## Appreciating the Future

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There are two aspects to the world of management, as described in the introduction to Part 3: the operational and the strategic. The argument of this chapter is that shifting from the operational to the strategic is hard and it requires appreciation of the future. The operational mindset is essentially narrow in focus and short term in its decision and action cycle. The strategic mindset is broad and long term. This common way of distinguishing between the two is a half-truth. Effective strategy is also grounded in the present and has depth as well as breadth. The challenge to practitioners is how to engage a decision constituency in a process that shifts them into a strategic mindset which is both focused and broad, both short and long term.

Whereas operations are more about picking fruit, strategy is more about growing orchards. Thus the split between short and long term orientation often occurring in organizational management is somewhat like, on the one hand, picking fruit without retaining any seeds for future trees and, on the other hand, postponing sowing seed until a new orchard is needed. It is a false dichotomy.

So a crucial and often overlooked aspect of scenario thinking is that to be effective it depends first of all on the presence of strategic thinking. To run day to day operations we develop an operational mindset which also acts as a cognitive filter on what we pay attention to. It becomes adept at picking up signals of the immediate. If we approach the understanding of longer range scenarios in this mental frame it will be ineffective. Similarly, if we try to develop scenarios whilst dominated by the operational mindset, they will have limited value because the 'bandwidth' of the scenarios will be too narrow. As Schwarz points out, 'scenarios really function when there is something game-changing to explore'. So the challenge is to cultivate a strategic mindset that has the bandwidth to pay attention to wider trends and possibilities that correlate with a game-changing stance.

It is difficult to recognize when the operational mindset is constraining the work, both when creating scenarios and when applying them in strategic conversation. This chapter describes some enabling conditions for strategic thinking, first by characterising a number of mental traps that decision-makers and their support staff frequently fall into; then by pointing out the importance of certain types of cognitive skill necessary for avoiding these traps; and thirdly by describing a case example of how a strategic conversation was facilitated in a way that moved a poorly integrated set of multi-product operational businesses forward to become a coherent strategic business. As such, it is an example of a way to incorporate the world of business into the world of management at the strategic level.

### The challenge of engaging decision-makers

There are three ways of appreciating the future. The first is where we create images of the future based on our best understanding of the factors which we believe will determine the future state of affairs. This is a judgement about the reality of the future. The second is where we make connections with our current interests and intentions and what we might be able to do about them. This is an instrumental judgement about how our images of the future inform our judgement on what we can do, what instruments or levers we have, and what role we might play. The third is where we place a value on a future state of affairs and either try to make it happen or establish a value position for ourselves. These three phases, based on the concept of 'appreciative system' (Vickers, 1965) provide a framework in which we can critique current use and misuse of scenarios in decision-making.

Scenario planning practitioners have developed a rich set of tools and processes for carrying out stage one, images of the future. These can range from sketches of future possibilities using simple quick-cut methods, like four-box frameworks, to extensively researched narratives annotated with copious research and statistical background. However, these do not necessarily engage the appreciative system of the decisionmaker if they are simply the product of the scenario planning support group. If the first stage does not properly engage the decision-maker's mind, then the second and third stages, which lead to decisive action, are impossible. Of course, the decision-maker disconnected from scenarios will still make decisions, but not ones informed by the level

To get a better sense of what we are missing in efforts to engage decisionmakers in scenario thinking, consider the typical, but usually unquestioned, assumptions that scenario planners often make with regard to what they are expecting decisionmakers to do.

For example, in being presented with a set of scenarios, what is the information structure that tends to be presented? There will be more than one version of the future, often three or four. These will be framed in various ways such as dilemmas, trilemmas, event trees, orthogonal axes and so on. There will be a set of drivers and uncertainties that the scenario set addresses. If well researched they may be quite unfamiliar, surprising or even shocking to the decision-maker. There will be some time span of interest, with scenarios depicting a state of affairs in ten, twenty, thirty years time. There may well be a time line for each scenario indicating how it might come about starting from where we are today. All this will be backed up with data graphs, bar charts and diagrams. There may also be illustrative examples from current affairs indicating pockets of the future in the present.

The decision-makers are then expected, without any preparation, to:

- Assimilate the multiple images and stories
- Understand how the driving forces and uncertainties ended up

there

- Envision scenarios which do not correspond to their current beliefs
- Place their strategic intent or strategy in that context
- Infer a transaction zone in terms of shifting from the 'might be' context to the 'make happen' capability of their organization

- Envision options and decisions that have implications for the present

But these conditions are complex, and their success in influencing decisions is often dependent on the decision-maker's participation in generating the scenarios in the first place. It is also dependent on having a clear notion of strategic direction formulated in terms that will relate to the context and language of the scenario set. The decisionmakers also need the mental agility and stamina to assimilate complexity rapidly, and visualise strategic consequences and their timings. Needless to say, this is usually asking too much of time-constrained executives; and so the gap persists.

Another reason that scenario planning has not been applied as well as it might is that the thinking part of it has been treated as a given. 'Give me the tool and I will use it' tends to be the position taken by both consultants and executives. If the field of interest were carpentry, the skill development component would never be separated from the tools themselves. There is the chisel, but there is also the skill and safety in using it well. A proper application of the tools must include mastery, apprenticeship and coaching. However, in the field of thinking we all too easily assume we are born experts! In practice there are cognitive skills that both scenario planners and decision-makers need to learn to get good results.

Once learned, the effectiveness of these cognitive skills can help cut through the time limitation constraints. They function differently from academic or professional skills which seek right answers. In futures work, faced with complexity and uncertainty, there are no right answers. Any appreciation of the future is a temporary place-holder to enable action to be taken. These skills then have a feeling and a cultural component which is often experienced as uncomfortable, unproductive and unreliable by minds schooled only in the combining of evidence-based analysis and strong opinion that imbues many board rooms and policy committees. Paying more attention to and researching the cognitive skills of strategic and scenario thinking may well provide a way out of the dichotomy between 'heavy' and 'light' processes, since the overarching criterion is effective insight for decision-making.

