object of de-construction – the self and its identity dissolving before the gaze of post-structural analysis, or vanishing at the presence of spiritual insight. The Indian episteme, and the teachings of P.R. Sarkar, revealed the social construction of individual identity, and the pathways to transcending narrow boundaries.

At the same time, his experiences revealed deep structures from the individual and social, from the local to the global levels. While he may be romantic about the nights he spent on the rooftop of his childhood home in Pakistan, under the stars and waking with the whole community at sunrise, the impoverishment of the land-less, the limitations to freedom and gender inequality that many in his own family had to endure, did not escape him.[121] Growing up in Indiana, and the other places in which he was subject to racism, taught him to be ashamed for having dark skin – a later to see racial and ethnic categories as superficial and dangerous. The post-colonial status of Malaysia and Pakistan and the dominated status of Hawaii may have introduced him to aspects of imperialism and colonialism otherwise hidden or naturalised.

Generally speaking, deep immersion in various cultures and contexts revealed to him worldviews beyond textbook codifications. Before he was introduced to the concept 'cosmology', he was probably already speaking different culturally set languages of reality, of how the world appears from particular cultural standpoints. His ability with languages (Urdu, English and French – now entirely English) might have been a window into these 'cosmologies'. Finally, his experiences and conversations with and within Islamic, Indian, Western, and Polynesian civilisations may have laid a foundation for understanding and articulating myth and metaphor from a civilisational perspective. He has been both an insider and an outsider, and perhaps within his own visionary future, a planetary citizen.

HORIZONTAL AND VERTICAL

His experiences revealed both 'horizontal' and 'vertical' elements. Horizontal refers to plurality of discourse/worldview/episteme that give rise to the categories we live in day to day (often the expression of power/ideological interests). This is 'the post-modern turn' that reveals how reality is mediated by cultural inter-subjective factors. The vertical, on the other hand, refers to depth, the existence of structures and layers that underlie one's social and cultural existence. These two patterns are in tension and challenge each other.

A totally horizontal approach sees reality as being completely mediated by inter-subjective discourse factors (those historically still active and power). Because 'reality' is all socially constructed, with every culture and every tradition seemingly impermanent and lacking an essential core, culture is not seen as anything really. Only the post-modern analysis remains real, and even this is socially constructed (largely a product of the West) and can be deconstructed.[122] Inayatullah rejects this extreme position, with the support of Zia Sardar's critique of postmodernism. The vertical challenges the extreme position, as while there are a plurality of epistemes and worldviews, as there are a plurality of cultures and discourses in the world. There are still real structural layers within each bandwidth of the horizontal spectrum, despite the fact that we can no longer call each structural layer a universal category. One might say that this approach is beyond structural universals,

as well as beyond extreme post-modern relativism, existing somewhere between the structuralism of Jung, Saussure, Levi-Strauss, Barthes and Lacan, and the post-structuralism of Foucault and Derrida. These contrasting patterns existed for Inayatullah to digest while growing up, and later became conceptual elements of his Causal Layered Analysis. CLA thus incorporates elements that facilitate the understanding and analysis of the horizontal and the vertical. While 'we assume universalities even as we speak from our own narrow tradition', unpacking the layers, ' how we mythologise the future', is the beginning.[123]

Inayatullah's conception of the *Vertical*, the general concept of layers, was most influenced by Oswald Spengler, P.R. Sarkar, and his own practise of meditation. However, Slaughter's typology of *pop, problem and worldview* levels of futures research was an important catalyst. *Vertical* causes are expressed as four layers that are nested, and linked from top to bottom. Thus litany is ultimately an expression of myth/metaphor, but not visa versa. Richard Slaughter, who in turn, derived the term from Frank Fisher, influenced Inayatullah's thinking around Litany. However, his and Slaughter's understanding of the term are now different. *Social Causes* was influenced by Galtung's analysis of imperialism (centre/periphery theory), the World Systems thinking of Immanuel Wallerstein, and the dominance of 'technical' explanations of social reality throughout academia. *Worldview/Episteme* may have come from Johan Galtung's analysis of cosmology and Michael Foucault's work with historical episteme. *Myth/Metaphor* was primarily influenced by William Irvin Thompson's concept of mytho-poetics, and perhaps also by Galtung's CMT (Chosen-ness, myth, trauma) theory. Finally, the understanding around his conception of the *Horizontal*; shifting assumptions into alternative myths, metaphors, episteme and worldviews, came from Michael Shapiro, other post-structuralist influences, multi-culturalism and the epistemological breadth implicit in his work with macrohistorians.[124]

LAYERS OF REALITY

There was a certain fatigue with post-modernism. While post-modernism was a clear break from the empiricist and expressive realist position,[125] Inayatullah found that 'postmodernism assumes no levels of reality, just alternative realities. Behind discourse are just alternative discourses'.[126] This has been best expressed through Zia Sardar's *Postmodernism and the Other*. Sardar, one of the driving forces behind multi-cultural futures and Islamic futures in particular, showed how postmodernism, instead of critiquing Western cultural and economic universalism/imperialism, had become a way to justify it. The hollowed out values of the West that now primarily embrace material life, and reject traditions with their 'superstitious' ethical and mythic elements, is projected upon the rest of the world, such that traditions of the non-West are de-valued and trivialised, mimicked and used for commercial and cultural exploitation. This disrespect for the diversity of traditions threatens the world with a homogenisation of culture that can only embrace

material values. But, irrespective of the West's material relativism, the cultures of the world retain true difference, unique identities, histories and traditions that are as necessary and important in significance, if not more, than Western material culture.[127]

This re-valuation of culture and tradition was central to the concept of layers, as it made a culture a legitimate focus of inquiry, where insight, perspective and indeed wisdom could be derived. Aldous Huxley's *Perennial Tradition* comes to mind. In contrast to a technical science that created 'universal' 'laws' of 'nature' beyond cultural and individual subjectivity, culture is where we all exist, and how we know the world. An analysis and understanding of the particular patterns that exist within human communities made sense. Layered analysis would become one method through which to derive a depth understanding of culture.

The primacy of culture and tradition was a theme that ran through Inayatullah's life. While not overly idealistic about traditions that imply inequality and oppression, as a son of a Sufi and a social scientist and himself a champion of the work of PR Sarkar, tradition was all around him, yet not in a simple fashion. It was tradition, but by choice. And his tradition by choice, his own personal and community journey became foundational to his perspective that there are layers of reality. Meditation was central for him, and helped him see from many perspectives and 'peel off the layers of the onion', and also to see that superficial and deeper layers exist simultaneously.

To the partial disapproval of Jim Dator, director of the futures program at the University of Hawaii, Inayatullah decided to do his dissertation on the work of twentieth century Indian guru P.R. Sarkar. While Dator wanted his students to focus on political and technological themes, they were veering into vastly different realms of inquiry, much to his dismay. It is to Dator's credit, however, that he created spaces for his students to pursue their research agendas. Dator's authentic pluralism remains among the reasons he is admired and loved by Inayatullah and other former students.

