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# **Openness Disposition: readiness characteristics that influence participant benefits from scenario planning as strategic conversation**

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## **Abstract**

In this paper we examine the impact of participant readiness to engage with, perform and benefit from scenario planning processes. Central to our examination is the concept of 'openness disposition', which in the context of scenario planning refers to the tendency to seek either to hold open ambiguity, complexity and uncertainty, or look for closure, simplification and surety when engaging in strategic conversations. Readiness indicates the capacity of individuals and collectives to work with competing narratives, dilemmas, tensions and differences of opinion, as may occur in scenario work. A focus on readiness through openness disposition enables critical evaluation of the utility of scenario planning to different individuals and groups based on their capacity to engage with equivocality during structured, exploratory strategic conversations. Based on findings emerging from a longitudinal field study with ProRail N.V. Holland, we empirically identify three characteristics of participant readiness, which are theorised to extend understanding of how individuals and groups might engage in, cope and benefit from, scenario planning processes.

## **Key words**

Readiness, disposition, scenario planning, strategic conversations

## Introduction

Characterised by ambiguity, complexity and uncertainty, the constantly unfolding world generates opportunities and threats for organizations that influence their performance or even survival (Jauch and Kraft, 1986; Milliken, 1987; Grinyer, Mayes, and McKiernan, 1990; Burt, 2007; Burt, Mackay, and Perchard, 2013; Bowman, MacKay, Masrani and McKiernan, 2013). Given the unknown nature of future external conditions, management teams understanding of how change will develop is varied and incomplete (Daft and Weick, 1984; Maitlis, 2005; Brown, Colville and Pye, 2015), and interpretation of the meaning and implications of shifting circumstances is divergent between top team members (Chia, 1998). Despite these challenging decision making conditions, the onus remains on management teams to steer the organisation onwards in an effective way. Against this backdrop, scenario planning has a well-established history of reducing equivocality in a management team's shared view of unfolding events (Wack, 1985; de Geus, 1988; van der Heijden, Bradfield, Burt, Cairns and Wright, 2002; Grant, 2003; Docherty and McKiernan, 2008). However, being able to build a productive, unequivocal position in a top management team is not a given (Maitlis and Lawrence, 2007; Cairns, Wright, Bradfield, van der Heijden and Burt, 2004).

Scenario planning is a process that is designed to create time and space for a management team to share their ideas, hopes and concerns about the changing world (Docherty and McKiernan, 2008). Through a pluralistic and participative process developing a set of plausible stories about the future, scenario planning accommodates divergent and conflicting thoughts without privileging one over another (van der Heijden, Bradfield, Burt, Cairns and Wright, 2002). In all likelihood none of these stories will emerge exactly as anticipated, although elements from across the scenario narratives may emerge (van der Heijden, Bradfield, Burt, Cairns and Wright, 2002), providing a management team with a heightened awareness of and sensitivity to the changing world as it unfolds (Chia, 1996; Chia, 1997).

There are many examples of successful application of scenario planning in practice at an organisational level, including Shell (Leemhuis, 1985; Grant, 2003; Cornelius, Van de Putte and Romani, 2005), British Airways (Moyer, 1996) and ICL (Ringland, 1998). However, there is a lack of understanding as to how individuals cope with ambiguity, complexity and uncertainty (and the corresponding lack of certainty) whilst experiencing the scenarios process (Burt and van der Heijden, 2003; Mackay and McKiernan 2004; Wright, 2005). As a consequence, little is known of the extent to which participant readiness to engage in scenario planning might impact the effectiveness of the process.

There is value in addressing this gap in knowledge as whilst there are claims about the success of scenario planning in supporting strategic planning and learning in organizations (Galer and van der Heijden, 1992; Moyer, 1996), there are also examples where scenario planning is argued to have failed to make an impact (Wack, 1985; Hodgkinson and Wright, 2002; Docherty and McKiernan, 2008). To date the limitations and boundaries of scenario planning have had relatively little attention, with exceptions exploring failure from a psycho-analytic perspective focused on decisional conflict (Wright et al, 2008), or limited action-taking following scenario building (Docherty and McKiernan, 2008). In addition, there are also concerns raised about the emotional and psychological capabilities of individuals and groups engaging with scenario planning (Healey and Hodgkinson, 2008; Hodgkinson and Healey, 2008; Bradfield, 2008). These issues suggest that there is a gap in theory about the 'users' (i.e. top management teams) of scenario planning. Specifically, there is lack of knowledge as to how

the 'readiness' or receptiveness of individuals to the conventions of scenario planning impacts process outcomes. Little is known about how individual capacities to remain open throughout the process, rather than seeking the certainty associated with premature closure, might influence how the scenario planning process is able to aid a management team (Chia and Holt, 2009).

A main contribution of this paper is the development of a 'readiness' framework for those about to engage in a scenario planning process. Readiness indicates the capacity of individuals and collectives to work effectively with the competing narratives, dilemmas, tensions and differences of opinion, that characterise the strategic conversations occurring in and around the scenarios process (van der Heijden, Bradfield, Burt, Cairns and Wright, 2002). As these conversations typically address matters of complexity, uncertainty and ambiguity, we describe a heightened level of participant 'readiness' as an 'openness disposition'. An openness disposition is a participant's capacity to remain comfortable with equivocality and avoid premature closure of potentially unsettling lines of conversation. This paper explores the extent to which an openness disposition enables individuals and groups to perform and benefit from scenario planning-based strategic conversations.