It is difficult for decision-making teams to make time to learn together at the strategic level. However, a skilled facilitator is able to take people through a strategy process that they have not previously practised and also, in the midst of doing that, inculcate many of the skills that are needed. This is because the best way of learning these cognitive skills is through active engagement. The skilled facilitator will not only run a scenario-to-strategy process but do it in a way that makes the methodology transparent and, as far as possible, devolved to the participants. We shall define this as strategy work.

This is distinguished from strategic planning and analysis in that it refers to the non-delegatable work that executive decision-makers need to do if they are to be the active progenitors of strategy rather than the passive receivers of proposals from strategy experts. Strategy work is characterised by a combination of factors:

- It is carried out by the responsible executive team, with wider involvement from the organization

- It is a design process not to be confused with operational management

- It functions at the level of developing uniquely new perceptions and mental models in contrast to 'business-as-usual thinking'

- It is facilitated by the timely introduction of strategy frameworks based on good research but depicted in a form such that everyone's experience can be mapped onto it and new insights gained

- It requires a progressive build up of new thinking over a time period of weeks rather than days, giving time for absorption and reflection

Given the expectations listed on the previous page and the demands of strategy work, it is not surprising that simply leaving people to talk over a strategic decision rarely leads to effective strategic conversation. The deeper causes of this relate to certain mental traps people easily fall into because they have not developed the cognitive skills to avoid them. The role of an experienced facilitator is crucial here. The facilitator can help the team by functioning as a coach and catalyst. The role of a catalyst is to increase the productive yield and achieve it with less wasted energy. Unlike a content consultant, the facilitator does not prescribe the strategy through a process of analysis, but lets the strategy emerge through a designed process of strategic conversation. Yet this is not a detached role like a behavioural process consultation. It is a cognitively demanding task of thinking through with the client team the hard stuff of the strategy work, as indicated in Figure 1.

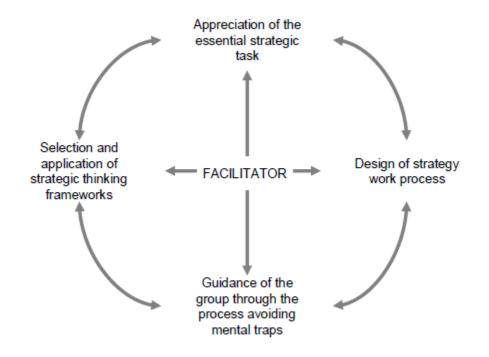


Figure 1 - The role of the facilitator in strategy work

The rest of the chapter here will first develop some of these mental traps as set out by Bradfield; second, it will describe some of the key cognitive behavioural skills that the facilitator needs to be competent in to coach the team through; and third, a case example which shows how these were orchestrated on a strategy work project.

# How the facilitator helps decision-makers avoid mental traps

In designing and facilitating a process of strategy work taking into account the above cognitive skills, the facilitator has a number of challenges to his or her own skill. Whereas the facilitator can use codified tools and techniques designed to be fairly easy to see, there are two additional major demands. The first is the intellectual challenge of

using a wide repertoire of synthesis tools and techniques as a flexible resource to draw on as the process unfolds, a kind of strategic thinking pharmacy. The role of the facilitator here is essentially a designer of 'thinking through'. This process design must be customized: an approach very different from the formulaic technique procedures of many consultancies. The second is the cultivation of emotional intelligence in the group to withstand a creative process which may unravel the vested interests of the decisionmaking constituency. Absence of this emotional intelligence is demonstrated by the tendency for those engaged in strategy work to fall into a number of mental traps which can be related to the findings in cognitive research summarised by Ron Bradfield. From the standpoint of a facilitator practitioner whose experience is based on working with management and policy teams, the mental conditioning referred to in that chapter as 'belief perseverance', 'confirmation bias', 'experience bias', 'overconfidence' and 'single outcome bias' all reinforce the tendency to fall into these traps.

These traps are like attractors that subconsciously pull people back into their usual thought patterns and judgement frameworks. They are symptoms of a stuck appreciative system. A key role of the trusted facilitator is to challenge the strategy work team whenever he or she notices a tendency to fall into one of these traps, for a fall virtually guarantees that critical information or perspective will be overlooked, or even suppressed. Of course, the strategy facilitator is also prone to falling in, but part of their education is to have explored these consciously and personally so as to have a clearer recognition of them. The network of 'remarkable' people is important here: a facilitator of strategy work who is not fairly frequently being shocked by interacting with interesting people is not likely to be on his or her toes!

The five aspects the facilitator needs to consider specifically are:

- Strategic belief
- Sequence of information
- Single loop learning
- Time horizon extrapolation.
- Intolerance of ambiguity

#### Strategic Belief

Belief must be distinguished from truth or reality. Belief is a mental and emotional condition that orients us to a view of reality. When that belief has sufficient correspondence with what is out there then it becomes a powerful coping mechanism to deal more easily with the world. It also serves to align people in a common cause and in concerted action. Belief is also the stories we tell ourselves about what is going on; these stories easily subside into the subconscious and are assumed to be reality.

Beliefs are hard to change because they carry a weight of emotional and cultural investment. Indeed, humans are the only species on the planet to go to war over their beliefs. Yet shared beliefs are also a source of shared meaning that enables communities, families, corporations to act reasonably coherently. So there is an inherent ambiguity in a belief system. On the one hand it is an essential condition of shared aligned action vital for successful implementation. On the other hand it is a constraint on truth and reality which can render us blind to the wider environment and its changes. When belief systems come into conflict with reality, reality eventually prevails. Most strategic shocks to corporations and governments are through the mismatch between their belief systems and reality. Beliefs lock down the appreciative system and prevent learning.

