Making Sense of Sensemaking Narratives

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Abstract

This paper analyzes the agreed and discrepant sensemaking of members of a project team. Embedded in a narratological approach to sensemaking research, we argue that before scholars may be able to understand in detail how agreements are reached and action becomes coordinated, we need first to take seriously the proposition that sensemaking occurs in the context of individuals' idiosyncratic efforts at identity construction. This, we suggest, means attending to the narratives that actors tell about their work and self both for others and their selves. The key research contribution that we make is to demonstrate how work on 'impression management' and 'attributional egotism' may be employed in order to account for discrepant sensemaking. This is important in the context of a literature that has left relatively unexplored the reasons why people interpret differently experiences they have in common.

Introduction

To what extent is the sensemaking of members of a project team shared, and how can we explain discrepancies in participants' understandings? One stream of theorizing practically ignores discrepant sensemaking, posits that organized action is the product of consensus among organizational participants, and represents organizations as systems of shared meanings (Louis, 1980, 1983; Pfeffer, 1981; Smircich & Morgan, 1982). A second approach recognizes that only minimal shared understanding between individuals is likely or indeed required in order to produce organized action, but has little interest in exploring why this is or how it may be accounted for (Donnellon, Gray & Bougon, 1986; Weick, 1979, 1995; Weick, Sutcliffe & Obstfeld, 2005). In consequence, why people disagree regarding their interpretation of experiences they have in common is relatively unexplored. While acknowledging the sense which is shared by group members, in this paper we focus in particular on the distinctive understandings that individuals' develop in their efforts to understand and to clarify aspects of their working lives. The contribution we make is to explore and to explain the simultaneously agreed and discrepant sensemaking of individuals in a work team, which is a necessary first step toward understanding how the sense that people make is translated into processes of organizing.

Predicated on an understanding that people are reasonably described as '*homo narrans*' (Fisher, 1984: 6) or indeed '*homo fabulans* – the tellers and interpreters of narrative' (Currie, 1998: 2), we analyze the retrospectively assembled narrative sensemaking constructions of members of a project team regarding their development of a new computer game. In keeping with other research, (e.g. Brown & Jones, 1998; Humphreys and Brown, 2002), we use the terms 'story' and 'narrative'

interchangeably. Our understanding of these terms is derived from Riceour (1984: 150) who argues that:

> 'A story describes a sequence of actions and experiences done or undergone by a certain number of people, whether real or imaginary. These people are presented either in situations that change or as reacting to such change. In turn, these changes reveal hidden aspects of the situation and the people involved, and engender a new predicament which calls for thought, action, or both. This response to the new situation leads the story toward its conclusion.'

Our decision to adopt a narrative approach has been influenced by the many claims that storytelling research is producing 'a rich body of knowledge, unavailable through other methods of analysis' (Stutts & Barker, 1999: 213) and is enabling organization theory 'to reinvigorate itself' (Czarniawska, 1998: 13). It has also been spurred by theorists with an interest in sensemaking who have argued that narrative is 'a primary cognitive instrument' (Mink, 1978: 131; Polkinghorne, 1988: 1) which constitutes the basic organizing principle of human cognition (Boland & Tenkasi, 1995). Importantly, it is also consistent with our understanding that subjectively conceived identities are available to individuals in the form of narratives which position an individual in relation to the discursive resources available to him or her (McAdams, 1996; Giddens, 1991). These self-narratives are 'worked on' by situated actors - formed, repaired, maintained, strengthened and revised to provide a continuing sense of 'coherence and distinctiveness' (Sveningsson & Alvesson, 2003: 1165). This is not to deny that there are other interesting and equally valid approaches to the study of sensemaking using, for example, interpretive schemes (Bartunek, 1984) and cognitive mapping techniques (Bougon, Weick & Binkhorst, 1977). Yet, while these are well established, despite some notable exceptions (e.g., Orr, 1990; Patriotta, 2003), there are still relatively few empirical studies of sensemaking and narrative.