Developing a readiness framework is intended to be a first step in addressing the limited understanding of how individuals and teams participate effectively in the scenario planning process. The framework was developed through analysis of fieldwork with the top management team of ProRail NV, the Dutch railways manager. We supported the team undertaking a scenario planning exercise for the first time as part of their change management process (see figure 1 in the methodology section). Fieldwork was conducted over an eleven-month period from March 2013 to January 2014. Our findings suggest that the senior management team demonstrated a "capacity to live with and tolerate ambiguity and paradox" (Ward, 1963, p 15), and "to engage in a non-defensive way with change, resisting the impulse merely to react to pressures inherent in risk-taking" (French, 2001, p 482). To varying degrees as individuals and a collective, this 'openness disposition' enabled them to use the scenario process as a means to reach beyond current thinking to find ways of coping with a complex and uncertain strategic future whilst avoiding simplification of challenges and premature closure. In this paper, we identify and elaborate three dimensions of 'readiness'— balance of thinking, attitude to timescales, behavioural orientation to action - uncovered by our study. We examine how these dimensions contributed to the utility of the scenario planning process, and we discuss the implications for future scenario planning research and practice.

The paper is set out as follows: in the next section we develop our theoretical framework that explores the evolution of scenario planning, from its origins in military application through to the emergence of a 'strategic conversation' perspective. With this philosophical shift, we develop the role of talk and conversations as a reflexive and recursive process across time and space. By doing so we are able to develop the connection between openness disposition, readiness to participate in scenarios, strategic conversation and the utility of the process. We then set out the approach adopted to empirically observe in vivo interactions and the evolving narratives during the eleven-month period. From the empirical analysis we present 'readiness' characteristics implied by our fieldwork, which we illustrate with participant comments. We then discuss the implications of the framework and an 'openness disposition', and conclude by drawing out implications for research and practice.

## **Theoretical Framework**

In this section we develop our theoretical conceptualisation of scenario planning as a process of strategic conversation, tracing its origins and identifying opportunities to build insights in this under-developed perspective on the role of scenarios.

Developing from the work of Kahn (1962) and Kahn and Weiner (1967) in a military context, in the late 1970s scenarios began to be introduced to business planning functions, challenging conventional methods based on linear forecasts (Amara and Lipinsky, 1983; Wack, 1985) grounded in historic data and experience-based assumptions of relatively stable circumstances (Emery and Trist, 1965; Rameriz, Selsky and van der Heijden, 2010). Such an approach was based on the search for pre-determined elements of the business environment (Wack, 1985; Burt, 2010). Against this backdrop, scenario planning emerged as an alternative strategic foresight technique combining economic theories and principles of systems analysis to develop non-linear representations of the changing world. However, initial attempts were of limited practical use as scenario representations were taken as 'real', failing to recognise these representations were based on 'regimes of signification' (Chia, 1997).

In any given context, regimes of signification are defined as a "set of conventionally established textual codes governing the organization and presentation of ideas, information, observations and conjectures in such a way as to render them acceptable" (Chia, 1997, p 73). For example, when Porter's five forces of industry and competitor analysis (Porter, 1980; Porter, 1985) were first introduced, well-established economic laws such as supply and demand and price and cross-price elasticity of demand provided the terminology to describe and frame Porter's new thinking. In connecting to existing frames, regimes of signification can enable individual decision makers to avoid challenging their assumptions and taken-for-granted beliefs, and can stifle creativity in developing relationships between events and happenings in the world to produce new novel insights. In the context of early scenario planning activities in a business setting, phrasing and framing insights from the process in the terms of existing regimes of signification within an organisation effectively neutralised many of the possible strategic management gains for decision makers.

In response to this practical gap, in the late 1980s and early 1990s scenario planning evolved from an analytical approach to a learning approach (de Geus, 1988; Michael, 1997) based on "information acquisition, processing and sharing" (Shrivastava, 1983, p 22), forcing participants to think outside their current regimes of signification in order to generate managerial insights rather than necessarily establish concrete foundations for planning. However, this approach remained grounded in a functionalist paradigm (Burrell and Morgan, 1979) where organization and environment are separate and discrete entities (Chia, 1999). Within this paradigm the premise is that the organization predominately stays stable, making ongoing adjustments and adaptations to achieve its goals and aspirations (Garud and Van de Ven, 2002). Therefore, whilst the learning approach addressed to some extent the 'regimes of signification' challenge, it still failed to recognise that an organization is always in the making and only achieves momentary periods of stability (Goodman, 1978; Tzoukas and Chia, 2002; Chia and Holt, 2009).

It is from this historical path that a recent, still under-developed, perspective of scenarios as strategic conversation (van der Heijden, 2005) has emerged. Underlying this approach is a notion that conversation is central to strategic sense-making as "humans appear to communicate through a uniquely complex language system, a system that acts like a sieve, filtering out concepts that are not of widespread utility, and retaining concepts that are" (Saucier and Goldberg, 1996, p 34). This

perspective recognises that strategy work, such as scenario planning, is something that people do, rather than a property of organization (Whittington, 2006), and that the “actual doing of strategizing in organizations takes place in the form of talk, text and conversation” (Fenton and Langley, 2011, p 1172). A strategic conversation perspective therefore represents a major shift from the previously described analytical approach that has historically dominated the scenario planning literature.

In understanding scenarios as strategic conversation, researching the role of talk, conversation and narratives places a focus on people and the reflexive and recursive relationship between time and talk in the constitution of making sense of the changing world (Boden, 1997). Regarding scenario work as strategic conversation implies a need to understand the tensions and divergence between organizational members (as they make sense of their changing world) and equally how reconciliation of ideas and views occurs through the reflexive connecting of fragments of conversations over time (Deuten and Rip, 2000; Kuhn, 2008; Fenton and Langley, 2011). Such a conversational process is known as ‘lamination’ (Boden, 1994; Taylor and Van Every, 2000) where there is a “continual layering of interactions and the building of one fragmented narrative on another resulting over time in the emergence of a dominant thread that becomes taken for granted and incorporated into subsequent interactions” (Fenton and Langley, 2011, p 1186).