Inayatullah's pioneering of the work of P.R. Sarkar may have contributed to his understanding of layers of reality. Corresponding to the classic Indian episteme, there are six levels of the mind:

1. *Annamaya Kosa* – that of the body, glands, blood, cells, etc. and controlled through Yoga
2. *Kammamaya Kosa* – that of instinct and physical desire, controlled through breath
3. *Manomaya Kosa* – that of reason and emotion and including memory, thinking, dreaming and the experience of pain and pleasure, controlled through concentration
4. *Atminasa Kosa* – that of the transpersonal mind (corresponding to the Jungian collective unconscious) connecting every individual and allowing collective action

5. *Vijinanmaya Kosa* – cosmic mind where will and historical purposes are the same

6. *Hiranamaya Kosa* – near union with pure consciousness.[128]

The grammar of the 'blissful' again is central in Sarkar's cosmology, for it is that state of mind that is the end of all existence. It is not the accumulation of wealth, beauty, knowledge or wisdom, rather it is a state of unity wherein distinctions between subject-object no longer exist, where the mind moves in a continuous flow of unconditional love.[129]

Other influences also existed. Inayatullah had begun to delve into the domain of macro-history, the 'study of the histories of social systems along separate trajectories through space and time in search of patterns, or laws, of social change'.[130] The work of Oswald Spengler, whose famous The *Decline of the West* created a stir in a climate of overconfidence, and laid bare Euro-centric notions of progress and history, expressed a much different approach to understanding historical reality. For one, he was a cultural relativist at a time when the West was supreme, asserting that each culture and civilisation has its own lifecycle. Each civilisation, moreover, could only be understood through its own internal laws, customs, origin, and context and thus he rejected a positivistic notion of a 'science' of history. Most importantly, yet in a similar vein, he also rejected the notion that understanding history 'could be based on truth or falsity':

> True science reaches just as far as the notion of truth and falsity have validity…But real historical vision belongs to the domain of significances, in which the crucial words are not 'correct' and 'erroneous', but 'deep' and 'shallow'…Nature is to be handled scientifically. History poetically.[131]

Litany

Inayatullah borrowed the word 'litany' from Richard Slaughter, who in turn had borrowed the term from Frank Fisher. Fisher worked at the epistemological level, exploring the social constructions of reality involving our relationship with nature, how we have historically come to reified social forms of existence that are threatening to destroy the human environment and the possibility of sustainable futures.[132] Litany expressed the most apparent, observable form of the social construction of reality. Because of its ubiquity, it overwhelms us with disconnected ideas and images, yet it is the reality that most live and think in. The concept of litany was eventually taken from Fisher and applied by Slaughter as a characteristic of what he termed 'pop futurism'. It passed to Inayatullah where it became a level in CLA.

The understanding of litany between Slaughter and Inayatullah differs, in that Slaughter may see litany as the most superficial and trite expression of the field, sometimes involving the exploitation of futures thinking towards political and commercial ends. For Slaughter,

the move away from litany and toward worldview reflexive 'critical' futures moves us toward his 'wisdom culture'. While Inayatullah originally saw litany in this way, considering it to simply be 'moronic', expressions of crude and absurd culture, he has come to see litany rather as the most superficial expression of deeper layers of reality, not as something that can be bypassed. Thus while litany is just the surface, the empirical, it is also the passageway to a deeper understanding.

Social Causes

Inayatullah had begun studying at the University of Hawaii at Manoa as an undergraduate in the early 80's, taking a Bachelor of Arts in inter-disciplinary studies and a Masters of Arts in Political Science, with a specialisation in future studies. He later went on to a PhD, focussed on comparative philosophy and macrohistory. Johan Galtung, who was a Visiting Professor of Peace Studies in the political science department, became a strong influence on Inayatullah's thinking, and a mentor in some respects.[133] Galtung was a Right Livelihood Award Winner and also a prolific writer in many fields such as macrohistory, as well as a pioneer in the area of peace research and conflict resolution. He also founded the Journal of Peace Research, the International Peace Research Organisation and most recently Transcend, a peace research institute that offers professional training in the field.[134]

In addition to a cosmological analysis of culture and civilisation, which is examined later, Galtung also articulated a theory of imperialism that adds a critical political and structural dimension to Inayatullah's conception of the political problematique. In 'A Structural Theory of Imperialism', Galtung reveals how the relationship between centre and periphery, imperial states and dominated states, operates. Borrowing from the work of Lenin, Galtung analysed how imperialistic relations systematically create harmony of interests and conflict of interests, to the benefit of elites of a 'centre' and the detriment of peoples in a 'periphery'.

The centre of the Centre (the capital decision making bodies in the dominant nations – in our time corporate/military/political USA) creates a bridgehead, forming a kind of unity, with the centre of the Periphery (the principle decision making and power base of the dominated country). For example, elites in the first world with elites in the third world, thereby creating a harmony of interest between the two centres, to the benefit of both, but to the detriment of the periphery. This can be seen in historical geo-political terms through European colonial structures, how the various European empires managed their colonies by educating an indigenous elite there, making them dependent on aid, finished/manufactured goods, and helping to maintain their power. In modern terms this can be seen through the US's support for puppet or friendly regimes around the world, often through financial and military aid (but not excluding military or paramilitary intervention) that support US trade, investment and industry.

The periphery of the periphery (which is the majority of the population – for example rural Mexico/Indonesia/Zaire etc.) is systematically exploited for resources, labour etc. So by way of the centre of the periphery (third world elites) being linked to the centre of the Centre (Washington DC/Wall Street), the periphery of the periphery (rural third world) is essentially disenfranchised politically and in other ways – thus setting up a conflict of interest between the two.[135]

The periphery within the imperialistic nation, for example suburban America, is kept satisfied with bread and circuses. This pathology extends into economic, political, military, communications, and cultural forms of imperialism. 'Only imperfect, amateurish imperialism needs weapons; professional imperialism is based on structural rather than direct violence'.[136]

Galtung's understanding of imperialism may have added a 'culture invariant' aspect to Inayatullah's analysis. While cosmologies may mediate different centre/periphery relationships, the problem of dealing with this dynamic, and the human suffering and impoverishment that it produces, must be dealt with historically and into the future. It is a geo-political imperative. At the same time, this analysis is a way of coming to grips with the totalising and hegemonic domination of the West in its many aspects, in particular the 'superior' cultural artefacts emerging from it. Allowing effective critique, problematising its legitimacy, and making the case for alternatives.