The tendency to run after 'me too' fashions in business or policy is an example of a belief trap. In essence, the core of Wack's 'gentle art of re-perceiving' is the way out of this trap.

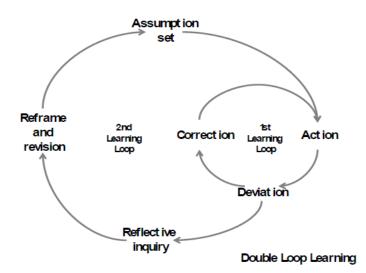
#### Sequence of Information

How we interpret information is through pattern recognition of meaning. The information may show conditions, trends and changes in the current situation. It may also contain extrapolations and assumptions of continuity or discontinuity. This mass or mess of information can be arranged in many different ways each of which may lead to a different interpretation. The brain is very prone to arrive at an arrangement or pattern which is determined by the sequence in which it encounters the information. If we are bombarded with rectangular objects we begin to piece them together in a rectangular way. A 'rectangle' hypothesis forms and becomes through repetition 'hard wired' in the brain. Emotional energy forms around the pattern which becomes its meaning. Exploration invisibly changes into dogma. This makes change of mind or entertainment of other interpretations difficult. If anomalous information comes along it is rejected as not fitting or even simply not noticed. Since in scenario thinking we need to be able to create multiple interpretations of the same data, it is critical to get out of the sequence trap. Caught in it we pursue our first understanding, leaving no room for second and third thoughts that may be better. Pride in quick decision-making can be a danger.

This is perhaps the most serious limitation of analytical method in a complex and changing world. Sequencing methods drive towards an inevitable pattern which can totally miss the point. Edward de Bono (2003) has pointed out the neurobiological inevitability of this trap in a pattern forming brain. Lateral thinking is a way to avoid the trap.

#### Single Loop Learning

Behind every current strategy there is a set of assumptions. We can call this the 'business as usual' mindset. Any action that is taken to achieve intended results is embedded in this assumption set. As action proceeds, performance may confirm the assumptions but deviations will occur that do not.



#### Figure 2, double-loop learning

The response is then to make corrections whilst remaining within the assumption set; tactical changes are made to get back on track, to make a 'work around'. The assumption set, remaining unquestioned, will sooner or later reveal itself through unbending commitment to the strategy and the pressure to prove 'we are right', in spite of increasing underperformance. However, if the assumptions themselves are incorrect, then momentum builds up until a crash or a bubble burst occurs demonstrating that deviation correction learning was not sufficient. A second loop of learning is necessary to reframe and revise initial assumptions. This requires some form of reflective inquiry, a pause to stand back.

Examples of this are where increasing resources are applied to fix a problem when the assumptions behind the problem are the real problem. In this trap great energy is put into single loop learning which is doomed to failure without the second loop. Argyris (1993) has pointed this out in depth with his analysis of defensive routines and professional incompetence. Carrying out reflective learning in parallel with operational learning is a way out of this trap.

#### Time Horizon Extrapolation

Part of the assumption set is the view of time and change held by the strategy owners. Consider the example of a strategy based on an analysis of trends, and aiming to reach a certain goal over a time span in which the trend is still valid. Two ways of looking a this can be called the linear and the sophisticated. The linear is most common and relates to the cognitive difficulty people have in visualising trend bends driven by non-linear dynamics, for example exponential curves. The sophisticated version takes into account non-linear trends but still places them within the same shape of environment or context. If a new business ecology emerges or there is a paradigm shift (Kuhn 1996) then this continuous view of time leads to conclusions that are far off the mark. This is because of the misfit between a discontinuity of pattern and longer range strategy simply collapsed into short range strategy extended in linear time.

This is seen most clearly where players are competing on the basis of their previous winning strategies without noticing that the game has changed. This shows up strongly in the innovator's dilemma described by Christensen (2003). The three horizon method is a way out of this trap. (Sharpe and Hodgson, 2005)

#### Intolerance of Ambiguity

It will now be clear that all the above thinking issues share the common characteristic that a single standpoint, however effective it might seem to be in the immediate and short term, carries the seeds of its own destruction. In a fast changing world going through discontinuous changes, single standpoints have a very short halflife. Since many social and organization systems are based on hierarchical authority, where leadership is expected to have the answers and know what is going on, and where the achievement and retention of power depends on this, then intolerance of ambiguity is both a cognitive condition and also a political necessity. The group equivalent of this state is intolerance of alternative or deviant views arising within a group. This is, perhaps, the strongest reason why scenario thinking is hard for the mainstream. The pressure to be decisive, clear and not change your mind is often too great to leave space for strategy work.

This shows in the intolerance of thinking in the margin in many businesses and institutions, hence not recognising where renewing innovation is most likely to come from. The way out of this trap is the cultivation of curiosity and multi-track thinking in both individuals and teams to extend the range of strategic conversation.

### Some requisite cognitive skills

A leader or facilitator skilled at strategy work will be on the watch for these tendencies and try to steer the group away from them. However, success or failure in this regard will be determined by the extent to which the individuals have the capability for double loop learning. There are a number of cognitive skills which the facilitator can learn himself or herself and then impart to the team in the strategy work process. The skill areas are evidenced partly by the behaviour of the group when they are together, and partly by the behaviour of the group when they have broken up. They are essential interventions in the usual thinking process that increase the chances of a change of mental model. The conditions in which these skills can be exercised are best achieved by involving a broad spectrum of people who do not suppress dissent but treat this as evidence of uncertainty and accommodate maverick views to stretch thinking. In this way there is more chance of achieving the requisite variety in understanding the world of business.