A strategic conversation perspective implies treating scenarios as a “consultative process with performative effects” which is undertaken with the intention of “being transformative, aiming at changing people’s perceptions and perspectives” (Kornberger and Clegg, 2011, p 154). Examining the scenario planning process with attention to how, and to what extent, individuals engage in strategic conversations about the future does not require the analytical separation of organisation and environment, thus offering potential to address a key shortcoming of a learning perspective. Treating scenarios as a strategic conversation moves individuals and teams away from seeking analytic certainty to engaging with multiple narratives that are imbued with multiple meanings. A readiness disposition requires individuals to be comfortable engaging with and ultimately reconciling multiple narratives (French, 2001; Fenton and Langley, 2011).

Furthermore, adopting a strategic conversation perspective focuses efforts on better understanding scenario planning outcomes in light of how able individuals are to *perform* the scenarios process. Developing such performativity insights will start to redress the balance in scenarios knowledge that is currently tilted towards the ostensive routines and formal methods associated with the historically dominant analytical perspective (see Feldman and Pentland, 2003).

In this article, we contribute to addressing the paucity of research on scenario planning as strategic conversation (Chermack, 2005; Chermack and van der Merwe, 2003; Sandberg and Tsoukas, 2011) and more specifically the gap in knowledge about how individuals engage with the scenarios process. We introduce the concept of ‘readiness disposition’ to refer to the extent to which individuals are able to perform and benefit from scenarios as strategic conversations. From empirical observation and analysis, we build understanding of aspects of participant readiness to engage in the typically equivocal, uncertain and ambiguous strategic conversations of scenario planning. In particular, we examine ‘openness disposition’ as an influencer of the readiness of individuals and teams to benefit from scenario planning related strategic conversations (McCrae and John, 1992; Saucier and Goldberg, 1996; Judge et al, 1999); where ‘openness disposition’ describes a mental attitude that “encompasses imagination, receptivity of new ideas, multiplicity of interests and adventure seeking”

(Bozionelous, 2004, p404). Using the concept of 'openness disposition' to shape a readiness framework emerging from interview data with a management team about to engage in scenario planning, and then tracking the progress of these individuals through the process, we are able to generate insights about participant readiness to engage in, perform and benefit from the strategic conversations of scenario planning.

### **Context, Background and Overview of ProRail**

Our readiness framework was developed through analysing scenario fieldwork with Dutch rail operator, ProRail NV Holland (referred to forthwith as ProRail). To frame our arguments, in this section we describe the setting for our research and introduce the ProRail organization.

ProRail is responsible for the rail network of the Netherlands, including managing stations, maintaining existing rail network, including laying new track, building new stations, allocating the space on the track for such work, and controlling all rail traffic and relationships with train operators. ProRail manage nine separate train operating companies carrying approximately 1,083,000 passengers per day, alongside 19 freight carrier companies carrying a combined 115,000 tonnes of freight per day. Between these two types of organisations ProRail is responsible for running 3,300,000 trains per year. At the time of the research, ProRail had 4129 employees and was structured with a head office located in Utrecht, four regional offices and 13 traffic control centers.

Established in 2005, the mission and ambitions of ProRail are intended to connect seamlessly with the strategic policy of the Dutch Ministry of Infrastructure and the Environment. Recently the Dutch Ministry of Infrastructure and the Environment set out in their strategic agenda - "the Long-Term Rail agenda" ("Lange termijn spooragenda")- intended to offer an attractive customer product, high quality rail system and an optimum use of the capacity of the Dutch railway system. In turn, ProRail were challenged to use this government strategy as the basis for the development and operationalization of their ambitions for the Dutch rail system. In response, ProRail developed and initiated a change program: "In Samenspel naar een vernieuwd Nederlands Spoor" (translation: "Together to a renewed Dutch Rail"). Represented in figure 1 below, this change program identified four strategic ambitions and seven change processes. The four strategic ambitions are:

1. Safer railway: zero avoidable accidents.
2. Reliable railway: zero avoidable disruptions.
3. Punctual railway: further increase in punctuality (together with the railway operators).
4. Sustainable railway: thirty per cent (30%) less energy consumption, the highest level on the CO2 performance table, and adopting of more innovative rail technology.

Relatedly, to achieve these four strategic ambitions, ProRail established and commenced in 2012 seven change processes to be delivered over three (3) years to 2015:

