Management Learning

Organizational learning and emotion: Constructing collective meaning in support of strategic themes

Helen Shipton and John Sillince

The online version of this article can be found at:

Published by:

$SAGE

Additional services and information for *Management Learning* can be found at:

Email Alerts: http://mlq.sagepub.com/cgi/alerts

Subscriptions: http://mlq.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

Citations: http://mlq.sagepub.com/content/44/5/493.refs.html

What is This?

Organizational learning and emotion: Constructing collective meaning in support of strategic themes

Helen Shipton
Aston Business School, UK

John Sillince
Newcastle University Business School, UK

Abstract
Missing in the organizational learning literature is an integrative framework that reflects the emotional as well as the cognitive dynamics involved. Here, we take a step in this direction by focusing in depth over time (five years) on a selected organization which manufactures electronic equipment for the office industry. Drawing on personal construct theory, we define organizational learning as the collective re-construal of meaning in the direction of strategically significant themes. We suggest that emotions arise as members reflect on progress or lack of progress in achieving organizational learning. Our evidence suggests that invalidation – where organizational learning fails to correspond with expectations – gives rise to anxiety and frustration, while validation – where organizational learning is aligned with or exceeds expectations – evokes comfort or excitement. Our work aims to capture the key emotions involved as organizational learning proceeds.

Keywords
Emotions, strategy, organizational learning, personal construct theory, validation and invalidation

Organizational learning (OL) has attracted wide interest from academic and practitioner communities alike over recent years. The logic is that through learning, organizations are positioned to recognize the need for change, to take advantage of emergent strategic opportunities and to incorporate new and better ways of working into their competitive armoury. Over the last decade or so there has been significant progress in our understanding of the constituent elements or design parameters of OL (Argote and Miron-Spektor, 2011; Thomas et al, 2001) and the stages involved such that individual insights are shared, captured and enacted at the level of the organization (Berends and

Lammers, 2010; Crossan et. al.,1999). Another body of work has examined learning in situ where dialogue is said to provoke the necessary distance from an individual's customary unreflective stance (Brown and Duguid, 2001; Tsoukas, 2009). Recently, OL has been viewed as a sense-making process set in motion as members respond to the cognitive shock of unexpected events or episodes (Christianson et al., 2009; Thomas et al., 2001). Although feelings and emotions have received attention in these various literatures (Argyris, 1990; Antonacopoulou and Gabriel, 2001; Kang et al., 2007; Scherer and Tran, 2008) missing is an integrative framework that captures the emotions involved as members assess whether OL is proceeding as envisaged, or not. Our goal is to shed light on this neglected area through focusing in depth on learning and change in a selected case study over time (five years).

Construct theory and organizational learning

Like others (Reger et al., 1994; Simpson and Marshall, 2010) we draw on personal construct theory (Kelly, 1955, 1963) (hereafter construct theory) in building our theoretical framework. Construct theory (Kelly, 1955, 1963) suggests that learning, emotion and change are inseparably connected. For example, disappointment or frustration might signal that an experience has failed to align with anticipation. By contrast, experiences that are in line with expectations may bolster positive feelings (such as excitement or comfort). We label perceptual changes validation – where the experience of an event (or sequence of events) confirms anticipation – versus invalidation, where the experience fails to meet with expectation. Following Kelly (1955, 1963) we also consider whether experiences are perceived to be familiar or unfamiliar; in other words, if the change is akin to current understanding and therefore unchallenging or instead unfamiliar, oriented towards exploring new and unknown areas, raising new and different questions.

Construct theory holds that people are driven to make sense of the world and their position in it by means of hypothesis-like constructs (Kelly, 1955, 1963). Constructs are bipolar evaluative dimensions (e.g. the company is threatened – the company is safe) used to resolve differences between expectation (e.g. this company offers a safe job) and actual experience (e.g. the company fails). Being conjectural and questioning, constructs are in a constant state of flux, depending upon whether experience matches what was expected, or disconfirms the construct (Kelly, 1955). In making connections between construct theory and OL, we note that people tend to employ a construction of experience 'which is similar to that employed by another' (Kelly, 1955: 55). This implies that there is scope for moving beyond individualistic, psychological perspectives to focus on collective, situated constructs that have meaning at a higher level than the individual (Gray, 2007; Jankowicz, 1999; Preskill and Torres, 1999). These collective, situated constructs arise in part from reflections on organizational developments (or themes) that are pertinent for the parties involved.

Our focus on OL further implies a strategic dimension (Crossan et al., 1999). OL is represented in the emergence of shared constructs embracing new ways of thinking and behaving that help the organization to achieve its goals (Reger et al., 1994). On this basis, we define OL as a process of collective meaning re-construal in the direction of strategic themes. This suggests that OL involves cycles of loosening and tightening construct systems, as members make minor adjustments (to reflect incremental change) or alternatively incorporate new and different questions as they contemplate more major strategic developments. Making significant adjustments is a challenge, both cognitively and emotionally (Kelly, 1955; Reger et al., 1994).

Despite these insights, mainstream OL literature attributes a largely peripheral role to emotion (Fineman, 2003). This is perhaps unsurprising since much OL literature has its disciplinary roots

in information processing paradigms where emotions are viewed as irrelevant or at worst distracting (Cyert and March, 1963; Huber, 1991). According to this paradigm, OL is achieved through dispassionately and objectively reviewing past experience and building the knowledge required to enhance organizational performance (Argote and Miron-Spektor, 2011; Huber, 1991). Knowledge, in turn, is amenable to measurement through capturing the combined cognitions of organizational members (Huff and Jenkins, 2002; McGrath, 2001), or alternatively seen as synonymous with changes in organizational performance, such as accuracy or speed (Argote and Epple, 1990). Another strand of OL literature focuses on its multi-level nature (Crossan et al., 1999). OL is seen to be a bottom-up, interactive process, with lower level insights being constrained by higher-level forces. The contribution of multiple individuals is combined during the (essentially cognitive) processes of interpreting and integrating, while institutionalization represents routinization of learning mechanisms at the organizational level. These approaches offer valuable insights about what OL evolves, how it might be measured and its cross-level nature. There is, however, less scope for teasing out emotional dynamics as individuals assess whether or not OL is proceeding in the direction that has been envisaged.