Consider how these capabilities operate in groups rather than in individuals. In the group setting we can identify distributed cognition capabilities. If no member of a group is individually skilled then the team is vulnerable to 'group think'. If some members have some of these skills then, in interaction with their colleagues, they can lift the level of thinking. Indeed, like skilled team players in a ball game they can pass ideas and insights around the group. In this way the performance of a team involved in strategic conversations can surpass the sum of the individual's performances.

To bring this discussion down to the pragmatic level of actual strategy work in teams, and to show how facilitators can move to overcome these problems, we describe below 15 specific cognitive skills that can be applied in actual strategic conversations. Any of them may be useful at any time but they gain in effectiveness as clusters. Each trio of skills creates enabling conditions for the resolution of one of the five framework dilemmas introduced at the beginning of this book. The way these enabling skills relate to a dilemma is illustrated in the Figure 3.

The dilemma is portrayed as having a vertical 'hard' value or dimension and a lateral 'soft' value or dimension. Though usually experienced as antithetical, the dilemma approach moves from 'either/or' to 'both and' by orienting them orthogonally. The resolution of the dilemma then is a navigated pathway of give and take between the dimensions until sufficient strategic insight is generated to achieve the 'both/and' transformation. In this context the wavy line of the pathway (likened to steering a sail boat against wind and tide) is the strategic conversation. (Hampden-Turner, 1990)

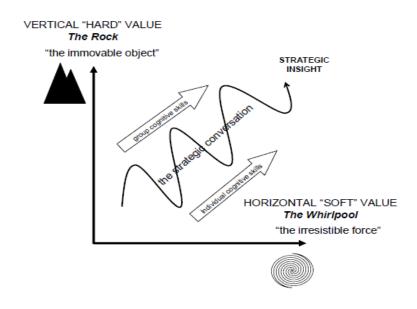


Figure 3, Strategic Insight as Dilemma Resolution

## Relating to the Dilemma: Simplicity/Complexity

#### Questioning the status quo

Strategy work is often triggered when evidence comes to light that a key assumption upon which business as usual depends is open to question. However, there is often inbuilt resistance to questioning the status quo because of the momentum of the current business; it may even be considered 'disloyal'. Bringing assumptions to the surface requires courageous questioning and much cross-comparison with other views, including those which are unwelcome. Strategic messengers risk being shot.

#### Recognition and acknowledgement of complex 'messes'

This is a well researched factor in creative thinking dating from the post-Sputnik era of creativity research. However, it is a difficult one for the action- oriented operational mindset to practise. Fuzziness, ambiguity and paradox are inherent in the nature of complex systems of interacting problems. Ackoff calls such systems of problems messes. The behaviour of a mess depends more on how its parts interact than on how they act independently' (Ackoff, 1999). A strategy process that does not go through a period of messiness and confusion will not be creative, and be unlikely to reframe or upframe to a new level of effectiveness. (Normann, 2001)

#### Graceful Entry

This is a term used by some cognitive scientists to indicate an optimum level of challenge for learning. If the challenge is too weak then complacency rules the mind. If the challenge is too great, then fear or panic rules the mind. In either case the challenge is suppressed or denied. However, there is an intermediate threshold, usually identified by the region in which the person will openly acknowledge doubt, where learning can take place. Finding that spot is part of the art of facilitation. John Holland and colleagues suggest 'Competition allows the system to marshal its rules as the situation demands, and it allows the system to gracefully insert new rules without disturbing established capabilities' (Holland et al, 1986).

## Relating to the Dilemma: Certainty/Uncertainty

#### Unearthing and articulation of assumptions and beliefs

To be effective, the operational mindset has to take as given a belief structure and act on it, often rapidly and without hesitation. The strategic mind however is interested in its own belief system, not as dogma, but as a factor that may determine its boundaries. This is often uncomfortable even for people who have practised the skill. Collyns notes 'my memory of doing this work is of feeling ill half the time because you are hit in your gut about things you hadn't thought of before and the impact they might have'

#### Sharing Current Perspectives and Negotiating Relevance

In strategy work individuals working in a group need to challenge assumptions and negotiate the relevance of trends and facts. This can be helped by using appropriate frameworks such as, for example, the classic 'uncertainty/impact grid'. A framework becomes an effective catalyst for strategic conversation when a group works collaboratively to populate it with their knowledge and insights; it acts as an organizing principle, based on in-depth intellectual research, but used to re-pattern shared thinking and judgements rather than analyse for 'the answer'. This works only if the framework introduces an unaccustomed way of looking at the situation and stimulates the questioning and unearthing of assumptions. The right level of cognitive dissonance ensures that the participants are thinking, using their knowledge and listening to each other in the context of the framework. Mental models begin to surface and become shared.

#### Appreciative Inquiry

This is both a cognitive skill (especially of listening) and a way of interpersonal interaction in teams and networks. It seeks deliberately to discover people's exceptionality – their knowledge and perspectives. It actively seeks out and recognizes people for their specialties – their essential contributions and achievements. Critical for strategy work, it is based on the principle of equality of voice – everyone is asked to speak their viewpoint. Appreciative Inquiry builds momentum and success because it credits the decision-making constituency with the inherent capability to generate its own decisions. Its goal is to create organizations that perform at the level of people's shared potential.

## Relating to the Dilemma Knowing/Intuiting

#### Reframing or re-perceiving both present and future

This perhaps is the essential core of Wack's 'gentle art of re-perceiving'. It is, as he says, changing the microcosm or mindset of the individual in order to see the big world differently. Perhaps we could also speak of re-appreciating the future in this context. The appreciative system goes through re-patterning and so sets new foundations for the three judgements of reality, options for action and value priorities. However, we must remember in this context also the point that the past has gone, the future is not yet and the only reality is the present. So re-appreciating the future is also re-appreciating the present.

