

Bramble Bushes in a Thicket

Narrative and the intangibles of learning networks

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About the book:

One of the most fundamental processes in business competition is inter-organizational learning. To create and distribute value across organizational boundaries companies need to learn from their competitors. Increasingly it is clear that the learning process depends on the creation of a complex set of networks across organizations. This book explores the creation of 'learning networks' and sheds light on how they function:- real versus virtual forms of interaction, collaboration versus competition in the learning process, and joint value creation versus individual value appropriation in networks.

The contributing authors are leading international experts in the field of global strategy whose chapters have been selected for their insights into the interdependence between organizational learning and networks.

- Explores the creation of 'learning networks' as a way for businesses to understand and learn from their competitors.
- Looks at inter-organizational learning networks and sheds light on how they function.
- Written by international experts in the field of global strategy.
- Contributions have been selected for their insights and interdependence between organizational learning and networks.
- Looks at topics such as real versus virtual forms of interaction, collaboration versus competition in the learning process, and joint value creation versus individual value appropriation in networks.



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In this chapter we explore how inter-organisational learning networks affect three systemic attributes of well-functioning organisations which are not often considered in value propositions for such networks: identity management, trust negotiation, and productive conflict. We approach the topic from the standpoint of a naturalistic sense-making paradigm, in which complexity, uncertainty and the stimulation of natural processes are emphasised over idealism, control and expert opinion. Since narrative and networks are two fundamental elements of human collective functioning and as such are integral to the naturalistic paradigm, we bring them together in this chapter. We consider how narrative participates in each of the network effects of identity, trust and conflict, and how that participation can best be supported to maximize these intangible yet strong elements of value afforded by inter-organisational networks.

This chapter is a contribution to a growing body of work that takes a *naturalistic* approach to research and intervention in organizations. Probably the best known correlate to our approach is the naturalistic approach to decision making pioneered by Klein (1998), on whose work we have drawn in our own work (Kurtz & Snowden 2003). We also draw on the schools of action research (e.g., Masters 1995) and grounded theory (e.g., Glaser and Strauss 1967). Here we contrast the naturalistic with the *idealistic* sense-making approach.

- In the idealistic approach, the leaders of an organization set out an *ideal future state* that they wish to achieve, identify the gap between the ideal and their perception of the present, and seek to close it. This is common not only to process-based theory but also to practice that follows the general heading of the “learning organization”. Naturalistic approaches, by contrast, seek to understand a *sufficiency* of the present in order to act to stimulate evolution of the system. Once such stimulation is made, monitoring of emergent patterns becomes a critical activity so that desired patterns can be supported and undesired patterns disrupted. The organization thus evolves to a future that was unknowable in advance, but is more contextually appropriate when discovered.
- Idealistic approaches tend to privilege *expert* knowledge, analysis and interpretation. Naturalistic approaches emphasise the inherent un-knowability of current and future complexities, and thus they de-privilege expert interpretation in favor of enabling emergent meaning at the *ground level*. (This upsets the modernist and post-modernist in management theory alike: the former seeking to mandate the future, the latter seeking to deconstruct source material.) In this respect we concur with the philosophy of the participatory school of action research (e.g., Wadsworth 1998), which refuses to separate researcher from researched and from researched *for* (usually those in control) and attempts

to bring all parties together into a common group of co-researchers, co-subjects, and co-actors.

- Idealistic approaches *separate* diagnosis (and thus research) from intervention, seeing the former as preceding the latter. The purpose of research in the ideal paradigm is to discover best practice by an analysis of the past that will inform and direct gap-closing interventions in the future. Research in the naturalistic paradigm is *intertwined* with practice, and sees all diagnoses as de-facto interventions and all interventions as providing an opportunity for diagnosis. An example can be found by contrasting Social Network Analysis (e.g., Cross & Parker 2004), which seeks to analyze networks in order to allow informed management intervention, with Social Network Stimulation (Snowden 2005-1) which seeks to catalyze the ramification of cross-silo networks.

Two of the most important elements of the naturalistic sense-making approach are *narrative* (as one of the primary mechanisms of complex knowledge transfer, creation and interpretation in human society) and *networks* (as one of the primary realities of human life – we are still, unless artificially constrained, tribal and clan-like in our needs and perspectives). It follows that the intertwined threads of narrative and networks will feature prominently in any naturalistic consideration of human endeavour.

With that foundation in mind, let us consider the application of naturalistic sense-making to learning networks. Inter-organisational learning networks are valuable yet intangible: while participants feel that they and their organisation have benefited, they struggle to explain what exactly those benefits are and how they can be expressed. Some proof of such value has been provided, for example, in the areas of increased speed of innovation diffusion (e.g., Strang and Soule 1998) and improved knowledge creation (e.g., Hamel 1991, Riggins and Rhee 1999). We would like to suggest three additional benefits of such networks that seem to us to be at least as important as these if not more so. Inter-organisational learning networks bring to organisations improved negotiation of multiple identities, increased discourse regarding trust and rule structures, and greater productive conflict. All of these benefits improve the systemic functioning of the organisation as a complex entity, and all involve strong narrative elements. We will consider each of these benefits in turn and suggest approaches that can help to support each benefit.

I. Negotiation of multiple identities

Human beings are masters of identity management, negotiating (without integrating) a constantly fluctuating constellation of identities. We may for example chat about politics (as a citizen) with a colleague (as a professional) while driving (as a motorist) our child (as a parent) to a school meeting (as a community member). These observations are well represented in the sociological literature by the related schools of identity theory (e.g., Stryker 2000), social identity theory (e.g., Tajfel & Turner 1986), and situated identity theory (e.g., Alexander and Wiley 1981), which all emphasise the importance and influence of multiple roles and identifications in complex social interactions. Some part of each individual's effectiveness depends on his or her ability to manage these multiple identities in a fluid, effortless way, the way a master craftsman manages his or her tools and materials.

Collectively, organisations also have multiple identities – as producers of shareholder value, as providers to employees, as players in industries, as creators of trusted products or services, as resources for customers, as agents of social change, as partners in local communities. These multiple organisational identities influence and are influenced by the multiple identities of their members.

Juarrero (2002) explains that the problem of identity has a long history in philosophy, generally distilled into two questions: *What makes something the same thing as it was before?* and *What makes two things the same kind of thing?* She raises the question of how organizations, which are decoupled from a physical location, can maintain identity. In the context of complex adaptive systems theory she creates a vivid and appropriate image (and we acknowledge her contribution to the title of this chapter) that is worth quoting in full.

... *whereas strong dynamic links among components (characterized as nodes) result in a “strong cluster”, weak links between strong clusters give rise to a*

community or a world. Since any node can simultaneously belong both to a strong cluster and to a larger networked community, society, or world, boundaries become diffuse, but also dynamic and creative. Complex dynamical systems thus begin to look more like bramble bushes in a thicket than like stones. And it is extremely difficult, as any outdoorsman will tell you, to determine precisely where a particular bramble bush ends and the rest of the thicket begins.

Organizations (and the individuals that make them up) are much like “bramble bushes in a thicket”, and the nature of their many interacting and co-evolving identities is self-similar as well as deeply contextual and ambiguous. Idealistic approaches (such as “best practices” and the “balanced scorecard”) are not best suited to handling such ambiguity, but naturalistic approaches (such as those we will describe below) are designed to deal with it.

Identity resilience

The collective identity resilience of an organisation, or its ability to manage its multiple identities smoothly and without breaking down (and also to maintain a sufficient diversity of those identities) is supported by the identity resilience of its employees. For example, say an organisation must make a radical change to its product line to compensate for a sudden drop in demand for a previously rock-solid product. Or say an organisation decides that devolving greater decision-making capabilities to members of its field staff will reduce the faux pas based on misunderstandings of local conditions that have beleaguered its sales efforts. To the extent that its employees are able to manage their identifications both to the particular products or services they support and to the larger identities of the organisation (for example as a provider of jobs to the local area), the organisation will be able to reinvent itself more successfully. If employees cannot flex their identification to a particular process or product (“I only know how to run this machine”, “We only market to this sector”), the transition will require more effort and may be less successful.

Organisations seem to recognise the fact that employees must manage multiple identities, creating “work-life” programmes to help them juggle activities. However, too often only lip service is given, painting the picture as a simple choice of how much time to allocate to different tasks, when the issue, and the ability, can penetrate more deeply into many aspects of behaviour. For example, employees often have to juggle customer relations with product development with industry outreach with project planning, and often some of these functions (and identifications) can be underserved because of inadequate training or even a denial (by the employee or others) that such functions are within the scope of work. Many employees do their work without being able to answer the question, “Who are you in this organisation?” (And possibly just as importantly, “Who are the others in this organisation?” and “Who is this organization?”).