Scholars writing from situated learning perspectives (Lave and Wenger, 1991) have focused on the way in which workplace knowledge emerges outside of conscious intent. Tsoukas (2009), for example, outlined three (cognitive) processes associated with dialogue: conceptual combination, expansion and re-framing, while Patriotta (2003) made reference to the stages released through narrative: knowledge creation, utilization and institutionalization. Reflecting the tacit nature of knowledge exchange, scholars of this persuasion have embraced the notion of knowing which it is said captures the all-pervading and semi-unconscious nature of OL (Coopey, 1995). Here, it is argued that learning involves the whole person – thinking, feeling and behaving – as he or she experiences working with others (Brandi and Elkjaer, 2011; Cook and Yanow, 1993). Despite offering useful insights, there is no overt discussion of emotion in these literatures.

Emotions, invalidation and unfamiliarity

Rather than comprehensively reviewing the literature on emotion and learning as others have done (e.g. Antonacopoulou and Gabriel, 2001; Fineman, 1997; 2003; Gabriel and Griffiths, 2002; Scherer and Tran, 2001; Vince, 2001; Vince and Gabriel, 2011) our purpose is rather to examine perspectives that cast light on the way in which member assessments of OL might give rise to emotions. We define emotions as felt phenomena arising from the appraisal of a situation and shaping action readiness (Frijda, 2007). Emotions are often categorized according to the arousal that they represent as well as whether they are pleasant to experience (Russell, 1980). In line with a circumplex model (Russell, 1980) we suggest that high arousal emotions (such as anxiety or excitement) might arise from unfamiliar experiences. Emotions that are inert – such as a sense of comfort or frustration – are likely to be linked with familiar, unchallenging experiences (Kelly, 1955). Furthermore, emotions shape behaviour towards what is appraised as good (validation) and away from what are appraised as bad (invalidation) (Levenson, 1999).

That emotions arise from invalidating experiences in the workplace is by no means new in the learning literature. Argyris (1990) has drawn attention to the defensive thought patterns and resulting anxiety that can inhibit open and honest reflection, while others (e.g. Fineman, 2003; Griffiths et al., 2005; Vince and Saleem, 2004) have highlighted how repeated patterns of caution and blame may give rise to a shared disquiet that impedes reflection and communication. Psychodynamic theory holds that the emotions generated through OL might either constrain or elicit change through reinforcing or inhibiting desired actions (Antonacopoulou and Gabriel, 2001; Berman-Brown,

2000). Recently, it has been argued that unexpected occurrences might trigger OL because they expose weaknesses and reveal unrealized behavioural potential (Christianson et al., 2009). Although rare events are seen to galvanize members in cognitive terms, words like 'shock' and 'weakness' are suggestive of emotion.

Validation, by contrast, is generally seen to represent a state of optimism or excitement arising from successful accomplishment (e.g. Griffiths et al, 2005) although there is a hint that a comfortable, acquiescent state might arise from contexts where challenge is limited (Leonard-Barton, 1992). That validation might be experienced in response to familiar, close-to-home experiences is implied in the work of Kang et al. (2007). They raise the prospect that members' emotions are different for exploitative as opposed to exploratory learning, with closer, more comfortable relationships evocative of comfort being typical in the former case. Exploratory OL is suggestive of emotions that are active and stimulating (Kang et al., 2007).

Despite these revealing hints, there is an apparent gap in the literature in terms of what emotions might be typically experienced where members perceive progress (validation), or lack of progress (invalidation), in achieving OL. This study is a preliminary attempt to address this gap.

Although our research questions were emergent over the five-year period of the study, our broad intentions were, first, to find out what were the main collective constructs, or strategic learning themes, that cast light on members' perceptions of OL as it evolved over time, and second to tease out the emotions involved as members reflected on progress or otherwise.

Methods

We were guided by scholars elsewhere who have endorsed the idea that collective themes might be captured through using informants as 'windows' through which extrinsic phenomena – in our case, the strategic themes and the changing meaning attributed to the themes – might become apparent (Morgeson and Hofmann, 1999). Our ontological position is close to constructivism but less than perfectly aligned; we acknowledge a myriad of realities as perceived by respondents but are interested in what the realities reveal about the underlying organizational themes, in this sense acknowledging the realist tradition eloquently portrayed by Helay and Perry (2000).

Our perspective relative to theory building also adopts a constructivist position in that our conceptual framework was emergent rather than prescribed from the outset (Helay and Perry, 2000). Running somewhat counter to this perspective, we had in mind a protocol that reflected in broad terms the areas that we believed might be important in addressing our research questions (Pratt, 2008) (see Appendix 1). Although the relative emphasis attributable to the topics covered in the protocol shifted over time, we were interested from the outset in the priorities that informants believed that the organization had, and the extent to which there were in their view opportunities for staff to learn and grow to successfully achieve the priorities identified. Insights from informants during the first phase of data collection suggested that a more emotionally centric perspective might be called for and this led us to connect with construct theory (Kelly, 1955) as our analysis moved forward. Here our work fits with Suddaby's (2006) depiction of grounded research, where emerging insights are informed by engagement with theoretical themes that provide a point of connection with the data.

Research context

Qualitative researchers have to select the site of their research with care to ensure that the setting presents the backdrop necessary to address the questions of interest (Golden-Biddle and Locke,

2007). Our selected company, Futuro (the pseudonym for a UK-based electronics company) was ideal in this respect. Employing between 700 and 950 employees, the company was large enough to allow us to talk about phenomena that were organizational (rather than the insights of one or two senior figures) but not so large that insights might be distorted given varying sites and modes of communication. The company was making a (painful) transition from being a manufacturer closely directed by the parent company towards becoming a provider of technological solutions for external companies. We followed scholars elsewhere (e.g. Knight and Pye, 2005; Maitlis and Lawrence, 2007) who have treated contextually specific learning themes as discrete analytic foci.