## Visualising and narrating stories that reveal an unfolding logic and dynamic of strategy

When asked why scenario practice does work well, Schwarz makes the point that 'story telling is what people do'. Taking the researched and thought out components of both scenarios and strategies and presenting them as a list or a diagram of strategy does not energise or inspire nearly as effectively as a well crafted story based on those components. Narratives create plots, thread things together and appeal to the imagination. Many scenario and strategy efforts fail to realise their potential because they have not come alive as mental images in the minds of the decision-makers and their staff. This is where strategy work is as much an art and design discipline as it is a management process.

#### Tolerating initially anomalous information to shift perspective

One of the reasons for emphasising the in-depth approach originally pioneered by Pierre Wack is that unusual insight doesn't come cheap. However, it is possible that, given the right mental training, it can come quickly. A mind used to dealing frequently with anomalous information (which is usually unnoticed or tuned out by the majority) develops an instinct for anomaly. As we know from creative science, paradigm shift (Kuhn, 1996) arises not from things which fit but from things that don't fit. This is reflected in business by observations such as those of Christensen regarding disruptive technology (Christensen, 2003). Something that 'can't be done' or 'won't work' proves its effectiveness all too quickly.

## Relating to Dilemma Reactive/Proactive

#### Constructive expression of doubt

In any working group there will be assertions and doubts. Doubt can be simply an inhibiting factor which saps energy and motivation as in the case of 'idea killers'. Constructive doubt, however, is the ability to treat even certainties as provisional and open to alternatives. This is important to build on for group cognition. For example, when experts in a room disagree about the 'facts', this can be reframed by the facilitator into an uncertainty which then feeds into the scenario thinking. In the generative stage of strategy work it can be crucial for team members to hold to 'model agnosticism'. This is also an enabling condition for avoiding the single loop learning trap.

#### Assimilation of and experimentation with new frameworks of thinking

The tools of analysis are not the tools of synthesis, and strategy work requires a capability to find new patterns and connections between things. It is easy to claim that 'joined up thinking' is needed in contemporary strategy and policy, but it is hard to accomplish. Perhaps the biggest obstacle to this is the limits imposed by professionalism. A discipline will codify methods and interpretations (judgements, in Vickers' terms) based on the domainal assumptions of that discipline. But scenario thinking embraces many domains in interaction. It is essentially interdisciplinary. To support interdisciplinary work we need a rich set of frameworks which cut across the usual categories of thinking. (In the case example that follows, over ten strategy frameworks were used as catalysts for strategic conversation in addition to the scenario techniques.)

#### Generating new ideas of opportunity and strategy

Idea generation is often left to chance or talent. However, it is a cognitive skill that can be called generative thinking, that can be learned. Generative thinking is at the heart of innovation. Often the components of an innovation are well known but the significant step is putting them together in novel ways that create new effects and possibilities. Scenario planning exercises are often dry because they use scenarios for testing and analysis only, and not for lateral thinking and option generation. There is a skill in applying the question 'what if?' in a way that opens up the space for new insights and options.

## Relating to Dilemma: Planned/Emergent

#### Mapping complex connections that articulate strategy

In complex fields of science and engineering we can no longer proceed without maps and models. These are usually 3D, computer-generated. Oil and gas reservoirs are mapped and explored in virtual reality; complex buildings and objects like vehicles are constructed in CAD before they meet materials; generals no longer proceed without war rooms and simulations. Yet in strategy work we mostly rely on words and numbers on bits of paper, or we restrict strategic thinking to what can be put on a few presentation slides. Strategic conversation is the essence of strategy making but it helps if a proportion of it is conducted through visual dialogue. A scenario set of the world of business may have a hundred factors that need to be considered, and the strategic challenge of an enterprise may require a hundred factors in the world of management. The number of possible patterns between these two is astronomical. Intuition is required and needs to be supported by the power of visualisation, much neglected in management and policy circles.

#### Cognitive re-priming to change the pick up of relevant information

Cognitive psychology has shown the power in our minds of cognitive priming. This happens when the ideas or world views that we have act as a powerful filter for what we notice and what we don't notice. One of the great benefits of multi-future thinking with scenarios is gained when, having entertained a future we hadn't previously considered and do not believe, we subsequently find information coming to light that is consistent with, and reinforces, that view. Scenarios which are new to us, and that we absorb, re-prime the brain to notice new types of information. Cultivating an open mind is not simply having an empty mind, which is impossible, but rather cultivating a mental radar that has been extended beyond current assumptions and political correct interpretations. Failure to re-prime in this way is perhaps the greatest cognitive failing of today's leaders (Chicoine, 2004).

#### Connecting ideas and analytics for testing and verification

In case the reader is now suspecting that the world of analysis has been dismissed as irrelevant, this final point emphasises that effective strategy work connects synthesis, in new and intelligent ways, to the domain of analysis (economics, statistics, market research, financial planning, etc). Indeed a key cognitive skill is the ability to make new sense of information, confirm or disconfirm hypotheses, and design new measurement systems or 'cockpits' to match the reframed strategy.

## A case example of facilitating strategy work with scenarios

What follows is an account, from the perspective of facilitating strategy work, of a designed process which took the managers of different business lines in an organization through an experience in which they learned strategic conversation whilst innovating a new corporate strategy. The case involves the management of a division of a major European corporation. The case history will help show how the various components link together to form strategy work. The steps and sequences in this case were customised to start from where the managers were, meet their challenge and accelerate their development both individually and as a team. The process described below is customised and therefore not a generic method. However, it does serve to illustrate some of the important points about design and facilitation.