Our paper is an investigation of the shared and discrepant narrative sensemaking of members of a work team. The principal contribution of this study is that it takes seriously the idea that although sensemaking is inherently social, it is fundamentally tied to processes of individual identity generation and maintenance. Drawing on established research (Boyce, 1986; Brown, 2000; Brown & Jones, 2000; Patriotta, 2003a,b), we show how notions of impression management (Goffman, 1959; Rosenfield, Giacalone & Riordan, 1995, al., 1995) and attributional egotism (Miller & Ross, 1998; Staw et. al., 1983) can be deployed to account for some of the idiosyncratic aspects of individuals' sensemaking. This is important in the context of a mainstream literature on sensemaking which makes few references to these concepts – they are missing from the index of Weick (1995) for example – and which has instead focused on either common collective meaning or the coordinated action that results from people's assumptions that meaning is shared.

The remainder of this paper is structured into five major sections. First, we review briefly the literature on how people seek to structure their experiences (Waterman, 1990: 41) '…by placing stimuli into cognitive frameworks (Ring & Rands, 1989; Starbuck & Milliken, 1988) in order to make sense of occurrences while maintaining a consistent, positive self-conception' (Weick, 1995: 23). The performance of stories, we argue, 'is a key part of [organization] members' sensemaking' (Boje, 1995: 1000) the analysis of which permits us to identify and to analyze what people agree on and where understandings differ. Second, an account of our interpretive, inductive research design and methods is presented. We pay particular regard to the argument that language is 'a representational technology that actively organizes, constructs and sustains social realit[ies]' (Chia & King, 2001: 312), and that 'realities' are fluid

discursive constructions being constantly made and re-made in the conversations between insiders and between insiders and outsiders. Third, we present our case data in the form of a single consensually agreed story, and then proceed to analyze it highlighting points of divergence between the key project team members. Fourth, we discuss how we may plausibly account for discrepant sensemaking with reference to notions of impression management and attributional egotism, before finally drawing some brief conclusions.

Sensemaking and Narrative

Sensemaking is a generic phrase that refers to processes of interpretation and meaning production whereby individuals and groups interpret and reflect on phenomena (Bean & Hamilton, 2006; Leiter, 1980; Stein, 2004; Weick, Sutcliffe & Obstfeld, 2005). Through processes of sensemaking people enact (create) the social world, constituting it through verbal descriptions which are communicated to and negotiated with others (Berger & Luckmann, 1966; Garfinkel, 1967). A wealth of research on, for example, policy making (Feldman, 1989; Janis, 1972), newcomer socialization (Louis, 1980), and decision making in crisis situations (Weick, 1993) has revealed sensemaking as a kind of creative authoring on the part of individuals and groups who construct meaning from initially puzzling and sometimes troubling data (Shotter, 1993; Weick, 1995). Sensemaking is a search for plausibility and coherence, that is reasonable and memorable, which embodies past experience and expectations, and maintains the self while resonating with others. It can be constructed retrospectively yet used prospectively, and captures thoughts and emotions: 'To engage in sensemaking is to construct, filter, frame, create facticity… and render the subjective into something more tangible' (Weick, 1995: 14).

One strand of the literature on sensemaking suggests that groups of people tend generally to see and to understand actions and events in similar ways (Brown, 1978; Louis, 1980, 1983; Pfeffer, 1981; Sackman, 1991; Smircich & Morgan, 1982; Smircich, 1983). Canteril's (1941: 20) use of the phrase 'frame of reference' to refer to a generalized point of view that directs interpretations has been the spur for others to argue that social actors locate perceptions in shared frameworks that enable groups to collectively '…comprehend, understand, explain, attribute, extrapolate, and predict' (Starbuck & Milliken, 1988: 15). The idea that sense is collectively pooled is fundamental to conceptions of organizations as networks of 'intersubjectively shared meanings' (Walsh & Ungson, 1991: 60), mutually engaged paradigms (Brown, 1978) and sets of generic routines and habituated patterns of action which 'fix' community understandings (e.g. Schall, 1983). Complementarily, much work on sensemaking is premised on the assumption that work teams are often characterized by an emergent consensus in thinking, variously described as 'intersubjectivity' (Linell & Markova, 1993), thought collective (Fleck, 1935), thought world (Douglas, 1986), shared interpretive scheme (Ranson, Hinings & Greenwood, 1980) or collective knowledge structure (Walsh 1995).