When identity is considered from a perspective in which the taking on of mutually exclusive roles is paramount and human activity is categorized into atomistic particles without reference to context, individuals and organisations are constantly presented with dilemmas as to which identity to support. The idealistic approach assumes that there must be some ideal resolution of such dilemmas, while naturalism prefers a paradox to a dilemma. For example, people often resolve identity conflict through ritual, which can manifest in small apparently insignificant acts that allow people to change the patterns through which they filter data. A pilot entering the cockpit of an aircraft goes through a set pattern of ritual activity that causes his or her identity as pilot to dominate his or her identity as a particular individual. Martin and Meyerson (1988) identified three perspectives on organisational identity in contemporary research on corporate culture. According to the *integration* perspective, organisational identity is strongest when it is shared and reflects the goals and beliefs of its founders or managers. From an integration point of view, “alignment” between expressed values and informal beliefs is desirable, leading to increased loyalty and coherence. This perspective is particularly prominent in the popular literature on culture and leadership. By contrast, the *differentiation* perspective highlights subcultures and sub identities within the organisation, derides efforts at false unification, and believes that it is necessary to recognize differences of

class and power within the organisation to make sense of its identity. The *ambiguity* (or fragmentation) perspective views the organisation more like a web in which coherent sub-identities are always appearing and disappearing and in which fluctuating elements of organisation-wide identity form and dissolve on particular issues. Martin and Meyerson emphasise that no one of these perspectives is entirely correct, but that all three must be considered when viewing the organisation. Thus an organisation is a coherent body (integration) that is divided against itself (differentiation) and always changing (ambiguity). In other words, organisations collectively manage multiple types of coexisting identities.

Silos as organisational identities

One often-quoted problem of organisational identity is the infamous "silo mentality". "Silo thinking" is blamed for many organisational ills, and horror stories abound of groups working metres away from each other, unaware of mutually critical information and unable to consider the perspectives and needs of other groups. The problem can be real, but the solution is often worse than the problem: a "change initiative" to remove barriers and force people to share all knowledge equally, in effect forcing multiple sub identities to merge into one grand identity. This rarely works, mainly because organisational silos do provide useful advantages: rapid communication through shared language and social context, consistency, and coherent response. In fact, one could say that simultaneous prescriptions for "removing silo mentalities" and "supporting team-based organisations" are at odds.

Actually, silos are a poor metaphor for overly isolated organisational identities. If we take a cursory look at actual silo design, we see that the two most important considerations are (a) avoiding "stagnant zones" and "bridges" in which material ceases to flow, ages and decays even while new material is being added; and (b) ensuring the proper release of material for release without "flooding" (too strong flow) or lack of flow. There is also much to be read about designing silos to handle particular types of materials with different flow properties. In addition, silo design extends to many considerations exterior to the silo itself – its location in relation to water sources and buildings; its foundation and shielding; its access and inspection methods; its vapor exchange provisions; its response to rain, wind, frost, and heat; the preparation of material for storage; and the proper retrieval of material for use. In fact, silos are as much about interaction and flow (between fields, between seasons, between production and consumption) as they are about isolation and storage.

A well-functioning team within an organisation is actually much like a well-designed silo: it concentrates its energy and expertise (and identity) into the tasks it is best suited for, yet maintains context-appropriate connections and flows that maintain its relationship with the entire farm complex. Silo design metaphorically corresponds not only to the internal functioning of the team, but also to its awareness of its place in the enterprise and its relationships with other teams and with the "fields" from which and to which its "content" flows in an unending rhythm. If we look at teams in this way, the most effective organisation is made up of teams that are not entirely "transparent" or entirely "knowledge sharing" but aware of and capable of constantly negotiating internal and external connections between identities – some strong, some weak – in ways that make them and the entire organisation more effective.

Identity resilience is not simply stability, but the ability to thrive in the face of environmental fluctuation and transformation. A resilient identity is *effective*, but it may not always be *efficient*. In nature, stability sometimes improves resilience and sometimes destroys it – and which of these is true changes unpredictably. Species tend to "choose" evolutionary "strategies" (actually, fall into canalized pathways) that range from succeeding best in periods of stability (as with "living fossils" such as horseshoe crabs and coelacanths which have remained essentially unchanged for hundreds of millions of years) to succeeding best in periods of instability (as in the famous story about 19th-century moths adapting their coloration to coal-blackened trees within decades). In different circumstances each of these extremes can be life-saving or deadly, but looking across evolutionary history few species that optimize stability have survived (which is why "living fossils" are so notable and amazing – and vulnerable). In organizations, the focus on efficiency that has dominated management theory for some decades and creates such practices as stripping away "surplus"

functionality may pose dangers to survival. The most effective systems leave a sufficient level of inefficiency in order that they can be resilient in changing contexts.

Inter-organisational networks and multiple identities

Inter-organisational networks help organisations manage their multiple identities by holding up a mirror and helping them to achieve descriptive self-awareness. They also change the nature of identities within the organisation. Balmer and Wilson (1998) describe how a network of radio stations provides several coincident types of affinity, with for example professional, geographic, generational, and ethnic-origin identity affiliations forming across stations. Rometsch and Sydow (2003) describe how a fast food franchise affects the identity perceptions of not only its franchisees but also its suppliers, who see their own role in upholding the vision of a network of "family restaurants" as critical. As people begin to see their organisation and their place in it "from the outside", that is, from other perspectives, they begin to be more able to evaluate and navigate their identities with respect to it. In our own experience, one of us participated in such an inter-organisational "learning network" and found that our most revealing experiences did not have to do with encountering new ideas but in seeing that the obstacles we faced in organisational life were not unique to our own organisation but were widespread and generic. These revelations permanently changed our view of our relationship to the organisation and our place in it.

These experiences match with Martin et al's (1983) "uniqueness paradox": the finding that stories were often told by people at different organisations to demonstrate how their organisation was unique – but those stories were widely similar among organisations. For example, employees at all the organisations studied told stories in which the uniqueness of their organisation was demonstrated by its willingness to promote people on merit (or not), to rise to meet obstacles (or not), and to forgive mistakes (or not). What inter-organisational networks provide is the opportunity for employees to discover this paradox for themselves through learning about the experiences of people at other organisations, and in the process to change how they manage their own constellation of identities in relation to their organisation. Stryker and Burke (2000) describe how identities can influence the patterns of chosen social affiliations, which can in turn change the identities that caused them to form. This means that identification with a broader network will alter the identities of individuals and groups within organisations.

These perspective-enlarging experiences are necessary to human sense-making. A particular context or contrast can stimulate a latent identity, resolve a longstanding conflict, or create a conflict where it is needed. In conditions of unexpected contrast (for example extreme stress or extreme release) we can achieve common purpose with a diverse range of individuals with whom we might have no previous or expected affiliation. The resulting coevolutionary processes are irreversible: our pre-existing and latent identities and those of the people with whom we have interacted are now altered.

Identity and narrative

One of the ways people have always talked about identity has been through the telling of *identity stories* which feature the individual or group as a coherent character with certain highlighted characteristics – the lone genius, the band of principled rebels, the misunderstood nobility. Stories told for purposes of identity negotiation (both individually and collectively) are fundamentally different from stories told for other purposes. Crites (1997) calls these stories "sacred stories" and describes them thus: "Such stories, and the symbolic worlds they project, are not like monuments that men behold, but like dwelling places. People live in them. . . . [They] inform people's sense of the story of which their own lives are a part, of the moving course of their own action and experience." All other stories are what he calls "mundane stories" about norms, expectations and experiences.