The division in question started as a set of functional islands each concerned with marketing and trading its own product. Although the division's performance was monitored as a whole by top management, there was no history of efforts at strategic repositioning. Indeed the financial performance was currently so good that there was no obvious reason to embark on a major exercise of strategy work. However, top management recognised that their world of business was changing and that the current business was likely to go through a discontinuity in the not too distant future. Yet in the face of unavoidable uncertainty, it was not clear what to do.

A new Division Head was appointed with the mandate to explore strategic options. He recognised that the best chance was to adopt a participative approach involving all unit heads and senior planning staff, and that it would require a designed and facilitated process of strategy work. This was underpinned by a strong sense that, in the absence of off-the-shelf answers, a 'strategy as learning' approach was most likely to develop competitive advantage through releasing the creative potential of the individuals and developing them into a strategic team. All the individuals in the group were experienced, of mixed age and gender, and operationally very successful.

As he summarised his position:

The method of linear analysis/deconstruction goes well with change processes which are 'political' or in need of close control. That is understandable, but one then runs the risk of giving a controlled, but inferior or even wrong answer to problems which in their nature are discontinuous and unpredictable. Adopting a method focusing on real learning, systems thinking, allowing for ambiguity includes real risk for the decision-makers as the outcome of learning cannot be predicted. However, it is necessary to take this risk precisely in order to address the ambiguity, long term uncertainty and discontinuity.

Through a series of five two-day workshops over a period of just over three months, the team were taken through a process that stimulated them to look more widely into the business and geo-political environment; to re-examine their business areas through unfamiliar frameworks that reshaped their mental models; to change their culture from a functional structure with stove-pipe reporting to a team culture with strategic conversation; and finally to arrive at a concerted integration of the different business lines into an overarching strategy based on a newly evolving business model. In this process the availability in the company of deeply researched scenarios developed over two years was significant, in that the wider economic and geo-political environment had been well studied by a corporate strategy group. The facilitator had been consultant project leader for this global scenario work.

What follows is a more detailed description of the process in relation to the way

the facilitation and practice methods helped to navigate the team's thinking through the five dilemmas described in the introduction to this book and avoiding as far as possible the mental traps. The role of the cognitive frameworks, the practical exercises to internalise them, and the changes of perception, evaluation and motivation they brought will be characterised. Sentences in italics refer back to the original dilemmas that set the scene in the introduction. The accompanying diagram indicates the cognitive skills which received most emphasis in this stage of the process. Of course, any of these skills may come in handy at any point in a strategy work process if the symptoms warrant it. The sequence of working through the dilemmas is shown in the following diagram.

The challenge facing the team leader was how to refresh a high performing unit probably based on an economic bubble that was unlikely to last more than three to five years, and hence liable to be caught out by the post-bubble conditions. However, because of current excellent performance, there were no operational reasons for engaging in a major revision of strategy. This starting point made them vulnerable to Trap 1 – being caught in fixed strategic beliefs. Further, the team leader was new to the unit and had only partial expertise in the range of businesses in the unit. He needed, therefore, a highly participative approach that would stimulate the creativity of the group.

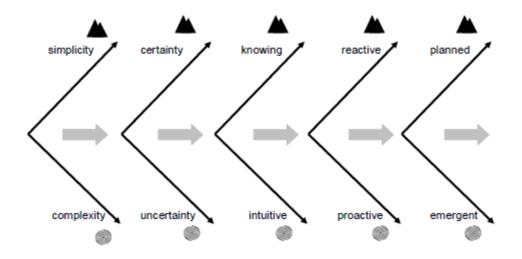
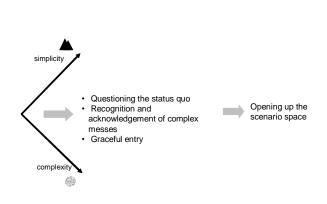


Figure 4, Sequence of working through dilemmas

#### Dilemma : Simplicity/Complexity

The first dilemma resolution task was to dislocate constructively the current business model and place it into a new context for strategy work thereby opening up the scenario space. This meant loosening the certainty in their current operation and plans. Using a scenario approach immediately would have been premature. The preparation was to have each business leader present their picture of the next ten years of performance but have the team raise any questions about those plans. The sequence of information trap tends to confine thinking to a fixed pattern corresponding to the way the plans are presented; so this cross-questioning was deliberately not answered immediately but recorded and clustered to give a shared 'map of doubts'.

This provided a loosening up of the thinking of the group which was selfgenerated drawing on the inherent diversity of the group. Many of the auestions raised related assumptions about the future, thus providing an antidote for the single loop learning trap by shifting the thinking towards the second of learning loop reworking assumptions. This provided а more responsive platform for a preliminary introduction to a set of three global scenarios that addressed some of the trends and uncertainties, and provided the first exercise in expanding the group's 'memory of the future'. A



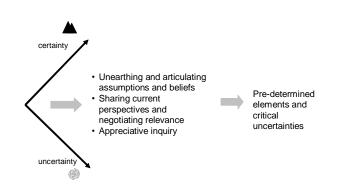
key framework introduced here was the distinction of levels between mission, strategy and tactics and how to avoid confusing these levels.

#### Dilemma: Certainty/Uncertainty

The second dilemma resolution task was to identify pre-determined and uncertain aspects of the future more clearly than before, developing a richer picture of possible changes over different time scales and introducing progressively greater levels

of uncertainty about the world of business. The scope of the group's own thinking about the future was stretched so that they began to own the futurethinking aspect of the scenario components.