A second thread in the sensemaking literature recognizes the differences in sensemaking between individuals and between groups in organizations (Brown, 2000; Brown & Jones, 2000; Starbuck & Milliken, 1988; Weick, 1979, 1995). Weick (1995: 188) argues that 'shared meaning is difficult to attain', Van Maanen (1979: 35) suggests that 'there is no guarantee that the meanings we produce will be coincident ones', and Brown (2004: 97) emphasises that among organizational participants '…as a matter of fact there is often lack of actual agreement, which is ignored or assumed

away'. One reason that people make sense differently is that their interpretive activities are prone to multiple distortions that result from incomplete or inaccurate information processing that is individually specific (Dearborn & Simon, 1958; Hedberg, 1981). Heterogeneity in sensemaking is also introduced through the operation of people's ego-defences (Argyris, 1982; Laughlin, 1970) – such as denial, rationalization and fantasy - which symptomize the fact that '…individuals attempt to make sense of ambiguous stimuli in ways that respond to their own identity needs' (Coopey et. al., 1997: 312). However, this literature has tended to focus on notions of 'equifinality', i.e. the various means by which different individual-level interpretations have similar behavioural implications through the development of common scripts and action routines etc. (cf. Weick, 1995; Donnellon, Gray & Bougon, 1986), rather than to explore discrepancies in sensemaking.

An understanding that sensemaking involves processes of narrativization (narrative-making) permits nuanced investigation of the extent to which individuals in a work team agree, share, disagree and contest understandings. Our argument that sensemaking is a narrative process is predicated on the view that 'man is in his actions and practice, as well as his fictions, essentially a story-telling animal' (MacIntyre, 1981: 201; cf. Fisher, 1984; Bruner, 1990). As Polkinghorne (1988: 1) has argued, narrative is 'the primary form by which human experience is made meaningful'. These insights have been incorporated into organization studies by a range of authors who have variously suggested that 'Narratives provide members with accounts of the process of organizing' (Mumby, 1987: 113) and even that 'The basic technology of organization…is a technology of narrative' (March, 1996: 286). The utility of the narrative form stems from its emplotment of sequences of actions and events in a

chronological and generally logically consistent manner in ways that explain equivocal happenings and outcomes (Patriotta, 2003a: 353). While narratives are filtered, edited and re-sorted based on hindsight, and thus 'inventions rather than discoveries' (Weick, 1994: 128), yet they are 'no more fictional than any other product such as thought since abstraction, schematization, and inference are part of any cognitive act' (Robinson & Hawpe, 1996: 111-112).

A narratological approach has been used to analyze both the shared, consensual nature of group sensemaking, and the uniqueness of individuals' understandings. Currie and Brown (2003: 564) suggest that 'One way in which we collectively make sense of …our social world is through jointly negotiated narratives' while Berry (2001: 59) has asserted that 'Organizational stories are the primary means of collective sense making for members of an organization'. Relatedly, there is a growing literature on how narratives carry a community's 'common-sensical stock of knowledge' (Patriotta, 2003a: 354) and facilitate knowledge sharing in organizations (Orr, 1990, 1996; Schreyogg & Koch, 2005; Snowden, 2000; Swap, 2001). Less frequently, but no less significantly, a focus on narratives has also been deployed to analyze the idiosyncratic, context-dependent and individual-specific nature of people's sensemaking (Giddens, 1984; Orbuch, 1997). From this perspective, organizations tend to be regarded as polyphonic, socially constructed verbal systems constituted by multiple, simultaneous and sequential narratives that not only interweave and harmonize but contest and clash (Rhodes, 2001). Consonant with this theorizing, research suggests the importance of stories about remarkable experiences for individuals seeking 'to make the unexpected expectable, hence manageable'

