

## Organisational Future Sense: Action Learning and Futures

---

**Robert Burke**

*Mt Eliza Business School, Australia*

*In this article, I make the following arguments: 1. Strategic planning needs to transform. 2. Planning for the future should be anchored by action learning, making it anticipatory action learning. 3. Planning for the future should use the quadruple bottom line approach. 4. Planning for the future should be inclusive of multiple ways of knowing. 5. Planning the future leads to organisational transformation. 6. Leadership is central in effective futures planning.*

---

Correspondence: The Mt Eliza Business School, Level 1, 63 York Street. Sydney NSW 2000, Australia.

Email: [rburke@mteliza.com.au](mailto:rburke@mteliza.com.au)

### *Futures Thinking vs. Strategic Planning*

While no one can predict the future, futurists, however, argue that applied futures thinking is a more realistic way of planning than many other methods, including strategic planning, because futurists apply foresight as the basic methodology. The differences between foresight and forecasting, the strategic planning methodology, are developed below.

Indeed it is not only futurists who challenge strategic planning. Henry Mintzberg, a leading management academic, argues in his book, "The Rise and Fall of Strategic Planning," that the reasons why strategic planning often falls down is because many organisations conceive of it as a completed plan "set in stone." Futures thinking, on the other hand, allows for flexibility and adaptability to changing circumstances which means the plan is dynamic and, in today's climate of rapid change, increasingly being modified to reflect the changing environment.

"Indeed, the whole nature of strategy making—dynamic, irregular, discontinuous, calling for groping, interactive processes with an emphasis on learning and synthesis—compels managers to favour intuition. This is probably why all those analytical techniques of planning felt so wrong... Ultimately, the term 'strategic planning' has proved to be an oxymoron."<sup>1</sup>

The major difference is that contrary to popular belief futurists do not predict the future as such, whereas strategic planners, the forecasters, attempt to (Igor Ansoff).<sup>2</sup> Futurists look at trends and drivers, which are beyond individual or organisational control, from which various forecasts can emerge through challenging foresight rather than planned forecasting. Igor Ansoff calls planned forecasting the visibility of the future, which is measured by the predicability of information about the future, available at decision time based on a free market economy.

In 1965, Ansoff's book "Corporate Strategy" was released and its text was based on Ansoff's experiences at Lockheed. He claimed that there was, "a practical method for strategic decision making within a business firm," which could be made accessible to all. As a result, a rational model for strategic decision making was devised concentrating on corporate expansion and diversification rather than strategic planning as a whole. Ansoff's model of strategic planning, which evolved into an intricate linear sequence of decision-making, has many challenging aspects.

### *Action Learning and Futures Thinking*

Anticipatory Action Learning (AAL), first coined by Julie Macken, Tony Stevenson and Sohail Inayatullah,<sup>3</sup> has swiftly developed as a futures methodology and constitutes a theoretical approach to thinking about the future. Inayatullah found that Action Learning and Futures Studies potentially have a great deal in common, not only in terms of their dis-

ruptive methodological orientation, but also in terms of their intention to create a different world, to understand selves and processes in different terms—to see what is not commonly seen and create what is not commonly known. By moving out of conventional frames of reference, both allow inquiry to move from litany, immediate concerns and epistemological assumptions to deeper causal, structural, world-view and myth levels. Other ways of knowing—the multicultural turn—thus naturally can find space to be expressed.

Action Learning and Futures Studies also have a commitment to connecting desired states in the future with the present, writes Inayatullah. Thus, within Futures Studies, instead of taking a means-to-ends planning approach, participants attempt to backcast the future. The future imagined is thus related to the past. The trajectory from the present to the future is remembered. This memory becomes translated into not so much a plan—which only is guise for non-action—but as with action learning into, concrete experiments, a new program, a new project, for example. The success or failure of these experiments can then feed back into the desired visions. Through action learning experimentation, the vision can thus retain its robustness.

Because there can be many responses to global trends and drivers, beyond the free market economy, futurists would argue that there should also be many scenarios or possible futures based on the collective effect of all the trends and drivers including, but not exclusive to, the free market economy. The tragic terrorist attack on New York and Washington on 11th September 2001 are a testament to this.

All of these future narratives should be plausible; some may even be considered probable. From all, however, metaphors can be developed from which practical applied futures thinking can prepare organisations for the “unexpected” and plan for their “preferred” future at a given selected time in the future. This methodology expands the organisations learning capability and, I would suggest, earning capability.

#### *Action Learning and Royal Dutch Shell Scenarios*

Probably the most famous example of this (and perhaps the first) is Royal Dutch Shell who, through scenario planning, had foresight into the early seventies oil crisis. As a consequence of this preparation when the crisis occurred, Shell actually benefitted, it moving from the seventh to the second largest oil company in the world, literally over night.

Curiously however, Shell only looked at econometrics and although they were well advanced in their scenario planning they hadn't seriously enough considered the social consequences and “valuemetrics” (that is other values beyond the economic, such as cultural values, ecocentric values, social values, etc.). They consequently paid dearly during the Nige-

ria experience. ( In 1995, leading opponent Ken Saro-Wiwa, a well-known writer, and eight associates who opposed on ethical grounds the Nigerian military regime were executed). Many believed Shell could have intervened and stopped the executions. They were also similarly unprepared for the 1995 Brent Spa experience (the collapse of Shell's oil rig in the North Sea and the consequential environmental threat).<sup>4</sup>

Shell and other oil companies, for their part, contend they have had no role in Nigeria's human rights violations. But the environmental pollution from oil drilling is undeniable in Ogoniland, where a half million Nigerians make their meagre living from farming and fishing. Oil spills have poisoned the waters, causing massive fish kills and human health problems, while gas fires in oil separation pits have destroyed much of the farmland. According to Roland-Pierre Paringaux, journalist for *Le Monde Diplomatique*, "neither Shell nor the military invest more than a pittance of the oil profits into the Ogoniland, so poverty is rampant throughout the region."

