Deep Futures: Beyond Money and Machines

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 "…it should be our challenge, as practitioners, to turn…foresight into insight."
(Andrew Curry, quoted in Inayatullah 2008b: 76)

"Many people believe that emotions stand in opposition to rational thought, but scientific evidence suggests the opposite. While emotions can overwhelm your rationality, you cannot be rational without being emotional. Emotions predate thoughts in the evolution of the human species and our personal development. Emotion can disrupt reasoning in certain circumstances, but without it there is no reasoning at all. Traditional cognitive models don't understand that reduction in emotion may constitute an equally important source of irrational behavior."
(Neuroscientist Antonia Demasio, quoted Burke 2009: 99)

Introduction

It was Washington DC Metro Station on a cold January morning in 2007. A man peeled a violin from his case, placed his hat before him, and proceeded to play six Bach pieces. During his sixty minutes in that place, some 3,000 people passed by, most on their way to work (Weingarten 2007).

Three minutes after the man began playing, a middle-aged gentleman stopped to look for a few seconds, before hurrying on. About four minutes after that, a woman threw a dollar into the hat and continued past. A couple of minutes later, a young man leaned against the wall nearby and listened for a few moments. Then he checked his watch and left. Next, a boy of about three years stopped, but his mother pulled him away. As she dragged him off, he kept turning back to look at the man with the violin. Similar scenes unfolded as several other children took an interest in the musician, but in every case the parents dragged them on.

In total, only six people stopped to listen, most for just a few moments. About twenty gave money, then hurried off. The man collected a total of $32. He finished playing and humbly left. There was neither applause, nor any indication his playing had been appreciated.

Yet, this had been no ordinary street performance. The violinist was Joshua Bell, a world-renowned player, and he had just played one of the most intricate pieces ever written. His violin was worth 3.5 million dollars. Just two days prior to his inauspicious subway performance, Joshua Bell had played to a packed house in Boston, where the cost of a seat averaged one hundred dollars.

The subway performance had been organised by the *Washington Post* as part of a social experiment about perception, taste, and people's priorities. In commonplace situations, where time has been reassigned to focus attention upon other things, how readily can we perceive the present? Beauty? Do we stop to appreciate the subtle? Are we capable of recognising human passion, human expression in a novel context? Have the cognitive spaces of our lives been colonised by an unconscious and invisible hegemony?

One person who did stop a moment to observe Bell was a woman named Jackie Hessain. Her perception tells us much about the nature of the modern world. When later asked what she had noted, she replied: "…nothing about him struck me as much of anything." (Weingarten 2007)

In fact she was not listening to the music at all. Instead, her perception was mediated by the social context of the situation and layers of subtle, unexamined meaning.

"I really didn't hear that much," she said. "I was just trying to *figure out* what he was doing there, how does this work for him, can he make much money, would it be better to start with some money in the case, or for it to be empty, so people feel sorry for you? I was *analysing* it financially." (Weingarten 2007, italics added)
She was then asked what she does for a living.

"I'm a lawyer in labor relations with the United States Postal Service. I just negotiated a national contract." (Weingarten 2007)

Hessain's delimited perception here is a function of the key way of knowing she employed within the situation: analysis, or "figuring out." It is my contention that Hessain's preferred way of knowing is one of the dominant ways of knowing of modern education, and especially modern academia, as I have argued elsewhere (Anthony 2008). Here what I refer to as critical rationality has assumed a hegemony hegemonic position over and above other ways of knowing, as I shall explain, below. Foresight and Futures work is no exception.

Another important factor to note is that the mind is a self-organising system (de Bono 2009). What we focus upon expands. Hessain's attention within the context of Joshua Bell's subway performance, and possibly across the broader context of her life, is upon financial concerns and "getting ahead." Similarly, where the study of futures focuses upon money, technology, and power, the futures that are discussed and imagined may be artificially narrow. I refer to these futures as "money and machine" futures.

The discipline of Critical Futures Studies (CFS) was initiated to address some of these cultural delimitations and their perceptual limitations (Inayatullah 2004). In theory it allows for other ways of knowing to be employed, yet in practice CFS remains heavily analytical. A more recent expression of Futures studies—Postconventional Futures Studies (PFS)—may be a means to build upon the cognitive insights identified intellectually within CFS, by permitting a greater legitimacy for, and incorporation of, other ways of knowing, especially the intuitive, the creative, and the spiritual. As opposed to Critical Futures studies, Postconventional Futures actively encourage the full employment of these other ways of knowing. Theory moves into praxis.

There are several things that I am going to discuss in this paper. In the first section I am going to trace the historical process behind the present domination of critical/rational ways of knowing in modern education and science. In the following section I shall address the question, "What are Deep Futures?" The section three queries: "Why do we need Deep Futures?" I then outline several specific Postconventional Futures tools and methods. Finally, I use a specific example—the

teenage drug problem in Hong Kong—as an example of the way PFS might be used in a real world policy situation.

Foresight, Knowing, and History
Like the famous "gorilla in the room" experiment (Simons & Chabris 1999) -where people are asked to fill out a questionnaire, and many fail to notice a man in a gorilla suit who enters the room- the Joshua Bell situation tells us much. People tend to see what they focus upon, and their relationship with the immediate environment and the world greatly influences their ability to perceive. It is also my contention that it also greatly retards their capacity *to feel*. This is of the greatest importance for what I am about to argue.

The self-stultifying function of paradigms, and the ways that dominant discourses control and mediate knowledge, has been widely discussed (Inayatullah 2004, Kuhn 1986, Sardar 1998). Paradigms delimit not only the boundaries of knowledge, but also restrict what questions can be asked and dictate what ways of knowing are legitimate (Grof 2000). Poststrucuturalism, and in its wake, Critical Futures Studies, have emphasised that discourses tend to be dominated by both explicit and implicit power struggles (Inayatullah 2004). Feminists, for example, have long decried that modern science is patriarchal, and that women's voices and feminine ways of knowing have been largely eliminated from science today (Eisler 2004, Milojevic 2005). Furthermore, qualitative analyses which I have conducted of popular and academic tests dealing with the subject of human intelligence indicate that the computer metaphor dominates representations of the brain, creating a mechanistic and reductionist view of consciousness, and restricts alternative representations of mind. This hegemonic problematique has flowed through to mainstream education and academia, where other ways of knowing have been stripped from many discourses (Anthony 2008).