(Robinson, 1981: 60), achieve ‘coherence, livablity and adequacy’ (Bruner, 1990: 112), and ‘predict future organizational behavior’ (Martin, 1982: 287).

In this paper, we analyze how members of a work team made sense retrospectively of a complex set of occurrences – rendered as actions, events, outcomes and evaluations – which constituted a specific project. Our analysis demonstrates that although people shared a common narrative frame and agreed on some details, yet they also held divergent understandings on many aspects. It is generally acknowledged that sensemaking is grounded in identity construction and that people make sense of their work activities under the influence of their individual-specific needs for self-enhancement (self-esteem), self-efficacy and self-consistency (Erez & Earley, 1993). In short, social actors make sense of actions and events in (at least potentially) unique ways. These we analyze using notions of ‘impression management’ and ‘attributional egotism’. Impression management refers to self-presentation behaviours that individuals employ to influence the perceptions that others have of them (Jones & Pittman, 1982; Schlenker, 1980; Tedeschi, 1981). Attributional egotism is the tendency of individuals to attribute favourable outcomes to the self and unfavourable outcomes to external factors (Betman & Weitz, 1983; Bradley, 1978; Staw, 1980). These concepts, we argue, need to be more effectively integrated into mainstream theorizing on sensemaking in order for it to offer more complete explanations of how people understand and read meaning into their work and organizations.

Research Design

This paper discusses the results of an interpretive, longitudinal research project conducted between January 2004 and May 2006. All the data were collected by a

single researcher who sought to immerse himself in the stream of organizational events in an inductive attempt to formulate ‘thick description’ (Geertz, 1973). The primary data sources for this study were 26 formal interviews with members of staff at CGS (a pseudonym), a small, privately owned company based in Singapore. An initial 5 interviews were unstructured, and focused on general issues centred on game development processes within the company. The subsequent 21 interviews were semi-structured, with participants asked to respond to a range of detailed questions regarding software development processes at CGS such as: ‘what are the problems you find in your work?’ and ‘what are the toughest decisions you have to make as a games designer?’ The 26 interviews were of between 60 and 90 minutes duration, and conducted in the company’s offices. At the request of senior managers, recording equipment was not used in the first 10 interviews, though detailed hand-written notes were made. By May 2005 the primary researcher had established a sufficiently strong working relationship with CGS for them to agree that all further formal interviews be digitally recorded onto computer files which were fully transcribed.

At a relatively early stage our attention turned to a specific project, namely the development of a new computer game for use on mobile phones called ‘Revolution’, and 11 of the 26 interviews were conducted with the 4 members of the project team responsible for developing the game. Throughout our study we also engaged members of CGS, particularly the developers of ‘Revolution’, in an on-going e-mail dialogue focused on IT development processes. This resulted in 124 e-mail exchanges which also inform our case sections. Other data sources on which we have relied include casual observations of work processes, dozens of informal conversations with participants both at their place of work and in informal settings, and a wealth of

company documentation including strategy reports, letters, memos, project documents and marketing brochures. Summaries of informal communications and observations were written-up in the form of 32 separately logged Microsoft Access database records totalling 10552 words.