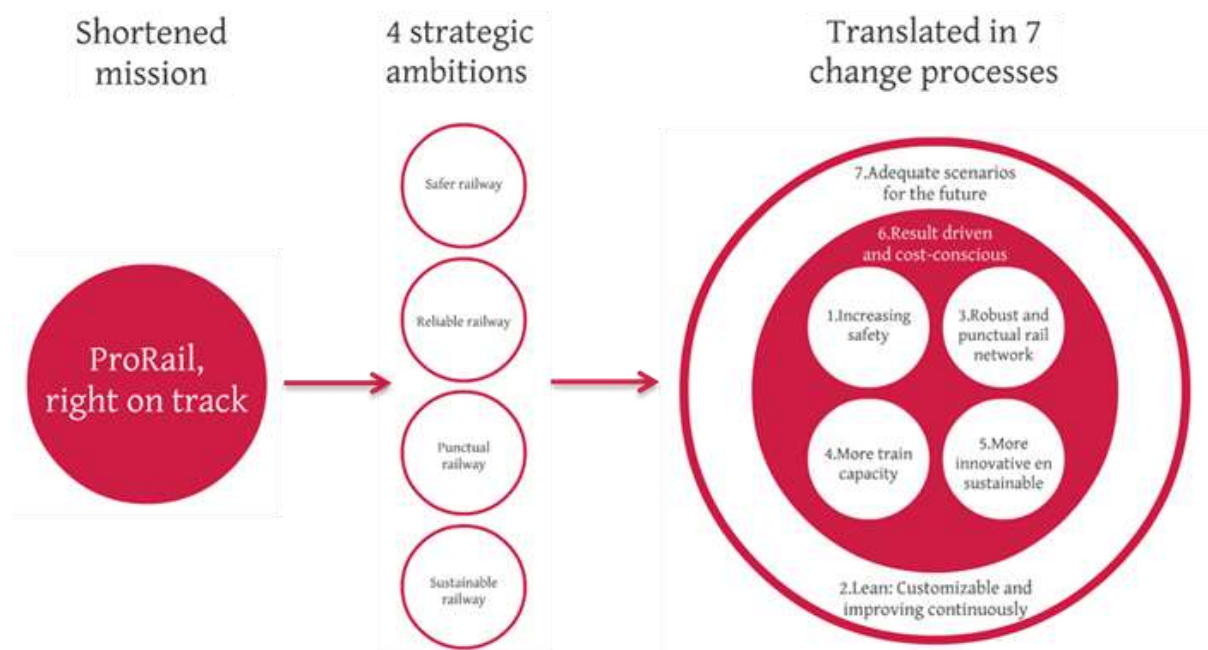


Figure 1: ProRail Strategic Change Agenda

Change process 7 was described as “an opportunity to learn and explore when thinking of the future. It is about bringing the outside in and organizing a strategic conversation, understanding future scenarios shared and lived through with our surroundings” (source: internal ProRail document). It was in enacting change process 7 – an initiative to create “Adequate scenarios for the future” – that ProRail engaged with the authors, providing full research access to ProRail as consultants and researchers.

### Empirical fieldwork

In the following section, we describe the research methods used – within the parameters of the access created by working on change process 7 described above - to collect and analyse data about the strategic conversations occurring as we supported the ProRail management team through a scenario planning exercise.

#### *Data sources*

Primary data sources were gathered throughout the duration of the project (Rossman and Rallis, 1998), which commenced in March 2013. The first primary data source was initial one-to-one interviews that were conducted with twenty-three members of the senior management team, including the chief executive and four other executive directors, nine operational and functional directors as well as eight senior managers and one member of the workers council. These interviews were conducted during April and May 2013. Each interview lasted between sixty and ninety minutes. The interviews explored each individual’s key concerns and perceived issues about ProRail’s strategic future (King, 1994; van der Heijden et al, 2002). Following initial interviews, each individual was invited to describe a future where their concerns and uncertainties developed into favourable conditions, as well as developed into unfavourable conditions, for ProRail. This interview activity provided an opportunity to understand individual managers’ concerns, issues and foci of attention when contemplating the future of the organisation.



During each of the interviews, apparent issues of participant interest were summarised and presented back to the interviewee. This allowed a reflective moment for the interviewee, as well as further clarification and refinement of interviewer understanding where applicable. Each interview was recorded verbatim, transcribed fully and subsequently analysed thematically (Rubin and Rubin, 1995). The themes were then anonymised, grouped with similar themes from the other (senior management) interviews (whether supportive or contradictory) and reported back to the senior management team in a three-hour workshop. The senior management team explored and commented on the range of themes, agreeing the focus for a subsequent scenario planning workshop. Their comments were also recorded and subsequently analysed.

A further primary data source was one-to-one interviews with the six nominated internal facilitators trained in scenarios methods. These interviews with the internal facilitators were conducted in June 2013. Each interview lasted between thirty and sixty minutes, with the intention of exploring emergent issues about their experience of facilitating change project 7. Key issues were again summarised and presented to the internal facilitator allowing a reflective moment for them, as well as further clarification and refinement of issue understanding where necessary. Each interview was recorded verbatim, transcribed fully and analysed thematically (King, 1994).

Our study was also informed by in vivo researcher observations (Waddington, 1994; Fenton and Langley, 2011), captured through extensive field-notes from three workshops with the senior management team. The first workshop occurred in June 2013, when the findings of initial interviews were reported back to the management team (workshop 1); the second was a scenario building workshop held in November 2013 (workshop 2) and the third a scenario implications workshop in January 2014 (workshop 3). Critical incidents (Flanagan, 1954; Woolsey, 1986; Chell, 1998; Butterfield et al, 2005) were captured and noted during all of these workshops.

The research team was also able to gather insights from regular informal conversations and meetings with the small group of 'key informant' ProRail facilitators responsible for the scenario planning project (Tremblay, 1982), again recorded in field-notes. These meetings allowed data to be gathered about the unfolding impact of the various activities and experiences of the project (Bray et al, 2000), which helped to clarify and sharpen the findings discussed in this paper (Johnson, 1998). Additionally, relevant internal documents such as change management proposals and reports, scenario story summaries and other related reports were reviewed (Forster, 1994).

#### *Data analysis*

After completion of the fieldwork, first-order analysis of the data was undertaken to identify emergent themes (Miles and Huberman, 1994; Strauss and Corbin, 1990). The first-order themes uncovered included (i) focus and priority of senior management, (ii) tensions in priorities, (iii) attitude to time, (iv) attitude to multiple plausible futures, (v) challenge to comfort zones and business-as-usual thinking, (vi) impact to surprises, tensions and contradictions, (vii) response to dilemmas, and (viii) identification of knowledge gaps.