The dominant ways of knowing in modern Western education and science have historical roots. The Western episteme has established critical/rational ways of knowing as the dominant cognitive processes which underpin Western knowledge. Around the 1500s scholasticism developed in Europe. This movement, which was central to the founding of modern education systems and universities, featured classification as its prime way of knowing. By 1800 analysis had fully developed in the social sciences, and around 1850 experimentation became a key way of knowing in the sciences (Pickstone 2000). These three dominant ways of knowing can typically be seen in the scientific method and the peer review system that underpin the publication of scientific research in the present age.

Finally, the birth of the modern personal computer after the mid-twentieth century heralded a new way of knowing. The computer became a prime mediator of knowledge, and with it came the advent of computer rationality (Klein 2003) as a highly influential way of knowing. The separation between observer and subject became even more distinct. Data came to be mediated via the machine on the desktop. As just one example, where once weather forecasters had relied, in part, upon an intuitive connection with the environment—going outside to check weather vanes, to feel the wind on their faces and the humidity in the air—they have now

come to sit before computers and analyse data fed to them via sophisticated computer models.[1]

History has not been so kind to some other ways of knowing, however - especially affective and intuitive cognition. Intuitive, mystical, and spiritual ways of knowing had often been suppressed throughout the history of Western thought. Now they have been almost completely crushed (Tarnas 2000, Anthony 2005b, 2006).

Other ways of Knowing, Other Ways of Thinking, Other Ways of Being
Yet, what exactly is "intuition"? There are multiple definitions, but for the sake of manageability I refer to two main kinds of intuition. The first is mundane intuition, which is the subliminal processing of information in the brain. This intuition makes itself known through subtle feelings which bubble up from just below the surface of cognition. Mundane intuition has not been widely investigated, but there is a body of legitimate research available (Torff & Sternberg 2001). Because this intuition is explained in terms of known brain physiology, it does not challenge mainstream scientific thinking about the mind and brain.

The second kind of intuition I refer to as mystical intuition, which has featured little in research, and is thus poorly understood. Few researchers want to touch it, because mystical intuition contains references to spiritual, mystical, and religious experience. It brings in discussion of psi phenomena and the paranormal, and the idea of the extended mind—that consciousness transcends the brain.[2] There is an effective "psi taboo" (Radin 2006) in modern science, making this domain of inquiry unattractive for most researchers. The provocation I present to Foresight and Futures practitioners is that both mundane and mystical intuition have legitimate cognitive functions, and are potentially invaluable in our work.

The Split in the Modern Mind
The development of modern science thus brought a rapid increase in our ability to process and develop rationality, as well as scientific knowledge and technologies. Yet this tremendous progress in the hard and soft sciences came at a great price. It has created a split in the Western mind (Tarnas 2000).

By the turn of the twentieth century another realm of knowledge had become suppressed, silenced. The once influential Romantic Movement lost momentum. Its prime ways of knowing had involved intuition and an emotive relationship with the other: the deep connection of the knower and the known. This affective cognitive process stood in complete contrast to the detachment of the scientific method, which necessitated that the observer be disconnected from the subject of observation. Even in the analytical and humanistic disciplines, academics were eventually forced to remove affective language and first person references. To generalise, Foresight and Futures work has been no exception.

The "alienated mind" was born (Anthony 2008). This is mind which is emotively disconnected from its environment, and by implication, from its intuitive and emotional body. Inner worlds - contemplation, reflexivity, meditation and prayer -

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[1] Klein (2003) also uses the example of weather forecasters.
[2] For a summary of the evidence and arguments for mystical intuition, see Radin 2006, Sheldrake 2003, McTaggart 2007, and Anthony 2008, 2010c (upcoming).

have been largely erased. The advent of computer rationality meant that intuition was drowned out by the noise of mobile phones, MP3 players, and laptops. The intuitive and spiritual has become part of the disowned future (Inayatullah 2008). As the twentieth century evolved, and life became increasingly individualistic and focused upon career, achievement, and entertainment, this estrangement from inner worlds became entrenched across the Western world. It has now become the norm in developed Asian cultures as well.

This historical process has enormous implications for foresight practitioners and futurists.

The Implications
An important aspect of Foresight is being able to perceive the trends, processes, and "signals" which are creating and affecting change within the present, and in turn shaping futures. The key point is that the above-mentioned historical hegemony means that these are now identified and processed via critical/rational ways of knowing, and especially via the mass media and computer. The whole process is mediated via databases, search engines, computer hardware, and sophisticated computer models. Computer rationality has now become the dominant way of knowing.

Given this problematique, what kind of information might we be failing to perceive? How can we be sure that we are being attentive to an optimal array of data, and processing it in an impartial way? Merely expanding the volume of information is not enough. It is the way information is being perceived and handled that is a key issue here.

Deep Futures
Futures are not simply dry Scenarios, not merely the compact, politically correct visions of policy makers and government think tanks. They are the images which fire our hopes and dreams within the present. Futures, whether preferred, probable, or possible, can call us to action, and can inspire us to reach higher and further. Human beings do not respond well to dry, empirical data. If that were the case, data for increasing greenhouse emissions would have seen a much greater shift in consumer awareness than we have observed. We human beings need something to be passionate about, something that gives us meaning and hope, something that brings us into deep relationship with each other, the world, and Gaia. Because they employ other ways of knowing and valorise intuition and inner worlds, Postconventional Futures methods, if diligently applied, can deepen our futures work. This paper title begins with the phrase "Deep Futures," because I believe that the greatest benefit of Postconventional Futures Studies methods may be that they can help us envisage and create deeply meaningful futures with depth.

To summarise, futures with depth contain these elements:

- **They inspire.** They instill us with passion, and ignite something deep within us.
- **They are the big picture.** They encourage us to see things in broader perspective, including the cultural, national, civilisational, the Gaian, and the spiritual.

- **They honour both the head and the heart.** They permit rational and intuitive ways of knowing and living to co-exist.
- **They permit expression of multiple cultures and worldviews,** not just dominant ones.
- **They are deeply meaningful,** not merely interesting, amusing, or engaging.
- **They permit deep connection** with each other, with nature, and with inner and spiritual worlds.
- **They honour universal human values:** peace, beauty, freedom, justice, and love (including freedom of thought and information, and financial freedom).
- **People and Gaia lie at the heart** of the future, not merely money and machines.

