ON LEADING, LEARNING AND ORGANIZATIONAL CHANGE:
A SENSEMAKING PERSPECTIVE

Theme: Methodology

Carter, MR

University of Bath

Colville, ID

University of Bath

Contact author: Colville, ID
University of Bath

School of Management
University of Bath
Bath
BA2 7AY

Telephone: 01225 386688
E-mail: I.d.colville@bath.ac.uk

Abstract

There is a tension between organization and learning because they pull conceptually in different directions. There is also a gap between living life forward and understanding backwards about which it is difficult to learn because learning is retrospective.

This paper links leading, learning, and change in an attempt to bridge the gap while at the same time it explores the tension between orgnaization and learning. We introduce models designed as heuristics that express the learning tendencies associated with two retrospective activities that can help in informing change; future perfect thinking which tends to confirm past knowledge, and requisite variety which discredits past knowledge.

The tension is characterised as finding a balance between these two tendencies, because as is illustrated by data drawn from to contrasting organizations, you can err on either side of the tension. We conclude that to err is to both organise and learn.

Introduction

Many who witnessed the events of September 11, 2001, let alone received the warnings, found it difficult to believe what they were seeing. Indeed, as events unfolded, viewers updated their beliefs as to what they were seeing which changed what it was they were seeing. A terrible accident becomes a terrorist attack: hind-sight is bound up with hind-believing.

This paper is not about the events of September 11 as such but it is concerned with the processes it highlights and why such events highlight that process. According to Kierkegaard (cited by Dru, 1938) 'life is lived forward but understood backwards' and this paper asks how or if it is possible to balance the future-oriented, forward living of life with the retrospective-oriented understanding of what happened. It suggests that the gap between living forward with flawed foresight and understanding backward with equally flawed but mischievously seductive hindsight (Weick, 1999:134) is central to the process revealed on September 11 and lies at the heart of the sensemaking perspective (Weick, 1979, 1995, 2001). Working from this foundation, we suggest that learning and leading are primarily identified with different sides of this gap, and that it is possible to see change as a synthesis or bridging concept.

For example, learning is clearly consistent with the backward understanding: that is, how can you learn from something which has not happened yet?   And while learning has a retrospective feel to it, the other side of the gap, that of living life forward can readily be construed in terms of leading (you lead to a future time /place).   However, while leading is imbued with a sense of time future and of things to come, the pronouncements of leaders are interpreted over and against the extant organizational culture which itself comprises the history of retained learnings. This provides a conceptual linkage between leading and learning via culture. Our position further suggests that the meaning, and hence the response to leadership, while it is shaped by culture, is not determined by it. We can learn from history without having to repeat it. Indeed, Schein, for example, holds that the unique talent of leaders is their ability to work with culture (1985, p2) but it does suggest this work involves changing what an organization says, sees and remembers.

Such a formulation does two things: first, it establishes that organizational change can be conceptualised as the synthesis, or perhaps more appropriately, the mediating concept between leading and learning, and living forward and understanding backwards. Second, as

saying, seeing and remembering are the elements of the organizing model of enactment, selection and retention (Weick, 1979) which underpin the seven characteristics of sensemaking (Weick, 1995), when dealing with leading, learning and change, we are engaged with sensemaking. For Weick (1995), sensemaking is best described as a developing set of ideas with explanatory possibilities rather than as a body of knowledge; a low paradigm that promotes speculation and conversation. This is the spirit in which our paper is offered to the OLK5 Conference and we look forward to the speculation and conversation it hopefully induces with conferees.   It behoves us to point out that that this paper is more than just informed by the writings of Weick it is grounded in them and we must acknowledge the great intellectual debt we owe to him. A possible criticism of his work, and one voiced by Kilduff (1996) was that many of the examples used to elaborate the ideas are not derived from recognisable organizational contexts. Our aim here is develop the sensemaking perspective and to show that it is relevant to more instantly recognisable organizational contexts.

The paper proceeds with a brief introduction to the sensemaking perspective together with discussion of requisite variety and the oxymoron that is organizational learning. This sets the scene for the next section which attempts to balance the forward living of life with its backward understanding using qualitative data gathered from change interventions (Carter, 2001). We then include a brief section entitled method, although since our aim is to provoke conversation, we do not follow more traditional stru[i]ctures of a detailed methodology/fieldwork reporting section but instead, retain our primary focus on the section which follows. Entitled 'back to the future', here we address and illustrate both *future perfect thinking* and *requisite variety*, which we then bring together in a graphical representation and discussion of *both…and thinking*. The paper concludes with some speculation about the relationship between leading, learning, and change in organizations, suggesting that leading is to do with increasing receptiveness to requisite variety while also promoting a novel pool of response repertoires which allow people to believe, see, and act in more expansive and changing ways. We also suggest that learning is to do with recognising how this believing seeing and acting differs from what has gone before and accommodating and adapting to those differences.

Sensemaking and requisite variety

Put plainly, sensemaking is literally what it says it is, namely making something sensible. Put less plainly, it is about how people make sense of their world by reducing equivocality or ambiguity. That is, in an effort to tame 'the wild profusion of things' and to introduce a workable level of certainty, people make informed bets as to 'what is going on' by ruling out a number of possibilities or 'might have beens' before arriving at a conclusion (Colville, 1994).

In the original organizing model (Weick, 1979), this reduction of equivocality was conveyed through the linked processes of enactment (saying), selection (seeing) and retention (believing).   More recent formulations have recast this reduction of equivocality as the sensemaking process which has seven properties:
1. Grounded in identity construction
2. Retrospective
3. Enactive of sensible environments

4. Social
5. Ongoing
6. Focused on and by extracted cues
7. Driven by plausibility rather than accuracy

<div align="right">Weick (1995:17)</div>

In a sentence, this says that sensemaking roughly follows a sequence in which people concerned with identity in the social context of other actors engage in ongoing events from which they extract cues and make plausible sense retrospectively while enacting more or less order into those ongoing events. When organizations are designed to maintain or strengthen these properties, their ability to make sense is strengthened, when the design undermines or weakens these resources, then people and organizations will lose their grasp of what is occurring (Weick, 2001: 463)

For the purpose of this paper, we have chosen to focus on two of the seven characteristics, in particular: *retrospect* which is concerned with reflective understanding and *enactment,* which is to do with the action of forward living. In doing so, we will be replicating the tactics used by many organizations as they attempt to make sense of and learn from the world. To understand the implications of this, we will also need to refer to the concept of requisite variety.