Although their current business plans were cast in a ten year horizon, it was clear that there were no discontinuities in their reading of the business environment; they were, therefore, in danger of falling into the time horizon extrapolation trap: treating ten years as one year ten times



over, with small changes. For this stage an approach called the Three Horizons was used (Sharpe and Hodgson, 2005). The gist of this approach can be described as follows. The rolling hills of the first horizon are the current business conditions known as 'business as usual'. Next, the foothills of the second horizon represent the innovations that challenge the first horizon with disruptive technologies and business models. Within the third horizon we find the higher mountains which represent a complete change in the

business ecology. The third horizon is too far away for us to predict specific technologies or societal arrangements. However, it is the domain of values and visions and hence could be the future time period in which current values might be displaced. Whether this happens depends on how far the first horizon mindset captures the innovations of horizon two; or how far the disruptions are exploited by the longer term vision. For example, how we will make the transition from an unsustainable energy economy to a sustainable one depends on how the tension between energy security and climate change is resolved.

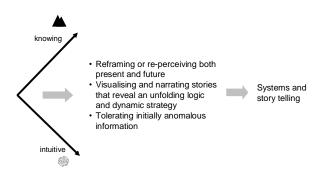
An important cognitive point here is that each horizon is associated with a different mindset and associated belief system. Mature strategic work is able to acknowledge all three horizons and switch between them at will. This is very hard for people not practiced in taking on world views different from their own dominant belief system. It is analogous to multi-future thinking with a scenario set. However, the framework is effective in giving people permission to step outside the box of orthodox linear projection and entertain peripheral observations about what is going on and where it might lead. In this case, the exercise led a number of members of the group to recognise the bubble nature of the current business-as-usual. The motivational level of the group increased significantly at this point.

#### Dilemma: Knowing/Intuiting

The third dilemma resolution task was to make an experiment of stepping from the known rational to the unknown intuitive. The group first of all took the second and third horizon conditions of the business environment, as they had mapped them, as a plausible future. They then asked the question 'what kind of a business idea (van der Heijden, 2006) would be successful in that environment?' This led to a number of ideas around opportunities, value creation and distinctive competence that were in marked contrast to their presentation of the business plans at the beginning of the process. At this stage there was little conviction that they were where the team needed to be, but they had significantly expanded the thinking; and a recognition that the current strategy

was vulnerable was well established. This was particularly evident when they were asked which competitors were most likely to adopt something like the new type of business idea. Indeed, it was then recognised that some were already doing it! This further strengthened the motivation.

This was now a somewhat unnerving situation for the group because they had mentally abandoned their current strategy as unsustainable, and yet had only speculated as to what the

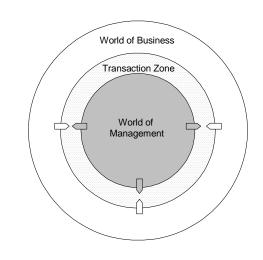


alternatives might be. Here they were most in danger from the intolerance of ambiguity trap. However, this was also a point where premature closure to get out of the tension could have shut down the process. To counteract this, a dilemma framework (Hampden-Turner, 1990) was introduced. This looked at the contrast, even incompatibility, of the first versus the third horizon and formulated them as dilemma pairs that needed

resolving in the second horizon. This 'both and' inquiry set up a strong field for creative thinking, and some initial dilemma resolution ideas began to hint at possible new strategies.

Up to this point the earlier introduction of the three global scenarios had been left hanging in the background. They were already bearing some fruit in that members were reporting current information that indicated 'pockets of the future in the present' that had previously been unnoticed. Before focusing on the development of new strategy, however, it was important to revisit the well researched global scenarios and focus them into the transaction zone (see diagram) between the wider environment and their organization.

This began to deal with reactive versus proactive dilemma. This is the area where the scenarios shifted from the domain of 'outside our influence' to 'where we might make an impact'. The current business lines were primarily product-oriented and it was becoming clear that in the third horizon the business model would need to focus much more on the multiproduct market. So four distinct market areas were designated and the team was



tasked to create focused scenarios in those areas consistent with the global scenarios. The process researching the transaction zone revealed the scenarios in strong relief; and by the end of this exercise they had become effectively internalised and the relevance to the business unit was incontestable. This meant that the potential for effective scenario impact on strategy development had been created. The group now had constructed a shared 'memory of the future' (Ingvar, 1985). But as yet there was no clearly formulated strategy for the scenarios to challenge.

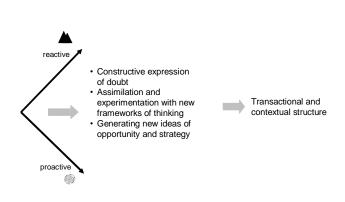
#### Dilemma: Reactive/Proactive

So the next step was to create a sketch strategy, much as an architect creates a sketch of a new building. This stepped firmly into the heart of the 'planned versus emergent' dilemma. They had firm operational plans for several years ahead with committed deliverables and yet they had, at the same time, to explore a completely different business model and a strategy to reach it. The framework used here was the strategy map (Horn, 2000). The team gathered round a long and large sheet of paper the length of a board room table. One end was designated the present, and the other, around three years ahead: the future. The idea was that the big changes in business model could not be conceived as discontinuous since the value generation by the current business must be sustained as long as the bubble lasted. So the strategy had to reflect the patient but urgent sowing of the seeds of strategic change. The framework here was dynamic strategy in which present and future business models have to be run in parallel and a timed transition managed. The table map was then populated with ideas for action on both business models working forwards and backwards from the future.

The impression at the end of this stage was a promising but somewhat incoherent bunch of ideas which didn't seem to entirely hang together.

The next step was the introduction of strategy as story-telling. This is applying some of the same considerations that Nordfors discusses in regard to the creation of

scenarios. Strategies too can be presented as stories of 'how we won', told before the battle. The team leader was challenged to place himself three years ahead and, looking back, tell the story of how the strategic transformation was now clear and well on track. As he put it, this was an act of will as well as creative synthesis. The result was a shift of energy and realisation as the team saw emerge from their ideas a pattern of strategy that became convincing and coherent. Of course, there were many rough



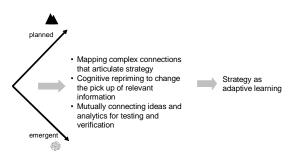
edges, consistent with the fact is that strategy work at this point was treated as a design process rather than an analytical one. The rich pictures that people had built up over the preceding stages now became a solid and arguable base for the new thinking.