Data collection

Our data collection was intensive, extending over a five-year period and involving interviews, observations of meetings, focus groups, company tours and documentary analysis. Although we started the study with an interest in how knowledge might be transferred from the individual to the organization, over time we became more interested in perceptions of progress, or lack of progress, about OL. Wherever possible, we tried to back up data derived from individuals with wider sources. For example, discussion from individual respondents about changing strategic demands was supported by insights from meetings we attended as well as annual company away days where desired new directions were outlined by senior staff and challenges widely aired.

To ensure a representative sample, senior management were asked to select individuals from across the company to reflect key areas of the business, calling upon those who were likely to have insight into the questions on our interview protocol. To this extent, we were drawing on a sample of respondents who were (in the eyes of senior managers) interested in and committed to OL. At the start, 24 interviewees were invited to participate in the study, encompassing senior and middle managers and assistant managers, team leaders, sales professionals, engineers, IT specialists, senior operators, quality control personnel and office staff. At the second point (2005/6) we interviewed 22 employees. As far as possible, we drew on respondents from the first phase, in order to explore changes in perceptions around the strategic themes that were starting to emerge. At the third point in time (2007/8) we conducted a further 34 interviews. We were guided by the two criteria specified above (representative sample plus pre-existing knowledge about items on our interview protocol). In addition, we asked that, where possible, we should speak to the same people again (three were unavailable for various reasons). Analyses were fed back into the company through on-going dialogue between researchers and the organization, with a 7000 word report and various management briefing documents, together with face-to-face presentations between researchers and senior managers.

At all time phases we emphasized our independent status, not part of senior management and not employed by the organization and also assured people that the conversation was confidential, stating that although interviews would be recorded in order to ensure accurate retention of the data, it would not be possible for individuals to be identified in any ensuing reports or academic papers. Most interviews lasted for approximately one hour; some were considerably longer than this, especially but not exclusively for those at more senior levels. After each interview, we conducted short de-briefing sessions and noted emerging patterns. We triangulated the data in various ways: by validating interview data with informal conversations that we wrote up as field notes, through studying archival material such as employee attitude surveys, details of policy and practice especially around the area of learning and training, employee briefing sessions and minutes of management meetings and by relating together interview and field note data.

Data analysis

Because our research spanned organizational hierarchies, it was important for respondents not to feel inhibited either because a more senior manager was present, or because weaknesses and worries could not be freely aired. We therefore carried out individual interviews, following suggestions about using individuals as informants about organizational attributes (Lindsley et al., 1995). We recorded and transcribed all the interview scripts and articulated our emergent theoretical understanding (Glaser and Strauss, 1967). To begin with, both authors read through all the transcripts, making notes of emerging themes and sharing insights. We then followed a two-stage fine-coding scheme in which codes are derived from interviews and agreed upon by the authors. Coding is an established method of description, conceptual ordering and theorization (Strauss and Corbin, 1998) whereby researchers extract the most relevant themes from the data, arrange them in a hierarchy and note them, to further document their precise meaning.

There were two separate stages in the analysis. For the first stage, we investigated the processes through which strategic learning themes emerged (Morgeson and Hofmann, 1999). To do this, we noted that respondents referred repeatedly to certain developments or strategic priorities (which we labelled 'strategic learning themes') and reflected on these priorities at length time and again. Our insights were reinforced by discussion at company away days, during meetings and evidenced in company documentation. The company's quest to become a solutions provider was a predominant theme during the course of our study. To achieve this strategic remit, the company had to make a transition *away from* being a manufacturer at the behest of the parent company *towards* offering business services (for example, designing new, custom-made office systems and tailoring technology solutions to meet the needs of customers outside the photocopying industry). Moving forward in this quest was inherently emotional, given the close, sometimes fraught, relationship between Futuro and the parent company.

Findings

Suddaby (2010) has suggested that for research that is constructivist in orientation, theoretical categories guiding the research might arise from the data rather than being specified a priori, stating that conceptual abstractions are broader and more all encompassing for research exploring a new or unusual theme. We were interested in members' perceptions about the prospect of becoming a solutions provider and how those perceptions changed over the course of the study, based on our definition of OL. To do this, we needed to explore what members believed their primary focus as a business to be and how effective and secure they felt with this focus. This led us to consider whether members perceived that their current remit was viable as a long-term prospect and their sense about Futuro's ability to attract new, service-oriented work (generating new business and new customers). We also examined whether members felt that there was sufficient exposure to the customer and freedom to realize commercial opportunities. As the study progressed, we referred to the wider literature on invalidation in learning (Argyris, 1990; Christianson et al., 2009), expecting that moving from one meaning construal state to another would involve a questioning of existing approaches. Over time, our findings suggested two related processes: disregarding (e.g. questioning the parent company legacy) and expanding (focusing on hitherto unexplored areas) (see Figure 1).

In the early phases of the study (2003–2005/6) we detected two contrasting emotional states. The first was validation arising from familiar, close to experience tasks and activities (strictly speaking a pre-learning phase), with the predominant emotion being comfort. This phase involved
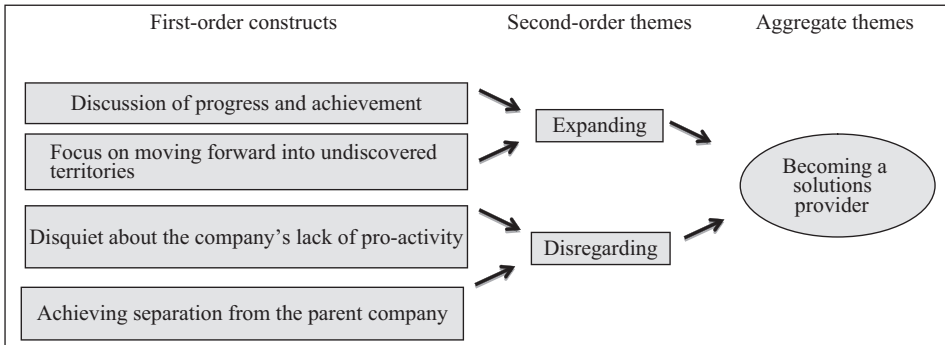
Figure 1. Data structure 1: The learning process for the strategic learning theme: Becoming a solutions provider.

dependence on the parent company, as summed up in the following quote from a production line team leader (Participant 9):

> I work for Futuro so I could end up anywhere but I don't fear that Futuro would ever turn round and say you are redundant go away. I think it's more a case of well I am going to ask you to work in this area now and perform this function.