Critical Futures Studies inform us that all Futures work is embedded within worldviews and paradigms, and this typically includes implicit hegemonies. The other becomes part of the disowned future (Inayatullah 2008). Like so many civilisations, the Western critical/rational worldview tends to see its version of social expression as a result of ineluctable historical forces - in this case the march of progress away from superstition and the primitive and toward the rational and technological. Many non-Western countries have adopted a version of this worldview as their preferred future. Chinese central government policy makers, for example, have developed the model of "scientific development" (Hu 2005), which, in practice, is extreme capitalism without democracy. Yet futures centred within the critical/rational worldview are but one expression of multiple possible futures. A key role of the postconventional futurist is to offer provocative alternatives (Slaughter 2006).

The concept of Deep Futures is effectively a synthesis of the critical/rational and mystical/spiritual[3] worldviews (Anthony 2008). The concept of DF is broadly representative of the philosophical perspective of postconventional futurists in general. Deep Futures is therefore no less "subjective" than any other expression of Futures.

The kind of science, education, and culture that we have developed in modern society make us proficient at analysing, classifying, and experimenting. But we are not so good at putting things back together, at identifying what is important, what is moral, what is great. Deep Futures has a prime aim of bringing together rational and intuitive thinking, to assist us in developing minds and futures that can help us thrive in a dynamic and rapidly changing world (Anthony 2005a).[4]

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[3] The mystical spiritual worldview is not really a single philosophy. I use the term to connect multiple expressions of culture, which share the commonality of seeing a mystical thread running through history. These cultures see minds as being connected to a kind of spiritual noosphere, and human beings as being capable of accessing this integrated intelligence (Anthony 2008). Examples include many indigenous cultures, much of ancient Greek culture, Christian mysticism, the European Romantics of the eighteenth and nineteenth centuries, and the alternative culture movement of the 1960s-'70s.

[4] Elsewhere (Anthony 2005b) I have addressed the characteristics and problematiques of the knowledge economy which I feel necessitate a broader range of ways of knowing (including the intuitive and creative) if people are to thrive.

The Four Branches of Futures Studies and Their Role in Policy
Australian futurist Richard Slaughter (2003) sees Futures Studies as having evolved through four distinct phases. The first was the empirical tradition, which was most prominent in the United States. The second was a "culturally based" approach—predominantly European—which eventually led to Critical Futures Studies. Then in the third phase an international and multicultural thrust emerged, which Slaughter finds is still developing. Slaughter's fourth phase has been the emergence of Postconventional Futures.[5]

We can depict the development of Futures Studies as in Figure 1, below.
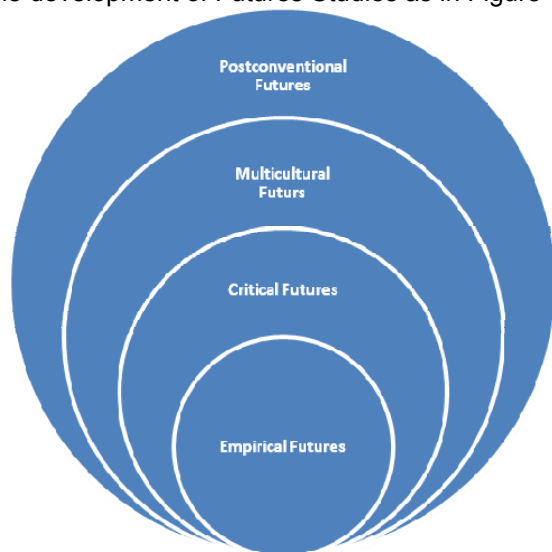

Figure 1. The Four Phases of the Development of Futures Studies, According to Slaughter (2003)

The development of Futures Studies reflects trends in Western thought before and during the twentieth century. Empirical Futures is the hard-fact approach, typical of the Western empirical tradition and experimentalism which quickened after 1850 (Pickstone 2000). Critical Futures Studies have been influenced by the mid-twentieth century postmodernists and poststructuralists, especially Michel Foucault (Ianyatullah 2004). Multi-perspectives are consistent with an addition of broader thinking in line with multi-culturalism. Finally, the postconventionalists have been influenced by thought emerging in the alternative movement of the 1960s and '70s, Eastern philosophy, and some of the advances in physics, systems thinking, and consciousness studies of recent decades.[6]

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[5] Slaughter (2003) distinguishes his Integral Futures Studies—predicated upon the work of Ken Wilber—from Postconventional Futures. However, for the sake of simplicity I have placed them in the one category, as they both honour a full range of ways of knowing and incorporate ideas from other branches of Futures Studies.
[6] For physics and systems thinking see Ervin Laszlo (2004) and Sheldrake, McKenna, & Abraham (2001). For developments in consciousness studies see Grof (2000), Radin (2006), Sheldrake (2003).

Each phase has its distinct tools, and in turn the ways of knowing employed vary. Therefore, each has the potential to affect the development of policy in different ways.

The Empiricists and Trends Analysers
This group of futurists is concerned about identifying the thrust of change, eliciting trends, and making extrapolations about the future. John Naisbitt's (1996) *Megatrends* books are a classic example. Their prime analytical process involves reading signals from the environment, and then extrapolating possible and probable futures. A more recent and commercially successful example is the Foresight Network.[7] This company, run by futurist Michael Jackson, engages in extensive Horizon Scanning, taking much of its data from academic journals and the mass media. It offers forecasts for corporations and governments.

Trends analysers often engage in some degree of speculation and sometimes engage in Visioning, but they tend not to question deeply the presuppositions of dominant discourses.

Critical and Multi-perspective Futures Studies
Critical and Multi-perspective Futures Studies can help to examine issues at a greater depth than do the empiricists. These branches of Futures Studies seek to help individuals and organisations better understand the *processes* of change, so that wiser and preferred futures can be created (Inayatullah 2008: 5, italics added)

Prediction is not the primary thrust of Multi-perspective and Critical Futures Studies, as they are more concerned with identifying the agents of change, who controls things, and who is going to benefit (Inayatullah 2008). A problem with dominant discourses within particular domains of enquiry is that they tend not to question the givens, the basic concepts which underpin discourses. In other words, the paradigm does not get named. The result is that thinkers may be too close to their subject matter, and fail to achieve the distance necessary to see alternative perspectives (Inayatullah 2004).