Evidence for the participation of identity stories in the process of organisational identity negotiation is easy to find. Says Wilkins (1984), "When I interviewed managers and employees at a successful major electronics firm they could not define in mere words what the 'company way' was but they could define it using stories which were well known in the company." The most important words here are "well known". Identity stories are not

necessarily told often, but they are known by everyone who identifies with the organisation. Such "lived-in" stories create filters by which the organisation creates its identity and through which it filters data from its environment. An illustrative example of such a story is the "nine-day fortnight" story observed by Wilkins (1984):

. . . most employees at one company I researched have been told the story about how the company avoided a mass layoff in the early 1970s when almost every other company in the industry was forced to lay off employees in large numbers. Top management chose to avoid a layoff of 10 percent of their employees by asking everyone in the company, including themselves, to take a ten percent cut in salary and come to work only nine out of ten days. This experience became known as the "nine-day fortnight" by some and is apparently used as a script for the future of the company. In 1974 the company was again confronted with a drop in orders, and it went to the "nine-day fortnight" scheme for a short period. When other companies in the industry began layoffs, the old-timers used this story to quiet the anxiety of concerned newcomers. . . . Employees occasionally tell [this] story to communicate that this is the "company with a heart". Everyone I talked to in the company knew the story, which is used both as a symbol and a script.

Sacred stories of organizational identity represent an *ideational* component of organisational culture (Keesing & Strathern 1998) and as such are quite different from mission statements and organizational value statements, which represent *rule-based* culture and tend to reduce the complexity of sacred stories to platitudes.

Another important aspect of identity stories is their dramatic or performance nature, which mundane stories rarely exhibit. Czarniawska (1997) uses the term "autobiographical acts" to refer to the processes of negotiating organisational identity stories and links them to Goffman's (1959) concept of the construction of the self through performances before audiences (including oneself). The organisation performs its identity stories differently to different audiences: to its customers, its shareholders, its employees, its competitors, and its partners. It makes sense to say, then, that employees participating in inter-organisational networks will be required to represent the organisation's identity stories to an external audience, and that those tellings will impact the process of negotiation and the identities themselves. The properties of an audience made up of individuals from a parallel organisation meeting for ostensibly cooperative purposes will have a different impact on organisational identities than the properties of other audiences (possibly those the organisation is more institutionally prepared to address, through marketing and communications departments). A question we have often heard in inter-organisational gatherings, when social time is permitted, is, "So what's it like to work for Company X"? (with the implied extension "as opposed to Company Y"). Outside such a context, people might not hear such a question, and such a performance before such an audience may not have a chance to impact the nature of the organisation.

A third aspect of identity stories is their apparent uselessness: they may appear to be "about" nothing. Anyone looking for concrete evidence of "knowledge transfer" or "peer learning" – or even truth – may discard these stories, which are in some ways the most important to retain. Bauman (1986) describes how stories may be patently untrue at a purely factual level, but may reveal much deeper truths about the community in which they are told. Bauman quotes one man, during "an exploration of storytelling and dog-trading in Canton, Texas", who says, "when you get out there in the field with a bunch of coon hunters, and get you a chew of tobacco in your mouth, and the dogs start running, you better start telling some lies, or you won't be out there long." In other words, among coon-hunters lying is a mark of truthfulness, that your word, deep down, can be trusted: that you belong.

Such storytellings are critical determinants of identity negotiation. Says Bauman: "Since at least the time when a distinctive body of American folk humor first emerged during the early years of the American republic, the hunter and the trader have occupied a privileged place in American folklore. Dog trading at Canton is a thriving contemporary incarnation of this American folk tradition. The tall tales and personal narratives of its participants place them in unbroken continuity with the generations of hunters, traders, and storytellers that have given American folklore some of its most distinctive characteristics." In other words, these hunters tell the stories they tell to "place" themselves within the "unbroken continuity" of a larger cultural identity. When one coon hunter told Bauman, "any man who keeps more'n one

hound'll lie to you", he was representing his identity as a member of a noble group, not complaining or bragging. You can imagine that someone observing storytellings like these in an inter-organisational network and looking for evidence of "best practices" transferred would conclude that the group performed no function and should not be supported, when in fact they could be on the verge of reinventing the organisation.

One of the paradoxes we have observed in our work is something we call the paradox of truth: If you ask someone to tell the truth, they will lie; but if you allow them to lie, they will tell the truth. However, this key aspect of narrative does not mean that we have to fall into the epistemological uncertainty of relativism. People, like the coon hunters in the example above, are "canny" when it comes to knowledge of truth and learning in day-to-day discourses; we are highly tolerant and indeed thrive on contextual ambiguity. People routinely concatenate events and subtly change the material of experience to create appealing mechanisms for the transfer of learning. Narrative in human systems does not fill the role of what can be termed *fact-objectivism* (Boghossian 2006) or epistemic truth, but instead supports the rapid transfer of learning and failure avoidance. This is why so many naturally occurring stories are negative (and why "best practices" is so limited in usefulness). Whole forms such as urban myths have developed to spread learning and warning without any need for literal truth.

Supporting narrative negotiation of identity

Our recommendations for supporting the exchange of identity stories in inter-organisational networks include one caveat and two devices.

The caveat is this: *organisational identities are emergent properties* of complex systems, and as such are slippery creatures. Outsiders cannot easily see them; they can be destroyed by contact or even direct reference; and they cannot be created or controlled by mandate. The "extraction" of such stories by "experts" is guaranteed to be an exercise in illusion, as is their "design" by "leaders". Say Boje et al. (1982): "In their attempts to examine the organization's myth system, OD [Organisational Development] consultants often substitute their own myths for those of the client organization." Actually, though we agree with Boje's statement, there is a degree of hypocrisy in it, since Boje himself, in his deconstruction of "organisational fragments", imposes his own expert ideology in an attempt to remove ideological bias. By contrast, our narrative methods attempt no expert interpretation of collected anecdotes and only *connect* people and anecdotes into dynamic ecologies of sense-making (on which more later). In a very real sense the post-modernist approach to narrative (of which Boje is an exemplar) represents a Hegelian anti-thesis to the thesis of managerial modernism: that which they criticise they also practice. In rejecting managerialism, we can equally discover the tyranny of the expert, as in Orwell's nightmare the animals look through the window of the farm to see the pigs dressed as men.

Saying that identity processes cannot be controlled (either by managers or by experts) does not mean that they cannot be *influenced*; it means that the methods used must be participative and emergent rather than analytical and prescriptive. For example, a shock to the system (such as the surfacing of a negative identity story) may be useful in order to create the conditions for breaking up unhealthy rigidity and renewing self-organisation; but as with all complex systems such interventions are not entirely predictable in their outcome. Pursuing multiple small interventions and seeing which seed desirable patterns works best: this is naturalistic evolution, not idealistic goal seeking.

Archetypes for narrative negotiation of identity

The first device we will mention that is particularly useful in supporting narrative exchange for identity negotiation is the *archetype*. We are all familiar with archetypes from the stories of our childhood: the "fairy tales" of the Brothers Grimm, the myths and legends of the Greek and Norse Gods, the animal stories of the Aborigine people of Australia, the myths of Native America. As people tell and retell stories about their environment, their beliefs and values as expressed through the characters within those stories gradually become more extreme. Eventually each character represents one aspect of the culture, and collectively the characters and the stories that reveal those characters provide a profound set of cultural indicators. In the modern age, we can see archetypal characters emerge in the form of cartoons such as the Dilbert series, in which the various characters are instantly recognizable in a modern

corporate environment. Just as a Dilbert cartoon resonates with its audience, so an archetype or archetypal story has immediate resonance with the unarticulated collective identities of the organization's members. At their simplest, archetypes can help a group articulate understandings that have previously remained beneath the surface. At their most sophisticated, archetypes can form part of a complex network of cultural integration.

We help people to construct sets of archetypes (Snowden 2005-2) that represent their understandings about themselves and about other groups, and then help them use those sets to reveal commonalities and conflicts. These comparisons have led to some truly revealing insights about "who we are" and "who they are". For example, we have seen senior management discover that while they see themselves as hard-working, their subordinates see them as free riders on the work of others; we have seen salespeople discover that they hold their customers in contempt; we have seen educators discover that they have labeled truly creative (if unconventional) people as unproductive; we have seen managers discover that they themselves are the largest obstacle their people face. Often these discoveries are painful, but they are always useful.

Issues of identity can be sensitive subjects, and archetypes provide an indirect route to disclosure and discourse that can be much more powerful than surveys and direct questioning, which rarely produce truthful answers. Archetypes also resonate with experience, and as such persist to create a shared language with which identities can continue to be reappraised as the organisation changes. In one example, an archetype constructed in one part of an organisation surfaced a year later in another organisation halfway across the world in a group speaking a different language. It was still meaningful and resonant, which is why it survived. This has been the function of storytelling for countless centuries.