Requisite Variety

Requisite variety is a concept drawn from open systems and is often expressed as a law that states 'that the variety within a system must be as least as great as the environmental variety against which it is attempting to regulate itself (Buckley quoted by Weick, 1979:88). If sensemaking is the reduction of equivocality, then the organization must first register that equivocality before dealing with it. Hence it follows that if a simple process is applied to a complex environment, only a small proportion will be registered and much equivocality will be left unnoticed, let alone suppressed. That is, the number and variety of 'might have beens' that are entertained in answer to the question of 'what is going on here?' do not exhibit enough complexity of beliefs or requisite variety as to what one might be seeing. Only variety can regulate variety and that is why in order to make sense of an apparently nonsensical world, the best stance is to meet it on many fronts and with novelty- indeed this is where learning begins. However, working against this is a strong tendency within organizations to use memory to define situations in the same old ways and to plug in the same old responses – this is where learning does not begin (Colville, 1994: 220).

The tendency and the trap is that people in organizations tend to interpret current enactments through past beliefs. This is where the import of Perrow's (1984,p.23) observation that 'warnings of an unimaginable event *cannot be seen* because it *cannot be believed*' (emphasis added) comes home. What also emerges, less dramatically, is that organizational learning is an oxymoron when viewed in the sensemaking model. Weick and Westley (2001) argue that to learn is to disorganize or increase variety; while to organize is to reduce variety. These are held to be antithetical concepts and hence the oxymoronic nature of organizational learning. There is said to be a tension between organization and learning but instead of looking to reduce it, or make the term less oxymoronic, the argument is that the tension can be beneficial and the oxymoron should be affirmed. The organizing model has many advantages

to it as it exploits past successful learning and its forte is efficiency.   Increasing requisite variety allows us to explore the possibility of new learning that leads to creativity and innovation. However, it does so with the potential expense of reinventing the wheel from scratch, or the organization may become so open to so many interpretations as to what is going on that it becomes paralysed by the complexity of beliefs and is unable to take simple action. There is a balance to be struck: a balance between the tensions of forward living and retrospective understanding; and between increasing variety and reducing it;   between retrospective sensemaking and enactment.

Retrospective

Weick suggests that Schutz's (1967) analysis of *meaningful lived experience* laid the groundwork for retrospective sensemaking, which captures 'the reality that people can know what they are doing only after they have done it' (p.24).

> 'When by my act of reflection, I turn my attention to my living experience, I am no longer taking up my position within the stream of pure duration, I am no longer simply living within that flow. The experiences are apprehended, distinguished, brought into relief, marked out from one another; the experiences which were constituted as phases within the flow of duration now become objects of attention as constituted experiences. What had first become constituted as a phase now stands out as a full-blown experience, no matter whether the Act of attention is one of reflection or reproduction…..*For the Act of attention* – and this is of major importance for the study of meaning – presupposes an elapsed, passed-away experience – in short, one that is already in the past.'
>
> Schutz, 1967: 51

Weick goes further to argue that 'time exists in two distinct forms, as pure duration and as discrete segments' (1995:25). We capture the gist of this by applying it to processes of adaptive change[1] by taking a snap shot of ongoing organizational activity, where each constitutes a series of smaller activities or interactions. From this view on retrospect, Weick concludes that the generation of meaning is an attentional process – of activity in the past, based upon when meaning took place and memory of that meaning.

Enactive of sensible environments

Enactment is a term Weick uses to convey the sense that in organizational life, people often produce part of the environment they face: 'they act, and in doing so create the materials that become the constraints and opportunities they face' (1995 p 31).   However, Weick underlines the problem of perceiving sensemaking in organizations as an individual act and stresses the *social and conversational* aspects of the process – 'sensemaking is grounded in both individual and social activity' (1995 p6). He reminds us that 'conduct is contingent upon the conduct of others, whether those others are imagined or physically present' (1995:36).

In earlier work (Carter, 2001), we cited case studies from the lives of actors within public and private sector organizations grounded in the rituals of their daily lives - devoid of major calamities; e.g. the large canvases upon which Weick tends to paint his examples of

---

[1] Adaptive change is the phrase used by Heifetz (1994) to describe situations not amenable to technical solution but instead, requiring experiment, novel thinking and innovation.

sensemaking: the Bhopal chemical leak, (Weick, 1988), Tenerife air crash (Weick, 1990) and Mann Gulch fire (Weick, 1993). We sought to shed light on why, at different levels of organizational working, we are continually in danger of being overwhelmed by 'surprising events'; the unexpected happens and yet actors are rarely able to demonstrate 'what is happening here' let alone an expectation of the unexpected (Weick & Sutcliffe, 2001).

A clue to why we are not good at dealing with the unexpected is given by unpicking two common aphorisms:

Seeing is believing
&
If it ain't, broke don't fix it

We *see* an airliner crash into a building and we *see* one of the largest companies in the world expand at a phenomenal rate over a ten year time frame and then apparently collapse in weeks, yet *seeing unbelievable* events does not help unless we have a corresponding event against which to judge the event and create new beliefs. This situation is exacerbated if we also work to a principle that it is only after an event has happened that we can fix it. The thinking is flawed as it suggests we can only fix what we *see* happening and *should* only fix things when we *see* that they have broken. By not searching out and testing our assumptions, we do not create a *belief* that those assumptions may be flawed and by the time we do realise that the unbelievable is happening, the situation is often broken and we lack the resources to make sense of it. This is precisely the trap that successful actions create and many organizations continue to encourage: that is, we are prone to replicating activity and filtering out subtle changes of context and environment.