The various primary data sources were then re-examined to elaborate these first-order themes. Reflective notes were made during this re-examination activity, and these formed the basis of exploring if any relationships potentially existed between the themes (Rees and Nicholson, 1994). On reviewing the reflective notes a recurring insight that emerged was an apparent tension for individuals

and the collective between the concerns of (i) 'gaining certainty in the way forward based on traditional approaches', (ii) 'seeking agreement in the face of competing priorities' and (iii) 'willingness to consider a range of possible improvements that were incremental in nature'. The research team then drew on the concept of 'readiness' as a starting point for building explanation as to the origins and implications of the tensions in the empirical evidence. Specifically, by re-considering the empirical data in relation to 'readiness' – the degree of participant receptiveness to the equivocality that might be experienced in the scenario process – and informed by the literature on an "openness disposition", initial constructs and dimensions of a tentative 'readiness' framework were identified as below:

- Balance of thinking: single views – multiple views (internal & external)
- Attitude towards timescales: fixed timescales – flexible timescales
- Orientation in behaviour: single mode – multi-modal (thinking, doing, exploring, exploiting etc. including managerial readiness to embrace ambiguity and uncertainty)

This framework describes characteristics, and associated polar dimensions, identified from analysis of individual participant talk in advance of engaging with scenarios and the talk between participants during scenario work. Through repeated review of the empirical data in light of the literature outlined earlier in this article, these mental attitudes seemed to be most influential on participant readiness to engage in the equivocality, uncertainty and ambiguity generated from strategic conversations in the scenario process. It is important to note that the characteristics and the dimensions in the framework should be considered as a spectrum rather than dichotomous alternatives.

### **Elaboration of Empirical findings**

The aim of this research project was to seek to understand readiness of participants to engage in, perform and benefit from scenario planning as strategic conversations. In this section, we use our tentative readiness framework to structure a re-view of our participant data, building insight about how the different characteristics and dimensions might impact participant performance of scenario planning conversations. For each dimension of our framework, we have attempted to illustrate different manifestations of the constructs as we experienced them in Prorail. Examples cited are intended to illustrate our theorising rather than suggest there are definitive categories within which individuals will neatly reside. It is also worth noting that our presentation of empirical data is in no way a judgment on the group of senior managers involved in the research. The mode of presenting in this section is based on the inductive nature of the research process which reflects the unfolding world. [Elaboration is provided below in both the findings and discussion sections].

#### **Balance of thinking: single views - multiple views (internal & external)**

Analysis of our case data with awareness of the concept of 'openness disposition' raised for us the question of "to what extent do those about to engage with scenario planning exhibit a propensity to fix on a single view of the world, or are they willing to hold multiple views of the world as suggested by others?"

Our findings suggest that where there is a willingness and capacity to handle multiple views of the world without needing to commit to a fixed perspective, openness is evident and participant readiness to engage in and benefit from scenarios is enhanced, in comparison to a propensity to fix on a single view of the world. Data from the pre-workshop interviews highlighted differences within and between

management team members as to how their balance of thinking shaped their readiness to engage in scenario planning. In individual interviews, participants that exhibited a capacity to describe multiple views of the future appeared subsequently able to engage constructively in scenario conversations with their peers, contributing productively to the dialogue that creatively developed different scenarios and yielding potentially valuable strategic management insights. By contrast, those that were unequivocal in individual interviews were observed to be less productive, and more visibly less engaged, participants in scenario conversations.

*Empirical example 1: Expressing multiple views of ways the world might be*

In a pre-workshop interview, commenting that a required “big system leap is difficult due to compatibility and because of the investments that are already there”, senior manager A then calmly adopts an apparently contradictory view that “Technically, I do not see much trouble. In the timing of projects, I see a risk of a lack of investment”.

In this interview segment, senior manager A comfortably, and without detectable signs of stress or anxiety, articulated two contradictory views— that there are risks in investing and in not investing, and that technical capacity is and is not a problem that needs addressed. Openness to equally plausible situational needs and future possibilities unfolding during conversation indicates a “capacity to live with and to tolerate ambiguity, uncertainty and paradox in order to allow for the emergence of new thoughts or perceptions” (Eisold, 2000, p 65). During fieldwork, senior manager A was consistently observed to be an engaged participant in the scenarios process and a constructive and productive member of group conversations. Furthermore, Senior manager A appeared able to engage effectively with scenario conversations as they evolved – in and outside of workshops, remaining untroubled when encountering contradictory perspectives raised in conversation with colleagues. Thus, analysis of senior manager A’s conversational approach suggests that a capacity to handle competing views of the future without needing to commit to a fixed perspective enables effective participation in the scenarios process.

*Empirical example 2: Commitment to a singular world view*

In contrast to the openness consistently exhibited by senior manager A, senior manager D’s performance in pre-interviews and the strategic conversations of the scenarios process was defined by a singularity of world-view. In an interview, senior manager D stated forcefully:

“A planning discussion does not interest me at all. It just does not matter! In all cases, a logistic puzzle needs solving: a red coat, blue coat, yellow box and a green pit all need to be present at the same time”. Later in the interview the senior manager reinforces the position when he stated: “Just do your job. This is the best guarantee that nothing happens to you”.

In this conversation, the individual questions the role and purpose of planning and thinking about strategic possibilities, exhibiting a single-mindedness about the future. Positing that issues that arise have to be (reactively) managed and it is simply a case of bringing the appropriate individuals together to solve ‘the problem’, the individual continually exhibited skepticism, linear thought and limited understanding of potentialities in the future. This closed perspective carried into engagement with scenario conversations characterized by rejecting the ideas, beliefs, opinions, or influence of others,

exhibiting limited peripheral awareness beyond role requirements and being unable to perceive latent opportunity and threat in novel scenario situations.

The empirical examples above are illustrative of the recurring observation from our fieldwork that participants exhibiting an ability to hold multiple world views were better able to engage in, perform and benefit from the scenarios process. Through their conversations, such participants were able to contribute to the holding open of situations and possibilities during discussions, as well as personally coping with and learning from the tensions and dilemmas that are inherent in such situations. By contrast, those whose talk consistently expressed a singular world view had a dampening effect on emergent possibilities during scenario conversation, seemed less able to engage with colleagues and as individuals seemed to extract little value from the scenarios process.

### **Attitude towards timescales: fixed timescale - flexible timescales**

A further question raised by our analysis was “to what extent is readiness to participate in scenarios influenced by attachment to a fixed schedule of activity or willingness to accept a fluid and unfolding schedule of activity?”