The second, contemporaneous orientation suggests invalidation with these familiar activities and frustration. A senior operator (Participant 22) during one of our early visits captured this feeling:

> Futuro World Wide is very dinosaurial and its ideas come down, and when something comes down … it's almost set in stone and it will be produced everywhere in the world and it's exactly the same.

During this early, awakening phase, the construct 'becoming a solutions provider' was perceived to be a distant prospect, not really necessary'. For the later phases (2005/6–2007/8), we found invalidation with experiences that were unfamiliar and members' emotions that were intense and far from pleasant, such as anxiety and a sense of threat. We also became aware of emotions that were appealing – such as excitement and enthusiasm, arising from perceived validation with unfamiliar, far-from-experience activities. Along these lines, a business development manager interviewed at Time 3 (Participant 29) shared with us that:

> they've sort of primed this site to really go out there and start to improve different things and you know, don't stop at boundaries.

Members felt at the second point in time that becoming a solutions provider was 'something for which we could be recognized', while at the final stage informants increasingly perceived that this was 'something that we have the potential to do well' (see Table 1).

Time 1 (2002/3): Becoming a solutions provider is a distant prospect

During this early phase there was evidence that members accepted the company's position as a manufacturer aligned with the parent company. The parent company was seen to offer valuable support for developing employees; thus several informants from the factory floor described the role of technical experts from the parent company. Validating statements were evocative of a sense of calm

Table 1. Validation/invalidation; familiarity and the extent of unfamiliarity and emotions: Time 1 becoming a solutions provider 'a distant prospect, not really necessary'.

Familiar/validated	Familiar/invalidated
There is no need to try anything new	We are too protected from the 'real world'
We find this encouraging	We are not allowed to get the best outcomes for the company
I get adequate guidance	We are limited relative to others
Familiar/validated: representative quotations:	**Familiar/invalidated: representative quotations:**
'We can request further support, externally, by asking for visits to Futuro World Wide.	'We have grand plans to introduce new plant into the factory. We've done the research, but getting the parent company to recognize this has been the difficulty.'
'Because this is a (Far Eastern) company learning is on the job, as it is happening and is very product specific'.	The (parent company) sales negotiators are very powerful. We are tied to them.'
'It is difficult for us to release people for this mentoring role…Anyway, the Japanese can provide better support'.	'The (Futuro World Wide Co.) like to retain control. There has been some slight change but it's a continual battle. They like to keep control'
I think Futuro have got a very good training programme. I think they find it very beneficial. I found it beneficial passing it on to other people	
Prevailing emotion: Comfort (e.g. we are effectively guided by the parent company; there is no need to be worried about the future; learning is adequate for our needs)	**Prevailing emotion: Frustration** (e.g. we are prevented from doing what we think is right; we lack recognition for our achievement; our focus on the basics makes us vulnerable)

or comfort, reflecting that the company was on course to achieve strategic goals, as perceived by the parent company. For example, the production manager (Participant 1) shared with us that:

> The benchmarking seminar with (Futuro World Wide) showed that we were very good at structuring things and allocating responsibilities through the deployment process

Comfort and security were tempered by a fear of possible actions where work outcomes ran counter to parent company expectations. One team leader (Participant 9) said:

> we've got to demonstrate we can do it right and we can do it well … if you take a (senior manager from the parent company) round and they go oh it's terrible, it's a mess, it's horrible

There were areas of frustration. A technology manager (Participant 2) spoke about his perception that people were unwilling to move outside their 'comfort zone' to push matters forward, in particular, to make closer linkages with the end customer. Another concern was the lack of knowledge sharing. A cluster of respondents suggested that this perceived weakness may be attributable to the requirement for alignment with the parent company and lack of opportunities for taking the initiative. An assistant manager (Participant 10) raised a telling point:

> we may have the best planning and scheduling people in the world but there's no point shouting about it when we get told what we need to do each time a new production line is set up.

Being inward looking led to keeping to what was familiar but the frustration showed that this was seen as invalidating of what employees wanted the company to become.

A great many statements at this time referred to what was familiar and validated, and captured a sense of dependence on the parent company and unquestioning acceptance of current ways of operating, giving rise to comfort. On the other hand, frustration was apparent in the questioning of existing, familiar activities that suggested dissatisfaction and that members could do more than was allowed.

Time 2 (2005/6): Being a solutions provider is something for which we could be recognized

There were signs throughout this period of imminent change in Futuro's worldwide strategy. The parent company's position on the global stage became more uncertain given developments in the photocopier/ electronics industry outside the UK and much of the parent company's manufacturing was becoming concentrated in the Far East rather than Europe. Senior managers reported that support was gradually being withdrawn from Futuro UK, and that they were increasingly expected to be proactive in the sense of taking advantage of opportunities for new business. While the earlier time phase was dominated by emotions evocative of comfort combined with frustration, the predominant emotion at this time phase was threat (see Table 2). The production manager (Participant 1) – earlier sanguine about the company's future prospects summed up anxieties:

Table 2. Validation/invalidation and the extent of familiarity/unfamiliarity and emotions: Time 2 becoming a solutions provider 'something we could become'.