Archetypes also represent a means of negotiating identity among groups. For example when two organisations are merging, the atmosphere is fraught with narrative. Identity is never stronger than when it is under threat. One of us experienced the takeover of a company by IBM. Prior to the IBM takeover, the organisation had three competing identities (and associated stories) that could be traced back to a previous merger of three groups to create a single division of a larger organisation. After the IBM takeover those competing identities merged for the first time, threatened by the larger identity of IBM.

Our methods use narrative to help people negotiate meaning among groups. Extraction of the archetypes that precede a merger in both organisations not only provides a valuable indicator of culture and a means of informing managerial decisions (If we do X how will each of the archetypes react), but also a means by which new *common* stories can evolve quickly. Interventions in which employees from one organisation re-tell their stories through the eyes of the other organisation's archetypes and vice versa in effect merge the underlying myth structures of the organisation. In conflict resolution, displacement of real world issues into a semi-fictional world of archetypes allows discussions to take place without threat. Telling a story about a set of archetypes allows me to tell a story about myself without allocation of responsibility for the story. We use the same technique in crisis management to allow disclosure of failure without allocation of blame.

Sense-making databases A second device we use to support narrative exchange for identity negotiation is the *sense-making database*. This contains anecdotes (raw, naturally occurring stories), but can also contain drawings, pictures, sound files: anything that allows people to make sense of complexity. A sense-making database is emphatically not an expert system, a knowledge base, a content management repository, a case-based learning system, or a best practices collection, although it may work in close collaboration with such systems. It is a matrix for storytelling as a mode of discourse. A few distinguishing characteristics:

- Anecdotes in the sense-making database have multiple interpretations and perspectives. They are not "codified" as having one meaning or "truth", but may have several competing interpretations preserved, which adds to their negotiation value. For example, if I can see that a group of product designers said a particular story was an unfounded rumour and a group of factory staff said the same story was "something the head office doesn't want known", I can learn a lot more from the story than I can if I am only told the story is factually true or false from an official point of view.

- Anecdotes in the sense-making database are contextually situated. They preserve as much contextual detail about the "story of the story" as is possible –Where did it come from? Why was it told? How was it told? Who told it? How did the audience respond? How was it different in another telling? How has it changed since the early days? When is it told? Who can tell it? What happens when it is told? This type of contextual situating gives users a greater ability to evaluate the story in a fine-grained way that is more useful to their navigation of identities than the simple facts of date, location and subject matter. One might for example see that anecdotes represented as personal experience increasingly tend to be about customer satisfaction, while anecdotes represented as second-hand increasingly tend to be about unhappy customers, which might lead one to investigate the possibility that accountability is suffering.
- Anecdotes in the sense-making database are intimately linked with conversation in a complex ecology of communication. They are not "captured" as "knowledge" and locked away forever, but are given the opportunity to participate in ongoing dialogue, perhaps growing or changing over time. In this way the sense making database in use becomes something larger than its software, larger than its content, and larger than its user community. Such databases are more like online communities such as epinions.com or eBay than they are like encyclopaedias. They allow patterns to emerge, which are very like the mechanisms for learning and knowledge transmission that take place in oral history. As people encounter anecdotes in different combinations in different circumstances, new stories (refined, purposeful) and anecdotes (raw, naturally occurring) emerge in the context of need.
- Anecdotes in the sense-making database enable pattern detection and sense-making. They are indexed by socially relevant abstractions such as archetypes, themes, values, conflicts, and other social constructs that permit people to use the body of stories not atomistically, for look-up only, but as a pattern detection device. For example, we have seen people discover parallels between their behaviour and that of historical figures and thus reveal a new perspective on how their actions must appear to others. Importantly, these discoveries are not handed down by outside experts but are discovered by people embedded in the context of the problem for themselves, which makes them infinitely more valuable (and acceptable).
- Anecdotes in the sense-making database are indexed by their tellers, as only they know the full context. If the anecdotes cannot be indexed by the storyteller, their indexes are socially constructed by groups of people representative of the community. They are never interpreted by an external expert. Thus the indexing structure (which can include archetypal characteristics) forms a mediation device between the individually situated context of an anecdote and the meaning of that anecdote in interaction with different contexts. The indexing structure, which is itself emergently derived through the process of archetype construction, creates a grammar of narrative interaction which sets into motion the narrative ecology mentioned above.

Anecdotes in the sense-making database create new anecdotes, which emerge from the serendipitous (not taxonomic) encounter between people and the database and each other. The net result is the evolution of ecology rather than the compilation of a resource. Identity management is an ongoing, social, interpretive, communicative, and complex process. Supporting it requires attention to all of these elements, whether using software as a tool or not. The easiest way to support the narrative negotiation of identity is simply to allow people to do it, because they naturally will if the activity is legitimised. Even something as simple as altering the schedules of inter-organisational meetings to allow time between presentations for free discussion can have an impact on the effectiveness of such meetings in supporting the identity-management function of the network. Recognition of the importance of identity negotiation, and not considering it merely a nicety, is half the battle.

II. Trust and rule structures

If we take a systemic view of trust in organisations, it is not about who can ask whom to do what, but how well the organisation is able to cohere as it flows over obstacles in its path. A

bicyclist encountering a rough patch will call upon her balance, her strength, her quick response time, her muscle memory – and her bicycle's design, and her built relationship with the bicycle, and even her built relationship with the road she is riding on – to trust that she will be able to ride over the patch without falling.

Trust is a feature of well-functioning systems that is "bigger on the inside than the outside" – that is, it looks simpler than it is. For example, it is commonly believed (and reported) that the winners of the Tour de France bicycle race are individuals, but in fact they are nine-person teams called "pelotons" whose intense coordination is essential to the success of the "winner". No single rider can hope to win a race against such teams, which use aerodynamic shielding, or a "common slipstream", to support the leader's progress. According to a *New Yorker* article on the success of Lance Armstrong (Specter 2002), "Cycling is, above all, a team sport, and the tactics involved are as complicated as those of baseball or basketball. ... there is usually at least one team rider positioned in front of his leader. Riding directly behind another man – which is called drafting – can save a skilled cyclist as much as forty per cent of his energy. ... The team members take turns "working," or pulling, at the front to give each other a rest." A well-functioning organisation, like a well-functioning peloton, is made up of people who give each other reciprocal "rests" via networks of mutual trust, and thereby help the organisation cover ground without falling behind or falling apart. In a peloton rushing down a mountain there is no time to discuss the rules of coordination, and clashes can be literally life-threatening, so the rules must be understood by all and built over time. In an organisation rushing down a recession curve, a similar argument can be made.

Much has been written about the "unwritten rules" (routines, norms, standards) of organisational culture and how people learn about these rules and the consequences of upholding and breaking them (e.g., Schein 1985, Johnson et al. 1994, Weick 1995). Not only does it take time for new employees to learn the rules (themselves having prior assumptions and beliefs to reconcile), but also the rules themselves are a moving target, evolving over time. Rules take various forms, from those specifically stated in policy, to those written but ignored, to those unwritten but often mentioned, to those unwritten and never mentioned (but still critical), to those unwritten and only loosely applied, to those that serve mainly for cohesiveness or initiation and have very little actual consequence beyond group acceptance. Rules can arise from many sources (from below as well as above), for many reasons (for self-protection, for team cohesiveness, for conflict avoidance), and in various relationships to each other (some rules are about the applicability of other rules). Some are imposed, some form out of attempted imposition (as backlash or as twisting of original intent) and some emerge on their own (sometimes to the consternation of those in charge, but sometimes wonderfully fortuitous).

Obviously there is much complexity to be navigated here, and much of it must be done informally. In a study of stories told about employees "not knowing the ropes" in over 500 organisations, Gilsdorf (1998) found that "Stating clear policy would have helped head off 20 percent of the problems narrated by this study's respondents." That leaves 80% of problems to be anticipated through direct experience: through conversation, storytelling, observation, and interaction. Gilsdorf also collected estimates of what these incidents of "not knowing the ropes" cost organisations, and found accounts of lost time, lost employees, lowered productivity, and ill will, not to mention monetary losses ranging from tens of thousands to millions of dollars per incident. The strength of unwritten rules is that they are habitual within the group and thus both adaptive and resilient. Good management practice creates habits rather than rules. Coming back to our bicycle-team metaphor for organisational effort, the more individual members have transformed rules into habits, even as they are renegotiated, the more smooth is the performance of the group overall. To outsiders (consultants, the new manager?) it may look like there are no rules at all, as though the entire group merely thunders down the mountain in perfect synchrony.