Paringaux writes that in 1993 the Movement for the Survival of the Ogoni People, led by Ken Saro-Wiwa, mobilised tens of thousands of people against Shell. It became an international issue. The pressure was enough to force Shell to stop production. To get it started again, General Sani Abacha's government unleashed a murderous repression. Hundreds of Ogoni were arrested, imprisoned and sometimes summarily executed. Two years later, Saro-Wiwa and eight Ogoni activists were executed in spite of international protests. There was tremendous outrage. Since then the company has admitted that it had been "forced" to pay the Nigerian security forces directly on at least one occasion in 1993. According to the 1999 Human Rights Watch annual report, repression and extra-judicial executions continued in several oil producing regions of Nigeria in 1998 and 1999.<sup>5</sup>

People in their droves avoided the Shell petrol pump in protest at Shell's actions, actions that affected Shell's "bottom line" as Greenpeace lobbied the British government, occupied Shell's Brent Spa oil rig and organised a widespread boycott of Shell stations in Europe during June 1995.

The Greenpeace campaign against the dumping of the Brent Spar was based on the concern that it risked creating a precedent that would lead to further dumping of oil/gas installations. If the oil industry was allowed to dump installations, Greenpeace feared, it would send a clear message to all industries that dumping was acceptable, undermining the work of the London Convention and OSPAR, the two international agreements which govern dumping at sea. During the protests, Shell gave up its dumping plans and started a long consultation and decision-making process that resulted in a solution for re-use and recycling.

Although it may not be well known, Shell's treatment of the Brent Spa incident has been very creditable and ecologically sound, and due recognition of Shell's good social and ecological behaviour has not had the wide recognition they deserve.

Shell set about dealing with the double blow to its reputation. It denounced Saro-Wiwa's execution and launched a \$US 2 million venture in Nigeria to build hospitals and schools. Shell also published, "Profits and Principles: Does there have to be a choice?"

As a result of futures thinking together with the Ken Saro-Wiwa and Brent Spar retrospective experiences, Shell was one of the first global mega-organisations to seriously adopt the triple bottom line (financial, environmental and social) and now report to the world on each.

In it, Shell makes a move unusual in the corporate world by admitting responsibility: "We believe we acted honourably in both cases. But that is not enough. Clearly the conviction that you are doing things right is not the same as getting them right. For us, at least, this has been a salutary lesson." More than Shell's written statement and the US\$2 million investment, it was Shell's human face and their display of remorse that helped restore its reputation.

#### *From Action Learning to Ethical Futures*

Shell has gone on to produce two more triple-bottom-line reports that detail its social, environmental and economic performance. Shell won the UK's Social Reporting Award, jointly with the Co-operative Bank, for its 1999 report. Among other things, the judges praised Shell for its good coverage of stakeholder engagement processes, coverage of its global operations and linkage of triple-bottom-line issues with Shell's own General Business Principles.

In the Shell Report 2000, the company set out a framework of Key Performance Indicators (KPIs) that it is developing with stakeholders. The KPIs cover the triple bottom line, and include indicators for innovation, customer satisfaction, acceptability of environmental performance and human rights. They also contain issues relating to governance and values such as reputation and stakeholder perception of quality of engagement.

This framework will form the basis for the company's future measurement and reporting of progress on its commitments to sustainable development.<sup>6</sup>

#### *Quadruple Bottom Line*

But arguably there is a fourth factor to be added to the bottom-line—that of future generations. The quadruple bottom line states that if an organisation plans to do something today that will adversely affect future

generations then they should not do it until such time as they can guarantee non-detrimental ways of doing things.

The need to go beyond the traditional bottom line is illustrated by BHP and the Fly River Papua New Guinea incident. This is an example of how all four quadrants of the quadruple bottom-line were affected. Not only did BHP's subsidiary, OK Tedi Mining Ltd (OTML), cease operations because the Fly River was environmentally devastated by their operations, its decision has also meant financial loss to the community, a loss of social cohesion for the community, and a loss of future prospects for both current and future generations.

OTML, its parent company, BHP, and the PNG Government must equally be held responsible for polluting the Fly River, reported South Fly MP Gabia Gagarimabu.<sup>7</sup> Mr Gagarimabu said it was many of the policy decisions made by them that had caused such an environmental problem which was beyond repair. "Past successive PNG governments have traded off the Fly River environment for short-term socio-economic gains," he said.

"Compensation payments in terms of taxes and royalties received by the PNG and Fly River Provincial Government and local landowners, which amounts to about K500 million during the past 15 years, is not enough considering the long-term environmental impacts and physiological stress the mine has caused to communities in the river catchment."

In a detailed statement made August 23rd, 1999, Mr Gagarimabu said the public revelation by OTML and BHP that environmental impacts in the river system had exceeded those previously predicted was an indication that OTML and BHP had been interested in making huge profits without due consideration for the environment and the livelihood of the local people.

The Mineral Policy Institute reported that the problems caused by OTML mines are very serious, and will become worse over the next ten years. Even after the mine closed the damage will last at least 60 years, thereby affecting future generations.

People living along the river have problems with: mud, gravel, and sand in the river; death of forests and swamps causing fish to die; and the staple diet of sago is threatened as Sago trees are dying.

The World Bank was asked by the Papua New Guinea Prime Minister to review BHP and Ok Tedi Mining's (OTML) mine damage assessment. This review was leaked and supported many of the conclusions to which environmental and human rights groups had come.