Sensemaking seeks to explain the retrospective nature of this process, how organizations are predisposed to simplification and the *over crediting*[2] of past actions as indicators of the future. We are lured by the notion of consistency and replication: it is comforting for people and organizations to feel 'in control' as events unfold; to consider (albeit briefly) and determine meaning (enact what is happening). However, where such consideration and meaning is based on 'lived' experience, it becomes easier for us to attribute familiar labels such as 'accident', 'blip in the market', 'instrumentation failure' or 'accountancy convention': if they match (more or less) the socially accepted meaning, they act as short-hand beliefs and confirmations that can be stored for future use. This is the processing of retrospect and enactment.

Method

The methodology and data reported here are consistent with Schein's (1987) clinical approach where data are gained as a result of change interventions, conducted by the first author operating as a process consultant. Our empirical evidence was drawn principally from

---

[2] Total crediting occurs when an organization responds in a totally habitual way with how it acts and interprets being under the control of retained memory/ previous learning. This organization has seen it all before, and will most likely see it all again until it is too late.

Total discrediting occurs then the organization denies its memory / learnings, together with any taken-for-granteds about ways of acting and interpreting. This organization has not seen anything like it before, and will not see it until it is too late. The one fails for lack of flexibility, the other from lack of structure.

five large public and private sector organizations, including a private bank and the police service in which, primarily, the first named author acted as a process change consultant. In each case, the aim was to facilitate the leading and learning of adaptive organizational change. To simplify matters for the reader, this paper draws on data from only two of these cases, a music company and a central government department, chosen here because of their striking ability to shed contrasting light on our propositions.

We engaged with and learnt from our actors – members of the executive team in each case - as we attempted to understand the commonsense worlds they had created, mindful of Wittgenstein's (1968) warning that things that are most important for us are hidden *because* of their simplicity and familiarity. We encouraged them to step out of their common sense worlds and travel back in time to review and challenge beliefs and knowledge, to gently (and some times not so gently) nudge assumptions about previous journeys.

We travelled with our actors (for up to five years) as they navigated the complexities of organizational life and sought to return to the common sense world by delivering simple (but not simplistic) messages for their people. In so doing, we learnt what happens when leadership creates a system to secure effort and define purpose and we learnt what happens when such a system is incomplete: when assumptions are made about overlapping meaning, when changes are treated as fixed recipes. Most importantly, we learnt what happens when leadership attempts to intervene but forgets that the quality of intervening in organizational change is defined by enactment not enthinkment (Weick, 1979).

So rather than try to recreate why certain events *had* occurred, we set a broad direction of working with executive groupings as they sought to adapt to and shape changes – we watched their circumstances develop and tried to understand, over a period of time, *what* they were doing – that is, how they made sense for themselves and their organizations. '….from the perspective of the managers and leaders who sit in the eye of the storm, shaping and being shaped by it.' (Champy and Nohria, 1996:263).

Back to the future

Organizations spend a deal of time and money planning for the future. The value of this activity is questionable in the sensemaking perspective if, following Schutz (1967), we accept the understanding of actions and the learning derivable is in the backward reflective glance. Furthermore, if we also acknowledge the inherent tension between organizing and learning discussed above, then finding a balance is difficult. This section explores the nature of the tension and is illustrated by data taken from two organizations that erred on either side of the tension and failed to get a balance. One engaged in total crediting and saw the future as a continuation of the past, while the other was overwhelmed by the technology of the internet and engaged in discrediting to a degree that it was unsure as to its identity and if it had a future. From this, we present a model that provides a tactic for thinking about balancing order and disorder which is subsequently used to inform a discussion on leading and sensemaking.

Future perfect thinking

All organizations make plans and statements about what they will do in the future. It is expected and institutional theory (e.g. Powell & DiMaggio, 1991) will explain through the use of coercive, normative and mimetic forces, why it is expected. This is despite the fact that the future is essentially unknowable (Colville, Waterman & Weick, 1999), in large part because knowing involves sensemaking and sensemaking operates retrospectively. However, this does not stop us from trying. One way for planning that allows profit from the advantages of retrospect is to assume that the future has already happened. Weick (1979) suggests that enactment produces outcomes that are given coherence retrospectively through the use of plausible explanations for how events occurred. He suggests that the telling of history in this way facilitates sensemaking because it is easier to describe histories about past events rather than future events. In future perfect thinking, you merely change the tense of events and turn the future into the past. Essentially, the argument here is that the placement of an event in time alters the sense that is made of it.

> 'The actor projects his action as if it were already over and done with and lying in the past. It is a full-blown, actualised event, which the actor pictures and assigns to its place in the order of experience given to him at the moment of projection. Strangely enough, therefore, because it is pictured as completed, the planned act bears the temporal character of pastness…The fact that it is thus pictured as if it were simultaneously past and future can be taken care of by saying that it is thought of in the future perfect tense'
>
> Schutz, 1967: 61

While it may sound difficult to grasp, the use of future perfect thinking is eminently practical and used extensively in sport where, for example, the kicker of penalties in rugby is imagining the successful completion of the kick before he kicks it in an attempt to increase the probability that it will happen. The future becomes a self-fulfilling prophecy.

The link that Weick (1979, 1995), Mintzberg (1978) and Boland (1984) make is that reflections on past activity tend to provide consistency of behaviour for future activities. A classic illustration of this from our data was where a combination of events produced a situation that made the (private) bank a saleable entity, events which were given a label – *strategy*. In this sense, it could be said that the process of 'historicizing' provides confidence for action. However, the downside of future perfect thinking is that 'the *feeling* of order clarity, and rationality is an important goal of sensemaking, which means that once this feeling is achieved, further retrospective processing stops' (Weick, 1995, p.29), effectively suggesting that our inclination to create order narrows perspective.

In figure 1, we give a graphical representation of future perfect thinking.