Inter-organisational networks and trust

Inter-organisational networks help organisations sustain productive rule networks within their boundaries by making the rules and the negotiations around them more visible and better

understood. When members of such networks trade experiences, they compare not only facts and procedures, but also "how we do things around here". In the same way that children find out that their dialects and accents are not universal, and thus learn more about the dialects they use, members of organisations find out that the unspoken rules they live by are not universal, and thus bring those rules into a closer scrutiny and a deeper understanding. To give a simple example, participants in one learning network pooled their experiences by telling each other stories with the theme of boundaries they encountered at work. Several generic themes emerged, such as "tunnel vision", "oversimplifying", "breaking the mold", and "rolling with the punches", with stories from disparate industries intermixed. This set of stories helped members to place their experiences within a broader range.

The importance of trust in the development of strategic alliances between organisations has been examined in a broad literature (e.g., Dyer and Chu 2000, Bachman 2001, Das and Teng 2001). Generally, the development of norms and understandings *among* organisations is considered most fully, and not their impact on intra-organisational trust. For example, say Child and Faulkner (1998), "The fact that partners from different countries ... follow different assumptions of 'what can be taken for granted' places particular difficulties in the way of creating trust-based relationships between them, over and above the tensions which might be expected to arise within strategic alliances in general." At the same time such cultural boundary crossings create a challenge for organisations to negotiate new mutually agreeable norms, they also provide a unique and valuable opportunity to make visible "what can be taken for granted" within each organisation.

Skule (1999) describes how an inter-organisational group of workers from five food-and-drink companies were taken through a training program that included "practice in other companies". Says Skule, "Most of the skilled operators described [the experience] in terms like "see things differently", "opened my eyes", "think more about what I am doing", "more alert" and "think more about the consequences". These new perspectives or ways of seeing in turn made operators attend to features in their work situation in a new way. From a former habitual way of working according to minimum standards, many skilled operators developed a more reflectively skilled way of performing their job, within the limits of existing job structures and routines." We believe this kind of benefit may not be as often used as is possible.

Trust and narrative

Attention to the importance of storytelling as a means to negotiate and make sense of collective rules has a long history of study (e.g., Wilkins 1983, Boje 1995, Gabriel 2000). To give just one example, Jameson (2001), in a study of management discourse in a restaurant chain, tells a fascinating story of how several managers went through a process she calls "storybuilding" to make sense of a new corporate directive. The directive specified that managers would be subject to a "three-strikes-and-you're-out" system for complying with requirements to submit timely information on new employees. If the paperwork was missing or delayed three times, the managers would lose their jobs. In one meeting a group of operations managers was discussing the three-strikes directive with their regional executive. First the executive told a story about how the rule would apply, using the terms "you" (the managers) and "they" (the corporate office). He then realised the managers were threatened by the use of "you", so he retold the same story with a third-person protagonist. At that time he also introduced the elaboration that even if a subordinate was in charge of submitting the paperwork (if the manager was out of town on business), the manager, not the subordinate, would be fired. This elaboration launched a series of hypothetical stories told by the managers in which the directive was "tried out" in various situations – the paperwork got lost by the corporate office, was called in but not mailed in, was mis-faxed, was hard to get from the new employee. In each case the executive kept repeating the same denouement – they, and no one else, would be fired. The managers used these fictional narratives to make sense of the new directive (which they knew they could not influence), to communicate to the executive their difficulties in complying with the directive (and thus perhaps getting him on their side in any dispute), and to come up with strategies to protect themselves and reduce the threat to their jobs. For example, they discussed saving fax records to prove they had submitted records on a

timely basis. This is a compelling example, but by no means unique, of how people naturally use narrative on an everyday basis to negotiate rules, whether official or informal.

People also use narrative to safely express differing opinions about rules and their effects on them. For example, Gabriel (1995) gives an account of an accident in which a fire extinguisher exploded in a research laboratory. Four collected accounts of the incident varied widely. One employee gave only a “detached description emphasizing the material damage”; another employee half-seriously presented the incident as a “personal attack” on her by the management; another employee concentrated on making clear that he was not rattled by the explosion; and a fourth jokingly represented the event as a failed opportunity to inflict damage “upstairs” (on the management). In each of these cases, the storytellers used the story as a vehicle in which to embed subtexts about negotiations of power and procedure. In the three-strikes story mentioned above, the operational managers populated their fictional narratives with fragments of actual experiences in order to “test” the directive from a perspective that made sense to them. Many such organisational stories embed rule negotiations inside accounts of seemingly unimportant events such as rearranging office furniture, scheduling time off, purchasing petty cash items, using the telephone and e-mail, and even making seating arrangements at meetings. Often these stories are not about what they appear to be about. As with identity stories, the importance of these rule stories may not always be obvious if looking for transferred knowledge or best practices; but without a free trade in such stories it is difficult for trust to emerge.

Supporting narrative negotiation of trust

As with the previous section on identity, our recommendations for supporting the exchange of rule-negotiation stories in inter-organisational networks include one caveat and two devices.

The caveat is possibly the most important in working with narrative: *respect the power and danger of narrative*. We have found that people just beginning to consider the possibilities of narrative pass through a predictable first stage of storytelling: they think that telling a good story will affect the change they want to see. This perception is partly based on a literature that says mental models determine action and are created by stories. The mental-models view is an attractive but unrealistically simplified view of human cognition. For example, patterns of experience, either encountered directly or vicariously through stories, create complex patterns in long-term memory that dramatically affect (indeed may form the basis of) decision-making. This is a far more complex phenomenon than simple “mental models” which imply a more structured and manageable process than is actually possible. For this reason we find the work of some people who advocate telling stories in organizations (the so-called “organizational storytellers”) dangerous.

Those who are seduced by the assumed quasi-deterministic attractions of organisational storytelling are led into seeking replicable recipes and focusing on intervention and prescription rather than description. For example, they might hire a professional scriptwriter or storyteller to help them craft a story that they believe will fill people with enthusiasm for the vision they want to expand, and they might see narrative primarily as a device for “cultural change” or other euphemisms for control.

This telling-stories phase soon passes when people realise that narrative doesn't work that way; instead it is a complex system that can be influenced but not controlled. “Official” stories that don't reflect the perspectives and realities of different people in the organisation tend to sprout other stories that more accurately do so. Particularly dangerous are “anti-stories”, or cynical reaction stories, which often warp the original story to negate its message. One famous example from IBM history is the story of how T. J. Watson, famous for his nasty temperament, decided that he would institute an “open-door policy”. He told his employees that he wanted to see lots of heads poking in his office door. The story soon got around that lining the inside of his office was a row of heads – on spikes.

We call such out-of-touch official stories “Janet and John stories” (so they are called in England; in the USA it is Dick and Jane, in Canada Bob and Betsy, in Wales Sion a Sian), after those sanitised manners tales told to children in which the good quiet little angels bear no resemblance to real children. We like to say that the ethics of narrative work is self-

policing, because if you try to control the narrative system in an organisation, it will punish you without any external force needing to do so. Still, we use a three-point set of ethical heuristics for narrative work: 1) always declare up front the use of narrative techniques (no stealth story work); 2) if asked any question about what sort of narrative intervention you are doing (such as instructing executives in how to tell stories for cultural change), answer honestly; and 3) appoint an independent arbitrator for any dispute over the use of narrative techniques in organisations. It is also important to understand that because narrative processes in organisations are complex systems, all diagnoses are interventions (thus "extracting" the stories of an organisation is not an effect-free observation) and all interventions are diagnoses (thus monitoring of any narrative activity provides useful new insights).

Disruptive metaphor

The first narrative device we recommend for the support of narrative trust and rule negotiation is *disruptive metaphor*. Metaphor can provide a common reference for the group that moves them away from current concerns and prejudices into a safer space, but a space that is disruptive, and even disorienting, in the association of ideas that it stimulates. It can be used for several purposes, including eliciting stories in sensitive areas, getting people to see things from different perspectives, and breaking up rigid entrained beliefs. For purposes of rule negotiation metaphor is most useful to help people talk about issues they are not able to discuss directly. People often use metaphor naturally in conversation, but deliberate support of it can be even more helpful, especially if people are at an impasse and unable to begin dialogue.