We interpret as ‘openness’ an attitude that ‘timescales are always approximate’ when seeking to manage events and projects. When anticipated timescales associated with plans are challenged in strategic conversation, an openness to timescale will be reflected in the talk of individuals showing seamless readjustment and the exploration of implications of new temporal parameters. For example, consider a team planning to install a new technology that sets out an initial project plan during a project design phase. As initially unanticipated factors arise (e.g. a new component being available 3 months ahead of schedule, a secondary project on which the implementation depends running 4 months late), the team seek to revise their plans according to the trajectory of events – evaluating what might be achieved according to the best information available. When an open disposition to such rolling evaluation of likely timescales of events is the natural way of operating, readiness to handle the ambiguities and uncertainties of scenario conversations is argued to be in evidence. Conversely, when shifting timescales cause a conversation to grind to a halt, and participants are unable to articulate a response, it can be argued that they are disposed to more rigid views of timescales and thus are less likely to be able to engage with and profit from scenario work.

#### *Empirical example 3: A collective intention for more flexible attitudes to timescale*

In the case of ProRail, the senior management team acknowledged openly, in workshop 1, that their focus was normally short-term in nature and key performance driven. This was partially explained by the focus on the achievement of targets set out in their 2012-15 strategic plan, with the plan focused predominately on change projects 1 to 6 noted above. The senior management team recognised a limitation in their attitude to timescales, whilst indicating that they would prefer to be able to tolerate and explore the changing world with a more fluid view of scheduling. As one senior manager noted:

“The plan restricts us in the end. It is a phase in which we are heading towards, driving and managing more punctually. The next step is daring to let the plan go”.

The potential for impacts on organisational performance entered the strategic scenarios conversations too. In the subsequent scenario workshop stress-test workshop one senior manager commented:

“It looks as though we have concluded basically the same as we already concluded in the scenario implications workshop: that things are developing faster and faster and that if we want to keep up, we have to organize things differently and approach ICT differently (emergent instead of blueprint)”.

This comment exemplifies a desire to be more flexible towards scheduling, which would open up the potential of scenario- and indeed other strategic management – conversations revealing new insights that might translate into beneficial organisational performance effects.

*Empirical Example 4: An engrained habit of thinking in terms of fixed, short-term timescales*

As an organisation responsible for managing complex operations, the tendency to revert to thinking in terms of fixed, short-term timescales that maintained system performance appeared deeply engrained in individual and group articulations of ideas. This created a tension in the scenario conversations as the collective disposition towards fixed timescales jarred with the shared intention for a more flexible attitude to timings (as expressed in example 3). This tension seemed familiar to the group, along with consequences for organisational performance. As Operational Director 1 commented:

“Availability [of our operating system] must be high and at the same time it must be possible to change. It is not an issue of choice between change and the same as our system needs to handle both. We are not really doing that now; we approach it as a choice which projects suffer from as a result”.

During the workshops, this tension contributed to the senior management team having difficulty in agreeing the core components to build scenarios. For example, there was significant discussion around how information and communication technologies (ICT) might affect demand for travel, the role of ICT to impact rail system complexity, the key stakeholders (including Government) driving ICT developments in the future, and the role of ICT standards in the future. These issues and the possible future developments were considered in the period to 2030 given the length and nature of investment timescales in the rail industry. Scenarios conversations on this topic oscillated between a desire on the one-hand for a project based ‘blue-print’ approach to ICT with clear, fixed and chronological project timescales over the duration of the project, and a more incremental and emergent approach that reflected the contemporary nature of rapidly changing ICT developments around ‘big data’ and user-driven ‘apps’. Whilst the group was able to acknowledge and agree that the emergent approach was appropriate and would require more flexibility in ICT project definition, implementation and attitude to timescales, the group also seemed unable to fully let go of a top down desire for control in favour of a more entrepreneurial evolutionary ‘go-with-the-flow’ approach (Jullien, 1995; Jullien, 2004; Chia, 2014).

Such tensions during the process of establishing and developing scenarios highlighted the senior management team’s desire to be in control of the future with clear fixed timescales. This inclination indicates a preference to be acting within a known comfort zone (French, 2001), which negatively impacted the pace at which scenario conversations were able to proceed and also limited the paths along which scenario conversations were allowed to proceed by the group.

**Orientation in behaviour: single mode - multi-modal (thinking, doing, exploring, exploiting etc. including managerial readiness to embrace ambiguity and uncertainty)**

Finally, our analysis raised the question “to what extent does an openness to varied modes of responding to strategic conversations influence participant readiness to engage in scenario planning?”

As we analysed our fieldwork data and findings, we observed that expressed participant willingness to switch operating style according to situational demands corresponded to ability to engage in, perform and benefit from scenarios conversations. Specifically, we observed heightened readiness to participate in the scenarios process from those that described themselves comfortable in changing their style of operating - from immersing themselves in operational processes to detaching themselves from the organisation, and from capitalising on the opportunity of a situation to investing in creating future opportunities without returning to some habitual mode of operating.

For example, consider a managing director that one week spends all her time in an operations department as part of resolving an emergent crisis, then the following week takes a retreat away from the operation to formulate strategic plans in a reflective way, before returning to the organisation the following week to undertake a mix of operations meetings, sales planning and staff reviews. This individual might be said to exhibit openness to varying modes of action according to the needs of the situation. Conversely, a managing director who always calls a meeting and sets a new performance objective for every emergent insight in their operation might be said to single-minded in their selection of response modes.

*Empirical example 5: The anxiety of contemplating a non-task oriented approach.*

In the case of ProRail the weight of shared concerns identified in the interviews was oriented towards internal issues – problems to be solved, tasks to be achieved, and need for agreement on priorities. This reflected participant dissatisfaction with the performance of the organization to date (as demonstrated by the seven change projects in figure 1). Additionally, the need to deliver on performance as part of the budget funding process encouraged a task focus. There was also an acceptance (by the senior management team) that there were a limited number of industry-related areas that would impact ProRail in the future.