Figure 1 Future Perfect Thinking

Future Perfect Thinking
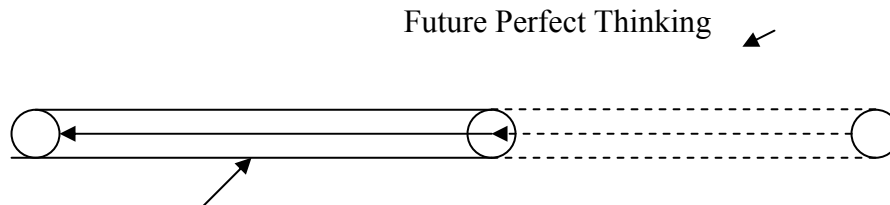
Future Perfect Thinking

Time past   Time Present   Time Future

Here, we see a narrow channel drawn speculatively from the future, through the present, into the past, where it can be fed from the narrow channel of what was known, or rather what was thought to be known, about previous events. The strength of this model is that it provides detail and certainty that may lead to action. The weakness is that it reduces the notion of action to the *probability* of outcome, rather than the *possibility* of outcome. This is fine where the rules of the game are invariant and we know that a discrete activity will always be positively rewarded e.g the rugby player always gets points for putting the ball over the posts: however, it becomes a straight jacket when events do not play to the rules or the rules are in transition.

Gioia et al (2002) attempt to inform this discussion by developing Schutz' (1967) and Weick's (1979) concept of *future perfect thinking,* suggesting that organizational members can and do select meanings for past events that suit/fit current needs by paying attention to actions that confirm the interpretation (Lant & Shapira 2001). Further, they provide examples where leaders have proactively determined how (as history) they would wish events of today to be viewed in the future, a form of social and cultural engineering to suit future desired images of the organization. They note the limitation of plausibility to the intended audience - 'does this make sense?' – both as a present day reflection on past events and a future day reflection on current events.

This is an appropriate warning but one that masks a principal feature of *future perfect thinking*. As a retrospective activity, the organizational actor will focus down into detailed activity and interpret future events from an existing repertoire of knowledge. In other words, they are predisposed to seeing what it is they saw before and they ignore that which they have not seen. In Joycian terms, we are the way we were. But as Weick (1995) points out, it is only *after* the event that understanding of what has happened takes place. 'Managers keep forgetting that it is what they do, not what they plan, that explains their success.' (p.55).

Furthermore, he limits the value of plans to providing 'an excuse for people to act, learn and create meaning' (2001: 311), thus a further caution to the durability of planning that could safely be vested beyond the cognitive stage of *future perfect thinking*. If actors concentrate all their efforts on creating plausibility for their endeavours, they may be trapped by the very nature of the believability they create.

Requisite Variety

The second tactic for thinking about the future is to use the previously outlined concept of requisite variety. Here, we re-position ourselves to the present but rather than look back to a 'known' past, we introduce *requisite variety* to deliberately call into question the nature of what actors actually know and we suggest that it is more their *belief* in what they know that hinders their ability to *see* alternative explanations. The law of requisite variety suggests that if we want to survive in a world replete with equivocality, we have to complicate our thinking and ask '*what'* questions rather than '*why'* questions: the former assumption challenges us to think of possibilities (the unknown - expanding equivocality) whereas the latter challenges us to think of probabilities (the known - reducing equivocality). It is only when we ask '*what is the situation?*' that we are able to deal with the consequences (Wittgenstein, 1968). Higgins & Bargh, 1987, Fiske & Taylor, 1991 assist us here, arguing that if managers are confident that they have interpreted the input correctly, they are less probing and more likely to be biased towards confirming existing beliefs – success breeds success.

The message of requisite variety is essentially be attuned to the possibility that the future will look not resemble the past and that you should doubt what you know. The irony is that it is the unwillingness to disrupt order that makes it difficult for the organization to create order i.e. engage in learning. Of course, one can avoid environmental variety and the need to use requisite variety by being protected from it but this requires powerful organizations which can, to some extent, regulate the input. But generally when this protection goes, it leaves the organization in an even greater need to change and that can bring further problems.

Some empirical illustrations

Our case study of a central government department illustrates a situation within the context of the Civil Service in which this was indeed a powerful organization that, with active colluding, could regulate and reduce the variety of input. However, as Weick points out 'simplifying an enacted environment may also simplify the enactor, which creates the problem of requisite variety all over again' (1995:193).

We suggest this was just the case – for many years the department had been protected from substantive change, certainly as far as management behaviours were concerned. Language had been shaped – the names of departments had been altered, but as a tactic, actively encouraged by the Permanent Under Secretary (PUS) and condoned by successive ministers to maintain distance from central government policies of reform. Ultimately, of course, the shield of protection was removed with a change of government in 1997, leaving the department 'off the pace', and management in the position of simplified enactors, apparently unable to enact a new environment: that is, it was a process for which they were ill-equipped.

'The potential contradiction between choosing the right thing to do and getting it done can be examined as a problem in requisite variety' (Weick, 2001p, 300). This is graphically depicted below at Figure 2.

Figure 2 Requisite Variety

Requisite Variety
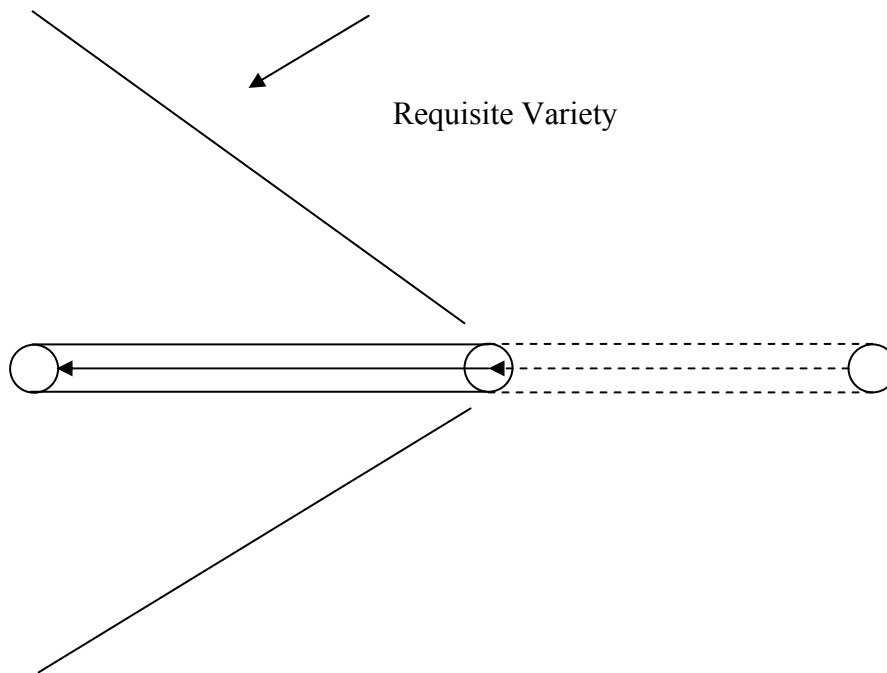
Time past   Time Present   Time Future