Familiar/invalidated	Unfamiliar/invalidated
We are not getting the basics right	We can't deal with change
We are not picking up on ways to improve	Our mentality as a company is dated
We are disconnected from the world around us'	We have not impressed key stakeholders
Familiar/invalidated: Representative quotations	**Unfamiliar/invalidated: Representative quotations**
'They come from (Futuro World Wide), they might come for three years, five years, one year, six months. We have got to start and try the same approach.'	'I'm not sure where we go next. From one end of the spectrum I can see it being closed down. To the other end of the spectrum- we're not geared up to this yet- I can see it becoming much more specialized, more tailored to business needs'.
'We may have the best planning and scheduling people in the world but we don't know because they work in a little vacuum of 'well when it comes to me I'll make sure there's X amount of thousand tons of toner, X amount of drums bought and so on'	'we're getting if you like, further and further away from the end customer, the person who is buying, because they haven't got a clue who they're buying off.
I don't think there's any long term view for Futuro at XX to exist on its own, in its own 54 acres, totally oblivious to everything else that's going on in the world and waiting for Futuro World Wide to tell us which product is going to take up how much space and require how many people.'	We have to get away from believing that the boxes are all we're going to do'
	My greatest surprise is I would have expected sales companies to be banging on our door every day demanding things. And they'd rather ignore us'
Prevailing emotion: Frustration (e.g. we are too reliant on the parent company; we are unable to achieve even the remit we have been set; our systems for developing people are inadequate).	**Prevailing emotion: Threat** (e.g. we are in acute danger; potential stakeholders are unaware of us; our limited thinking might undermine future opportunities; we are not seen as worthy of attention from the wider group)

the prospect is winding down and winding down and winding down and I know potentially we could automate the department to a high degree reduced by less people, but all the time we are chipping away at our skills base that we'll never get back.

Faced with unfamiliar, outside-experience expectations, members often reported their sense that they were not equipped to deal with the challenges they faced. In particular, the emerging separation from the parent company led to a sense of threat about how possible it would be to reach out to customers. The plea of an assistant manager (Participant 10) was typical:

it's getting the message across to customers that we are here and we are able to deliver.

Managers themselves perceived their own culpability. Discussing the way in which the company struggled to make connections with customers, the CEO (Participant 16), for example, said:

It's our fault and our managers' fault … we are missing some serious tricks.

Other managerial-level informants (e.g. Participant 21), asked about whether the skill mix and expertise mix would have to change, shared the view that the company had more work to do, that there was a call to:

give people the freedom to think and try new things if you like, but what they are not doing they are looking very internally, somehow we've got to get them out looking a little bit wider.

Employees at less senior levels were also concerned at the threat propelling them away from their role as a dependent supplier towards a more uncertain and independent future. Around this time, the parent company withdrew a major production line from Futuro, leaving a vacant space, which acted as a visual reminder to staff that the security they had hitherto benefited from may not be inexhaustible. Although these anxieties were to some extent managed by senior managers at Futuro in that an upbeat tone, evidenced in meetings and communication strategy, was maintained about the continuation of work from the parent company, our evidence suggested that the sense of threat had started to permeate organizational hierarchies. One senior operator (Participant 21) shared with us his view that:

I think we are not so protected now and we have to try and look after ourselves rather than rely on [Futuro World Wide] doing it for us.

There was also continuing frustration, because people were aware of where they wanted to be and of their not having got there yet. As an IT technician (Participant 19) commented:

sometimes you just think to yourself oh should I even bother looking at something else or should we just leave it as it is.

This frustration was due to exposure that had not previously existed; as one (engineer) respondent (Participant 15) seconded to the newly-formed business development department noted:

Whereas before I was quite isolated and wasn't getting exposure to the sales companies – now, within this activity I have more exposure.

At this stage, threat and frustration were apparent as members attempted to move forward with a new strategic remit. Across respondents, there was evidence of invalidation in that progress was not occurring as expected and hoped. Invalidation gave rise to a sense of threat where members reflected on unfamiliar experiences and frustration where day-to-day experiences were proving unsatisfactory and in need of adjustment.

Time 3 (2007/8): Becoming a solutions provider means 'something that we have the potential to do well'

A change was noticeable in 2007. Threat and excitement characterized how employees expressed themselves about the solutions provider construct (see Table 3). Excitement was expressed when people said that the company had achieved some success as a provider of business solutions and these developments were in previously unfamiliar areas. CarCo – a major international manufacturer of motor vehicles – requested Futuro's involvement in building an office technology system across the company. This was the first major vindication of the company's quest to act as a solutions provider. An engineer (Participant 15) shared with us that:

> we won one of the biggest tenders in Europe, they needed this solution … they hadn't got the solution, they couldn't provide the time – we developed the solution for them.

Table 3. Validation/invalidation and the extent of familiarity/unfamiliarity and emotions: Time 3 becoming a solutions provider 'something we have the potential to be good at'.

Unfamiliar/invalidated	Unfamiliar/validated
Global pressures mean we have to change	We are more focused
We need to take control	We are impressing the parent company
We are not achieving our potential	We are building a business of our own
Unfamiliar/invalidated: Representative quotations	**Unfamiliar/validated: Representative quotations**
'We don't want to be just a manufacturing plant and being just a manufacturing plant actually is putting us under a great deal of pressure if that's the only thing that we can rely on because of China and all the rest of it, you know, making things at a very low cost.'	'the timing is now right to get out there and do it- moving into business solutions is starting to focus us a bit..it's an exciting time for us if we can get it right'
'I think if we don't do something ourselves then we're completely letting the agenda get away from us'	'I think they (Futuro World Wide) can appreciate how dynamic we are and they are actually putting the head offices at London… So to me that's an indication of them realising we are going great guns…closeness to Futuro UK is important.'
So at the minute, really if I was sat in (Futuro World Wide) I'd be thinking we're not actually getting value out of (Futuro UK).	Our successes are proving that we can market and sell our own products; we are delivering something unique and different, home-grown at (Futuro UK).'
Prevailing emotion: Threat (e.g. there are major challenges ahead; we may not be able to deliver; this is a frightening prospect).	**Prevailing emotion: Excitement** (e.g. we are moving into new areas and proving successful; we have impressed powerful stakeholders; we are increasingly capable).

Enthusiasm and pride was widely felt as production, IT and administrative staff shared with us their delight that this contract had been honoured ahead of schedule, delivering a tailor-made office solution to CarCo to exceed quality standards. Another major contract was awarded to the area dealing with the technically complex process of producing photocopier dye, where an international supplier of printing equipment placed a series of new orders. The company had also expanded the sales of recycled office technology to customers who were looking for business solutions that minimized damage to the environment. This part of the business was reported to have grown from a point where its contribution was negligible to one where it accounted for almost 15% of total revenue (according the company minutes documented April 2007).

These developments led several respondents to take feel more confident about the company's future prospects. A manager in the photocopier assembling division (Participant 21) – who had earlier expressed doubts – shared with us his delight that Futuro was demonstrating its capability at attracting business:

> as a business, we are less reliant on engineering now because engineering as a skill and knowledge process is going to have less and less impact on our business. The added value now – and the exciting bit – is in the people and the information and processes; they can talk about the processes they can sell.