Some notable futurists in this domain are Jim Dator (2009), Zia Sardar (1998), and Ivana Milojevic (2005).

Postconventional Futures studies
Consider the following knowledge claims made by Sohail Inayatullah. They encapsulate the essence of Postconventional Futures Studies.
- Questioning assumptions at every level: the mission, the goals, the product, core competencies.
- Anticipatory—scanning the future, using all of our ways of knowing, all of our senses.
- Participatory—including others, since non-inclusion of one variable can change outcomes in unanticipated ways (Inayatullah 2002: 121).

In this instance, Inayatullah is referring to Anticipatory Action Learning, but within the context of his deep approach to Futures. Inayatullah's approach encapsulates the

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[7] www.shapingtomorrow .com

essence of good Futures work: deep questioning and a commitment to action, to change.

Postconventional Futures Studies incorporate all the tools of the empiricists and the critical futurists, and then adds some. The key distinction is that postconventionalists incorporate data and ways of knowing which are often excluded from dominant discourses in modern Western and developed societies, and make this a central aspect of their approach. In particular, there may be an inclusion of arguments, perspectives, and the data of emotional, intuitive, spiritual, and visionary human experience. In other words, the inner dimensions of cognitive experience return to the discourse. Some postconventionalists, such as the Integral Futures practioners (who employ the thinking of Ken Wilber), may actively seek dissent (Slaughter 2006).

In my own writing I have introduced the idea of deliberate provocation, taking the term from Edward de Bono (2009). de Bono points out that the mind is a self-organising system, and that traditional thinking tends to hinder genuinely novel perception and creativity. Some of the concepts and tools I have developed fall beyond the boundaries of critical/rational thinking. These include integrated intelligence (Anthony 2008) (where intelligence is viewed as transpersonal, rather than being restricted to individual brains); the Harmonic Circles method (Anthony 2007) (where participants assume responsibility for psychological projections at the other via deep introspection); and Integral Inquiry (Anthony 2010b) (where research is carried out while deliberately using specific tools that require the application of mundane and mystical intuition).

My concepts and tools are deliberately designed to make users uncomfortable, in particular with the use of other ways of knowing, thinking, and doing.

The ideas and methods used by postconventionalists may lead to some degree of tension with more conservative thinkers in dominant science and education. However, it is my contention that, if skillfully managed, this tension can be used to great benefit, and as a means to explore futures in greater depth. It can help us to question more deeply the presuppositions of more conventional Futures work, and dominant discourses in general.

Finally, while Postconventional Futures practitioners adopt an approach which is provocative and encourages deep reflection, the process is not meant to impose an alternative worldview on stakeholders.

While the categorisation of "postconventional" is not hard and fast, futurists employing an approach which is consistent with my definition include Marcus Bussey (2009), Linda Groff (2008), Sohail Inayatullah (2009), Tom Lombardo (2007), Richard Slaughter (2006), and the writer Marcus T. Anthony (see references).

Some Tools of PFS
One of the benefits of being a postconventional futurist is that all the tools of the other branches of Futures Studies can be included in the futures process. The specific methods and tools employed, and the range and depth of analyses, can be varied according to the nature of the audience and the aims of the gathering. In my

own writing and presentations I can refer to empirical studies and trends analysis, use Causal Layered Analysis (Inayatullah 2008), or encourage participants to explore intuitive processes.

In some situations it may be necessary to emphasise different tools. For example, more conservative institutions and audiences within the hard sciences may be more receptive to empirical methods and analyses. In such a situation, a postconventional futurist might focus upon the data, but then develop a deeper analysis via tools like Causal Layered Analysis. This is an approach which Sohail Inayatullah employs.

Bringing in the deeper psychological and spiritual perspectives of the postconventional futurist may be difficult, or even impossible, in some circumstances. The key is to appreciate just how far an audience can be stretched in terms of their understanding and their worldview. As futurist John Naisbitt (2007) says, one should not get so far ahead of the parade so that nobody can see where you are.

Table 1, below, is a generalised depiction of some Futures and Foresight tools and approaches which are suitable for each phase of Futures Studies. The table also indicates that there is an approximate correlation between the branches of Futures Studies and the four levels of Inayatullah's (2004) Causal Layered Analysis. As mentioned, each branch incorporates the tools and ideas of the previous branch(es).

Phase of Futures Studies	Tools and Methods	Approximate Level of Causal Layered Analysis
Empirical	Trends analysis, Horizon Scanning, data collection & analysis, Scenarios.[8]	Level 1. The Litany
Critical and Multi-perspective	Multiple perspectives, incorporating the other, Scenarios, Backcasting, Visioning, Causal Layered Analysis.	Levels 2 & 3. The Social/Systems & Worldview/Paradigm Levels
Postconventional Futures Studies	Causal Layered Analysis, Integral Futures, Harmonic Circles, Integrated Inquiry, integrated intelligence and other ways of knowing, deep Visioning.	Level 4. The Myth/Metaphors Level

Table 1: The Phases of Futures Studies and Their Preferred Methods

Why We Need PFS and Deep Futures
Ultimately all policy requires choices. Deep Futures, as I define them, potentially allow for a greater diversity of stakeholders to participate in decision-making, using a

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[8] Obviously the application of a tool like Scenarios would vary greatly when used in each branch, because the ways of knowing vary. The same applies to any given tool.

broader range of ways of knowing. The analytical tools of Multi-perspective and Critical Futures Studies open spaces for "others" to participate; the introspective component of Postconventional Futures Studies permits a theoretical inclusion of the other ways of knowing.

We have reached a threshold in human history. Now, early in the twenty-first century, there is a convergence of critical issues which threaten our very existence: climate change and environmental degradation; terrorism and a possible clash of civilisations; the growing gap between rich and poor; the incredible power—and danger—of science and technology; and most recently, the financial crisis. Deep Futures can be employed within this context of crisis, and for the following reasons.