A particularly apt choice of metaphor can break down barriers to discussion of difficult subjects, putting aside literal truths to get at deeper cultural truths. For example, the book *Longitude* by Dava Sobel (1998) describes how the British government offered a rich reward to anyone who could discover a means to measure longitude at sea, which would dramatically improve the safety of seafaring. A furniture maker in the English Midlands proposed that longitude could be measured by constructing a clock that would keep accurate time on shipboard, and thus longitude calculated by examining the time difference from Greenwich Mean Time at midday. Though the solution was obviously correct, the "experts" in London denigrated the furniture maker's solution for decades and never fully paid him the substantial reward. Their science locked them into solutions based on measurement of the distance of the moon from the earth and creating tables based on the day of the year, in effect replicating the established method for measuring latitude with a sextant and a calendar.

Given that story, it is much easier to ask people to think of instances when someone under their management has been treated like the furniture maker than to ask the same people to think of instances when they have mistreated people out of ignorance and prejudice. The metaphor allows people to understand and discuss the issue at a deeper and less personally threatening, but still disruptive level. It allows people to "own up" to bad practices that they might otherwise attempt to excuse, and it allows people to safely "accuse" others of similar practices. Common childhood stories, examples from other industries and disciplines, science fiction, and historical accounts can all provide useful disruptive metaphors. Such metaphors can even be woven into group exercises in which people are confronted with the characteristics of their own organisations in metaphorical form, perhaps exploring an alien planet or negotiating an ancient treaty. If we contrast this type of exercise with the "fall into each others' arms" trust exercises that are typically anti-storied about in organisations, we can see that disruptive metaphor allows the real issues to be discussed rather than papered over with pretensions to trust. Some of our more elaborate methods based on metaphors involve creating displaced environments (artificial life universes, alternative histories, contrasting industry sectors) designed based on a study of the organization, but with the problems displaced to the metaphorical environment. In a game environment employees are thus able to explore novel solutions without the encumbrances of current best practice and responsibility for outcome.

Story construction

A second narrative device for the support of narrative trust and rule negotiation is support for *story construction* as a sense-making activity. Note that we say "as a sense-making activity"

in deliberate contradiction to the usual expectation of story construction as a creator of persuasive material. The use of story construction for propaganda is entirely legitimate (indeed, the term "propaganda" need not have any negative connotation – it is merely the spreading of some information rather than others), but is less amenable in a complex system of narrative exchange. We help people construct purposeful stories out of collected anecdotal material, using age-old fable forms, to negotiate meanings among different perspectives. Such fables are grounded in the reality of the organisation and create a shared language people can use as a shorthand for oblique reference. For example, we once helped a group to create lessons-learned stories about a large construction project, the first of its kind for the corporation. The stories were taught to improvisational actors and were performed at a global annual meeting. The audience then interacted with the actors, adding and creating new variations of the original form. Humour and resonance with actual experience embedded the story in the group. The story title was “and then the corporate seagulls come in and shit all over you”, the language reflecting the culture of the group. The target of the story was to allow managers in the company to explain unique aspects of their organization to partner companies on large construction projects. Some years later on another project we were gathering stories in the field from a water utility company who had just started a project with the construction company. The corporate seagull story returned without alternation, years after its creation with the same purpose.

The reader will now be able to link these interventions back to earlier examples of the creation of new myth form stories in a merger. Different networks need different stories to create their identity and the nature of their interconnection. As in a religious community, a set of stories provides a moral framework to which disparate activity can be referenced to resolve differences (think of the parable of the good Samaritan). Socially constructed stories can be used to create a sustainable and (due to necessary ambiguity) resilient framework by which the different parts of the bramble bush (and the thicket) can interact and maintain coherence.

III. Productive conflict

Deutsch (1973) defined conflict as arising when two parties have incompatible goals and obstruct each other in meeting those goals. Kabanoff (1985) pointed out that conflict can arise when group members have compatible goals but approach the situation differently based on diverse backgrounds and value systems. Thomas (1992) defined conflict as arising when one party feels pain or discomfort, projects its cause (correctly or incorrectly) onto another party, and (critically) does not accept the situation. Thomas' definition brings perspective to the forefront by distinguishing situations in which parties have differing goals but accept the difference or simply don't care about the outcome.

Recent years have brought a growing interest in the positive nature of intragroup conflict, though its roots go back to Follett (1942) and Coser (1956). The old idea that all conflict is negative (thus the importance of "conflict resolution") has been replaced by a distinction between desirable and undesirable conflict (thus the importance of "conflict management"), though the diffusion of this distinction to the popular press has not been complete. Deutsch (1973) compared cooperative conflict, in which group members see the conflict as a group problem that requires common effort to solve, and competitive conflict, in which group members see the conflict as a win-lose struggle. This distinction was subsequently enlarged on by many authors and variously termed positive versus negative, constructive versus destructive, productive versus unproductive, and functional versus dysfunctional. Ravn (1998) poses the interesting possibility that Thomas' definition of conflict includes in it both productive and unproductive conflict, because productive conflict stops before it gets to the third phase of non-acceptance, instead using the energy of conflict as a positive force.

Many authors (going back to Geutkow and Gyr 1954) have distinguished between *cognitive* conflict over how tasks should be carried out and *affective* conflict over interpersonal relationships. Jehn (1997) added a third type of conflict – *process* conflict, over who should do what – and found that group members differentiate between these three types of conflict in practice, even in the middle of conflicts. Several authors (e.g., Jehn 1994, Amason 1996) have found cognitive conflict to be helpful, and affective and process conflicts to be detrimental to group performance. Amason and Schweiger (1997) point out how difficult it is to separate

these types of conflict in real life: for example, conflicts about task strategies are often "taken personally" and so lead to affective conflicts. So conflict is a double-edged sword: the good comes with the bad. It is dangerous to concentrate energy too strongly on reducing affective conflict because cognitive conflict might also be reduced, leading to groupthink and repression; and it is dangerous to promote cognitive conflict without regard to the effect it has on reciprocal trust relationships.

Amason and Shweiger (1997) suggest that groups which maximize cognitive conflict while minimizing affective conflict have two characteristics: *openness*, or the accepted practice of openly airing "diverse and dissenting viewpoints", and *mutuality*, or norms of cooperation that prevent such diverse exchanges "from being misinterpreted as personal attacks or political manoeuvring". Thus shared behavioural norms that represent the cooperative nature of the group provide a sort of boundary mechanism to separate positive from negative conflict. Jehn (1997) empirically found that group norms were used in practice to allow cognitive conflict ("We need to fight about this") while disallowing affective conflict ("Leave that out of the office"). George and Stern (2002) give an excellent example of such separation norms in their description of the "four rules for not killing each other" used by three high-level defence officials in the US President Clinton's cabinet: 1) "no friendly fire", or refrain from criticizing each other publicly; 2) "walk ourselves back", or retreat voluntarily from an unreasonable stand; 3) "presume innocence", or talk to your colleague before you believe he or she has done something dishonest; and 4) "no policy by press conference", or agree to things before announcing them. These rules all served to keep cognitive conflict from "crossing over" into personal attacks and power plays.

We find Alper et al.'s (2000) concept of "conflict efficacy" useful: it says that conflict should be measured not by its nature or origin, but by its contribution to the perception among group members that conflicts can and are dealt with productively. In other words, whatever works for a particular group at a particular time is what works, and the group has to find this out in practice. Say Alper et al., "Teams that are confident they can deal with their conflicts are likely to work productively; teams that doubt their conflict management abilities may become demoralized and ineffectual." Thus the value of any particular conflict depends on the history, context and dynamics of the group (which seems a more valid systemic view). Our own work also indicates that conflict, particularly if individuals are protected by ritual practices of formal conflict, increases the scanning capabilities of a group.

Inter-organisational networks and productive conflict

Inter-organisational networks help organisations improve productive conflict within their boundaries in two ways: first, by increasing the productive conflict experienced by groups and individuals of the organisation who are in contact with the outside network, and second, by making each internal group's norms for conflict management more visible in comparison. It does not seem that much work has been done specifically on the types and natures of conflict in inter-organisational networks to date. Certainly there has been discussion of how conflicts of interest can arise between partners in business ventures, but there has not been strong attention to how inter- and intra-group conflict plays out in inter-organisational learning networks.

We see some propensity in the literature on inter-organisational networks to believe that members of such networks succeed best when they maximise their exposure to "best practices", which are universally agreed upon, universally applicable, and free of conflict. However, the evidence shows something different and more interesting. Beckman and Haunschild (2002) studied the effect of inter-organisational networks on acquisition premiums, as quantitative measures of "good deals" reached for the future success of the firm (lower premiums meaning better deals). They found lower premiums paid when inter-organisational networks were diverse in experience, reporting experiences of high and low premiums paid, than when networks were universally low in premiums paid. This contradicts the idea that organisations work by imitating others and gives support to the idea that the communication of experiences, of as wide a range as possible, produces the best informed decision making. Those experiences are inevitably going to produce conflicting advice and opinions, which are useful expansions of an organisation's experience.