The only option BHP proposed was for early mine closure. This did not include a plan to minimise the impact on people who depended on the mine. BHP concluded that this option would have the best environmental impact, but would have the worst social impact.<sup>8</sup>

We can see from this example how attention to the quadruple bottom line may have produced a different, arguably more sustainable and prosperous, bottom line for both BHP and the Fly River community. BHP's immediate past CEO, Paul Anderson, clearly recognised this as the new BHP Charter explained in his article for the winter/spring 2001 edition of the *Mt Eliza Business Review*, "We value: Safety and the Environment—An overriding commitment to safety and environmental responsibility."<sup>9</sup> This needed to be strongly stated as the BHP Charter has as its purpose ".....to create value through the discovery, development, and conversion of natural resources and the provision of customer focused solutions."

### *Differing Opinions and Worldviews*

Futurists nevertheless can hold very different opinions on where they see importance based on the worldview they hold.

Phil Ruthven in his online report writes that the emergence of an Asia Pacific Region—with "sovereignty" *à la* the EU—will devolve many (but not all) issues to a higher government. Population policy is likely to be on such an agenda. Just as immigration policy was ceded by State Governments in Australia to the National (Federal) government in 1901, some partial devolution to our Asia Pacific Regional body could be anticipated in the next century. So today's exogenous factors could become internal factors (to the region) in the 21st Century.

Tim Flannery, author of "The Future Eaters"<sup>10</sup> and Ruthven have very different views on population for Australia.<sup>11</sup> As we enter the 21st Century, estimates of desirable population levels for Australia range from 6-12 million (Tim Flannery) to 100-150 million by the Year 2100 (Phil Ruthven).

Ruthven cites ecological constraints and cultural harmony as the basis for maintaining low populations. Some are hiding closet xenophobia if not racism. The sole high proponent or rather forecaster, and Ruthven, cites realism (the emerging borderless world), international morality and defence (by co-operation) as the reasons for the likely higher figure. Others would add economic advancement as a reason for higher immigration and population levels, but it is well to remember that 12 of the Top 20 Standard of Living Nations (of around 240 nations) in the world today have population levels lower than Australia.

The low level proponents, such as Flannery, suggest our environment is fragile and we do not have enough water or useable land for many more inhabitants. Ruthven argues that our environment is fragile which suggests we should be careful; but we should always remember it is not so much the number of people that upsets the fragility so much as their activity.

Ruthven goes on to say that the "useable land" claim will carry nothing but disbelief and derision from the rest of the world and especially our neighbours in the Asia Pacific, because:

1. Australia has 34% of the land mass of the Asia Pacific and 1% of its population.

2. If just 20% of Australia's land mass is "useable" then our density rises from 2 people/sq km to 12 people/sq km (equal lowest in region).

3. Japan's "useable" land mass is 15% (of its 370,000 sq km) or around the size of Tasmania. Its effective density is therefore 1650 persons/sq km.

4. The same calculation for other neighbours in the Asia Pacific yields similar sobering facts.

This econometric view of the world is based on the argument that population and ecology are a resource. It also assumes that humans will change their activities whereas history suggests the opposite.

If you took an ecocentric view of the planet (humans are an intrinsic part of it but not owners of it), as Flannery does, then you would probably agree with him. If you took a western worldview (the planet is owned by humans and is here to be of use value to humans), then you would probably agree with Ruthven. No serious study, that I am aware of, has ever been done on what are the optimum demographics for Australia. The Government seems hesitant to do such an analysis presumably because the report may not support Ruthven's and the Western world-view of consumers.

A well illustrated example of these differing worldviews was illustrated by Tom Gosling of Sustainable Population Australia in his letter to the editor of *Australian Business News* (July 2001)<sup>12</sup> commenting on Charles Kovess, article (*Australian Business News* June 2001 edition)<sup>13</sup> Charles Kovess...seems proud of his hairy-chested ambition to see Australia's population grow to 50 million but this growth for the sake of growth and it doesn't make sense.

"Australians actually had a much higher standard of living in world terms when their population was much smaller.... After all countries like Sweden can make Volvos and Saabs and jet aircraft with only half our population and enjoy an excellent standard of living without the natural resources we have...

Far from having vision, I think Mr Kovess totally lacks vision because he cannot see the sense of having a rise per capita spending power rather than a mere rise in population numbers."

So the lingering question remains, why is it that strategic planning (strategic vision statements based on traditional linear problem-solving techniques rather than decision-making tools from a multi-dimensional



non-linear view) is still so popular? Is it because it pretends to claim it can predict the future, which, undoubtedly, is very attractive? Arguably, however, it may probably be because strategic planning is simple, it is usually linear and projects the wishes (hopes) of the organisation in economic terms. It rarely requires thinking the unthinkable (global shifts in power, changes in national structure such as the Balkans, major discontinuities such as the terrorist attack of 11th September 2001), or learning in the unknown (non-linear, chaos—order and disorder together). All too often this form of strategic planning forecasts what the organisation wishes (hopes), based on free market economics, to happen often regardless of what are the world trends and drivers outside the organisations control.

For the past 15 years or so, the business world mantra has been for those who believe that companies should be run for the exclusive benefit of shareholders, with the interest of management aligned to shareholders through the use of stock options and similar equity-linked incentives schemes, according to Edward Chancellor writing for the *Australian Financial Review*.