Immanuel Wallerstein, creator of the World Systems Theory, also influenced Inayatullah's structural/political analysis. World Systems Theory uses a core/periphery perspective, distinct but related to Galtung's centre/periphery distinction. A student of C. Wright Mills, Wallerstein was deeply influenced by the Annales group of historians in Paris, and the third-world intellectual radicalism of the 1960's and 1970's. Fieldwork in Africa brought him face to face with the realities of poverty and oppressive capitalist structures. Praxis, the interweaving of theory and practice, was his methodological thrust, a way to 'uncover hidden structures and allow oneself to act upon the world and change it'.[137] Wallerstein's World Systems Theory was in part a critique of modernisation theory, and a revision of Marxism. As such the theory challenges the notion of the nation state as the fundamental unit of analysis, instead taking a historical and planetary approach. He explains the history and emergence of a world capitalist system through four stages: from the end of a feudal era in Europe, to British hegemony, world industrial development and finally the emergence of US hegemony.

This long-term approach (*la longue durée*) comes by way of Braudel and emphasises geo-ecological change. Marx's influence is seen in his emphasis of class struggle and materially based social conflict, as well as dialectical historical transformation. Dependency theory underpins his explanation of core-periphery relations, the exploitation of certain peripheries

(labour intensive) classes/races/nations by a core (capital intensive) militaries, cadres, the wealthy and technology. Like critical futurists in many places, a single evolutionary trajectory for the world is also rejected.[138] While Inayatullah had studied other systems theories, in his opinion, Wallerstein's worked for the very reason that other systems theories didn't work, it wasn't a-political, the question of power is successfully addressed.[139]

Other social causes that may have influenced Inayatullah's thinking are too numerous to detail. Suffice to say that social causes are rationalistic discourses that emerge from worldviews. In this respect Galtung sees both Western Marxism and Liberalism being variants of each other – the Western predilection toward creating ideological or religious synthesis that are incommensurate with any other totalising scheme, counter-posed to the 'Oriental' tendency to straddle multiple schools at once.[140] Far from a rejection of social analysis, it is clear that 'emancipatory' social analysis is an important aspect of Inayatullah's overall project, and he believes that many important insights and understanding are to be gained here. CLA is, however, a way of nesting social analysis into a cosmological framework.

Worldview and Episteme

In Galtung's analysis, the actions of nations were symptomatic of deeper historical causes and civilisational cosmologies. An understanding of 'deep civilisational codes' could allow one to get past the confusing day-to-day affairs (litany) and official national positions/policy (social analysis) to understand larger patterns. Cosmology, which roughly refers to a totalising understanding of the universe from particular cultural and historical positions, expressed through totalising relationships within that culture's life-world, is a central unit of analysis in Galtung's research. In *Structure, Culture and Intellectual Style*, Galtung showed how intellectual productions differ from culture to culture, and civilisation to civilisation, based on the greater inter-subjective variables involved – histories, cultural dispositions and worldviews. What Galtung uncovered were cultural and civilisational structures lurking beneath the facade of a legitimation process for intellectual production. On the one hand, this exposition is an extension of centre/periphery dynamics, as he reveals how much of intellectual production is simply the aping of dominant (centre) intellectual cultures within certain intellectual 'geo' cosmologies (Latin America's dependence on the French intellectual tradition, for example). On the other hand, each intellectual cosmology differs considerably, which is worth exploring.

For example, Galtung describes the 'Saxonic' tradition (UK, US, Australia and dependents) as very weak in paradigmatic analysis and theory formation, focussing instead on empirical investigations and developing elementary proposition productions. Pluralism and debate is a dominant value, with an emphasis on team spirit and 'convergence'. In the 'Teutonic' tradition (Germany, Austria and peripheries) pluralism will not be so valued, and team spirit gives way to somewhat brutal critique. In contrast to the Saxonic, the Teutonic is

strong on paradigmatic analysis and very strong on theory formation (as well as deduction from basic principles – small number of premises to high number of conclusions), but weak on empirical description and proposition production. By extension, the Teutonic works within 'schools' of thought (such as the Frankfurt school or Vienna circle), their very vertical hierarchies and their respective intellectual projects. In the US this may be perceived to be too partial to authority and a blind rejection of empirical 'facts'.

The 'Gallic' (France and its intellectual dependents) on the other hand, puts considerable emphasis on style and the poetic force of an argument. While the Gallic is, like the Teutonic, strong is theory formation and paradigmatic analysis, it is also dialectic (multi-polar/ dualistic), unlike the Teutonic. Instead of arriving at an underlying structure and its principles, the Gallic strives to elucidate a balance and harmony between competing forces. In the Gallic 'the totality cannot be shown through rigorous deduction. It has to be hinted at, one has to dance around it and view it from many angles until in the end it rests suspended between two poles'.[141] This analysis of intellectual production can also be extended into civilisational cosmologies. From this vantage point, it can clearly be seen that the intellectual culture we belong to will mediate the knowledge produced, not simply in method but also in content.

In Michael Foucault's *The Order of Things: An Archeology of the human sciences*, a book that had a significant influence on Inayatullah's thinking and development of CLA, Foucault examined how knowledge had been ordered through different historical periods in differing ways. In effect, he revealed that what may be considered universal structure, is actually the particular expression of a researcher, writer, or thinker's historical and cultural context, what he termed episteme. Foucault showed that during the Renaissance, knowledge was based on the principle of similitude and resemblance, that is, knowledge was likeness. During the Classical period knowledge became representational, the signifier was the signified, language was transparent and revealed the true nature of things. In the Modern period knowledge became an understanding of abstract forces and internal/organic structures – history and psychology respectively. Thus, knowledge structures in the human sciences can be said to be particular and situated in history, among other factors.[142]

> In any given culture and at any given moment, there is always only one episteme that defines the conditions of possibility of all knowledge, whether expressed in theory or silently invested in a practice.[143]

Inayatullah credits Foucault: 'his epistemes, or historical frames of knowledge, are primary in understanding how particular nominations of reality become naturalised'.[144] By 'archeology', Foucault meant the study of the archive – the discourses and documents present and historical that continue to function and transform through history. In addition, archival study is by definition not limited to authoritative texts, but opens the research

domain to the entire context we live within, no matter how trivial or marginal that may seem to be. This may cast a light on the discontinuity and ruptures in the way the world is realised.[145] Archaeology is a search for 'the underlying knowledge (savoir) that makes [practices, institutions and theories] possible…implicit knowledge (savoir) special to this society'.[146] Finally, Foucault influenced Inayatullah's concept of 'geneology'. For Foucault, geneology was about uncovering the marginalised discourses, ignored theories, dissenting opinions and local knowledge that has not been institutionalised as valid knowledge. It was to make apparent the historical and political struggles that have occurred in the valorisation of knowledge. For Inayatullah's future-oriented CLA, this means an inquiry into the genealogies of the future(s); what knowledge is privileged and what knowledge is silenced, what discourses have been successful in constituting the present and what are alternative discourses for alternative futures.[147]