There is some debate about how best to increase productive conflict. Some authors have developed "conflict stimulation" methods (e.g., Van de Vliert and De Dreu 1994) meant to increase productive cognitive conflict in groups. Macy and Neal (1995) describe classroom activities that use devil's advocacy (deliberate dissent), dialectical inquiry (tension between ideas) and reverse brainstorming (criticism of previously generated ideas). However, these methods have their limits: George and Stern (2002) point out that devil's advocacy, in which one group member is temporarily given the role of voicing unpopular opinions, is much less effective in a homogenous group than the inclusion of a "genuine dissenter" who embodies the role fully.

Our own work involves breaking a group into several sub-groups each of which works on a problem in parallel. At strategic points a representative of each sub-group presents their solutions to another sub-group who are instructed to be passive during the presentation. The presenter then turns their chair so that they cannot maintain eye contact and now has to passively receive and take notes as the audience "savage" their ideas. Participants are instructed to be unfair, unreasonable and unforgiving. (This technique will be recognized by those in writing groups as a variant of the "fly on the wall" approach.) If you have five such sub-groups, an idea can go through four such baptisms of fire. The fact that everyone is involved, and the ritualisation (lack of eye contact, instruction to be unfair) removes personal threat and encourages greater scanning capability in the group. An external "devil's advocate" can be rejected by the group as an outsider, but the taking up of the role by a member of the group is always constrained by the prior participation of that individual in the decision processes of the group.

All of this would argue for true diversity in group membership, including diversity of cultural and learning backgrounds, as a way to stimulate productive cognitive conflict. For example, groups composed only of people with particular degrees from particular regional schools in particular subjects are likely to produce less constructive conflict than groups of people with varying educational experiences in various fields from around the world.

So a genuinely wide range of experiences and backgrounds is the best contributor to productive inter-organisational conflict, which brings more than "best practices" to network members: it brings a radical re-vision of existing practices and knowledge structures. Armstrong (1990) says this well: "One way of demystifying the seeming naturalness of a set of beliefs or interpretive practices is to juxtapose them against opposing conventions that organize the world according to different principles that may seem equally obvious to their adherents.... Confronting presuppositions radically different from one's own may lead one to become clearer about what one believes and why, or the challenge of rigorous opposition may compel adherents of an approach to refine their methods or to clarify their hypotheses with more subtlety and precision than they might have developed if they had not met resistance." Holmquist (2003) makes the case that learning in intra-organisational and inter-organisational networks is intermingled and that conflict is a critical ingredient in this intermingling: "The explorative character of much interorganizational learning does not occur by itself; it occurs as a result of a confrontation and a combination of single organizations' experiences." He also makes the point that because inter-organisational networks typically have a less centralised structure than the organisations themselves, employees who participate in such networks are exposed to "conflicts and instability as a result of the lack of formal authority", which can increase productive conflict within their own organisation. All of these signs point to the utility of inter-organisational networks as a source of not only new knowledge but also of productive conflict that improves the organisation's ability to reinvent itself from within.

Productive conflict and narrative

Narrative is intricately linked with conflict in two ways. First, all stories include conflict between opposing forces. Bal (1992) gives the example that "a man won a race" is not a story—but "a man with a limp won a race" is. The man's limp is a negative force, and his victory implies a positive force (possibly his determination) that struggles with the negative force. As a more detailed example, consider this Indian folk tale (Ramanujan 1991):

Once a lamb was drinking water in a mountain stream. A tiger came to drink the water a few yards above him, saw the lamb, and said, "Why are you muddying my stream?"

The lamb said, "How can I muddy your water? I'm down here and you are up there."

"But you did it yesterday," said the tiger.

"I wasn't even here yesterday!"

"Then it must have been your mother."

"My mother has been dead for a while. They took her away."

"Then it must have been your father."

"My father? I don't even know who he is," said the desperate lamb, getting ready to run.

"I don't care. It must be your grandfather or great-grandfather who has been muddying my stream. So I'm going to eat you," said the tiger. And he pounced on the lamb, tore him to pieces, and made a meal of him.

Conflict occurs at three levels inside the story: intrapersonal, in the tiger's explanation of his actions to himself; interpersonal, in the conflicting goals of the tiger and lamb; and environmental, in the "way of things" which means that tigers will eat lambs whether or not they can explain it. Conflict occurs at even more levels outside the story, in its inevitable multiple interpretations. Why did the tiger feel the need to justify his action? Who and what is this story really about? Is it about injustice, rationalisation and duplicity, or is it about natural order and the political correctness of artificial apology? Narrative does not give answers to these questions, as logical analyses might, but maintains a necessary ambiguity.

This brings us to the second link between narrative and conflict: people use narrative reasoning to understand and negotiate conflict. According to Fisher's (1984) "narrative paradigm", we make sense of the world by comparing the many different and possibly competing narratives we encounter throughout our lives, and we use "good reasons" at least as much as "evidence" as the basis for decision making. "Good reasons" are determined by two uniquely narrative criteria of which humans, as "storytelling animals", are uniquely aware: *narrative probability* (or coherence), or whether the story hangs together, and *narrative fidelity*, or whether the story rings true. For example, the tiger and lamb story coheres because it has a beginning (possibility), middle (tension) and end (resolution), creating a larger unified idea than a simple string of events would. And it has fidelity because it resonates with our experience, leading us to quickly think of several analogous situations in our own lives.

Bennett (1997) describes a similar pattern of narrative reasoning in his observations of how jurors piece together evidence in criminal trials: "[E]ven when evidence is introduced in the often disjointed 'question-answer' format in a trial, the key elements generally will be abstracted by jurors and arranged in story form during deliberation." According to Bennett, jurors have to decide two things about a case: plausibility, or "Could it happen that way?"; and verifiability, or "Did it happen that way?". Facts and evidence provide some of the proof as far as verifiability, but jurors also test narratives for plausibility and adherence to their own experiences of the world. For example, if the car was running for five minutes already, could it have been cold, as the defendant says it was? Indeed, we use the term "story" colloquially to talk about negotiations surrounding conflicting versions of the truth – "your story doesn't hold up"; or, "that's my story and I'm sticking to it."

Supporting narrative negotiation of conflict

Our most important recommendation for supporting the exchange of narratives surrounding conflict (its revelation, management, negotiation, resolution, and even useful escalation) is to simply appreciate it. People seem to have a powerful belief that competing stories ought not to exist and make strong efforts to resolve such conflicts. What do you do, for example, if one

group's "best" practices are another group's "worst" practices? If you are looking at knowledge as a thing that can be captured and transmitted, you might resolve such disputes (with force if necessary) so that one "answer" is available. But if you look at knowledge as a socially constructed, contextually situated, and constantly re-negotiated phenomenon, and especially if you are trying to help people maintain productive conflict as a source of inspiration, creating such an artificial resolution would throw away something of great value. (This is a mistake made by countless textbooks.) Rather, you would want to provide people with full access to such conflicts, rich in contextual detail, so that they can make the most of them.

The value of conflict is one of our reasons for not being enthusiastic about narrative techniques that have been derived from therapeutic practice and seek to privilege one type of story over another. An example of this would be appreciative inquiry (e.g., Whitney et al. 2003), which seeks to encourage behaviour change by directing the emergence of (only) positive stories. Similarly, facilitation techniques based on avoiding conflict and encouraging consensus can reduce the capacity of a group to act in the real world, by reducing the range of options considered and failing to detect opportunities or threats in the environment whose potential is represented by weak signals.

Narrative for conflict exploration

We often design narrative systems and narrative interventions that specifically work with conflict to make it more visible, as with the juxtaposition of competing sets of values and themes. We might, for example, help an organisation collect a set of "raw" stories from their employees and/or customers, then have separate groups index the stories according to the same criteria (truthfulness, origin, intent, for example), and present the competing interpretations in a sense making databases that people can use conflict as a visible device for pattern sensing. Or we might have different groups of people construct fable stories on the same subject and show them to both groups. This is especially useful when two or more groups of people need to come together, such as in an acquisition, or are interdependent, such as staff and customers. This is another reference to our argument for the creation of conditions for the rapid evolution of cross-boundary stories.