Chancellor's report followed the scandal at Enron and a string of other high-profile failures; however, the idea of shareholder value has come under increasing scrutiny. Critics claim that its successes have been exaggerated and that its most obvious result has been the personal enrichment of management at the expense of the very shareholders it was supposed to benefit. Managers' pursuit of shareholder value has been accompanied by the manipulation of earnings and other tricks which threaten to undermine the trust essential to the market system. Shareholder value can also be criticised on a theoretical level: it assumes the stock market is efficient, in the sense that share prices reveal intrinsic value, and advises managers to let those prices guide their actions. Yet market efficiency is dependent on the stock market passively reflecting value. Once the market starts determining business activities, a feedback loop has been created which can lead to instability. The boom and bust in the stock market, the rise and fall of the technology companies, the massive sums wasted in the telecoms boom and the ensuing corporate scandals have all followed more or less directly from the indiscriminate pursuit of shareholder value. It is time for the business and financial world to wake up to its shortcomings.

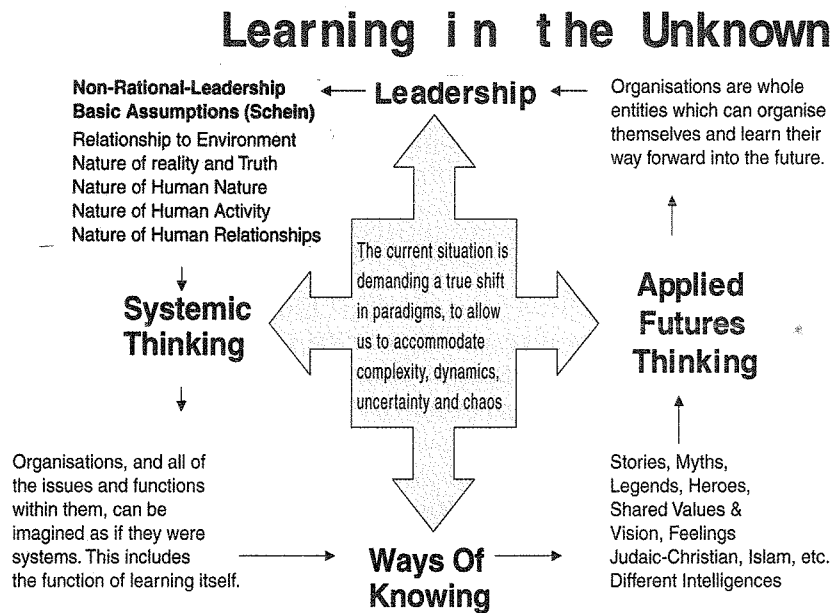
As a result of slavishly pursuing the shareholder value fad, many companies have badly damaged their relationships with their other "stakeholders"—suppliers, customers and employees. Some of the largest companies in the US, such as IBM and General Electric, have spent more in the past decade on repurchasing their shares than on developing their businesses.<sup>14</sup>

### *Anticipatory Action Learning and Leadership*

Among the ways forward is a transformation in leadership.

The following model is my attempt to create a more effective model for transforming leadership. It incorporates anticipatory action learning, for achieving sustainable futures draws from the work of Sohail Inayatullah, Richard Slaughter, Richard Bawden, Edgar Schein, and Malcolm Davies:

*Figure 2 Learning in the Unknown*



© Burke, 2000

### *Learning in the Unknown Explained*

This model shows leadership as a non-rational process now associated more with Emotional Intelligence (EQ) and Spiritual Intelligence (SQ). IQ is common to all but more directly related to management or rational processes, which often results in the use of a linear deterministic methodology. EQ and SQ are argued as using different neural patterns (tracts) in our brain which better equip us for complexity and chaos.

My argument is that leadership is not a constant always-present phenomenon. Leaders are those people that provide “acts of leadership” when situations demand it. At other times they are people who are often

ordinary members of society and of organisations. As such I have great difficulty in recognising leadership in business, because of the apparent lack of regard to the wider world and the wider community outside that of the organisation itself. Much is written about business leaders, but the literature generally focuses on acts that results in increased shareholder wealth or in meeting KPIs (Key Performance Indicators).

As an Australian witness to the downfall of many iconic Australian organisations (such as Ansett Airlines) and others (such as HIH Insurance, and One-Tel), I was amazed to see that many of the CEOs received huge bonuses based on achieving KPIs, regardless of the true state of their businesses. Indeed, Ansett's CEO Toomey received huge bonuses because he had met the KPIs set, in spite of the fact that the company was disintegrating around him at the very same time. This, ironic situation cannot be a testament to leadership, but rather a testament to the lack of it, particularly on the part of the board of directors.

Examples of acts of leadership, as I see it, are those of Timor's Xanana Gusmao's struggle for independence, South Africa's Nelson Mandela's struggle for freedom and for independence, and Burma's Aung San Suu Kyi's struggle for independence. The actions of these leaders have had wide spread bottom line effects, extending to business, society, economy, ecology, and to that of future generations.

### *Complexity, Systems Thinking and Applied Futures Thinking*

System thinking and complexity theory argues against the rational models of planning and control. Instead they emphasise the importance of narrative, conversation and learning from one's own experience as the central means by which we gain understanding and knowledge, thus being the central tenet of my model.

Ways of knowing introduces different cultural and spiritual beliefs as well as difference in measuring importance, whether it be Islam, Confucian, Buddhist, Women, Indigenous, etc., ways of knowing.

Applied futures thinking is akin to anticipatory action learning. Reg Revans has developed an approach to action learning that argues that learning results from the following: programmed learning + questioning insights ( $L=P+Q$ ). Program learning is the learning we get from school and higher education bodies. It is necessary and of vital importance but is only part of the learning process. Questioning insights is reflection and double-loop learning that is usually a difficult skill to acquire in Western cultures. This is the result of an educational system that is grounded in the linear learning model (which requires repetition of predictable answers known in advance).

Inayatullah<sup>15</sup> has modified Revans, formula to  $L = P + Q + \text{Ways of Knowing [WoK]}$ . This modification turns it into an applied science that enables players to act the preferred future—now. In an increasingly globalised multicultural and multidiversified world, anticipatory action learning is expected to prove highly effective.