1. We need tools which provoke new ways of thinking—to bring to attention, and then challenge, existing paradigms and ways of doing things.
2. We need ways to get people to *really* engage with each other, to get them thinking beyond their entrenched perspectives and worldviews, and their different paradigms.
3. We need deep connection with others and the world, and the reigniting of inner worlds and intuitive knowledge—other ways of knowing alongside the rational mind.
4. We need to honour the data and empirical methods, but to contextualise them (Hawkins 2002).[9]
5. We need responsible, adaptable, creative, and wise leaders and citizens (Moffet 1994, Pink 2005).
6. We need processes which place *people and relationships* back at the centre of society and culture. We need to move beyond money and machines futures.

Money and Machine Futures
The essential philosophical position I take is that the combination of capitalism and technoscience[10] creates societies dominated by money and machines, bereft of depth, heart, soul, and deep connection: Futures without depth. Such shallow futures stultify the development of inner worlds, the balanced connection with emotional and intuitive ways of knowing, as perception becomes fixed upon external loci and immediate gratification. Money and machine futures take people away from the present moment, where the connection with the intuitive is most readily felt in a relaxed and centred state (Jacobson 2008). The Joshua Bell anecdote at the beginning of this paper exemplifies this process.

Worldviews and paradigms are typically implicit and unconscious (Kuhn 1964), and thus tend to remain unexamined; the unexamined potentially becomes hegemonic. The self-organising nature of mind tends to reinforce the known, and "the thinking trap" may occur when we do not deliberately invoke provocation to stir ourselves out

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[9] Hawkins, a modern mystic, posits a hierarchical model of cognitive development, both individual and collective human. He argues that there are limits to the rational mind, and that by itself it is poor at contextualising data, because it is inherently dissociated from the other, and from the world. I have argued this position also (Anthony 2008).
[10] Technoscience is science driven by modern capitalist society (Pickstone 2000). Pickstone argues that it constitutes a new way of knowing.

of the human tendency toward linear thinking (de Bono 2009). Policy makers, organisations, and futurists are not exempt from this problematique.

Therefore we need ways to avoid becoming trapped in shallow futures. We need ways to ensure that our policies are informed by a broader awareness of the social, cultural, and paradigmatic constraints that bind us. It is my contention that Postconventional Futures methods can help.

Money and machine futures depict future society as being like a great machine. Computers and technologically advanced and prosperous cities are central motifs. These are images of the future dominated by flying cars, robots, and glass domes. They often make minimal reference to inner worlds, the human psyche, the emotional, psychological, or spiritual.

Policy which focuses upon science and technology at the expense of inner worlds and connection will likely create social and psychological problems, as is discussed later in this paper.

Futures Methods With Depth
Here I outline several Deep Futures methods. Some of these are methods in development, and require further application before their genuine value can be determined.

Causal Layered Analysis (Sohail Inayatullah 2004, 2009)
Causal Layered Analysis (CLA) is a poststructuralist Futures method developed by futurist Sohail Inayatullah (2004). CLA can help examine the deeper meanings embedded within problems, texts, and discourses through an exploration of four specific levels. It is particularly useful as a means to conduct inquiry into the nature of past, present, and future. It opens up the present and the past to create the possibility of alternative futures.

In other words, it can deepen our understanding of the future.

CLA is an extremely flexible tool, and the focus of analysis can be upon different levels according to the aims of the research, the gathering, and the audience. Many other Futures methods can be used alongside it. For example, my Harmonic Circles method (Anthony 2007, 2010a) can be used as part of the worldview/paradigm level, as it encourages participants to reflect upon their worldview and biases.

These are CLA's four levels:

- **The litany** examines the "surface" of the issue—empirical and verifiable data, what can be readily seen and measured, or what is typically seen when there is no attempt to look deeper. Data at this level can be useful in making immediate changes, but may be limited if participants lack a broader understanding of the problem.
- **The social/systems level** identifies underlying systemic issues. The greater depth allows stakeholders to deepen their understanding of the situation and place the data in greater context.

- **The worldview/paradigm level** examines the paradigmatic and civilisational factors which affect the issue. Futures thinking which addresses this level can help create the conditions for a paradigm shift. We can envisage new futures and devise new strategies.
- **The myth/metaphor level** uncovers the myths, metaphors, and deeper psycho-spiritual drivers of issues. It is at the mythic and metaphorical level that postconventional methods come into play. Most notably, other ways of knowing can be used.

Integral Futures (Richard Slaughter 2003, 2006).
This approach to Futures uses Ken Wilber's Integral Operating System and Four Quadrant system to deconstruct and analyse futures. The four quadrants are the social, the cultural, the empirical, and the first-person. Most notably, Integral Futures acknowledges the transpersonal realms and the perennial philosophy of the Eastern world. This sees consciousness as evolving from pre-personal (unconsciousness), to conscious/rational, and then to transpersonal.

Visioning.
Visioning, where idealised futures are imagined and planned, is in itself neutral in terms of the application of ways of knowing. But is an ideal situation to allow intuitive and emotive cognitive processes to be employed.

Scenarios.
Scenarios may work best where deeply reflective work is done beforehand, opening spaces for alternative futures to emerge (Curry & Shultz 2009). Causal Layered Analysis, in combination with creative and intuitive thinking, can be used here.

Harmonic Circles (Marcus T. Anthony 2007, 2010a).[11]
This tool invites the user to reflect deeply upon his/her worldview and biases, via a depth-psychology approach. It employs a free association method to assist the user in tapping into the unconscious, and is compatible with non-ordinary states of consciousness.

Integrated Inquiry (Marcus T. Anthony 2010b).
This recently-developed alternative research method combines intuitive and rational ways of knowing, as the researcher goes about investigating his subject matter. The researcher pays as much attention to the inner world of thoughts, feelings, and dreams as to the external environment. Foresight and Futures practioners can use it during their research.

Integrated Intelligence and Other Ways of Knowing (Marcus T. Anthony 2008, 2010c).

Integrated intelligence (INI) assumes that the mind extends beyond the brain, and that the information that is "out there" can be consciously accessed via feelings, images, dreams, auditory prompts, and so on. The process incorporates non-ordinary states of consciousness, achieved through deep relaxation and

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[11] I have used these three tools extensively in my own research and futures work. However, they are in the early stages of development, and require more extensive application in real time and space.

physiological self-control. INI can be employed as an assumed genuine human capacity, or used as a provocation. In the latter case, it is not necessary to "believe" in it, merely to go about futures work employing specific INI tools and using them as prompts toward the end of achieving more innovative and creative thinking.