Openness and mutuality

Another set of recommendations comes from Amason's and Schweiger's (1997) observation that groups which maximise cognitive conflict and minimise affective conflict create an atmosphere of openness and mutuality. Each of these qualities is well known to be supported by narrative exchange, and as such can be augmented using narrative techniques.

An atmosphere of *openness* is one in which unpopular opinions can be put forth without fear of reproach. The use of narrative to safely express such opinions has been widely studied and demonstrated. Stories tell of experiences, not of arguments. Still, it can be difficult to tell stories one knows will not be well received, and there are ways to make this easier.

Anonymity helps people tell stories that need to be told but that may hurt them personally and therefore are dangerous to tell. Anonymity can be achieved via online communities, public kiosks, proxy interviewers, or even something as simple as giving storytellers pseudonyms that only they can link to their actual names. Anonymity has benefits for both tellers and listeners; executives may hear things in an anonymous online community that would never cross the power barrier in "real life". Another type of anonymity is the attribution of stories to fictional characters such as archetypes. Fictional explorations, such as alternative histories and speculative futures, help people to indirectly tell stories about the present or recent past. All of these are ways of providing masks that allow people to reveal themselves.

An atmosphere of *mutuality* is one in which people recognise the cooperative nature of their endeavors and respect each other as equal players. Mutuality requires that people see things from each other's point of view so that actions can be interpreted with understanding rather than with rushes to judgment and blame. Here again narrative can play a strong role: one of the oldest uses of the art of storytelling is providing a different perspective. Indeed, the very act of listening to a story requires the willing suspension of one's own perspective to temporarily entertain another view of the world. Folk tales abound with stories where the

third worthless son slays the dragon, where the dragon is an enchanted prince, where the handsome prince is a nasty thief, and where the thief saves the day. The purpose of such stories is to remind us that we should not take things for granted and that we should keep our minds open to possibilities that may seem foolish at the time. Thus a clever person maintains multiple informal networks with large amounts of diversity, rather than just clustering with like minded individuals.

The value of conflict among narratives

Storytelling (and even narrative self-description) is not a magic cure-all for misunderstandings and blinkered perspectives. Sometimes it can provoke as much blindness as it can remove. There are dangers when one uses narrative without adequate attention to the unique qualities of stories as communicative devices. These dangers have to do mainly with the fact that the creation of any narrative downplays some aspects of reality and highlights others as it condenses experience.

- The danger of *vividness* is shown by an experiment carried out by Reyes, Thompson and Bower (1980). Mock jurors were given either “vivid” or “pallid” statements supporting claims that a defendant was or was not drunk when he ran a stop sign. A pallid statement might be: “On his way out the door, Sanders staggered against a serving table, knocking a bowl to the floor.” A vivid statement might be: “On his way out the door, Sanders staggered against a serving table, knocking a bowl of guacamole dip to the floor and splattering guacamole on the white shag carpet.” Judgments of innocence or guilt were unaffected by vividness when the statements were first presented; but 48 hours later, people who had been shown vivid statements judged the defendant significantly more guilty than did people who were shown pallid statements. Thus if stories about “us” are vivid and stories about “them” are pallid – even if both sets contain positive messages – the vivid stories will win out. The creation of a vivid or pallid story is such a subtle point that people may do it even without knowing they are doing so.
- The *fundamental attribution error* (Ross 1977) is important to affective conflict and can be exacerbated by storytelling. When attributing causes to behavior, people tend to attribute their own behavior to situational causes (“I’m tired this morning”) and the behavior of others to dispositional causes (“You are a bad driver”). This has been well demonstrated in the field (e.g., Jones 1979). Thus if stories about “us” contain more situational detail than stories about “them”, people may continue to blame the actions of the other party solely on dispositional causes.
- The problem of *framing* has also been well demonstrated (Kahneman and Tversky 2000). The way in which a question is framed – the way in which a story is presented – has a measurable effect on the beliefs people form after reading it. For example, if stories about “us” mention that we saved half of the earthquake victims, and stories about “them” mention that they lost half of the earthquake victims, which group will seem more successful? Which will seem more heroic? You can see this subtle perspective constraint in television news: we “strategically withdrew” while they “were routed out”; we “regretted collateral damage” while they “slaughtered civilians”.

Thus creating a sense-making database or other storytelling device can be nothing more or less than creating a propaganda machine – intentionally or unintentionally – if these factors are not taken into account. Such an artifact will do nothing to improve conflict management and may even make matters worse. There are many ways to ameliorate this possibility, from collecting stories using impartial or naïve interviewers or observers to requiring that no story be indexed by an outsider or even by one group.

One practice we have had success with, which essentially entails creating conflict *within* a sense-making database, is to merge a “disruptive/simulative database” of stories from another domain into the narrative database. These might be stories about historical conflicts or from

science fiction or alternative history ("counterfactuals"). If these stories have been collected from multiple perspectives and indexed along with those of the group, they can provide unexpected comparisons that show group stories in a new light. For example, perhaps a manager's action in the last quarter showed an eerie resemblance to Napoleon's march on Moscow, with similar disastrous consequences. Or perhaps everyone has been sure that a rapid expansion initiative will succeed, but they find their own stories about how this type of thing has been a sure-fire win throughout history contrasted by actual historical accounts of several organisations believing the same thing just before they went bankrupt. Especially when people from different organisations are telling stories together, having some independent stories in the mix can help to provide a wider perspective than just "how we do things" and "how they do things".

Conclusions

In picking up Juarrero's (2002) delightful metaphor of brambles in a thicket, we have sought to situate naturalistic approaches to learning networks in a naturalistic approach that reflects the realities of human life. We have de-privileged the expert interpreter (by argument and by practice), be they the analysts of modernism, or the de-constructivists of post-modernism. We have also called a *plague on both your houses* to the claimed universalism of process engineering and systems dynamics alike.

Human society evolved using narrative as a means of creating meaning and communicating knowledge within a network of families, clans and tribes. We have therefore taken an approach that uses narrative as a prime sense-making capability, and as such we have used it as both a conceptual and practical lens through which we can look at identity management, trust negotiation and the use of productive conflict. We have shown how narrative techniques based on naturalistic approaches to diagnosis and intervention can improve the systemic functioning of organisations; we also claim that this approach provides results that idealistic approaches cannot hope to achieve.

Naturalism works because unlike idealism it is aligned with the ground truth of organisational life. Contrast the 'management' of a children's party with that of an organisation. Can you imagine providing detailed work plans with formal learning objectives to each child on arrival at the party? Would you produce a milestone based project plan for the party? Maybe a formal set of values, accompanied by motivational posters (you know the sort of thing, water dropping into ponds, eagles soaring over valleys with platitudinous statements of idealistic intent)? Not even the most committed management consultant would make those mistakes in their identity as parent. We manage the party by creating boundaries that restrict dangerous play (and they had better be elastic; rigid boundaries have a habit of becoming brittle) and we encourage play with catalysts such as a football, party games, a swing, a DVD. We seek to stimulate beneficial self-organisation, as any more formal option would result in cognitive overload. And of course we seek to create, use and live that experience as a story. It is our natural impulse, but unfortunately we leave our natures at the door as our identity shifts from parent to manager, and we assume that behaviour that would never be tolerated by our children (or indeed by ourselves) will be accepted by our adult workers.

Common perceptions of the work world as machine-like and ordered, and thus subject to the rules of order, are cultural legacies of the industrial revolution that still blind us to the fact that organisations are in fact complex adaptive systems. As an example, consider the etymology of the term "manage" itself. According to Williams (1983) the English verb "to manage" was originally derived from the Italian *maneggiare*, meaning to handle and train horses. The *manege* form of horseback riding, a more involved and time-consuming form than modern dressage (which was meant to replace manège with something more accessible to the unskilled) is a similar use of the word. In this earlier meaning the emphasis is on learning with, abiding with, adapting to, respecting, and working with another complex entity: the horse and rider as coevolving brambles in a wider thicket of social traditions surrounding beauty and form. Around the early 18th century, this original meaning merged with the French term *menage*, or household, making it easier to adapt the meaning of the combined term *manage* to the metaphor of the obedient machine, to the corridors of power, and to the actions of controlling and directing. The naturalistic approach we have advocated, in effect a return to

manege rather than *menage*, is the most effective way to achieve results in organisations made up of real people. Its practice in the generation and management of learning networks is not difficult; it simply requires us to unlearn the practices that arise from a *menage* directorial tradition of management theory and relearn what we already know to be true of the *manege* multiplex world we live in.

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