Anticipatory action learning has the potential to be a new powerful trend because it accepts that there are many ways of knowing beyond the western Judeo-Christian way of knowing upon which Western government and Western business is based. In a globalised world, these are seen as advantages.

Tony Stevenson<sup>16</sup> writes that from such a mindset, education would play a different role from the accelerating trend to apply knowledge and skills to achieve predetermined goals for the ruling, global elite. Instead, the futures-oriented educationist could encourage a participative exploration of alternative future goals and active creation of new cultures to meet the particular needs of the local learners in a world that has been globalised. Such a task would question any blind subservience to global power and encourage knowledge and skills for the development of appropriate, evolving local cultures.

He continues to argue that to nurture such a new mindset, university curriculums would need to encourage a sharper focus on things now being taught more extensively in many primary schools, even if at a different level. While universities would not abandon the imparting of professional knowledge and skills, these would now be offered within a new pluralist environment that would ensure experiences such as:

- exposure to a variety of mindsets, not just the dominant one
- understanding human consciousness and creating alternative tools for thought and change
- thinking across a range of mindsets, clearly declaring the epistemological assumptions, or “clean epistemological accounting,” as Francisco Varela called it
- critically questioning personal assumptions and traditional values
- exploring new life patterns and cultures, and social inventions generally
- integrating theory and practice, and quantitative and qualitative inquiry
- interdisciplinary understanding
- lifetime learning

- design and delivery of learning to suit local conditions, specific cultures and a variety of learners
- intercultural and intergenerational exchange and sensitivity
- long-term thinking (futures) and responsibility for future generations.

My belief is that business is leading this revolution in learning in many instances and that business will be the most effective medium to shift thinking towards the above model. I believe this to be the case because business seems to take the question of leadership seriously and is shifting the nexus between business and philosophy (the Newtonian-Cartesian worldview) to business and psychology/chaos (the Chaotic worldview).<sup>17</sup>

Leadership has always been, and will continue to be, the key to prosperity. An ecocentric leadership model reflects a worldview more appropriate for the 21 century.<sup>18</sup> The impact of people such as Edgar Schein, professor of management at the Sloan School of Management at the Massachusetts Institute of Technology, on leadership and culture, and Australia's own leadership development programs, available from Mt Eliza Business School, will continue to be felt and offer meaning and purpose to both individual and organisational life as we shift to this more appropriate ecocentric worldview.

### *The Evolving Action Learning Model to Anticipatory Action Learning (AAL)*

An action planning/action research method was first employed using Revans' equation:

$$L = P + Q$$

L is Learning, P is Programmed learning and Q is Questioning Insights.<sup>19</sup>

Reg Revans is widely acknowledged as being the person responsible for bringing action learning into a practical environment. The two main works of Revans were his "Origins and Growth of Action Learning" (1982) and "The Golden Jubilee of Action Learning" (1989).

The action learning process is a sequence of steps (plan R, act R, observe R) upon which one reflects and which one repeats as many times as is necessary to deal with a particular problem. Action learning must have the component of action research.<sup>20</sup> Zuber-Skerrit describes action research by defining it in a model she calls CRASP. This model integrates

educational theory and teaching practice through action research. The CRASP model of action research is:

Critical	(and self-critical) collaborative enquiry by
Reflective	practitioners being
Accountable	and making the results of their enquiry public,
Self-Evaluating	their practice and engaged in
Participative	problem-solving and continuing professional development.

Action research is, therefore, practical. It is involved in the actual workings of people in their workplace, learning from the results so that future problem-solving is made more effective.

*"First, most people define learning too narrowly as mere 'problem-solving,' so they focus on identifying and correcting errors in the external environment. Solving problems is important... But if learning is to persist, managers and employees must also look inward. They need to reflect critically on their own behaviour, identify the ways they often inadvertently contribute to the organisation's problems, and then change how they act. In particular, they must learn how the very way they go about defining and solving problems can be a source of problems in its own right."*<sup>21</sup>

It can be argued that the traditional education system does not encourage action learning but rather focuses on repetitive learning and learning for repetition. Mumford (1980)<sup>22</sup> states that the main steps in the rational approach to the learning process are:

- \* Collect data on what needs to be learned
- \* Set objectives for learning
- \* Define standards of performance
- \* Monitor achievement
- \* Review the reasons for deviation from standard
- \* Decide what additional research is necessary

Davies (1997)<sup>23</sup> argues that the non-rational approach to learning is where both strategic and operational values are amenable to managerial or rational analysis at both cognitive and behavioural levels, but cultural values are not. At least not at the behavioural level. It is at this level where leadership becomes paramount in creating a cultural milieu, which un-

derwrites the successful management of the organisation's strategic and cultural value processes and systems. It is in this sense that leadership and culture are conceptually intertwined.

Marquardt (1999)<sup>24</sup> added implementation to Revans equation and we now had  $L=P+Q+I$ . At about the same time, Sohail Inayatullah, in his 1999 David Sutton Fellowship<sup>24</sup> work for the International Management Centres Association, argued that the intention is to create the practical and conceptual underpinning of "Anticipatory Action Learning." This would be a questioning process that specifically takes issue with the present, which focuses on creating a foundationally participatory process about what futures we desire.