In the analysis of our data we paid special regard to language as 'perhaps the primary medium of social control and power' (Fairclough, 1989: 3), and the role of stories in the reproduction 'of existing social and power relations' (Fairclough, 1995: 77). This is consistent with an increasing trend for scholars to regard organizations as discursive constructions and to focus on discourse as 'the very foundation upon which organizational life is built' (Fairhurst & Putnam, 2004; cf. Grant, Hardy, Oswick & Putnam, 2004). Practically, this involved us reading and re-reading our transcripts and other data sources, gradually piecing together each of the main protagonist's narrative of events. Each individual was sent a version of 'their' narrative and invited to comment on it. We then analyzed each actor's story, comparing it with the other versions, and looking for commonalities, contradictions, vagueness and nuances of various kinds. This allowed us to generate tentative analyses of the narratives, to identify omissions in each individual's storyline, recognize where the narratives were in conflict, and to speculate on the possible intentions of the team members. Our preliminary interpretations were then written-up and presented to academic colleagues at a conference and a departmental seminar, and the suggestions we received were subsequently 'recycled back into the inquiry in order to narrow down, revise, [and] restate specific hypotheses for further development' (de Beaugrande, 1985: 55).

Importantly, we acknowledge explicitly that 'social science is the practice of a craft' (Mills, 1970: 215), and that the stories we have constructed reflect analytical techniques and research interests that are, to an extent, researcher-specific. That is, in adopting a narrative framing for this research, focusing on discrepant sensemaking, and linking our findings to the literatures on identity, impression management and attributional egotism we have made a series of methodological and epistemological choices which reflect our knowledge, skills and prejudices. Furthermore, interviews are theoretically and linguistically complex events in which researchers need to be reflexively aware that interviewees may be engaged not merely in the recounting of facts or experiences but in political action, script following and impression management (Alvesson, 2003; Alvesson & Skoldberg, 2000). We explicitly acknowledge that in relating their stories to us the protagonists in our study were engaged in a kind of 'identity work' in which they were constructing versions of their selves both for their benefit and ours. All this is to say that this paper, like all texts, is a personal statement designed to have a particular effect on our readership (Denzin & Lincoln, 1994: 2), and that the data we employ is the outcome of multiple processes of 'mediation' both on the part of our respondents and ourselves.

Making Sense of Sensemaking Narratives

CGS was a small, specialist games developer that by early 2005 had produced ten products, both independently and in cooperation with studios in France, Italy and Ireland. Founded in 2003 in Singapore it had a headcount of nineteen and a three layer management hierarchy. Directly reporting to the MD were a lead artist (who headed a team of three other artists), a lead programmer (responsible for a team of four junior programmers) and a project manager who was charged with coordinating between the

artists and programmers. The company drew also on the services of four freelancers, three interns on six month contracts, and a part time secretary. Since 1998, the computer games industry in Singapore had been specially targeted by the Government to make an increased contribution to the country's GDP. Three separate government agencies – the Media Development Authority (MDA), the Infocomm Development Authority (IDA) and the Singapore Economic Development Board (SEDB) – were at that time responsible for cultivating the games industry. While the MD of CGS praised the Government for its direct and positive involvement in the sector, he also expressed the view that the games industry in Singapore was still fragile, that there was an insufficient local supply of technically skilled labour and that they felt under pressure to be successful so as to bolster the country's portfolio of commercial achievements.

In the following sections we analyze the re-constructed stories of the four team members responsible for a game called 'Revolution'. At this time, CGS was also involved in developing two other games for European clients, but the 'Revolution' project was of particular significance, staff said, because it was perceived to be a means of building a strong relationship with ZMedia (a pseudonym) which had commissioned the work. The importance that CGS attached to the cultivation of long-term relationships with clients should be understood in the context of a recent project that went disastrously awry: a game had been developed, delivered and ultimately rejected by an Israeli client who had then threatened legal action against them. 'Revolution' was designed as a "turn-based" history game in which a player makes a single move and then awaits the computer's response. The four protagonists were all Singaporean nationals, of Chinese ethnicity and university graduates. Alf was 34

years old and not only the game designer but also the founder and MD of CGS. Gayle, who was 24 years old, was the lead artist for CGS and a specialist in Japanese art styles. Don, who was 20 years old, was a junior programmer seeking to become a specialist in 'Java' games, and this was his first major project. Andy was the senior programmer, 29 years old, with broad experience in Internet applications development and an established specialist in 'Java' games.