Myth/Metaphor

In the 1980s, Inayatullah found 'instant rapport' with the work of William Irwin Thompson and spent a considerable amount of time with him. *Darkness and Scattered Light*, *The Pacific Shift*, *The Time Falling Bodies Take to Light* and *At the Edge of History* were some of Thompson's more influential works on the spirit of Inayatullah.[148] A cultural historian with a mytho-poetic perspective, Thompson was the son of working class Irish Roman Catholics. However, he said that by the time nuns started to try and teach him Roman Catholicism in primary school, he had already discovered yoga through mystic experiences at an early age. He went on to champion a planetary culture, through the cross fusion of art, science and religion, working with people such as James Lovelock, Lynn Margulis and Gregory Bateson, who were also articulating 'Gaian' ways of thinking and knowing, part of the new thinking in complex living systems and processes.[149] He eventually founded the Lindisfarne fellowship, which brought together creative people, artists, writers and mystics from around the world who were creating the ideas, art, science and mythos for a planetary culture. It was a rejection of his academic life and the 'MIT internationalism', that he felt was shallow and simply Americans colonising the world.[150] Thompson essentially saw the primacy of myth as giving rise to science, and as underlying science.[151]

> Levi-Strauss has said that "myth is an act of faith in a science yet unborn", but that point of view is still too close to Frazer; it sees myth as a foreshadowing of something which will be truly known through science. You could just as well say that science is an act of faith in a mythology yet unborn, and that when we truly know the universe of which we are a part, we will see that the way DNA spirals in our cells and the way nebulae turn in space are all related to a particular dance of idea and pattern.[152]

Thompson shows how narrations and expressions of Time are given by 'unconscious systems of ordering'.[153] From Darwinian/evolutionary thought, through to the classical Greek history of Thucydides, he shows how narration is based on pre-existing cultural assumptions, myths or hidden needs. 'All narratives, artistic, historical, or scientific, are connected to certain unconscious principles of ordering both our perceptions and our descriptions'.[154]

Thus, ideology and rationality is a form of 'false consciousness', including the ideas of Marx, Habermas, Mohammed and E.O. Wilson. Ideology is the 'excrement' of the mind.[155] Thompson saw myth as the memory of the history of the universe. Myth is the grand narrative, the wisdom and story of the universe, while history is simply the most recent superficial headline in the nine o'clock news.

> …history is written by elites which are the ego of a civilization. If it's written by men in England, it's not about women and slaves in Athens or Semites with hooked noses who created the alphabet and the Mediterranean trading culture. The kind of history you learned in classics was a white, male, patriarchal narrative. That's the history of the ego. The history of the soul is always the history of the voiceless, the oppressed, the repressed: the marginal people, the artists, the women, the African.[156]

Thomson occupied himself with uncovering a mythos for the universe, a history of the soul and an ethos for the emergence of life. He has compared the metaphor of the Eucharist 'take and eat for this is my body and my blood' as describing the explosion of a supernova that scatters heavy metals necessary for life on the planets. The story of St Michael, who forces demons down into the underworld, describes the anaerobic crisis several billion years ago in which cynobacteria forced anaerobic bacteria down into the bottom of lakes. And he has said that 'Gaia, the whole biosphere, is really our collective body politic'.[157] He has fused new understandings of the Earth and biology with a mythic and poetic understanding of reality.

Thompson's thrust is toward the creation of a new myth of humanity, one incorporating the new understanding of Gaia, living systems and complexity. But if myth can be translated across cultures, in a planetary story of evolution, how does Inayatullah arrive at the horizontal spectrum of epistemes? How particular myth underpins and gives rise to a particular worldview, can also be understood through Inayatullah's description of identity:

> trauma creates identity, since it creates the foundational experience of inclusion/exclusion, separation and unity, which of course is about our descent from God, and on and on…The transformation from identity is transcendence, both in the evolutionary sense but as well in the spiritual sense.[158]

Trauma arises through the interaction with the environment, 'the Other', giving rise to myths that capture a culture's or civilisation's separation or 'descent from God'. Thus myths are produced in some archaic point of origin, different in each place, and reflecting the distinctive features of that civilisations form of identification. Galtung's 'CTM syndrome' (chosen-ness, trauma, myth), another influential element in Inayatullah's conception of CLA, exposed how cultures often identify themselves with transcendental forces, thereby creating a belief or sentiment that they have been 'anointed' with the right to show others 'the Other' the true way, to the point of justifying conquest and the right to control and govern. This 'chosen-ness' is built into myths of a great past, a heroic age, inducing 'collective sentiments of grandeur', to be recreated in a great future. The present is a halfway point between a great past and great future. Trauma represents the suffering, real or imagined, that a culture underwent that may have led to a fall, and the path that that culture must travail to return to greatness. People can be galvanized and made cohesive through the memory of a particular trauma/glory, regardless of its historical truth, and as this historical memory crosses generations, the trauma has been embedded into the identity of the group. This clarifies how mythic trauma may help create the distinction of self/Other, cohesion and separation – and give rise to civilisational/cultural identity.

This understanding of civilisational cosmologies, that maintain self/Other boundaries, is also reflected in Johan Galtung's article *Western Civilisation, Anatomy and Pathology*. It is invoked through a civilisation's distinction between centre and periphery – the identity boundary of that civilisation. What gives rise to this self/Other dynamic, different in each civilisation from the Western, Indic, Sinic to Nipponic etc are the invariant aspects of that civilisation's cosmology, which is 'so normal and so natural that they become like the air around us, un-noticed'.[159] In a passage that illuminates how metaphor works within Inayatullah's CLA, Galtung writes; 'ideally, one should be able to invoke a cosmology by one figure alone, an image so powerful that the essence of that civilisation is carried in that image alone'.[160]

Thompson also invokes a similar understanding of metaphor in describing a cosmology and forms of rationality, that a mythic image communicates the essential quality of the 'unconscious ordering', and the worldview and rationality it gives rise to.[161]

POST-STRUCTURAL INFLUENCES

Michael Shapiro, also a professor in the Political Science Department at the University of Hawaii argued to Inayatullah 'for futures studies to move forward it must engage with post-structuralism'.[162] In *Reading the Post-Modern Polity*, Shapiro argued for a 'geneological' approach to political theory, one that situates a political discourse spatially and temporally in order to open a potential for alternative discourses. As such, Shapiro

critiques Habermas for assuming that the subjects of which he speaks, and of which he articulates an inter-subjective communicative process capable of transcending their living circumstances, have 'intentional control' regarding the meanings that they use to communicate.[163] Shapiro argues, in the same vein as Jacques Derrida, that this amounts to blindness in the face of a speaker's historical tradition, the tradition that gives rise to their communication and the immediate requirements (perhaps power/ legitimation) that exist for that speaker now.[164] In other words, the denial of the 'situated-ness' in discourse amounts to a loss of control in the face of such discourse. On the other hand the acknowledgment of our situated-ness in a discourse allows for freedom and alternatives to arise. In a similar vein, while a discourse creates intelligibility, allowing for rational communication and understanding, it also sidelines and ignores other discourses and thus other alternatives.