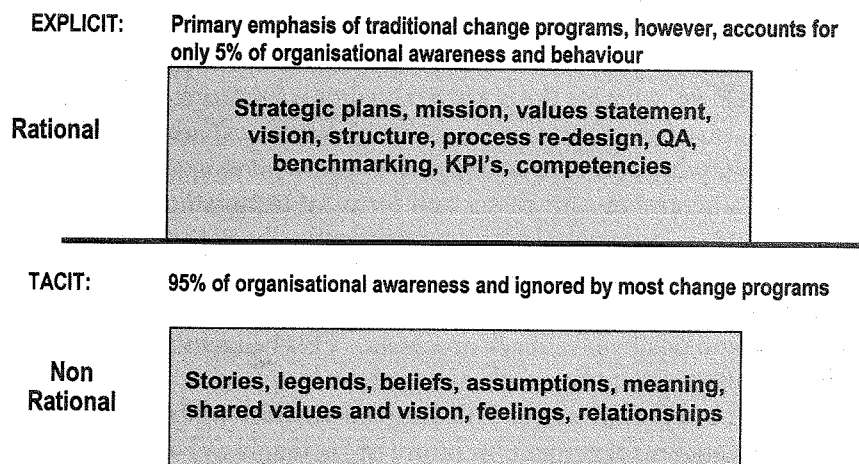
The evolution of the Revans model :

$L=P+Q$	Revans
$L=P+Q+I$	Marquardt (+implementation)
$L=P+Q+C+I$	Davies (+ non-rational, culture)
$L=P+Q+WoK+C+I$	Inayatullah (+ ways of knowing)

Anne Ward (2001)<sup>26</sup> has linked these trends developed by Davies and Inayatullah to organisational learning. The chart below, devised by Davies, reveals how organisational learning is still largely undertaken.

### *Why Organisational Change Programs Fail*

**Figure 3 Why Organisational Change Programs Fail (Ward 2001)**



### *Understanding the Present Through Complexity*

A short summary of current complexity thinking would begin with Benoit Mandelbrot's (1977) description of the creative present as "bounded instability." This summary is based on the work of David Parker and Ralph Stacey.<sup>27</sup>

- The Mandelbrot Set "blob" derived from the study of non traditional Euclidean concepts of forms, such as ferns, broccoli, clouds, mountains and coastlines etc, rather than regular shapes such as triangles, rectangles and cubes.
- This discovery showed a third state existed other than what was previously thought of as just stability or instability. Benoit Mandelbrot called this third state "bounded instability." It is represented in the "blob" as those wispy bits at the borders or ends.
- Those wispy bits at the borders and ends are continuously new and creative. The variety of forms generated is such that the system is one of continuous creation.
- The small variations in parameter values lead to huge variations in the behaviour of the system, or "self organization."
- Self organisation occurs when non-linear feedback systems are pushed far from equilibrium (the traditional management model) into chaos and complexity, where they are capable of spontaneously producing unpredictable, more complex forms of behaviour.
- Ilya Prigogine's concept of "emergence" is that it is a fundamental property of non-linear feedback systems which he called "Dissipative Systems."
- A Dissipative System contains forces due to friction that dissipate energy, but they still preserve a structure. In other words they self organise.
- At the end of the day, it is the negative non-linear feedback loop that is creative, whereas the positive non-linear feedback loop takes on the form of disruptive overt and covert political activity (that we see everyday), defence mechanisms, game playing and hugely neurotic unconscious processes and forms of leadership.
- Organisations dominated by such positive feedback processes are attracted to disintegration and ultimate failure. In order to survive and thrive organisations must employ some combination of both negative and positive feedback processes. This behaviour will have all the hallmarks of "Scientific Chaos."
- Chaos theory challenges the limited notion of traditional organisational management literature of "managing change", i.e., how an organisation can return to "normal" or "equilibrium."



- Chaos theory argues that this is a limiting idea and that “changeability” as a constant must be built into organisations.
- Agreement only through consensus is not good. Policies or business structures and systems that make it impossible for differences between people to flourish, that prevent a creative tension, block adaptability and innovation is what happens through consensus. This happens when groups try to create equilibrium or consensus rather than celebrate diversity and difference. We can have agreement that is fluid rather than rigid.
- Creativity emerges spontaneously from the self-organising political and learning processes of people in organisations.
- Destabilising information promotes innovation and change and must not be distorted or filtered out by the organisational bureaucracy or vested interest.
- The focus, then, should be on creativity and entrepreneurship as well as on bureaucracy and short-term planning methods.
- Managing organisations and economies is a paradoxical matter in which one approach necessarily conflicts with the other - complexity theory.

### *Conclusion*

Anticipatory Action Learning (AAL) is an effective way of planning for the future. Although AAL is linear in nature with linear feedback loops described through backcasting, it is not representative, nor is it meant to be, of the “reality” of the non-linear present with both its negative and positive non-linear feedback loops. But nor is strategic planning, although it purports to be, which is also a linear deterministic approach. The difference between these two linear systems is that futures planning assumes a pre-determined “preferred” future from which we plan. Strategic planning also envisages a “preferred” future but to which we plan. This distinction is important as it highlights that strategic planning is more likely to be reactive planning to present situations and pressures such as achieving budget or other numerical measures such as market share, etc. Strategic planning is also short-term—usually 1 to 5 years. AAL, on the other hand, is about creating change from multiple perspectives, including social, environmental, economic, and future generations, and it has a much longer time frame, (in business, usually 10–20 years, but in some cases, hundreds of years), and is based on a more holistic view of prosperity.

The argument of this paper is that strategic planning is only of value if there is a great deal of certainty and a great deal of agreement about the immediate short term future. Given this certainty, appropriate strategic rational models have value and give direction. However, this state, particularly in a world of rapid change, is rare because of the high levels of complexity that is the hallmark of current reality.

There is a need to plan, however, as this gives a focus and purpose to match that of organisational and human activity. AAL seems more appropriate in a rapidly changing environment because the ideal "preferred" future is based on the quadruple bottom line. Therefore AAL has a higher humanistic and social value to it and being broader in context allows for greater content enabling planners more opportunity for improvement and change.