Toward Consensus: A distillate narrative of the 'Revolution' project

From the development team's descriptions of the 'Revolution' project we have pieced together a composite narrative derived from (what we discerned to be) the 'overlap' between each actor's account:

> In September 2005 ZMedia (a client company based in Ireland) approached CGS regarding the development of a computer game for mobile phones called 'Revolution', based on the American War of Independence. This was the second time that ZMedia had approached CGS with a major project, the first having resulted in a mobile game called 'Between the Lines' (BTL). In commissioning these kinds of product ZMedia's goal was to cultivate a long-term relationship with Vodaphone as a supplier of high quality games for their handsets. Senior personnel at ZMedia had originally discovered CGS on the Web and from directory listings compiled by the IDA and MDA, and, after the success of the 'BTL' project were sufficiently confident in the company to hand over most of the creative control to Alf and his team.
>
> Alf served as the initial game architect and produced '*…the technical design mechanisms for the game, such as* [the] *game characters' statistics, how far they* [characters] *could see, what actions they could take*' (Alf). Although not a professional artist, he browsed the internet and referred to history books to create a rough mock-up (a series of sketches) indicating the kind of artwork the game required. He then passed his designs to the animé artist, Gayle, to embellish or modify as she saw fit. Concomitantly, and in liaison with Gayle, Don began the programming work. The new game was to be based partially on the 'BTL' game and once Andy had provided Don with the game code he began modifying it to accommodate the demands of 'Revolution'. Making use of the concept and engineering aspects of an existing game was useful because it meant that many of the game's features could leverage existing code, reducing the need to generate new programmes, and consequently the amount of time it would take to complete the project. Andy, it was agreed, would act as an

advisor/supervisor for Don for whom this was an opportunity to gain experience in game development:

'*I was more like a consultant. I gave him the code to look at and then see if he had any questions. If there was some code he found ambiguous then I just explained* [it] *to him*' (Andy).

Gayle proceeded to design an impressive-looking game ('*At this stage of the project the game art looked pretty decent*' (Alf); while Don made a number of technical modifications to the code in order to free up as much file space as he could for Gayle to work with: '*Saving memory space is important for other game aspects like maybe better graphics or user interface*' (Don). Once Gayle had produced her artwork and Don began combining it with the programme code it became clear that the size of the executable file would need to be reduced due to the technical restrictions imposed by mobile phone handsets: '*I didn't realise the game was getting bigger and bigger and so I told her* [Gayle] *to reduce the images somewhat. We were looking for ways to reduce the file size*' (Don). Gayle edited the artwork accordingly, and reduced the number of different colours used in the game: '*I had to edit the existing artwork, and reduce the colours*' (Gayle). The development of the game was hampered by Vodaphone's 'tedious' quality assurance principles which had to be accommodated, and the difficulties associated with 'porting' the game to different mobile phones: '*newcomers to Sharp handset-porting, such as myself, face hair-tearing moments when they try the Sharp tutorial and the sound doesn't come out of the emulator – and the documentation doesn't mention this bug at all*' (Don). The game was then sent for 'client review' and further alterations, such as the re-sizing of some of the icons and the addition of an educational feature, had to be made:

'*…on the whole ZMedia liked the game so far, but they had some problems with the size of the icons. It's something a little bit annoying. They [the icons] seemed fine to me*' (Don).

'*The client wanted some educational feature in it because the game itself is historical… So it's like an encyclopaedia*' (Andy).

To compensate for the expedient rather than optimal graphics Alf then made some modifications to improve the flow of the game and Andy asked Don to introduce some animation (moving smoke and water-effects) into the scenery. Unfortunately, older lower-end phones could not cope with the technical enhancements, so when porting to these phones many of them had to be removed. In March 2006, a product was delivered to ZMedia for which CGS received an agreed fee and the team moved on to other projects.