However, during the reflective moments following interviews, most managers expressed anxiety at the limitations that a short term task focus might imply for the industry and ProRail in the future. For example, as one manager commented:

“We are simultaneously homogeneous and different. There are several potential ProRails and several worlds that ProRail could live in. Do we go with the flow or facilitate the future? We are clear what we do and why we do it, or do we develop potential futures?”

Further anxiety emerged during interviews in relation to the time commitment that was required to participate in the scenario process, given the short term demands of day-to-day life of the senior management team. Our observations of the behaviours in and in parallel to the scenario process consistently identified prioritization based on task urgency and a high level of goal orientation as common characteristics held by many of the senior management team members.

*Empirical example 6 – The green shoots of multi-modal thinking*

However, this collective tendency towards a particular mode of acting softened as the scenario conversations progressed. An emergent consequence of the scenario building workshop was the

fundamental shift in the potential for ICT to impact the ProRail operations. Such a shift challenged the strongly held beliefs about the top-down blue-print approach to ICT that ProRail adopted in the past (to provide clarity and certainty in the plan, if not the implementation). Contemporary drivers of change, including big data, innovative 'apps' and incremental approaches to ICT developments were now challenging ProRail to be more open to innovation and develop flexible options for the future. Such an approach would be a fundamental shift for ProRail and for the governing Ministry in how action was to be taken. The workshop participants concluded that the way the Ministry controls ProRail is influencing the way ProRail approach ICT projects. Every time there is a disruption or failure in the network ProRail is asked by the Ministry to deliver detailed plans on how to prevent this in the future. To support further exploration of future possibilities the management team agreed to 'stress-test' the implications of innovation in traffic control systems over the scenario timescale, opening up new ways of acting in response to insights from strategic conversations.

The reflections of session participants further reveal an interest in embracing new ways of behaving. Discussing the final scenarios process report, one senior manager commented that it was "fascinating to read; it made me think about hockey games of my daughter. If you tell the girls all they need and must do, nothing good happens. If you emphasise their good things, the flow will come". Echoing the sentiments of colleagues, he continued to develop this metaphor into an explanation of why a blend of different modes of acting, rather than a commitment to a single way of managing, would be required to address the future challenges uncovered through the scenario process.

Here we see evidence of flexibility and openness to new ways in acting, revealing an increasing propensity over time for the management to exhibit comfort working in different ways with ambiguity and the unfolding situation. Initially, scenario conversations were stalled by a tendency to react to insights in a single way, but as conversations progressed, the participating team was able to identify that more value could be yielded by the process from opening up to new ways of responding to scenario insights.

## **Discussion**

### *Scenarios, readiness and coping with the unfolding world*

Reviewing our emergent readiness framework, we can consider the question "to what extent does openness disposition influence how participants are able to engage in, perform and benefit from strategic conversations of scenario planning?" Our findings suggest that an openness disposition creates a "capacity to see what is *actually going on*, in contrast with what was planned for, expected or intended – even when what is actually going on is uncertain or even unknown" (Simpson and French, 2006, p 245), which translates into effective and insightful scenario conversations. An openness disposition requires the management team to "cultivate the practices of listening, waiting and passivity in contrast to directing and doing" (Simpson and French, 2006, p 246), fostering individual and collective capacity to cope with the equivocality and ambiguity arising in scenario conversations. In essence, openness disposition opens up a space within which dialogue can flow, individual perspectives can be shared with others, and collective insight can be built through the performance of scenarios conversations. Where an absence of openness disposition was observed in the ProRail case along any of the three characteristics of the readiness framework, the potential for engagement in, productive performance, and profit from scenario conversations was diminished.

Our findings also align with the notion that scenario planning as strategic conversation is about worldmaking in constantly changing circumstances across time and space (Goodman, 1978), where time is not considered as chronological and space is not limited by distance. Both are connected through a process of '*relevating*' (Paton, Chia and Burt, 2014). The scenarios strategic conversational process is designed to open up an opportunity to share ideas, experiences, and concerns by de-constructing and re-constructing world views (Chia and King, 1998; Cooper, 2005). As conversations exposing us to the ideas of others, scenarios can challenge regimes of signification - acting to create a breakdown in current thinking to reveal the inadequacies of such thinking and understanding (Sandberg and Tsoukas, 2011). It is important to recognise that in a constantly changing world "knowledge itself must be understood as a momentarily stabilized and encoded pattern of relations always about to become something other than itself" (Chia and Morgan, 1996, p 58). In this way, the scenarios process can become the narrative platform for strategic 'worldmaking' conversations not the end product of worldmaking. To benefit fully from this process seems to require an openness disposition that allows us to challenge our own existing views, experience novelty and be open to seeing the world for the first time (Chia and King, 1998). In some instances, an openness disposition will manifest as participants being comfortable with 'no decision' as the outcome arising from strategic conversations (Chia, 1996), when the propensity of the situation is not sufficiently pregnant with insight and possibility to take a decision (Jullien, 1995).

Managers can be comfortable with the familiar and be unaware of 'otherness' that is unseen in an unfolding situation (Chia, 1999). Traditional modes of thinking are based on "a form of linear and hierarchical thinking that goes from sign to referent, image to reality and effect to cause, motivated by an origin-seeking impulse" (Chia and King, 1998, p 469). In the case of ProRail, such a way of (business as usual) thinking is illustrated in empirical example 3. Otherness is based on revealing the unseen, yet complementary "silent oppositional concept that functions to constitute the differences that, in turn, enable conversation to stabilize its meaning" (Chia and King, 1998, p 470). Otherness, if revealed, is not about searching for (the sources of) order, it is about over-coming the seduction of 'simple location' to embrace the creative relational process that links the seemingly unrelated into new novel ways of worldmaking.