The civil servants found themselves in the trade off position of taking what, for them, would have been regarded as dangerous action (that might have led to understanding), and safe inaction which led to confusion (what they chose). Weick (1988) says that 'it is often less true that 'situations' determine appropriate action than that 'preconceptions' determine appropriate action' (1995: 306). It was these 'preconceptions' that they were unable to break away from.

The converse could be said of the music company within which we worked. Here was an organization that appeared to have embraced the complexity of input (changes to the music industry led by changes in technology) and responded to previous events (Internet piracy, problems associated with parallel importation) with an equally complex response.   Our data from these organizations tended to confirm the polarity of the oxymoron of organizing and learning.

On the one hand, the civil service case is densely packed with symbols and relics not merely of past successes but past processing: 'it would be very difficult for a private organization to compete with us; they simply do not understand the concept of protocol'. It is a very difficult place to learn the rules of the game, as they are so specific as to be virtually impenetrable to the outsider and, one might suggest, deliberately reinforced to protect them from infiltration. The organization was centrally controlled and its history had taught members how to garner support from ministers as a special case worthy of protection. Whilst new members might need to learn appropriate behaviours, these were behaviours set *within* very tight boundaries

and definitions, so learning was about old ways of doing, not new ways of doing; that is, concerned with learning about the past.

The music company, on the other hand, operated with a centralised top management group that dealt with City of London institutions and accounting processes. At an operating level, life was deliberately de-layered and kept simple with a number of small labels, each one of which would promote its own roster of artists and be associated with different styles of music[3]. There is considerable overlap between activities of labels in music companies and they are notoriously protective of individuality and creative licence. Music labels employ people (A&R departments) to search out the unknown and develop what might become the next popular act: they do not want nor encourage people in this function to be systematic or organized. Only one in ten acts that are broken (launched by the label) makes a profit for the music company, so their search is not for acts that replicate but create – for very good commercial reasons. Home-grown talent that brings new revenue streams is far more cost effective than buying in success and also reflects well on the reputations of the labels and executives. Music companies challenge their labels to break convention, to upset balanced equilibriums – to *learn* what might appeal to their buying public: the occasional punk rocker using expletives on the radio or artist throwing a bucket of water over the deputy prime minister only serves to prove that the process is alive and well.

These illustrations show how quite different organizations made sense of their worlds using the same tenets of retrospect and enactment but applied them for different ends: hence, 'this does not *feel* like the civil service' and 'this does not *feel* like a music company' was an expression of discontent about the way ongoing activity was viewed as moving away from confirming accepted conventions (*noticing* influences that might disrupt the status quo) or moving towards accepted conventions (*failing to notice* influences that might disrupt the status quo). The meanings for organizational actors were therefore 'get back in the box' or 'break out of the box'.

Weick notes that decentralisation is a key method of ensuring a wide variety of inputs (1995:.56). This is supported by Huber & Daft (1987) who suggest that complexity can increase perceived uncertainty. Smircich & Stubbard (1985) make a further point that 'the organization of the music industry rests in particular patterns of beliefs, values, and assumptions that support the ongoing creation, distribution, and enjoyment of the various forms of music' (727). Organization here is about ongoing creation or renewal - it is the output that Smircich & Stubbard appear to suggest that shapes the nature of the organization. This would follow the decentralised nature of a business that is constantly adapting to and indeed attempting to best guess trends in music taste in diverse geographic locations. A music business needs to take note of equivocal inputs, therefore it structures to accommodate this requirement; hence, it is more adept, or at least comfortable, with requisite variety.

In assisting executives from the civil service organization to plan for adaptive change, we found broad support for techniques that focused upon the detailing and re-cycling of past activity 'we have to ensure we move from a firm foundation' and when challenged that

---

[3] This model is much the same as that adopted by Richard Branson when he owned Virgin Music, keeping the number of people employed in a specific label to around 50 – if numbers grew he would seek to separate out a new music genre.

departmental business plans literally made no mention of the future or prescient central government mandates, the response was of surprise and novelty that this should be thought necessary. The music company, however, published its business plan describing; 'a future that can only be measured by what we do not know…. what will the formats be…. is the Internet a sustainable medium for music product?'

How these organizations were structured appeared to be reflected in their level of tolerance for ambiguity and variety. At critical points of self-determination, both embarked on processes of adaptive change using the mantras, meanings and actions with which they had both become successful. We talked earlier of change being the mediating concept between leading and learning – but this acknowledges the tension of moving between methods of living forward and understanding backward – without that tension there is no change.

In attempting to embrace the government's modernising agenda, the department sought to expand its repertoire of behaviour: it changed titles (but increased the levels of hierarchy); used business metaphors (but behaved in ways that distained the business environment); and talked of integration with other government departments (whilst pleading for special treatment). The music company having found its markets speared by organized piracy of copyright sought to tighten its repertoire of behaviours: it requested anti-piracy units to focus on parallel importations[4] of product (but turned a blind eye to local business heads selling into foreign territories to make budget targets); it attempted to introduce copy protection (but marketing departments made it unworkable by insisting that customers would not buy product that could not be copied – thereby permitting piracy); and insisted that all pre-release material (ie. material that had not yet reached its release date) be uniquely identified (but no one kept a record of who was issued with identifiable material).