### *"The House that Self-Interest Built"*

In the past decade, we have been experiencing a glorification of self-interest perhaps unequalled since the 1930s. It is as if, in denying much of the social progress made since then, we were thrown back to an earlier and darker age. Greed was raised to some sort of high calling; corporations were urged to ignore broader social responsibilities in favour of narrow shareholder value; chief executives were regarded as if they alone create economic performance. Meanwhile, concern for the disadvantaged—simple, old fashioned generosity was lost.

Indeed to quote Mintzberg again, this time working draft April 2002, "Beyond Selfishness" with Robert Simmons and Kunal Basu:

*"A society devoid of selfishness is certainly difficult to imagine. But a society that glorifies selfishness can be imagined only as base. Our intention here is to challenge such a society. Not to deny human nature, but to confront a distorted view of it. In so doing, we wish to promote another characteristic no less human: we call it engagement."<sup>28</sup>*

How we operate in the present, however is not fully responsive to either strategic planning or anticipatory action learning or futures thinking. Futurists, I believe understand this and therefore an idealised future can be envisioned beyond the narrow scope of problem solving which, I believe, is the basis of strategic planning.

How organisations operate in the present is as both positive and negative non-linear feedback systems—rational and non-rational. Rational refers to the more traditional management theory such as shown in the

table below, i.e. processes, procedures and structures and linear in nature. Non-rational refers to beliefs, culture, courage and will etc which is non-linear, exhibiting randomness and chaos.

*Table 1: Principles of Complex Adaptive Systems and Classical Management Theory*<sup>29</sup>

Complex Adaptive Systems	Classical Management Theory
Change and transformation are inherent qualities of dynamic systems. The goal of management is to increase learning and self-organising in continuously changing contexts.	Organisations exists in equilibrium, therefore change is a non-normal process. The goal of management is to increase stability through planning, organising, and controlling behaviour.
Organisational behaviour is inherently non-linear, and results may be nonproportional to corresponding actions. New models and methods are needed to understand change.	Organisational behaviour is essentially linear and predictable, and results are proportional to causes. Thus linear regression models explain most of the variance of organisational change.
Inputs do not cause outputs. The elements of a system are interdependent and mutually causal.	Systems components are independent, and can be analysed by separating them from the rest of the system, as well as from their outcomes.
An organisation is defined, first of all, according to its underlying order and principles. These give rise to surface-level organising structures, including design, strategy, leadership, controls, and culture.	An organisation can be completely defined in terms of its design, strategy, leadership, controls, and culture.
Change should be encouraged through embracing tension, increasing information flow, and pushing authority downwards.	Change should be controlled by minimising uncertainty and tension, limiting information, and centralising decision making.
Long-term organisational success is based on optimising resource flow and continuous learning. A manager's emphasis is on supporting structures that accomplish these goals.	Organisational success is based on maximising resource utilisation, to maximise profit and increase shareholder wealth. A manager's emphasis is on efficiency and effectiveness, and avoiding both transformation and chaos.

### ***Complex Adaptive Systems***

#### ***Classical Management Theory***

Change and transformation are inherent qualities of dynamic systems. The goal of management is to increase learning and self-organising in continuously changing contexts.

Organisations exists in equilibrium, therefore change is a non-normal process. The goal of management is to increase stability through planning, organising, and controlling behaviour.

Organisational behaviour is inherently non-linear, and results may be nonproportional to corresponding actions. New models and methods are

needed to understand change.

Organisational behaviour is essentially linear and predictable, and results are proportional to causes. Thus linear regression models explain most of the variance of organisational change.

Inputs do not cause outputs. The elements of a system are interdependent and mutually causal.

Systems components are independent, and can be analysed by separating them from the rest of the system, as well as from their outcomes.

An organisation is defined, first of all, according to its underlying order and principles. These give rise to surface-level organising structures, including design, strategy, leadership, controls, and culture.

An organisation can be completely defined in terms of its design, strategy, leadership, controls, and culture.

Change should be encouraged through embracing tension, increasing information flow, and pushing authority downwards.

Change should be controlled by minimising uncertainty and tension, limiting information, and centralising decision making.

Long-term organisational success is based on optimising resource flow and continuous learning. A manager's emphasis is on supporting structures that accomplish these goals.

Organisational success is based on maximising resource utilisation, to maximise profit and increase shareholder wealth. A manager's emphasis is on efficiency and effectiveness, and avoiding both transformation and chaos.

Organisational success to me would therefore encourage a much stronger emphasis on understanding complexity and a much stronger emphasis on applied futures thinking. Short term strategy planning should be just that - short term. That is within a given time when agreement and certainty is high strategy can be effective. When that period begins to shift from either agreement not being close or certainty not being as close then strategy will have less effect as the emphasis will need to be on why the shift from certainty has or is occurring. Inevitably this will be due to the increasing levels of complexity.

An incredible fact is that over 50% of the world's wealth is owned by only 200 companies who employ less than 1% of the population. This is not sustainable and highly volatile. Refer September 11.

Henry Mintzberg in his current article "Beyond Selfishness" concludes by saying: "We can live our lives obsessed with getting even more, with keeping score, with all that constant calculating and scheming. Or we can open ourselves to something else, engaging ourselves to engage others, so

as to live our lives in balanced harmony.”

Contrary to what business believes it is understanding intangibles assets, not tangible assets that matter.

“...the industrial landscape is no longer shaped by physical flows of material goods and services, but is characterised by stocks and flows of ideas, images, symbols and information. In today’s scenario, market services and intangible goods now contribute over three-quarters of U.S. GDP, and intangible inputs today account for over 70% of value added in the automotive and consumer goods industries”<sup>30</sup>

The starting points for this understanding are:

- understanding futures
- understanding intangibles, and
- understanding business complexity.