> …genealogists remain suspicious of all conversations, because they recognize that systems of intelligibility exist at the expense of alternatives. Therefore to strive to deepen intelligibility and provide more access within available conversations is to consolidate the power arrangements that the persistence of such conversations helps to maintain.[165]

This is why Shapiro saw post-structuralism as essential for futures studies to move forward. The futures program in Hawaii was supposedly about 'alternative futures', yet there could be no alternatives, in Shapiro's view, if one remained blind to one's own discourse, one's temporal (historic) and spatial (cultural/structural/power) situated-ness. One could spin out a hundred alternatives that, because they existed within the same epistemic boundaries, would simply be versions of each other. Alternatives could only arise through an understanding of how discourse and contextualising influences frame issues.

By 1990, Inayatullah had articulated this approach applied to foresight, through a paper published in Futures called 'Deconstructing and Reconstructing the Future: Predictive, Cultural and Critical Epistemologies'.[166] This piece was influenced by Inayatullah's work in the Hawaii court system. In it, he looked at how epistemic assumptions were 'embedded in planning and futures studies'. He found that futures research could be grouped into three categories.

1. Futures research that focused on prediction worked for the purpose of control and extending power and assumed a deterministic universe, with the future a place to colonise (Predictive Futures).

2. Futures research that focused on culture worked toward insight, examining cultural images, myth, and 'universal narratives that ensure basic human values', plus the analysis of class, gender, ethnic and other categories (Interpretive Futures).

3. Futures research that tried to 'undefine' the future, to make existing categories and discourses problematic. This approach sees the present as 'fragile', as the victory of 'one particular discourse', and analyses forms of power that underpin these discourses (Critical Futures).[167]

CLA exists within this last category, but can also be a form of cultural research. CLA 'searches for power so that it has no where to hide and [is] futures oriented, creating alternative futures'.[168]

INSIGHT: 'PROBING BENEATH THE SURFACE': BUDAPEST 1990

Richard Slaughter had been the first to articulate a theoretical framework for critical futures studies. A systematic critical analysis of the futures field showed him 'hidden structures' within futures work and literature. It was at a World Futures Studies Federation conference in Budapest in 1990, in a session organised by Allan Tough around innovative futures thinking called 'Cutting Edge Ideas', where Slaughter first presented a critical futures typology of futures research. Abstracted from an earlier piece, it essentially laid out a typology of futures research from litany to the epistemological.

Inayatullah was in the audience and he immediately saw that this was more than a typology, but could be worked into a method.[169] It gelled with Inayatullah's own understanding of layers and made intuitive sense. It was this flash of insight that would begin the process of developing the CLA framework and testing it through practice.

INTUITIVE ACTION RESEARCH

CLA was first tested at two conferences in Bangkok together with Tony Stevenson, a Brisbane based futurist and former president of the World Futures Studies Federation, and who also worked with a critical futures focus. The first, in 1991, at a futures conference dealing with pollution and overcrowding, and later, in 1992, on a futures of ecology conference. Many students took part in this conference and helped Inayatullah develop CLA. Tony Stevenson lent Inayatullah a practice orientation, and was indeed one of the people who influenced him toward incorporating action research/learning into foresight.

Figure 1 shows the outcome of one testing session. It is important to note that this period of testing and refining spanned at least six years, and continues in 2002. It was not simply a theory created through a small pool of academics in a particular field. It used the feedback of many individuals from all walks of life. Other testing grounds were the Andorra World Futures Studies Federation futures studies course, Visioning workshops at Southern Cross University, Queensland and Queensland Advocacy Incorporated on disability futures (1994–95), to name a few. Through the first part of this period, Inayatullah did not tell

Level	Issue	Solutions	Agency
Litany	• gridlock • pollution • waiting time	• hire consultants • transportation planners both local and international	Government and contractors
Social causes	• hyper urbanisation • rapid development and economic growth	• creating overpasses • switching from an industrial to an information economy • telecommuting and mobile phone use • using transportation modelling software etc	international agencies and corporations
Worldview	• development model • assumptions about the idiocy of rural people, that one should leave the farm and seek wealth in the city	• transform the development model • create deep decentralisation and localism ('where local people control their economy and feel they do not have to leave their life and lifestyle')[170] • focus on agricultural reform and the dignity of work and valuing local customs	public intellectuals and social movements
Myth	• Bangkok, 'city of gold' – the image of the good life in the city, the story of making it big in a Western like setting	• focus on indigenous metaphors, and return to pre-modern ways of knowing Mystics and fringe artists	mystics and fringe artists

Figure 1: Key Transport Issues in Bangkok using CLA

people he was doing CLA he just used it. They would talk and he would organise the information based on the level. But this became too difficult after a while so he began explaining the method to people.[171] The method then evolved through working with others. While working for NRMA, Inayatullah and Gary Saliba, an Australian futurist, saw that there were similarities between their two approaches. Gary Saliba used the idea of switching assumptions to arrive at alternative scenarios. While Saliba applied this to

strategic scenario building based on soft systems/complexity mapping, Inayatullah learned to apply this to worldview, episteme, myth or metaphor, switching these 'horizontally' to arrive at alternative solutions or renditions of issues.[172]

> …theory, approach and methodology are deeply interwoven in post-structuralism, as opposed to empiricism or interpretive discourse, where there are clear differences between theory, values and data. In CLA and post-structuralism, they are all nested.[173]

PUBLICATION

The Journal of Technological Forecasting and Social Change first rejected the paper on CLA: 'the referees could not understand a word of it'. Although Inayatullah asked the editor for his opinion, he refused to engage him. When he finally sent it to Futures, it was accepted and given a good response. This was in 1998.

CONCLUSION

Sohail Inayatullah's journey as a child began his inquiry into the nature of reality. Cross-cultural/cross-civilisational experience may have imprinted in him the existence of many ways of knowing, the horizontal dimension. His following and championing of P.R. Sarkar, and meditation may have been primary in revealing kosas, or layers of mind – and providing him direction. Academic research in Hawaii, and experience in their court system gave him post-structural influences, as well as structural influences, and a futures oriented/planning approach to policy (1989). Slaughter's typology provided the catalyst for the development of a method (1990). But Inayatullah was practice oriented, perhaps something he picked up from his father's interest in action research,[174] so he quickly began testing the method with people at futures conferences and workshops (1991–92). Upon moving to Australia, he continued testing the method (1994+). It was seven years after conceiving of the idea for a layered method, and testing it in numerous places across the world that his paper on CLA was finally published in Futures (1998).