The oscillation between extremes of wanting to void the past and of dealing with future as though it was the past, led to unfortunate payoffs. On the one hand, the government department could not satisfy demands for change (which resulted recently in full scale external enforced change through changes in the executive body) and on the other, the music company attempted to abandon its physical world for that of the future based internet world, a near total discrediting of the past based upon physical product. Both, organizations, inevitably, lost credibility in the eyes of their stakeholders as a result and they endured and continue to endure difficult periods of transition.

Both…and thinking

Future perfect thinking as represented by Fig 1 provides us with a tactic for thinking about the future and while it has the advantage of providing a history that aids sensemaking, it tends to encourage thinking that repeats that history and fails to detect changing environmental conditions or encourage learning. Requisite variety provides another tactic for thinking about the future and while it has the benefit of being sensitive to and responding to equivocality and promoting learning, it runs the risk of being so flexible, it can not stand up. In Figure 3 (see

---

[4] Parallel importation is where those operating in the 'grey' market take advantage of price differences in different territories by importing product at outside official channels from a cheaper territory. Within the European Union this is not an offence but importing product into the Union is a breach of copyright law.

below), we bring these two together, offering our graphical reproduction of *future perfect thinking* and *requisite variety*.

Figure 3: *Both…and* thinking

Time past   Time Present   Time Future
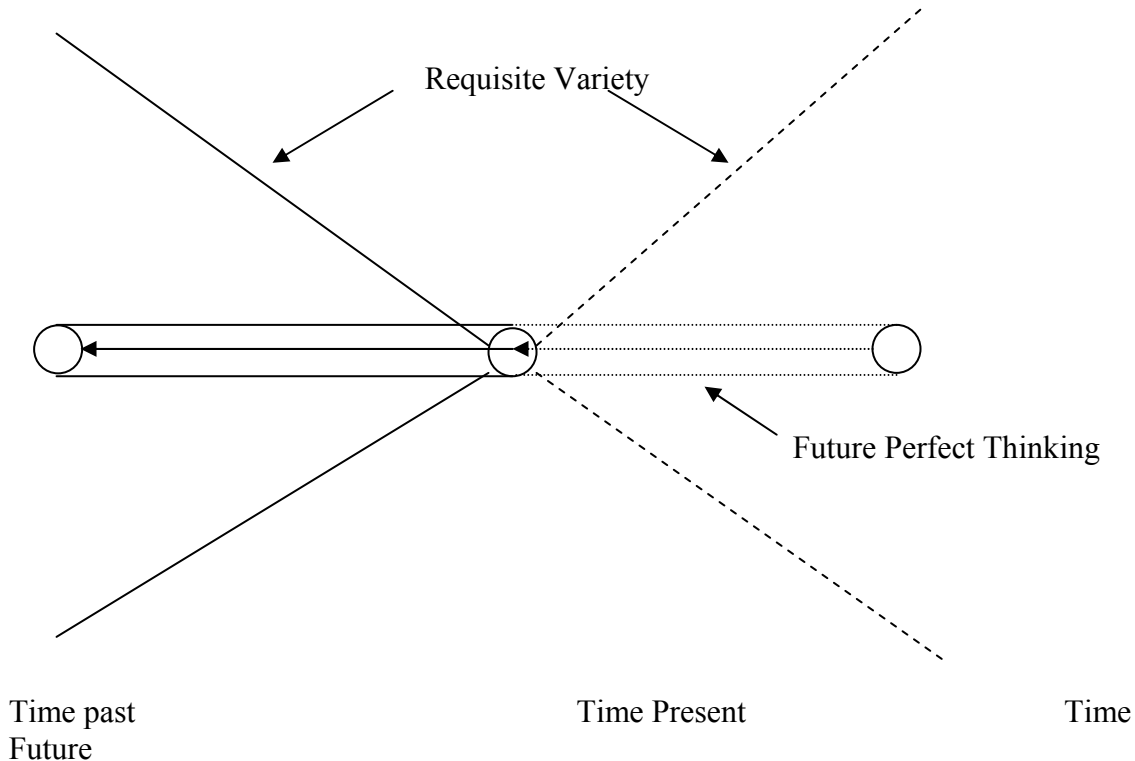
Using this graphic, we position our actors in time present and suggest that with further engagement and rigorous questioning of past beliefs, extension to the cognitive repertoire of plausible activity as it unfolds in the present is possible. At the same time, we acknowledge that plans serve as definitions of future activity (however ultimately flawed they may be) and if well-positioned, can served to stimulate levels of organizational confidence – such plans can be enhanced by using *future perfect thinking,* always providing the authors of such plans do not overstate their accuracy, based on interpretation of past action and thus, the expectation of future action. Figure 3 also draws in dotted lines the possibility of a future orientation, again positioning our actors in time present but suggesting a possible future dimension by expanding the boundaries of plausibility through requisite variety. We are not suggesting that members of organizations could predict the future – far from it: we are suggesting that the retrospective nature of requisite variety can be used to alert people to improbable events as they unfold in real time and alert organizational leaders and planners to the need for resilience and improvisation for moments in time that have not yet been reached – the explicit emphasis being that it is dangerous to predict the future.

On leading
It is worth reiterating that sensemaking is not about decision making and neither is it about interpretation because it includes generating what is interpreted if we pay attention when we

enact and if we enact, we have the option of ignoring or accounting for phenomena: so either way, the decision process is informed. Our position is that leaders are better informed if they are able to apply requisite variety as they validate information upon which 'decisions' are predicated. Leading organizational change calls for actions that promote discontinuity whilst providing sufficient confidence for people to take action – the rub being that providing a sense of cohesion is generally regarded as learning from the confirmatory nature of past experience. We, therefore, suggest that leadership is about setting organizational structures and working agendas that at one and the same time seek to learn from the past and exploit the weakness of that learning by overlaying the concepts of requisite variety and future perfect thinking.