Yet, our fieldwork highlights that attaining sufficient participant readiness to perform scenario planning conversations in a beneficial way may be more problematic than is suggested in the extant scenario planning literature. Our findings suggest that individual and collective outcomes from the scenario process are enhanced where participants display an openness to equivocality and "framing what is seen in far greater complexity than a checklist can incorporate", treating conversation not as "a technical fact-gathering activity but underpinned by empathy and creativity ... marked by receptivity, openness and preparedness for empathy" (Cornish, 2011, p 140). Without this capacity for openness and empathy being present in individuals or a collective, scenario conversations may prove slow, frustrating and without discernible value.

#### *Openness, propensity and challenging business as usual thinking*

To exhibit an 'openness disposition' shows acknowledgement and acceptance of what can be described as 'the propensity of the moment' (Jullien, 1995; Jullien, 2004) – a sense for the energy and movement of processes in the world, even if their combined momentum takes us into an unfamiliar territory. An openness disposition thus avoids premature rejection of options and requires a



managerial mind-set that understands that knowledge arises out of interaction rather than on the basis of preconception and pre-planning (Simpson and French, 2006). In such circumstances managers with limited openness are likely to revert to the short-term and familiar (Levinthal and March, 1993), and will be unlikely to be able to have conversations with others that open up the potential to think the (previously) unthinkable.

Our findings suggest that scenario conversations enable participants to perform incisions into the changing world, achieving outcomes such as attending to unresolved issues and concerns, labelling and clarifying experience, adding meaning where none existed, creating space to let new ideas flourish and drawing out new and novel insights about the changing world. Our case suggests that to achieve such outcomes requires participants to exhibit in their conversations openness to multiple views, flexibility in scheduling and thinking about timescales and holding onto contradiction and suspending bias towards the familiar. As illustrated by the empirical examples in the previous section, participants from the ProRail management team that were ready to challenge their prior assumptions, remain open and develop a heightened awareness of novel possibilities were able to profit from scenario conversations.

Equally, we observed that where an openness disposition was initially weak – such as in relation to timescales or modes of acting in the readiness framework – the act of participating in scenarios conversations over time moved individuals and collectives enhanced the readiness for more productive engagement in future scenarios conversations. In other words, through involvement in a sequence of scenario conversations, participants became more disposed towards holding multiple views, remaining more fluid about timescales and being open to multiple modes of responding to insights yielded by strategic dialogue with colleagues. This insight suggests that, aside from immediate strategic management learning and insights, participation in scenarios conversations might nurture an openness disposition that benefits individual and collective potential to engage in subsequent scenario sessions, and also carry a more flexible and responsive approach into everyday work.

## **Conclusion**

The literature is replete with ‘successful’ case studies of scenario planning across a wide set of contexts. However, concerns have also been raised within the literature about a lack of insight as to the limitations and boundaries of scenario planning, such as the emotional and psychological capabilities of individuals and groups to engage with scenario planning. Our findings offer a partial address to these issues as our framework is a first step towards identifying the dispositional characteristics of ‘readiness’ to engage with scenario planning. We have identified how managers might react to and cope with ambiguity and uncertainty of their constantly changing world through strategic conversation. We have identified the need to understand, remain open and manage the strategic conversation by laminating fragments of conversation until a coherent thread emerges. The empirical evidence reveals that this requires managers to be open to novelty, newness and otherness which are the contrary opposites of the familiar.

In order to benefit from scenario planning our study reveals the importance of an openness disposition through which “we are raising the possibility that working effectively in the present moment may require us to acknowledge our experience of not knowing, of ignorance” (Simpson and French, 2006, p 246). Recognising and accepting such a situation is likely to be uncomfortable for many senior managers. Senior managers tend to be time-constrained and as a consequence strategizing may be

considered a luxury. Under such conditions the tendency for management will be to rush into actions based on simplification of the complex situation, and be unaware of the unintended consequences of such actions. Overcoming such a tendency and developing the capacity to absorb, contain and stay open did not emerge early in the ProRail fieldwork. It was in the stress-test workshop where the change in managerial approach became fully evident. As one manager noted:

“Scenarios are an instrument to have a strategic conversation. It is good to have a discussion like this before we start doing what we do always”.

The ‘readiness’ characteristics and dimensions that are presented in this paper is one possible step in addressing some of the concerns that we identified in the literature. We argue that it may provide clues as to individual and organizational ‘readiness’, however, we do not offer it as a panacea. We have sympathy with Wack’s (1985b) concern about ‘interface’ and hope that our contribution adds some deeper understanding about his concern. We recognise that further research is needed in this area to identify additional constructs as well as explore ‘readiness’ in different contexts.

As an initial step into an underdeveloped aspect of the scenarios literature, we believe this paper opens up further possibilities for researching scenario planning as strategic conversation. For example, it would seem valuable to explore dialogue as the basis of sensemaking (rather than as an analytic tool) in order to further understand how mutual meaning consensus occurs and how collective benefits might be realised through scenario conversations. Furthermore, exploring the antecedents of participant readiness and openness disposition could add further insight to our understanding of the value and limitations of scenario planning to a practitioner audience. And research could also be undertaken to examine in more detail how ‘openness disposition’ changes as the scenario process is performed – within and even between scenario planning programmes.

As a ‘strategic conversation’ perspective can be applied beyond the scenarios process, we believe the concepts of ‘participant readiness’ and ‘openness disposition’ offer potential in developing understanding of performative aspects of topics with strong analytical traditions. Specifically, examination of the applicability of ‘participant readiness’ and ‘openness disposition’ in strategy formulation, foresight and futures studies may offer fruitful directions for further research. Furthermore, recognising the limitations of claims that can be made from a single case study, replication studies examining the effect of ‘participant readiness’ and ‘openness disposition’ in alternate national contexts, industries and organizational types would further deepen understanding of scenarios from a strategic conversation perspective.

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