The Purpose of Postconventional Approaches
What is the purpose of allowing such alternative thinking to be part of Futures and Foresight work? Sohail Inayatullah puts it this way: "Futures thinking ultimately can go far as mapping and changing memes and fields of reality." (Inayatullah 2008)

This is a contentious issue, but one with which I concur. There is a great deal of scientific evidence to support the ideas of non-local fields of consciousness and collective intelligence (McTaggart 2007, Grof 2000, Sheldrake 2003, Radin 2006), and just as much skepticism (Dawkins 2006, Blackmore 2003, de Glasse Tyson 2001). However, it should be pointed out that the purpose of the employment of Deep Futures tools should not be as a means to change people's belief structures or worldviews. Such an approach would be a violation of the participants' rights, and an abuse of the role of teacher/futurist as facilitator. Instead, Deep Futures can be used as a way to incorporate a broader range of perspectives and types of data, to act as a deliberate provocation, and to break through entrenched ways of thinking about and perceiving the world and its many possible futures.

Much of what is true of Causal Layered Analysis is true of Deep Futures in general. Inayatullah (2008b) points out that the goal of CLA is the integration of the four levels, to honour each, and allow the expanded understanding which emerges to help us better prepare for, and *consciously* develop, our futures. As Inayatullah writes:

> *Each level is true, and solutions need to be found at each level. Thus policy solutions can be deeper. Litany interventions lead to short-term solutions, easy to grasp, packed with data. Systemic answers require interventions by efficiency experts. Governmental policies linked to partnership with the private sector often results. Worldview change is much harder and longer term. It requires seeking solutions from outside the framework in which the solution has been defined. And myth solutions require deepest interventions, as this requires telling a new story, rewiring the brain and building new memories and the personal and collective body (Inayatullah, 2008: 9).*

Deep Futures in general can be used as a framework for teaching Futures Studies, for specific analyses, and for workshops and seminars. Its focus upon depth and bringing forth data and perspectives from within different layers of the problem permits other futures methods to be used alongside it. In this sense it is reminiscent of de Bono's (2009) "six thinking hats" method, which permits a place for a broader range of cognitive processes than are typically permitted in modern education and organisations.

Taken together, CLA, interwoven with the other methods referred to here, can potentially deepen our appreciation of the forces driving change and futures. The processes create the potential for insight and for greater awareness of the forces

which shape the self, from within and without. This may potentially lead to better foresight.

Effective Policy vs. Deep Policy
Deep policy goes deep, by definition. How, then, do standard policy guidelines about delivering effective policies compare to Deep Futures? The British government has developed the following criteria for policy makers. We may assume that the goal is to be inclusive, and to go deep. I list the general guidelines here, and indicate what level of Inayatullah's Causal Layered Analysis (CLA) they address. Recall, level one is the surface/empirical, level two the social/systems, level three the worldview/paradigm, and level four the myth/metaphor.

1. It clearly defines outcomes, taking into account the likely effect and impact of the policy in the future, five to ten years and beyond. **L1**
2. It takes full account of the national and international situation. **L2**
3. It takes a holistic view, looking beyond institutional boundaries to the government's "strategic objectives." **L2**
4. It is flexible and innovative, willing to question established ways of dealing with things and encourage new and creative ideas. **L3**
5. It uses the best available evidence from a wide range of sources. **L1**
6. It constantly reviews existing policy to ensure it is really dealing with problems it was designed to solve without having unintended detrimental effects elsewhere. **L1-L2**
7. It is fair to all people directly or indirectly affected by it and takes account of its impact more generally. **L2-L3**
8. It involves all stakeholders at an early stage and throughout its development. **L3**
9. It learns from experience what works and what doesn't through systematic evaluation. **L1-L4 (Kamerer 2009)**

At first glance, this looks quite comprehensive. It potentially allows for all of levels of CLA, with the possible exception of a weakly represented level four, myth and metaphor.

Yet there are often problems in the implementation of policy guidelines. Firstly, governments and organisations often fail to follow their own effective policy guidelines. The United States and its allies, for example, did not invoke a deep approach in invading Iraq. They didn't consult the Islamic World, and we can assume they did not examine their own civilisational biases. And this is not to mention the obvious lack of foresight in failing to think very far beyond the fall of Baghdad.

My second issue is in regard to the methods that can really make policy go deep. To do this we need tools which allow policy makers to be poked and prodded into seeing things at deeper levels. Simply saying, "Let's include the Muslims," for example, may be limited if there are no ways for a deep level of communication to unfold, for worldview assumptions to be addressed, and for prejudice and judgment to be acknowledged. This is where CLA, used in conjunction with other methods such as Harmonic Circles, might be of great benefit.

The third observable point about effective policy guidelines going deep is that they do not address much of level four of CLA—where deeper psycho-spiritual factors come into play. And this includes the employment of intuitive and introspective ways of knowing.

Teenage Drug Abuse in HK
Finally, I shall address a specific policy issue in Hong Kong, and see just how deep policy and analysis went (at the time of writing). Joseph Wong (2009), a former secretary for the civil service in Hong Kong, in an article published in the *South China Morning Post in Hong Kong,* addressed the problem of drug abuse by teenagers in HK. This is a problem which has come to attention in recent times. Just a week before the article was written, around 700 young people were arrested, including 110 Hong Kong citizens in Shenzhen, the mainland Chinese city bordering Hong Kong**.** The youngest of them was only 13 years old (Wong 2009).

Hong Kong officials have tried to address the problem. Hong Kong Chief Executive Donald Tsang was quoted as saying that drug abuse is a "tough enemy." He said that voluntary drug testing at the community level would begin as soon as possible. Furthermore, he announced that the government was studying hair-testing as a way to test for drugs. Secondary schools in Tai Po district would be asked to join a pioneer scheme for drug testing in schools. (Wong 2009)

The media and discussion at the time turned to the question of drug testing, and the logistical nightmare of implementing it. The government was not unaware of the shallowness of such a focus. Donald Tsang himself pointed out that a comprehensive policy should include the problem of "mobilising the whole community, law enforcement against drug traffickers, and rehabilitation of drug takers." (Wong 2009)

Here, Tsang is moving into the social and systems levels of the problem. But even this remains at the social/systems level, and does not address worldview and mythic levels three and four of CLA.