Heifetz & Laurie (1997) see the role of mobilising people for adaptive change as the responsibility of leadership that needs to steer their people and themselves through the process of breaking long standing patterns of behaviour, often rooted in deeply held values and beliefs. However, they go further and suggest that this is best achieved through the collective sensemaking of their people. In essence, leadership sets the pattern that we might describe as a clarification process of knowledge/language/symbols from which the collective sensemaking must then take its course. In so doing, this accentuates the point that the best sensemaking frameworks are those that recognise the inevitability of distortions and the most beneficial errors are often the most surprising ones.

Weick (2001:9) makes the point that the role of *sensemakers* is to convert experience into an intelligible world, not to look for the one true picture that corresponds to a pre-existing, preformed reality.

> 'To make sense of complex change people need to intervene and enact in the interest of simplification: they need to tell stories, value imagination, and use rich communication media in the interest of complication: and they need to encourage collective mindfulness through teams and networks in the interest of both simplification and complication.'

<div align="right">Weick, 2001:306</div>

Whetten (1984) uses the phrase *sensegiving,* illustrated in the process described by Gioia & Chittipeddi (1991), whereby leaders can assist the sensemaking process for organizations.

Figure 4 Sensegiving

Sensemaking   Sensegiving   Sensemaking
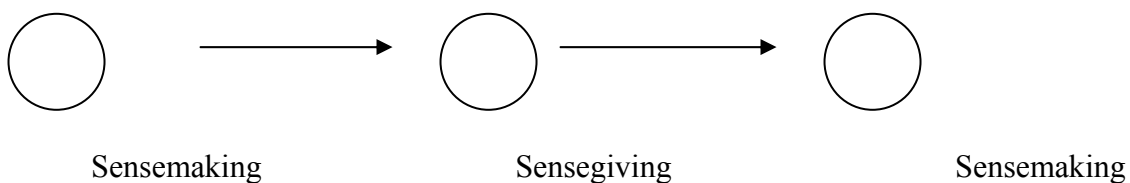
They take a view similar to ours that in times of organizational change, leaders have the opportunity to follow their own sensemaking by shaping the change input (sensegiving) for

their organizations (Figure 4, above). The notion of *sensegiving* is attractive to us as a summary of potential leadership intervention even though it may be considered part of the wider sensemaking process; however, we differ in a number of areas.

For Gioia & Chittipeddi (1991), the focus is upon strategic change: whilst we do not exclude strategic change from our own model, neither do we consider it appropriate to limit our position to strategic change alone. Much of what we have seen of sensemaking and opportunity for leadership intervention has been at the more mundane level of organizing and to exclude this activity would infer that such interventions only impacted through large-scale change initiatives. Quite often, we saw that the initiatives themselves can be the output of prior activity – such as the bank case of retrospectively labelling an opportunity for sale as 'strategy'.

Furthermore, heavy emphasis is given to the role of the *leader* rather than what we prefer and suggest being the role of *leadership,* where ongoing negotiation of meaning fits more comfortably as a social activity. More importantly, Gioia & Chittipeddi (1991: 434) contend the extent to which the *sensegiving* process may be modified is limited to the negotiations that take place between the leader and stakeholders after the proposed vision has been delivered to them.

> 'The original abstract vision is likely to become more well defined and undergo some modification (at least concerning espoused manifestations of the vision or processes used to achieve it). After that, the CEO and the top management team can make some adjustments and then push for a concerted effort towards a realization of the vision by the organization's stakeholders'

This appears to provide a generalised account of the intervention process available to leaders involved in strategic change. It does not attempt to explain how the *sensegiving* process in itself may limit the sensemaking process. The model described relies upon subsequent negotiation with stakeholders to refine the organization's vision (change). Our view would be that by this stage, leadership has already made its point and the response is likely to be as much about defining the leadership process ('selection' as it relates to previous leadership interventions), as about taking meaning from the content, let alone the extent to which negotiation will take place which will have a lot to do with context and style of the organization. 'In making sense, or attributing meaning to surprise, individuals rely on a number of inputs. Their past experiences with similar situations and surprises help them in coping with current situations' (Louis, 1980: 247).

Gioia & Chittipeddi (1991) contribute to the possibility that *sensegiving* may be a plausible extension to the sensemaking process at times of adaptive change. We may differ in the application of such a concept but it assists us to reconcile an active interventionist process. *Sensegiving* implies an active role [for leadership] but for us, it is also a complex role, possibly too complex for the individual – leader or otherwise. It is here that common sense of a high order will be exercised or exorcised: if the former, we are inclined towards thinking of organizational form that is able to sift through complex inputs – by sharing out responsibility – and produce manageable outputs that acknowledge the variable nature of

continuity (future perfect thinking) and change (requisite variety). We leave Weick (1979: 261) to summarise for us: -

> 'The importance of complication is difficult to overemphasize ….. In the real world signs on relationships can change, the swiftness with which an effect follows activation of a cause is variable…..whatever additional ways we can find to complicate observers should also be adopted'

Summary - A call for fore-believing

> '…….what makes us human is our capacity to bring to the moment both imagination of the future and the remembrance of the past'

<div align="right">Scott Peck, 1999p. 261.</div>

This apparently simple postulate for an apparently simple activity is, as we have detailed, so very difficult to bring to the function of organizing. Our data illustrate that leading relates to sensitising people to shifting circumstances, providing them with cues as to what is happening and clues as to what they can do about managing situations as responses NOT (necessarily) based on recycling the past. Lewin first made the point that you cannot understand organization without trying to change it and in an appreciation of Lewin's work, Schein (1996) more recently observes that '…the process of learning about a system and change that system are one and the same process', hence organizational change is more appropriately understood as 'managed learning'. In planning change, it is necessary to not merely alter input but also alter the learning process – to break out of existing pre-dispositions by using the tension of the oxymoron between organization and learning: this is the bridging concept and this is change.