A proposition that one might make is that CLA is not about a methodology, but about opening up spaces to alternative epistemes, cultural worldview, discourses and hence opening up pathways to substantively alternative futures from what is currently offered through mainstream 'pop' and 'problem oriented' scenarios and the like. The proposition, in other words, is that CLA is about getting distance from 'the future of the world' (as narrowly defined, predictive and a culturally reductive), and enabling 'world futures', an approach to foresight inclusive (and critical) of many futures, from many cultural perspectives.[175] This is in part rejected by Inayatullah, and in part accepted. In rejecting this proposition he writes that:

> [CLA is about] rethinking the nature of inquiry, from either/or to both/and, and ensure that the inquiry does not lose a vertical gaze, the notion of ethics. Move people to understand that long lasting change means being focused on myth and metaphor as well as worldview and policy. In that sense, CLA is about CLA, it is about the method.[176]

In accepting this proposition he writes:

> (CLA methodology) is the litany level. At the policy level, CLA is about changing how government policy is done. At the worldview, it is about an integrated planetary civilisation, post West and post East. At the myth, it is the mode from which a new story can arrive.[177]

Inayatullah's practice orientation, with his commitment to interrogating worldviews, myths and metaphors at workshops and conferences around the world, has helped CLA to move beyond the confines of academic circles, and to move into the lived experiences of individuals, groups, communities and organisations. Many of these with little or no knowledge of the futures field. CLA has also been used and adopted by many in the futures field, and by a few outside of it, for its practicality in surfacing hidden assumptions that limit the options of groups and individuals. Its ability to reframe issues in unique ways has allowed groups and individuals to imagine truly alternative futures that not only inspire, but which can be more humane, sustainable and one step in the emergence of a 'Gaia of civilisations'.

AFTERWORD

We can derive several lessons from Richard Slaughter and Sohail Inayatullah's respective journeys. A primary lesson is how their thinking partly emerged through facilitated education. In the case of Slaughter, his own travels and independent university study allowed him to develop intimacy with the world he lived in. This intimacy grew out of an inner voice and life experiences that contradicted the standard approach to education. For him this culminated in a meaningful and unprecedented PhD in futures studies education in 1982. In the case of Inayatullah, it was his own practice of meditation and the study of the teachings of P.R. Sarkar, which culminated in his PhD dissertation on P.R. Sarkar and macrohistory. Where would these two be if they had not been allowed to follow an independent path of study and develop their own unique insights and inspiration? Perhaps they would have worked outside the academy, more marginalised. As it stands, they both learned to listen to and trust this inner voice. Along the way mentors and 'mystics' aided them. John Reynolds became a mentor for Slaughter, teaching him the value of a critical orientation. Later, Ken Wilber provided inspiration for him, illuminating the inner path of development. For Inayatullah, Johan Galtung and William Irwin Thompson were inspirational thinkers that provided academic guidance, with P.R. Sarkar the primary spiritual guide. Jim Dator, of course, gave him the space to explore new paths. The respective stories of Slaughter and Inayatullah challenge a prescriptive approach to education and argue for an inner sensitive, future-oriented and experiential pedagogy.

Their respective relationship with agency is also important. While Slaughter has made institutional and social foresight a primary way of addressing the 'civilisational challenge' and enabling consciously chosen futures, Inayatullah has preferred working at a local level with local stakeholders incorporating the praxis of action research – theory has emerged through participation. The different approaches have yielded qualitatively different results. For Slaughter, the result has so far been his work to develop other IOFs, culminating in the creation of AFI. For Inayatullah, it has been the development of a method (CLA) accessible to and used by many. Writing, editing and publishing critical futures literature, of course, has also been an important form of agency for both.

The importance of the inner dimension for both men is also relevant. For Slaughter, Aldous Huxley's Perennial Tradition and Ken Wilber's writings (among many other influences) provide a ground for cultural recovery and the development of a 'Wisdom Culture'. For Inayatullah, the inner world, revealed through meditation, is primary. The

Indian episteme, and *Kosa* (layers of mind) provide a pathway for transcending narrow boundaries of self and ethnicity. For both men inner exploration and development is a precondition for the healthy development of the 'outer' world.

The importance of examining culture, identity, worldview and the critique of knowledge producing communities is also apparent. For Slaughter the distinction between image and substance slowly morphed into his typology of futures research. For him, no futures work is complete without an examination of possible distortions, bias, mystification, embedded interests and the cultural frame of reference from which such work emerges. For Inayatullah an examination of worldviews, cosmology and episteme allows for alternatives to be explored and imagined. This has been more in the tradition of participatory self-analysis. In general, epistemic re-conceptualisation is seen by both as a valuable, if not central, method of creating change.

Challenging the reified nature of the status quo runs through the work of both men. The 'civilisational challenge' has been Slaughter's way of articulating a forward view that challenges the 'taken-for-granted-ness' of modern society and the Western worldview. Slaughter's historical orientation makes many of the assumptions we un-consciously live with problematic. Slaughter has 'dialectically' critiqued the US futures tradition for this very same taken-for-granted-ness. Inayatullah, on the other hand, has been more focused on critique that situates futures thinking within its particular cultural/civilisational context. While Inayatullah has also added to the critique of the West, this has been more in line with multi-culturalism. What is considered 'global' or 'universal' or 'law' may simply be the expression of a culture's orientation. An exploration of a multiplicity of cultures way of knowing is the primary critical thrust that highlights the idiosyncratic nature of each tradition.

Both have worked on integrating layers and domains of reality and have approached futures work incorporating eclectic influences. 'A la' Habermas, cognitive interests range, depending on the situation. While not rejecting a technical-instrumental futures research, Slaughter (via Habermas) opens the field to communicative and emancipatory domains. His incorporation of Ken Wilber's Integral Theory has been the most recent thrust in this labour of integration. Inayatullah has primarily used his distinction of predictive, interpretive and critical as well as CLA as ways of integrating and explaining futures work. Empirical and instrumental futures work is not rejected, but there is an attempt to put them in their place, and to open up valuable and overlooked spaces of inquiry. For both, there is no one totalising angle, perspective, discourse, or theory in which to view the future and futures work. At the same time, all perspectives are not equal and relative, because the question of power, sustainable futures and human emancipation remain of major importance.

Most importantly, the importance of the emergence of a community of practice cannot be over-emphasised; their work has coincided with the emergence of a critical futures community across the world and across many domains. Slaughter and Inayatullah's particular critiques of the status quo and the futures field have been part of a mass critique from thinkers, writers and actors beginning in the 19th and carrying into the 20th century. In such a *historical project* there is no final statement about the future, but rather a multifaceted critique of the dysfunction around us (much of which we have learned to take for granted) evolving dialectically and heuristically, and an opening of the field to culturally and philosophically different visions, interpretations, influences and opportunities. This historical project is partly the possibility of a planetary culture and global identity. Addressing the threat of world nuclear war, and successfully addressing global scale environmental devastation is also part of this. This historical project actively critiques the 'monological' Western worldview, seeking knowledge beyond empiricism and instrumental rationality. It has examined and critiqued the materialist and consumerist mindsets that have blossomed of late, and explored the causes of ethnocentrism, war and genocide. Much of this project has been a critique of US and Western hegemony, their cultural artifacts, and other form of imperialism. In my opinion this historical project points toward an epistemologically diverse world community equipped to deal with its many challenges and able to create a socially and ecologically sustainable world for futures generations – rich in tradition, human wisdom, health and human rights. Finally, this historical project is inclusive and open to the participation of many, it is up to us to continue, expand and create.

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[65] Slaughter, R, 1982, p75.

[66] Slaughter, R, 1982, p75.