From this we can deduce that AAL Learning offers a more effective way of business planning than strategic planning as it operates in all three spheres. Ways of Knowing takes on the implications of non-linear thinking and is critical to the effectiveness of AAL as Inayatullah intended. Non-linear thinking takes on the challenge of Complex Adaptive Systems (which organisations are) and is thus effective in chaos management and economics as championed by Parker and Stacey (1994:39-40)<sup>31</sup> who state:

“Social organisations which are non-linear and have the capacity to behave as dissipative structures exhibit fractal-like qualities.....Since human systems, including business organisations and economics, are non-linear feedback systems, the lessons from chaos are profound. Our contention is that business organisations and economics are essentially dissipative structures exhibiting both stability and instability at the same time. The spontaneous self-organisation of economic agents leads to unpredictable and emergent outcomes. Clearly, the implications of all this are dramatic for they rule out any notion of useful long-term planning, in the sense of achieving specific, predictable outcomes. Instead, they make the case for establishing structures and processes that promote maximum adaptability.

Economic systems, in order to be changeable, must operate far from equilibrium where it is impossible for anyone to predict reliably the long-term outcomes. Consequently, no one can be in control of an economy.”

Anticipatory Action Learning helps promote maximum adaptability and provides an effective challenge to the reliability and relevance of current planning methodologies.

## Notes

1. Minzberg, H. 1994. *The Rise and Fall of Strategic Planning*. N.Y.: Free Press).
2. Igor Ansoff, H. 1990. "General management in turbulent environments." *The Practising Manager* 11(1): 2.
3. Macken, J. T StevenSon S Inayfullal cf. p. 128 1999. "New learning curve sends planners back to the future." *Australian Financial Review- Weekend* (December 31-January 3): 2-3.
4. Schwartz, P. and Gibb, B. 1999. "When Good Companies Do Bad Things." Wiley
5. <<http://mondediplo.com/2000/12/08oil>>
6. <<http://www.pwcglobal.com/extweb/manissue.nsf/docid/F2C229B0D463808285256AEC005F1A37#The%20Best-Practice%20Example%20Of%20Shell>>
7. <<http://www.postcourier.com.pg/19990824/news11.htm>>
8. <<http://www.mpi.org.au/oktedi/introp1.html> Mineral Policy Institute>
9. Anderson, P. 2001. "Leadership in a major corporation - a personal view." *Mt Eliza Business Review*.
10. Flannery, T., 1994. *The Future Eaters: An Ecological History of the Australasian Lands and People*. Sydney: Reed.
11. Ruthven, P., "Australia's population in the 21st Century: being realistic, On Line Opinion." <<http://www.onlineopinion.com.au/Dec99/Ruthven.htm>>
12. Kregur, R., Ed, 2001 *Australian Business News*. Letter to the Editor.
13. Kovess, C. "Leaders and Passion, the key to great leadership," *Australian Business News*, June 2001:27-28
14. Chancell, Ed, 2002, "Perverse incentives." *Australian Financial Review* 07/06/02.
15. Inayatullah, Sohail. 1999. *Questioning the Future*. David Sutton Fellowship Proposal International Management Centres <[www.i-m-c.org](http://www.i-m-c.org)>. Published as Inayatullah, S. *Questioning the Future*. Tamsui, Tamkang University Press, 2002.
16. Stevenson, T. 1999. "Rethinking our ways of Knowing." Paper presented at the international conference, Globalism and Regionalism: A new role for the universities in the next century. Mamaia, Romania, 16-19 September 1999.
17. Hock, L. 2000. *The Chaordic Age*.
18. Capra, F. 1997. *The Web of Life: A New Synthesis of Mind and Matter*. Flamingo, London.
19. Revans, R.W. 1982. *The Origins and growth of Action Learning*. Chartwell-Bratt, London.
20. Zuber-Skerritt, O. 1991. *Professional Development in Higher Education - A Theoretical Framework for Action Research*. Calt: Griffith University.
21. Argyris, C. 1991. *Teaching Smart People How to Learn*. Harvard Business Review.
22. Mumford, A. 1980. *Making Experience Pay*. McGraw Hill: U.K.

23. Davies, M. 1997. "Leadership and Learning"- Brief summary of a paper given at the Australian Business Conference, October 1-3, 1997, Newcastle, New South Wales, Australia.
24. Marquardt, M. 1999. *Action Learning in Action*. Palo Alto: Davies Black Press.
25. Inayatullah, Sohail. 1999. Questioning the Future. David Sutton Fellowship Proposal International Management Centres <[www.i-m-c.org](http://www.i-m-c.org)>
26. Ward, A. 2001. Futureware Corporation-Capability Statement.
27. Parker, D., and Stacey, R. 1994. "Chaos, Management and Economics: The Implications of Non-Linear Thinking." Institute of Economic Affairs, Bournemouth Press. UK.d.
28. Minzberg, H., Simmons, R., Basu, K., 2002. working paper "Beyond Selfishness" <[www.henrymintzberg.com](http://www.henrymintzberg.com)>
29. Lichtenstein, B.B., 2000. "Self-organised transistions: A pattern amidst the chaos of transformative change." *Academy of Management Executive*, 14(4): 128-141.
30. Brookings Institution 2000 presented by Professor Rod McDonald, Special advisor to the Australian National Training Authority, to the Learning, Education & Training Committee of Australian Business Limited, which the author chairs, 11 June, 2002.
31. Parker, D., & Stacey, R., 1994. *Chaos Management and Economics: The Implications of Non-Linear Thinking*, Hobart paper 125, The Institute of Economic Affairs, UK.