This paper was intended to stimulate conversations about how people can learn from the past and lead into the future. We have suggested that this is only possible when change is used as a disturbance that takes people out of their normal rhythm. During most processes of adaptive change, organizations have the time (should they believe it necessary) to craft, to educate and provide exemplars. In other instances time does not allow and the demand is for real time understanding; nevertheless we have argued that it involves the same processes of retrospect and enactment.   We started by drawing attention to the attacks of 11th September because this and other recent events (the fall from grace of Enron, WorldCom and even the administration of the Catholic Church) serve to provide a span of attention (for time present, at least) when those who work within organizations might be willing to engage in conversations that acknowledge the plausibility that the unbelievable is merely the improbable waiting to happen. If people can transfer that learning into how they organize, they can take the oxymoron of organization and learning as an opportunity rather than an impediment to the delivery of adaptive change.

Sensemaking can be summarized as a series of ongoing conversations involving strong convictions weakly held. We invite further conversation .

Bibliography

Boland, R.J., Jnr. (1984). Sense-Making of Accounting Data as a Technique of Organizational Diagnosis. *Management Science,* 30:868-882.

Carter, M.R. (2001). *The Sensemaking of Adaptive Change: A perspective.* Unpublished Ph.D thesis, University of Bath.

Colville, I.D (1994) Searching for Karl Weick and reviewing the future, *Organization*, 1(1): 218-224.

Coville, I.D., Waterman, R.H. & Weick, K.E. (1999) Organizing and the search for excellence: making sense of the times in theory and practice, *Organizaiton*, 6(1): 129-148.

Champy,J. & Nohria,N., (Eds), (1996). *Fast Forward,* Harvard Business Press: Boston, MA.

Dru, A. (1938) (ed). *The Journals of Kierkegaard,* Oxford: Oxford University Press.

Fiske, S.T. & Taylor, S.E. (1991). *Social Cognition.* New York: McGraw.

Gioia, D.A. & Chittipeddi, K. (1991). Sensemaking and Sensegiving in Strategic Change Initiation. *Strategic Management Journal*, 12: 433-448.

Gioia, D.A., Corley, K.G. & Fabbri, T. (2002). Revising the past (while thinking in the future perfect tense). *Journal of Organizational Change Management,* 15(6): 622 – 634.

Heifetz, R. (1994) *Leadership without easy answers*, Cambs, Ma: Harvard University Press.

Heifetz, R & Laurie, D. The Work of Leadership. *Harvard Business Review.* January – February.

Higgins, E.T. & Bargh, J.A. (1987), Social Cognition and Social Perception. *Annual Review of Psychology,* 38: 369-425.

Huber,G.P. & Daft, R.L. (1987). The Information Environments of Organizations. In F.M.

Lant, T.K. & Shapira, Z. (2001). Introduction: foundations of research on cognition in organizations. In Lant, T.K. & Shapira, Z. (Eds), *Organizational Cognition: Computation and Interpretation,* LEA, Mahwah, NJ, pp. 1 -14.

Louis, M. (1980). Surprise and Sensemaking: What Newcomers Experience in Entering Unfamiliar Organizational Settings. *Administrative Science Quarterly.* 25: 226 – 251.

Mintzberg, H. (1978). Patterns in Strategy Formation. *Management Science.* 24(9): 934 – 948.

Peck, M.S. (1999). *Golf and the Spirit.* London: Pocket Books.

Perrow, C. (1984). *Normal Accidents: Living with High-Risk Technologies.* New York: Basic Books.

Powell and DiMaggio (1991) *The new institutionalism in organizational analysis*, Chicago: University of Chicago Press.

Schein, E.H. (1985) *Organizational Culture and Leadership*, Newbury Park, Ca: Sage.

Schein, E.H. (1987). *The Clinical Perspective in Fieldwork.* Newbury Park: Sage.

Schein, E.H. (1996). Kurt Lewin's Change Theory in the Field and in the Classroom: Notes Toward a Model of Managed Learning. *Systems Practice,* 1: 27-47.

Schutz, A. (1967). *The Phenomenology of the Social World.* Evanston: Northwestern Press.

Smircich, L. & Stubbart, C. (1985). Strategic Management in an Enacted World. *Academy of Management Review.* 10(4): 724-736.

Starbuck, W.H. & Milliken, F.J. (1988). Executives' Perceptual Filters: What They Notice and How They Make Sense. D.C. Hambrick (Ed), *The Executive Effect: Concepts and Methods for Studying Top Managers,* pp.35-65. Greenwich, CT:JAI.

Weick, K.E. (1979). *The Social Psychology of Organizing* (2nd ed.). Reading: Addison-Wesley.

Weick, K.E. (1985). The Significance of Organisational Culture. *Organisational Culture.* Frost, P.J. et al. (Eds.). Beverley Hills: Sage.

Weick, K.E. (1988). Enacted Sensemaking in Crisis Situations, *Journal of Management Studies.* 25(4): 306 - 317.

Weick, K.E. (1990). The vulnerable system: An analysis of the Tenerife air disaster. *Jpurnal of Management,* 16: 571 - 593.

Weick, K.E. (1993). The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster. *Administrative Science Quarterly.* 38: 628 - 652.

Weick, K.E. (1995). *Sensemaking in Organisations.* California: Sage Publications, Inc.

Weick, K.E. (1999). That's Moving: Theories That Matter. *Journal of Management Inquiry.* 8(2): 134 – 142.

Weick, K.E. (2001). *Making Sense of the Organization,* Oxford: Blackwell.

Weick, K.E. & Westley, F. (2001). Organizational Learning: Affirming an Oxymoron. Dierkes, M. (Ed). *Handbook of Organizational Learning and Knowledge,* pp. 440-458. Oxford: Oxford University Press.

Weick, K.E. & Sutcliffe, K.M. (2001). *Managing the Unexpected.* San Francisco: Jossey-Bass.

Whetten, D.A. (1984). Effective Administrators: Good Management on the College Campus. *Change.* November – December: 38 – 43.

Wittgenstein, L. (1968). *Philosophical Investigations.* Oxford: Basil Blackwell.