These developments gave rise to active emotions, conveying enthusiasm and pride. This sense of progress was sometimes judged relative to Futuro World Wide. For example, the production director (Participant 29) captured the views of several respondents when he said that:

> we are now probably the most able and innovative unit within the whole of [Futuro World Wide].

There was also a sense of threat and frustration that co-existed with this excitement. The CEO (Participant 16) expressed his continuing anxiety, arising from the invalidation that members faced when dealing with unfamiliar experiences. Feeling that there was still too little understanding of the external context, he argued that the company was struggling to learn and respond appropriately:

> we have to understand and this is where if you like the organization needs to learn itself … we have to understand the whys, the benefits to the total organization … not this little box here.

There was a widely shared perception, across organizational levels, that the company was not committed enough to progressing with new ideas and services to business, being lacking in its ability to draw people together and share ideas. One team leader (Participant 7) spoke for several informants at production level, sharing his frustration, when he told us that he was:

> really struggling to get enough people round the table to talk about innovation … It's very difficult to get them to see the importance of putting time aside to step back and review.

People showed that ways of thinking and feeling had changed away from the comfortable Futuro culture of the past towards excitement tinged with threat, especially when discussing the question of how to make commercially viable links with customers. This meant that emotions across this time phase were generally more active than passive, switching from doubt to conviction, from anxiety to enthusiasm, depending on whether members reflected on recent success or expressed concern about the future.

These evaluations across the solutions provider theme varied across the three time periods. In the first phase, 2003/4, statements were generally about familiar situations, giving rise to comfort

and an emerging sense of frustration. In the middle phase, 2006/7, there was mostly invalidation and unfamiliarity that produced threat, alongside continuing frustration. In the last phase 2008, all statements were either validation of the organization in unfamiliar situations, or invalidation of the organization faced with these unfamiliar situations. The emotions expressed were largely threat and excitement. Over the course of the study, not only had people come to feel validated by new obstacles, but they also came to find old practices and attitudes to be inappropriate.

Discussion

Theoretical implications

OL has generally been conceptualized as a process of knowledge exchange, which spans levels (Casey, 2005; Crossan et al., 2011; Thomas et al., 2001) or alternatively occurs in situ as members work closely together in practice (Cook and Yanow, 1993; Gherardi, 2011). Although we concur with these scholars about the strategic nature of OL, our approach is somewhat different. Our reading of construct theory (Kelly, 1955) suggests that constructs have meaning at a higher level than the individual, as people within the same environment reflect on developments that effect them. OL occurs to the extent that these shared constructs are aligned with strategic goals. Rather than explaining OL in terms of cognitive prompts (Argote and Miron-Spektor, 2011; Huber, 1991), we look instead at how constructs are revised in relation to questions of strategic significance for the organization (Brandi and Elkjaer, 2011). Through tracking thoughts and feelings over time at Futuro, we have gained unique insight into the way in which shared constructs transitioned as members became increasingly confident about their new strategic orientation. In doing so, we have spotlighted the emotions involved.

   We argue that invalidation signals that change might be required, while validation reinforces the viability of selected options, and that emotions arise from the assessments that members make in one direction or another. Comfort, frustration, anxiety and excitement are experienced throughout OL depending on the point at which OL involves familiar or unfamiliar experiences, and whether or not progress is proceeding as envisaged.

   Our data suggest that OL comes about as members contemplate strategic themes, on one hand expanding their conceptual framing to encompass new insights while on the other disregarding perspectives seen as no longer apposite (Kelly, 1955, 1963). Threat (*invalidation* in the face of unfamiliar experiences) is connected with expansion, as members reflect on the enormity of the task ahead and the difficulties that they face in realizing a new way forward. Excitement, like threat, is linked with expansion, but here there is *validation*: perceptions that the company is recognizing and emphasizing that Futuro developed skills, engaging in successful experiences and dealing effectively with challenges outside of prior experience. These emotions, although contrasting, were at the same time complementary, in that excitement came about where the experiences giving rise to threat were validated. Switching from one to the other and back again seemed integral to OL, with threat raising the prospect that change was required and providing the necessary focus, while excitement prevented the tension from becoming overwhelming and opened the prospect of new directions being realized.

   Frustration – also arising from invalidation – came about as members disregarded familiar ways of working, either because of exposure to new stimuli, or from an inherent sense that better ways of working were not being addressed. Comfort reflected calm acquiescence that existing practices were appropriate to meet the demands the company faced. Again, comfort and frustration were often experienced in tandem; indeed, frustration sometimes came about *because of* comfort, an

emotion deemed unacceptable to some respondents contemplating OL. As with the preceding emotions, threat and anxiety, there is no clear trajectory from one emotion to another but rather a weaving together of the two; comfort leading to frustration, frustration at times dissipated through (a desire to achieve) comfort.

Although our focus here is member assessments of progress in OL, rather than emotions and learning conceptualized more broadly, our study offers a glimpse into the complexities involved. Informants did not necessarily agree about whether progress had occurred, especially when they alluded to the challenge of what remained to be done rather than what had been achieved. This suggests that not only might assessments of progress vary across employees; also, in larger and more administratively complex organizations, employees may have differing opinions about the viability of selected strategic directions, not corresponding with senior management. Here, invalidation may give rise to a sense of relief – or calm and comfort linked with a sense that progress is *not* likely to occur. In Kellian terms, this state of affairs would suggest that the shared construct system had not evolved to the extent that members accepted the need to expand the construct.

Prior work on emotions and OL has alluded to the role of power (Vince and Gabriel, 2011). Our data suggest that there are subtle differences across individuals whose responses vary depending in part upon their position in the organizational hierarchy. As a general rule, people in less powerful positions – senior operators rather than business development specialists, for example, were more inclined to report frustration than anxiety in response to invalidating experience, perhaps because they were less exposed to unfamiliar experiences than senior members. At times, individuals retained attachment to anxiety regardless of mounting evidence suggestive of validation in OL. The emotions literature has pointed out that anxiety is often difficult to attribute to a particular cause, and might instead be described as a sense of apprehension or expectation of danger (Salecl, 2004). The underlying emotional states of individuals in combination with their assessments of strategic progress might go some way towards explaining how intensely emotions are experienced.