#### Dilemma: Planned/Emergent

The strategy map was now further refined and some gaps filled in. Major threads of market position, business model and support infrastructure were clarified and these

now became the strategy input for interaction with the scenarios to help generate options This was carried out in the three threads in each of the three focused scenarios. The thinking task was defined in three layers – testing, developing and innovating.

At the end of the process the team realised that they now had a shared strategy in а common language developed thev had integrated together; they had sustaining business-as-usual with transformational activities in readiness for changed competitive а



environment; they had rehearsed the major challenges likely to be thrown at them by top management; and they had created the platform for a further six months of strategic analysis to ground the ideas in current and anticipated realities. They now had integrated the planned and the emergent.

## The Emergence of Strategic Conversation.

Each workshop built on the new steps that had been made in the previous one. By the fifth workshop the group were standing around a huge wall-sized strategy map and engaging in animated conversations about pros, cons and possibilities. This is in marked contrast to the first workshop where there were presentations with questions, and the conversation was largely directed towards the facilitator, with people remaining glued to their chairs. However, it is important to recognise that the intervals between workshops were also very important.

After each workshop, tasks to continue consideration of aspects of strategy development were allocated by the Division Head. These deliberately involved collaboration in pairs or small groups cutting across the business lines. Workshops took place in different locations to enable people to become more acquainted with each other socially (the operations spanned South East Asia, Europe and North America). In the middle of the process people expressed difficulty in handling the cognitive challenges, especially rapidly switching from operational to strategic mindset in the midst of operations. This was demanded since work between workshops had to be slipped in wherever and whenever it could be. As things progressed, the Division Head noted how the quality of the discussion improved even in operational management meetings and, towards the end, how the team increasingly placed operational decision discussions in a strategic context. The members of the group were also seen to be exchanging intelligence about the business environment in a more comprehensive way and keeping each other informed in the context of the scenarios they had worked with. Above all, they recognised that they owned the new strategy and they could go on improving it. It was ingrained in their minds deeper than any plan.

They had all gained some experience of cognitive skills and were beginning to get the hang of consciously switching from operational to strategic mode and back again without tripping over themselves. In reviewing their original 'map of doubts' they found they had addressed them all, and noted their change in confidence. However, they also recognised that they were now in a never-ending process of strategic improvement: this, was just the beginning. In a rapidly changing world they must engage the rest of the organization in ongoing strategic conversation! Their next step could include stepping into larger group exercises of the type described by Curry.

#### Is scenario practice method or magic?

At the end of this chapter I would like to reflect on the never-ending story that is strategic conversation. There is a continuing debate on the relative merits of 'light' approaches and 'heavy' approaches. Schwartz makes the point that if you can start a process from where people are, then there is a chance that they will see better what a more thorough process might give. On the other hand, Collyns reflects on the importance for Shell in the early days working with Pierre Wack of exploratory breadth and depth. He comments 'It's closer to magic than technique'. My own experience, leading over 50 scenario projects in the last 20 years since my initial 'apprenticeship' in the 80's (with Kees van der Heijden, Ged Davis and Arie de Geus), is that we need both light and heavy approaches. In fact, for me some of the magic is in having both.

From the perspective of cognitive skills, the 'light' approach begins with graceful entry. We have to delineate the arena of uncertainty that the decision-makers are willing to work with openly, and explore from there. The heavy approach, however, involves being able to sit in the 'mess' for a lengthy period and accept nothing less than a cognitive re-priming that gives rise to a fundamentally reframed world view. However, this is not a simple linear spectrum. As the mental traps highlight for the many more that could be considered) progress is a step function from a base where the psychology of denial, of propaganda, of vested interests and power through commanding a dominant world view all tend to keep scenario thinking well contained within politically correct boxes. Perhaps here is the most challenging paradox of the scenario method: the very method that has been developed to move us out of limited thinking is itself prone to being captured within the thinking that needs to be changed.

There are lessons from the field of creative thinking that can offer food for reflection here. A saying by Pasteur has become a favourite among scenario planners: 'creativity favours the prepared mind'. Without technique, discipline and codification of strategy work, including scenarios, there is too much likelihood of going off down rabbit holes and losing the big picture. However, a saying attributed to Lord Byron is also worth considering: 'In order to be creative it is necessary to have read very little and thought very much'. Perhaps this describes the difference between the Ph.D. and the entrepreneur. Without adventurous imagination we will never envision the future that is strategically game-changing. In this sense the less mainstream aspects of Pierre Wack's innovations may be much more critical than has been recognised. I have no doubt my capacity to enter into this field was due to several years of intense research study with J. G. Bennett, a remarkable polymath who was a pupil of Gurdjieff, one of Wack's teachers. Gary Chicoine also developed my understanding of factors like induction, graceful entry and deconstructing the future, drawing on his own vast explorations of Western and non-Western psychology.

Appreciating the future is an integration of method, technique and discipline with creative exploration, intuition and insight. Rather than being antagonistic, as they are perceived to be in everyday culture, in strategic conversation they are woven together. The quest of strategy work is to discover and create a new integrity. Its value is shown by its results, which rely on all three phases of judgement having been carried through. We are inspired by Pierre Wack's pursuit of depth and his patience in stimulating the insight of others, originating from his ability to live in the world of economic business detail and simultaneously meditate in the regions of the unknown. This is what scenario practitioners strive to sustain in their various ways of supporting and facilitating strategy work.

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