Within this situation, we can see that CLA provides a framework which enables us to at least observe the depth of the policy.

The next question which follows is: what factors which underpin teenage drug taking have not been addressed? We still have not really asked why students are taking drugs. Some community members have been quick to point this out. Some have said the young people are bored. There is nothing fun to do. But is this the entire answer?

We could go deeper still, and ask if modern life in HK genuinely addresses deeper psycho-spiritual needs of human beings. This is a level four issue, where other ways of knowing, inner worlds, passion, feeling, a sense of connection, and deeper meanings come into play. We might note that Hong Kong is almost the archetypal money and machines society, famous (perhaps infamous) for its finance-based culture and concrete and glass skyline.

Another issue is whether the policy addressed all stakeholders. What about the teenagers themselves? Are we really addressing *their* needs? This would require an

expansion of analysis to become truly holistic, including looking at what the education system is doing to the young. Cultural issues come into play, as the Hong Kong education system is still strongly Confucian, with memorisation, rote learning, and testing dominating. Society is very hierarchical and super competitive. It's the neo-Darwinian paradigm (Loye 2004) in operation, and students who fail are often just left to sleep in class, or put in the back row (with the best students up in front). Because of the focus upon work and "getting ahead," many teenagers barely see their parents, who often work long hours. The psychological implications for teenagers are obvious.

In China, where the central policy of "scientific development" lies at the heart the Communist party's vision of the future, up to twenty five million of the eighty million teenage Internet users are addicted to the Net; numerous military-style boot camps have sprung up to help cope with the problem (Free To Make 2009). In Hong Kong, some children are developing "biophobia," and are scared of trees and of walking barefoot on grass (K, 2009).

Some argue that the Internet deepens understanding and awareness, but many would disagree. A recent US study found that 40 per cent of Twitter chat is "pointless babble," along the lines of "I am eating a sandwich now" (Forty Per Cent 2009). This is not a deep future, but one of mindless distraction.

Shallow policy initiatives begin by asking how we can get teenagers to start taking drug tests. The very lack of depth in such policy may reflect the lack of personal connection in Hong Kong society. The government is often seen as aloof and unaccountable, and not truly representative of the people. Seen in this context, the shallow response of government reflects a top-down, hierarchical power structure, which lacks genuine relationship with the people. Deep policy in a perfect world would consider a more holistic range of factors, or at least acknowledge their impact on the young people.

Conclusion
What will come of Postconventional Futures Studies remains to be seen. Its central processes and other ways of knowing may become more acceptable to governments and educational institutions in the future. It may be that the other ways of knowing will remain "other," limiting Postconventional Futures to a position on the fringes of mainstream discourse.

Nonetheless, it is my contention that PFS methods may potentially enhance Foresight and Futures practice, including policy-making processes. PFS may help us create Deep Futures. Money and machines are not enough to sustain our species. We can no longer afford business as usual. As the Joshua Bell anecdote posted at the beginning of this paper suggests, something subtle yet crucial is missing from developed cultures, with their rush to achieve external gratification. The critical/rational worldview which focuses upon these values has created an impasse in the development of materialistic, developed cultures. A shift in thinking is required. Yet even this may not be enough. We may also require a shift in *feeling* (as a way of knowing), in relationship, in education, and in the way we *perceive* and create our Futures. It is my hope that we can all be part of this shift.

Bibliography

Anthony, Marcus (2003). "Visions Without Depth." *Journal of Futures Studies*, 7(4), 55-65.

Anthony, Marcus (2005a). "Education for Transformation: Integrated Intelligence in the Knowledge Economy and Beyond." *Journal of Futures Studies*, 9(3), 31-35.

Anthony, Marcus (2005b). "Integrated Intelligence and the Psycho-Spiritual Imperatives of Mechanistic Science." *Journal of Futures Studies*, (10) 1, 31-48.

Anthony, Marcus (2006). "A Genealogy of the Western Rationalist Hegemony." *Journal of Futures Studies.* May 2006, 10 (4): 25 – 38.

Anthony, Marcus (2007). "Harmonic Circles: A New Futures Tool." *Foresight,* 9 (5), 23-34.

Anthony, Marcus (2008). *Integrated Intelligence.* Rotterdam: Sense Publishers.

Anthony, Marcus (2010a). "Civilisational Clashes and Harmonic Circles." *Futures,* Upcoming, 2010.

Anthony, Marcus (2010b). *The Professor's Other Brain.* Hong Kong: Benjamin Franklin Press Asia.

Anthony, Marcus (2010c). *Beyond the Frontiers of Human Intelligence.* Hong Kong: Benjamin Franklin Press Asia.

Blackmore, Susan, (2003). *Consciousness: An Introduction.* Oxford: Hodder & Stoughton.

Bourke, Robert (2009). "From Strategic Foresight to Conversations about Alternative and Desired Futures Using Scenarios to Transform the Present." *Journal of Futures Studies.* 13 (4), 99-104

Building Harmonious Society Crucial for China's Progress: Hu, (2005). *People's Daily Online.* Retrieved January 11, 2005, from http://english.peopledaily.com.cn/200506/27/eng20050627_192495.html

Bussey, M. (2009) "Six Shamanic Concepts: Charting the between in futures work". F*oresight*, 11 (2) 29-42.

Curry, Andrew, and Shultz, Wendy (2009). "Roads less travelled: Different methods, different futures." *Journal of Futures Studies.* 13 (4), 35-60.

Dator, Jim (2009). "The Unholy Trinity Plus One." *Journal of Futures Studies*, 13 (3), 33-47.

1   Mc Cartney, Jane (2009). "Internet Addiction Among China's Teenagers Spawns Brutal Boot Camps." *timesonline.co.org.*
http://technology.timesonline.co.uk/tol/news/tech_and_web/the_web/article6809831.ece. Accessed 25.10.09.

Dawkins, Richard (2006). *The God Delusion.* London: Houghton Mifflin Harcourt.