Practical implications

Our work reveals that when reflecting on strategic themes, members' emotions can switch from enthusiasm to anxiety and back again. Given how demanding this is, we raise the question of whether people might benefit from emotional support being available not just for employees but for managers too, especially following invalidating experience. Organizational policy and practice might take this into account, for example, through implementing reward and recognition systems to reflect an ability to support others. Although there is a wide literature addressing OL from a knowledge-sharing perspective, less attention has been given to the question of building networks for emotional support, although the idea comes close to Vince and Gabriel's (2011) depiction of care in an organizational setting. Here, though, the focus is building the emotional resilience needed to deal with OL, through, for example, the sharing of success stories, role modelling, coaching focused on surviving failure, communicating and sharing exciting big picture perspectives. Acknowledging that emotions exist is a necessary first step.

Limitations and future research

Although our work represents a specific context, there are implications for future research. We suggest that by adopting a more emotionally centric perspective, future researchers could shed light on what practices or combination of practices might enable or accelerate OL, by taking into

account member assessments of progress or otherwise. It would be interesting and valuable to make comparisons between cases with clear evidence of OL (in line with strategic progress) as opposed to those where little learning occurs, and strategic goals are progressed negligibly, or not at all. In doing so, researchers could home in on validation and invalidation, taking into account employee perceptions of OL. Conceptualizing OL in this way also heightens the need to understand how meaning re-construal takes place across diverse individuals and groups who may not always be in agreement about strategic priorities.

Emotional ambivalence, conceptualized as holding strongly opposed emotions simultaneously (Plambeck and Weber, 2010), seems to us an important area for future research. Our study showed that at least two predominant emotional states can co-exist. We observed comfort alongside frustration early on in our analysis, and threat in combination with excitement at later points in time. There is the suggestion in our data that building a tolerance of emotionally conflicting states might be an important means to facilitate OL, especially where high anxiety is reported (where people appear almost overwhelmed by their problems). Research has shown that experiencing ambivalent emotions may enable people to deal with intense emotions, for example, offering reassurance when fearful (Baron, 2008). Although the notion is tangential to the main focus of our study, we suggest that OL might be accelerated where organizations build a culture through OL mechanisms to help people tolerate emotionally conflicting states.

In asserting that insights are collective we had to deal with the reality that perceptions and feelings changed over time, in a way suggestive of a gradual blending together of trends, rather than there being sudden and clear-cut changes at a particular point in time. We have tried to reach a rough approximation of feelings and perceptions in the time frames indicated and this estimation is suggestive of overall trends rather than pointing to exact emotional and cognitive states. It would be useful to explore different ways of capturing collective emotions, especially those arising from experiences that are unfamiliar and at the same time validated. By looking for evidence about whether members are expanding construct systems and disregarding prior ways of thinking and acting, future researchers could home in on OL relative to the strategic themes identified in that setting. Overall, we suggest a balanced emphasis, where emotions are seen as integral to, rather than separate from, the cognitive dynamics that underlie learning and change in organizations.

Funding

References

Antonacopoulou E and Gabriel Y (2001) Emotion, learning and organizational change: Towards an integration of psychoanalytical another perspectives. *Journal of Organizational Change Management* 14(5): 435–451.

Argote L and Epple D (1990) Learning curves in manufacturing. *Science* 247(Feb): 920–924.

Argote L and Miron-Specktor E (2011) Organizational learning: From experience to knowledge. *Organization Science* 22(5): 1123–1137.

Argyris C (1990) *Overcoming Organisational Defenses: Facilitating Organisational Learning*. Boston, MA: Allyn and Bacon.

Baron RA (2008) The role of affect in the entrepreneurial process. *Academy of Management Review* 33(2): 328–340.

Berends H and Lammers I (2010) Exploring discontinuity in organizational learning: A process analysis. *Organization Studies* 31(8): 1045–1068.

Berman Brown R (2000) Contemplating the emotional component of learning: The emotions and feelings involved when undertaking an MBA. *Management Learning* 31(3): 275–293.

Brandi U and Elkjaer B (2011) Organizational learning viewed from a social learning perspective. In: Easterby-Smith M and Lyles M (eds) *Handbook of Organizational Learning and Knowledge Management*. 2nd edn. Chichester: John Wiley, pp. 23–41.

Brown JP and Duguid S (2001) Knowledge and organization: A social-practice perspective. *Organization Science* 12(2): 198–213.

Casey A (2005) Enhancing individual and organizational learning: A sociological model. *Management Learning* 36(2): 131–147.

Christianson M, Farkas M, Sutcliffe K, et al. (2009) Learning through rare events: Significant interruptions at the Baltimore and Ohio Railroad Museum. *Organization Science* 20(5): 846–860.

Cook S and Yanow D (1993) Culture and organizational learning. *Journal of Management Inquiry* 2(4): 373–390.

Coopey J (1995) The learning organization, power, politics and ideology. *Management Learning* 26(2): 193–213.

Crossan M, Lane H and White R (1999) An organizational learning framework: From intuition to institution. *Academy of Management Review* 24(3): 522–537.

Crossan M, Maurer C and White R (2011) Reflections on the 2009 AMR decade award: Do we have a theory of organizational learning? *Academy of Management Journal* 36(3): 446–460.

Cyert RM and March JG (1963) *A Behavioural Theory of the Firm*. Englewood Cliffs, NJ: Prenctice-Hall.

Fineman S (1997) Emotion and management learning. *Management Learning* 28(1): 13–25.

Fineman S (2003) Emotionalizing organizational learning. In: Easterby-Smith M and Lyles MA (eds) *The Blackwell Handbook of Organizational Learning and Knowledge Management*. Oxford: Blackwell, pp.557–574.

Frijda N (2007) *The Laws of Emotion*. Hillsdale, NJ: Lawrence Erlbaum.

Gabriel Y and Griffiths D (2002) Emotion, learning and organizing. *Learning Organization* 9(5): 214–221.