This narrative, as we understand it, is a distillate of each individual's sensemaking – a compilation of actors, actions, motivations, scenes, events and outcomes– tailored, cut and finished by us, the authors' of this paper. While we appropriated it from each

individual's personal telling, we subsequently sent (albeit an earlier and more detailed version of) it back to the four protagonists for them to comment on. The feedback we received suggested that the text we have here reproduced represents a consensus version of the project. It is a narrative framing forged through ongoing processes of networking, negotiation and communication – a collective shared memory that has been talked into existence. As Taylor and Van Every (2000: 33-34) describe it: 'A situation is talked into being through the interactive exchanges of organizational members to produce a view of circumstances including the people, their objects, their institutions and history, and their siting [i.e., location as a site] in a finite time and place'. It is what Weick, Sutcliffe and Obstfeld (2005: 414) refer to as 'a locally plausible story', a constitution of equivocal inputs by which people enact sense back into the world 'to make that world more orderly' (Weick, Sutcliffe & Obstfeld, 2005: 414).

In addition to being a 'sedimentation' of collective sense and a resource for further sensemaking two features of this narrative are noteworthy. First, while it is not quite a 'tale of the field' (Van Maanen, 1988), having been constructed by us, it is nevertheless embedded in a particular context and incorporates specific aspects of CGS's history and personal characteristics of the tellers. It may thus be viewed as a unifying statement of collective identity; a means of sharing and agreeing understandings about '…what it [the organization] is about, what it does well and poorly, what the problems it faces are, and how it should resolve them' (Feldman, 1989: 19). That is, it embodied a series of claims for CGS regarding what was central (e.g., computer games development for international clients, commercially successful) and distinctive (e.g., good external reputation, responsive to client needs) about it (cf.

Albert & Whetten, 1985). Second, the narrative was a means of encoding various kinds of tacit knowledge, for example regarding the difficulties of applying Vodaphone's quality assurance principles, the complexities of 'porting' to various kinds of hardware, and the restrictions imposed by the memory limitations of low-end mobile phones. As Harfield and Hamilton (1997: 67) note, narratives are 'interesting forms of passing on knowledge' which provide problem-solving competencies (Pfeffer & Sutton, 1999; Orr, 1996). This story was of course merely one item in CGS's collective repository of accumulated wisdom that helped participants 'to keep track of their behaviour and of their theories' (Patriotta, 2003a: 352), and which could be drawn on in order to inform and facilitate other projects in the future (Linde 2001; Wendelin 2005). However, both as a statement of collective identity, and a source of knowledge, the narrative was not entirely unproblematic as each individual appropriated and layered it with interpretations that incorporated their particular identity concerns.

Fragmenting Unity: multiple versions of the 'Revolution' project

There was, undoubtedly, much that the participants in the 'Revolution' project agreed on – how and for whom the project was commissioned, who was principally involved, what roles they played, the approximate sequencing of activities, and some outcomes. However, while there was overall agreement on the structuring of the narrative this nevertheless left considerable scope for disagreement on how various aspects of the project should most appropriately be interpreted. Here we will consider this individually-specific sensemaking under five category headings: 'project goal'; 'main problems and their causes'; 'solutions and their sources'; 'evaluation'; and 'learning' (see Table 1 for a summary).