De Bono, Edward (2009). *Think! Before it's too Late!* London: Random House.

de Grasse Tyson, Neil, (2001). "Coming to our Senses." *Natural History. New York*, 110(2), 84.

Eisler, Rianne (2004). "A Multi-linear Theory of Cultural Evolution." In: Loye, David ed. *The Great Adventure: Toward a Fully Human Theory of Evolution.* New York: Suny.

"Forty Per Cent of Twitter Messages Pointless Babble". *www.freerepublic.com.* 17.08.09. Accessed 25.10.09.

"Free to Make a Killing" (2009). *South China Morning Post* (Hong Kong), 23.08.09.

Grof, Stan (2000). *Psychology of the Future.* New York: Suny.

Groff, Linda (2008). "Religious Diversity, Interreligious Dialogue, and Alternative Religious Futures: Challenges for an Interdependent World." *Journal of Futures Studies,* August 2008.

Hawkins, David (2002). *Power vs. Force: An Anatomy of Consciousness.* London: Hay House.

Inayatullah, Sohail. (2002a). *Questioning the Future*. Taipei: Tamkang University Press.

Inayatullah, Sohail. (2002b). "Alternative Futures of Genetics and Disability." Retrieved January 22, 2007, from http://www.metafuture.org/Articles/geneticanddisability.htm

Inayatullah, Sohail (2004). "Causal Layered Analysis: Theory, Historical Context, and Case Studies." In Inayatullah, Sohail (ed.) *The Causal Layered Analysis Reader.* Taipei, Tamkang University Press.

Inayatullah, Sohail (2008). "Six Pillars: Futures Thinking for Transforming." *Foresight*, 10 (1), 4-21.

Inayatullah, Sohail (2009). "Questioning Scenarios." *Journal of Futures Studies*, 13 (4), 75-80.

Jacobson, Leonard (2008). *Journey into Now.* Sydney: Conscious Living.

Jung, Carl (1989). *Memories, Dreams, Reflections.* New York: Vintage.

K, Angela (2009), "Chickens Have Feathers". *The Malaysian Insider.* 25.10.09. http://www.themalaysianinsider.com/index.php/opinion/angela-k/32700-divorced-from-nature-. Retrieved 25.10.09.

Kaku, Michio. (1997) *Visions.* New York: Anchor.

Kamerer, Peter (2009) "Learning From the Past." *South China Morning Post*, 29.07.09.

Klein, Garry (2003). *The Power of Intuition.* New York: Doubleday.

Kuhn, Thomas (1986). *The Structure of Scientific Revolutions.* Chicago: University of Chicago Press.

Lombardo, Thomas (2007). *Contemporary Futurist Thought.* Bloomington (IN):Authorhouse.

Loye, David, (2004). "Darwin, Maslow, and the Fully Human Theory of Evolution." In: D. Loye, ed. *The Great Adventure: Toward a Fully Human Theory of Evolution.* New York: State University of New York Press, 20-38.

Laszlo, Ervin (2004). *Science and the Akashic Field.* Rochester: Inner Traditions

McTaggart, Lynn (2007). *The Intention Experiment.* New York: Free Press.

Milojević, Ivana, (2005). *Educational Futures: Dominant and Contesting Visions.* New York: Routledge.

Moffett, James, (1994). "On to the past: Wrong-headed School Reform." *Phi Delta Kappan*, 75(8), 584-590.

Niasbett, John (1996). *Megatrends* 2000. New York: Smithmark Publishers.

Naisbett, John (2007) *Mind Set.* New York: Collins.

Pickstone, John (2000). *Ways of Knowing: A New History of Science, Technology and Medicine*. Manchester: Manchester University Press.

Pink, Daniel (2005). *A Whole New Mind. New York: Riverhead Trade.*

Radin, Dean, (2006). *Entangled Minds.* New York: Paraview.

Sardar, Zia., (1998). *Postmodernism and the Other.* London: Pluto Press.

Sheldrake, Rupert, McKenna, Terrence, & Abraham, Ralph. (2001). *Chaos, Creativity, and Cosmic Consciousness.* Rochester: Park Street Press.

Simons, Daniel and Chabris, Chris (1999). "Gorillas in our midst: sustained inattentional blindness for dynamic events." *Perception*, 1999, Vol. 28, 1059- 1074.

Slaughter, Richard., (2003). "Integral Futures—a new Model for Futures Enquiry and Practice." Available from: http://foresightinternational.com.au/catalogue/resources/Integral_Futures.pdf (Accessed 7 July 2006).

Slaughter, Richard. (2006). "Beyond the Mundane—Towards Post-Conventional Futures Practice." *The Journal of Futures Studies,* 10 (4), 15-24.

Sun, Wukong, (2007**). "**A Fake Story about Fake Buns." *Asia Times* (online). http://www.atimes.com/atimes/China/IH01Ad01.html. Accessed 10.07.08.

Tarnas, R., (2000). *The Passion of the Western Mind.* London: Pimlico.

Torff, Bruce., & Sternberg, Richard., 2001. "Intuitive Conceptions Among Learners and Teachers." In: B. Torff, & R. Sternberg (eds.) *Understanding and Teaching the Intuitive Mind.* London: LEA, 3-26.

Weingarten, Gene (2007). "Pearls Before Breakfast". Washington Post (online), 08.04.07. www.washingtonpost.com/wp-dyn/content/article/2007/04/04/AR2007040401721.html. Accessed 20.10.09.

Wilber, Ken. (2000). *Sex, Ecology, Spirituality*. Boston: Shambhala.

Wong, Joseph (2009). "A Tricky Dilemma." *South China Morning Post* (Hong Kong). 03.07.09

Endnotes
[1] I have used upper case for "Foresight", "Futures" and "Futures Studies", where the reference is to the disciplines of Foresight and Futures, but lower case where referring to "foresight" as a verb, and "futures" in the general sense (as the plural of "future"). I have also used upper case for the various branches of Futures Studies, and the formal concepts and tools of Futures Studies, including the tools which I have developed.
[1] Video footage of the performance can be seen on YouTube.com, and at www.washingtonpost.com/ wp-dyn/content/article/2007/04/04/AR2007040401721.html.
[1] Klein (2003) also uses the example of weather forecasters.

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