Gherardi S (2011) Organizational learning: The sociology of practice. In: Easterby-Smith M and Lyles M (eds) *A Handbook of Organizational Learning and Knowledge Management*. Chichester: John Wiley, pp.43–65.

Glaser B and Strauss A (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago, IL: Aldine.

Golden-Biddle K and Locke K (2007) *Composing Qualitative Research*. Thousand Oaks, CA: SAGE.

Gray D (2007) Facilitating management learning. Developing critical reflection through reflective tools. *Management Learning* 38(5): 495–517.

Griffiths D, Winstanley, D and Gabriel Y (2005) Learning shock. The trauma of return to formal learning. *Management Learning* 36(3): 275–297.

Helay M and Perry C (2000) Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative Market Research* 3(3): 118–126.

Huber G (1991) Organizational learning: The contributing processes and the literature. *Organization Science* 2(1): 88–115.

Huff A and Jenkins M (eds) (2002) *Mapping Strategic Knowledge*. London: SAGE.

Jankowicz AD (1999) Planting a paradigm in Central Europe. Do we graft or must we breed the rootstock anew? *Management Learning* 30(3): 281–299.

Kang S-C, Morris S and Snell S (2007) Relational archetypes, organizational learning and value creation: Extending the human resource architecture. *Academy of Management Review* 36(1): 236–256.

Kelly G (1955) *The Psychology of Personal Constructs*. Vols 1 and 2. New York: Norton.

Kelly G (1963) *A Theory of Personality: The Psychology of Personal Constructs*. New York: Norton.

Knight L and Pye A (2005) Network learning: An empirically derived model of learning by groups of organizations. *Human Relations* 58(3): 369–392.

Lave J and Wenger E (1991) *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.

Leonard-Barton D (1992) Core capabilities and core rigidities: A paradox in managing new product development. *Strategic Management Journal* 13(SI): 111–125.

Levenson R (1999) The intrapersonal functions of emotion. *Cognition Emotion* 13(5): 481–504.

Lindsley D, Brass D and Thomas J (1995) Efficacy-performance spirals: A multilevel perspective. *Academy of Management Review* 20(3): 645–678.

McGrath R (2001) Exploratory learning, innovative capacity and managerial oversight. *Academy of Management Journal* 44(1): 118–131.

Maitlis S and Lawrence T (2007) Triggers and enablers of sensegiving in organizations. *Academy of Management Journal* 50(1): 57–84.

Morgeson FP and Hofmann DA (1999) The structure and function of collective constructs: Implications for multi-level research and theory development. *Academy of Management Review* 24(2): 249–265.

Patriotta G (2003) Sensemaking on the shop floor: Narratives of knowledge in organizations', *Journal of Management Studies* 40(2): 349–375.

Plambeck N and Weber K (2010) When the glass is half full and half empty: CEOs' ambivalent interpretations of strategic issues. *Strategic Management Journal* 31(7): 689–710.

Pratt MG (2008) Fitting oval pegs into round holes. *Organizational Research Methods* 11(3): 481–509.

Preskill H and Torres R (1999) *Evaluative Inquiry for Learning in Organizations*. London: Pitman.

Reger R, Gustafson L, Demarie S, et al. (1994) Reframing the organization: Why implementing total quality is easier said than done. *Academy of Management Review* 18(3): 545–584.

Russell P (1980) A circumplex model of affect. *Journal of Personality and Social Psychology* 39(6): 1161–1178.

Salecl R (2004) *On Anxiety: Thinking in Action*. London: Routledge.

Scherer K and Tran V (2008) Effects of emotion on the process of organizational learning. In: Dierkes M, Child J and Nonaka I (eds) *Handbook of Organizational Learning*. New York: Oxford University Press, pp. 369–392.

Simpson B and Marshall N (2010) The mutuality of emotions and learning in organizations. *Journal of Management Inquiry* 19(4): 351–365.

Strauss A and Corbin J (1998) *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks, CA: SAGE.

Suddaby R (2006) What grounded theory is not. *Academy of Management Journal* 49(4): 633–642.

Suddaby R (2010) Editor's comments: Construct clarity in theories of management and organization. *Academy of Management Review* 35(3): 346–357.

Thomas J, Sussman S and Henderson J (2001) Understanding strategic learning: Linking organizational learning, knowledge management and sense-making. *Organization Science* 12(3): 331–345.

Tsoukas H (2009) The dialogical nature of knowledge creation. *Organization Science* 20(6): 941–957.

Vince R (2001) Power and emotion in organizational learning. *Human Relations* 54(10): 1325–1351.

Vince R and Gabriel Y (2011) Organizational learning and emotion. In: Easterby-Smith M and Lyles M (eds) *A Handbook of Organizational Learning and Knowledge Management*. 2nd edn. Chichester: John Wiley, pp.331–348.

Vince R and Saleem T (2004) The impact of caution and blame on organizational learning. *Management Learning* 35(2): 135–154.

Appendix 1: Questionnaire schedule

The topics described below were covered during each of the three time phases. There were some changes in the answers people gave over time (as described in the Findings section) so that new topics emerged during later time phases. For example, the strategic learning themes became clearer during phases 2 and 3, as did responses suggestive of validation versus invalidation.

What organizational mechanisms exist to enable the sharing of knowledge across organizational boundaries?

What priorities do you think the organization has and how does this affect the direction of your learning? Are other people affected in the same way, do you think? What is the role of Japan in this?

Is there scope for bringing knowledge into the company from outside, by benchmarking the practice of competitors, for example, or visiting other members of Futuro world-wide?

Do you think that the learning opportunities that staff have is sufficient to address organizational priorities? Do you think the parent company in Japan are aware of the learning opportunities that exist at Futuro Newtown? Are opportunities for learning provided by the parent company?

Would you say that Futuro was effective in the way in which it manages learning?

What examples can you offer?

What priorities does the organization have and to what extent are there opportunities for staff to learn and grow in order to successfully achieve the priorities identified? What is the role of the Japanese parent company in this?

Is there scope for bringing knowledge into the company from outside, by benchmarking the practice of competitors, for example, or visiting other members of Futuro world-wide?