[67] Slaughter, R, 1982, p76.

[68] Slaughter, R, *Futures Tools and Techniques*, DDM/Futures Study Centre, Melbourne, 1995.

[69] Slaughter, R, 'Futures Beyond Dystopia', *Futures*, Vol. 30, No. 10, Pergamon, 1998, p1000.

[70] Slaughter, R, 1998, p1001.

[71] Bottomore, T, *The Frankfurt School*, Ellis Horwood & Tavistock Pub., England, 1984.

[72] McCarthy, T, *The Critical Theory of Jurgen Habermas*, Polity Press, Cambridge, 1984, p63.

[73] Marx might contend that these technical interests need be put under the control of a socialist agenda, hence the concept of socialist science. However, in Habermas' view, scientific interests and socialist interests were of different natures, one a general necessity for control and production and the other a need for emancipatory transcendence of certain oppressive constraints of one's social world.

[74] McCarthy, T, 1984, p69.

[75] McCarthy, T, 1984, p72.

[76] McCarthy, T, 1984, p81.

[77] McCarthy, T, 1984, p79.

[78] Habermas, J, *Towards a Rational Society*, Heinemann, London, 1971.

[79] Slaughter, R, *The Foresight Principle: Cultural Recovery in the 21st Century*, Praeger, Westport, CT/Adamantine, London, 1995, (Bibliography).

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[81] Slaughter, R, The Role of Critique in Futures Work, *WFSF Bulletin*, 2002, p4.

[82] Slaughter, R, *WFSF Bulletin*, 2002, p4.

[83] Slaughter, R, The Making of a Futurist: An Autobiographical Sketch, 2002, p8.

[84] Slaughter, R, *Futures for the Third Millennium: Enabling the Forward View*, Prospect, New South Wales, 1999.

[85] Richard Slaughter Interviewed by José Ramos, Australian Foresight Institute, June 2002

[86] Wilber, K, *No Boundary: Eastern and Western Approaches to Personal Growth*, Shambhala, Colorado, 1979.

[87] Huxley, A, *The Perennial Philosophy*, Chatto & Windus, London, 1946.

[88] Slaughter, R, The Making of a Futurist: An Autobiographical Sketch, 2002, p9.

[89] Richard Slaughter Interviewed by José Ramos, Australian Foresight Institute, June, 2002.

[90] Slaughter, R, The Making of a Futurist: An Autobiographical Sketch, 2002, p11.

[91] Slaughter, R, The Making of a Futurist: An Autobiographical Sketch, 2002, p10.

[92] Sohail Inayatullah interviewed by José Ramos, Melbourne, May, 2002.

[93] Galtung argues in *Structure, Culture and Intellectual Style*, (Sage, London, 1981, p817–856) that while colonial academic peripheries tend to simply mimic imperial academic thinking, provincial centres are more innovative than the pinnacles of academia itself. This might also explain the relatively greater openness in Australia to such things as foresight and action research that have made little headway in Mainland, USA.

[94] Email Transmission, Sohail Inayatullah to José Ramos, 4 July 2002.

[95] Richard Slaughter Interviewed by José Ramos, Australian Foresight Institute, June 2002.

[96] Slaughter, R, The Making of a Futurist: An Autobiographical Sketch, 2002.

[97] Slaughter, R, 'Lessons from the Australian Commission for the Future: 1986–1998' *Futures for the Third Millennium*, Prospect, New South Wales, 1999, p166.

[98] Slaughter, R, 'Lessons from the Australian Commission for the Future: 1986–1998' *Futures for the Third Millennium*, Prospect, New South Wales, 1999, p166.

[99] Slaughter, R, 'Lessons from the Australian Commission for the Future: 1986–1998' *Futures for the Third Millennium*, Prospect, New South Wales, 1999, p168.

[100] Slaughter, R, 'Lessons from the Australian Commission for the Future: 1986–1998' *Futures for the Third Millennium*, Prospect, New South Wales, 1999.

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102 Fisher, F, 'Environmental Science for the Third Millennium: Development of a Metascience', Fingana, November, 2000, p4.

103 Berger, P.L & Luckman, T, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, Penguin, 1967, p108.

104 Richard Slaughter Interviewed by José Ramos, Australian Foresight Institute, June 2002.

105 Beare, H & Slaughter, R, *Education for the 21st Century*, Routledge, London, 1993.

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107 Slaughter, R, 'Knowledge Base of Futures Studies: Series Introduction', *KBFS*, Futures Study Centre, Melbourne, 1996, p2.

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112 From Slaughter, R, *The Foresight Principle: Cultural Recovery in the 21st Century*, Praeger, Westport, CT/Adamantine, London, 1995 (Bibliography).

113 Slaughter, R, *Futures for the Third Millennium*, Prospect, New South Wales, 1999.

114 Slaughter, R, The Making of a Futurist: An Autobiographical Sketch, 2002, p16.

115 Belsey, C, *Critical Practise*, Methuen & Co. Ltd., NY, 1980.

116 This is reflected in The Knowledge Base of Futures Studies, which is a strong attempt to see through the eyes of future oriented thinkers from many different cultures and background, instead of an attempt to define one 'correct' particular approach to the future, or the articulation of an idiosyncratic vision of a preferred or extrapolated future.

117 Inayatullah, S, Email interviewed by J. Ramos, July 2002.

[118] Inayatullah, S, 'Why I hate passports and visas' (Unpublished).

[119] Inayatullah, S, 'Macrohistory and layers of reality', *KBFS*, Futures Study Centre, Melbourne, 1996.

[120] This attitude toward categories extends into the method of CLA itself. As Inayatullah writes: 'CLA can be located within futures studies... but as well within the larger development of the social sciences, the post modern turn. I see it far more than merely a futures method'. From email communication 4 July 2002 from: Sohail Inayatullah to: José Ramos. In addition to this, CLA can be seen as a method of content analysis within the communications discipline – as Inayatullah writes: 'CLA is well received...because of the conflicting levels of information we receive. CLA helps sort out these levels. I guess, it is timely because of increased information and a bit of fatigue with postmodernism' Email transmission 15 June 2002 from: Sohail Inayatullah to: José Ramos.

[121] Inayatullah, S, 'Macrohistory and layers of reality, *KBFS*, Futures Study Centre, Melbourne, 1996, p1.

[122] This point is taken up in Zia Sardar's *Postmodernism and the Other* and is challenged and rejected as yet another example of the de-legitimation/invalidation of any peripheral structures. Inayatullah also uses this position to challenge extreme postmodernist relativism.

[123] Email transmission from: Sohail Inayatullah to: José Ramos July 2002.

[124] Some of this thinking began with the inquiry into the tension between agency and structure, two patterns that continuously emerged in the field. On one side were the Americans saying that it is all just a matter of doing it – like the Nike slogan. The individual has the power to create anything. Then there were the Marxists, who saw structure as primary, that people were locked into structures of oppression. There also existed a Jungian influence (supported by Campbell's work) at the myth level. But most of this level's influence was from Thompson.

[125] Belsey, C, *Critical Practice*, Methuen and Co., London, 1980.

[126] Sohail Inayatullah interviewed via email by José Ramos or 6/15/02.

[127] Sardar, Z, *Postmodernism and the Other: The New Imperialism of Western Culture*, Pluto, London, 1998.

[128] Inayatullah, S, *Understanding Sarkar*, Brill, Boston, 2002.

[129] Inayatullah, S, 2002.

[130] Inayatullah, S, 'The Weight of History and the Pull of the Future', *KBFS*, Futures Study Centre, Melbourne, 1996.

[131] Oswald Spengler quoted in Galtung, J & Inayatullah, S, ed. *Macrohistory and Macrohistorians,* Praeger, Westport CT, 1997, p99.

[132] Systems I course at Monash University, Melbourne Australia, w/Professor Frank Fisher, February 2001.

[133] Email transmission from: Inayatullah, S, to Ramos, J, October 2002.

[134] Galtung, J. & Inayatullah, S, ed. *Macrohistory and Macrohistorians*, Praeger, Westport CT, 1997 (biographical appendix).

[135] It is amazing to see how well this framework works in our time. How many puppet dictators has the West supported to the detriment of that other nation's peoples?

[136] Galtung, J, 'A Structural Theory of Imperialism', *Journal of Peace Research*, 1971, p91.

[137] At http://web.mit.edu/esd.83/www/notebook/WorldSystem.pdf, p1, 16 December 2002.

[138] At http://web.mit.edu/esd.83/www/notebook/WorldSystem.pdf, p4, 16 December 2002.

[139] J. Ramos Phone interview w/Sohail Inayatullah on 15 January 2003.

[140] Galtung, J, 'Western Civilisation, Anatomy and Pathology', *Alternatives VII*, 1981, p150.

[141] Galtung, J, *Structure, Culture and Intellectual Style, from Social Science Formation*, Sage, London, 1981.

[142] Foucault, M, *The Order of Things: An Archaeology of the human sciences*, Routledge, New York, 1970.

[143] Foucault, M, 1970, p168.

[144] Inayatullah, S, 'Layered methodology: meanings, epistemes and the politics of knowledge', *Futures* 34, Elsevier, 2002.

[145] Foucault, M, *Foucault Live: Collected Interviews 1961-1984*, Semiotex(e), NY, 1996, p57–58.

[146] Foucault, M, 1996, p13–14.

[147] Inayatullah, S, 'Causal Layered Analysis: Post structuralism as method', *KBFS*, Futures Study Centre, Melbourne, 1996.

[148] Email transmission from: Sohail Inayatullah to: José Ramos 14 July 2002.

[149] http://www.levity.com/mavericks/thomson.htm, 23 July 2002.

[150] In relation to this distinction between internationalism and planetary culture Thompson says: 'Planetary culture isn't a mono-culture. Planetary culture is basically saying that in internationalism, the governing science is economics. A planetary culture suggests a shift to ecology as the governing science. It energizes diversity, it requires a larger gene pool and it deals with the new sciences of complexity rather than linear reductionism. We're not all becoming one. We might be going in hyperspace to a level of integration in which we all participate in this multi-dimensionality, but it's high in individuation'.

[151] Thompson, W.I, 'The Cultural Implications of the New Biology' from *Gaia: A Way of Knowing*, Lindisfarne Ass., 1987.

[152] From William Irwin Thompson's book *Darkness and Scattered Light* quoted at: http://www.levity.com/mavericks/thomson.htm

[153] Thompson, W.I, 'The Cultural Implications of the New Biology' from Gaia: A Way of Knowing, Lindisfarne Association, 1987, p13.

[154] Thompson, W.I, 1987, p13

[155] Thompson, W.I, 'Nine theses for A Gaia Politique', *In Context*, Fall 1986.

[156] http://www.levity.com/mavericks/thomson.htm, 23 July 2002.

[157] http://www.levity.com/mavericks/thomson.htm, 23 July 2002.

[158] Sohail Inayatullah Email interviewed by José Ramos, 14 July 2002.

[159] Galtung, J, 'Western Civilisation, Anatomy and Pathology', *Alternatives VII*, 1981, p147.

[160] Galtung, J, 'Western Civilisation, Anatomy and Pathology', *Alternatives VII*, 1981, p147.

[161] Thompson, W.I, 'The Cultural Implications of the New Biology', *Gaia: A Way of Knowing*, Lindisfarne Ass. 1987.

[162] S. Inayatullah Email Interviewed by José Ramos, 14/06/02.

[163] Shapiro, M, *Reading the Postmodern Polity*, University of Minnesota Press, 1992, p9.

[164] Shapiro, M, 1992, p9.

[165] Shapiro, M, 1992, p15.

[166] *Futures*, Vol.22, No. 2 March 1990, 115–141.

[167] Inayatullah, S, 'Methods and Epistemologies in Futures Studies', *KBFS*, Futures Study Centre, Melbourne 1996.

[168] S. Inayatullah Email Interviewed by José Ramos, 14/06/02.

[169] Inayatullah, S, 'Causal layered analysis: post structuralism as method', from *Questioning the future*, Tamkang University, Taipei, 2002 (notes).

[170] Inayatullah, S, *Questioning the future*, Tamkang University, Taipei, 2002.

[171] S. Inayatullah Email transmission to José Ramos, 26 June 2002.

[172] Saliba's talent was to include in these models intangible human issues, values, interests, and perceptions and see their relevance within organisational contexts. Upon mapping a 'system' (more of a 'context' in Saliba's usage), he would change the assumptions underlying that system, thereby creating the starting point for an alternative future, scenarios that could be normative, extrapolative or strategic. Inayatullah saw how this shifting of core assumptions could be used within an analysis of layered causality. As litany and problem-oriented levels were nested in more intangible but more profound levels of worldview/episteme and myth/metaphor, Inayatullah saw that one could work down from superficial levels to deeper levels and access culturally based worldviews and epistemes, then switch worldviews/epistemes or myths and metaphors, and give rise to radically different framings of issues, scenarios, and spaces for action. CLA could then be a method for switching assumptions. Instead of just a method of analysis to uncover cultural assumptions, perception, worldview, episteme, myth and metaphor, it could also be used as a way of breaking out of staid and constraining ways of knowing and discovering new ways of knowing that offered more.

[173] S. Inayatullah Email transmission to José Ramos 18 July 2002.

[174] J. Ramos phone conversation w/S. Inayatullah in May 2002.

[175] This is reflected in *The Knowledge Base of Futures Studies*, which is a strong attempt to see through the eyes of future oriented thinkers from many different cultures and background, instead of an attempt to define one 'correct' particular approach to the future, or the articulation of an idiosyncratic vision of a preferred or extrapolated future.

[176] Email transmission from: S. Inayatullah to: J. Ramos, 14/07/02.

[177] Email transmission from: S. Inayatullah to: J. Ramos, 14/07/02.