Table 1 about here please

Project goal. While all the members of the project team said that the primary objective was to design, develop and despatch to ZMedia a game that met the client organization's specification, there were some subtle and some marked differences in individual understandings. Alf emphasized that the primary goal for CGS was '*to deliver the project on time, that's all*'. Gayle also recognized that meeting the deadline set by the client was '*the most important goal*', but maintained that '*I want to put in my best design work also…I try to provide the best design I can*'. Rather than deadlines or design quality Don regarded the project as an opportunity to develop his professional skills: '*I was looking to learn something from this since I hadn't done many game projects before, except in School* [university]'. Andy's view was that the project represented an opportunity to leverage existing code (to which he had devoted a lot of time and effort) and so '*improve on a previous incarnation of the game essentially*'. Thus in conceiving the project each person had a distinct view depending on identity attributes such as the professional role that they occupied (MD, artist, or programmer) and level of experience.

Main problems and their causes. All the project team members agreed that the development of 'Revolution' had been marked by difficulties which they had individually and collectively worked to overcome. Alf said that while time and resource constraints (which meant that the game had not been adequately 'play tested' prior to delivery) were unfortunate, the single most important factor that had disrupted the project was Gayle's lack of commitment to CGS. This meant that '*The* [art]

quality wasn't quite there' and that following the client review Andy (who was a skilled programmer but not an artist) had had to re-size the icons (rather than Gayle), further compromising the 'look' of the game: '*it* [the game] *had a very watered down kind of look – it didn't look nice at all*!' (Alf). Gayle, however, argued that the problems encountered were due to time constraints ('*If I were to redesign the whole thing it would have taken too much time*') and Don's lack of knowledge and technical skills. She said that she was not made aware of any file space limitations until after she had designed the game art, that she '*couldn't get much feedback on my art from Don, who seemed snowed under with work and was holding me up*', and that even though she had warned Don that some icons were '*too big for the screen*' yet '*no one believed what I was saying*'.

Don partially contested Gayle's version of events, maintaining that he had worked hard to ensure that she had the best possible software with which to work and that he had kept her informed regarding technical aspects. For example, he said: '*I wanted to use a resolution of 32 x 32 pixels for the tiles. I asked her [Gayle] "what's your opinion of using 32 x 32? Is it too big? Or will it lose too much detail?" And she gave me her opinion that it should work*'. Don's narrative regarding problems and their causes implicated the limitations of the original BTL code that Andy had developed, ZMedia's '*annoying*' request that some icons were re-sized when '*they seemed fine to me*', and the technical difficulties associated with porting games to mobile phones. His version highlighted in particular the difficulties he had faced in working with Gayle to reduce the number of colours in the game: '*…we had to make her compromise…We can't have something that looks good but then runs at 1 frame per minute*!' (Don). Contrary to Alf, Andy's narrative suggested that Gayle had in fact

done '*a good job*' and that many of the putative difficulties identified by other members of the team were 'normal' aspects of new product development of this kind. ZMedia's requests for alterations had meant that there was a '*lack of play-testing due to lack of time*', but the real cause of quality problems with the game was Don's lack of programming skills:

> '*Don was doing most of the game itself… Design-wise the code could have been cleaned up quite a fair bit. And save on memory and that kind of optimisation stuff. …. His coding style I would say is not that efficient. So there's a lot of chunks here and there that need to be optimised*' (Andy).

Solutions and their sources. Alf, Andy and Don all maintained that the most important set of innovations that were made - in order to compensate for the sub-standard 'look' of the game - were the scenery animations. Based on Andy's ideas, Don had programmed a two-layer 'map' which allowed moving smoke and water effects. All three argued that '*…this made up for the less than lively graphical look of the game*' (Andy):

> '*…one thing cool we had was that we had moving water. That was part of Don's coding. And we had smoke, which looked pretty interesting. Made the environment more realistic*' (Alf).

> '*For example, on the first level [of the game] there was a small pond in the middle of the map. The pond Gayle did was actually just a flat colour blue.* [It was] *So boring looking. So I tried to make it randomly change colour so it looks like water and not like a blue thing*' (Don).

In addition, Alf's version of events suggested that it was he and Andy (rather than Don) who had played the major role in overcoming the technical difficulties associated with porting the game to Sharp and Panasonic phones which '*…aren't available in Asia. I had to buy them from eBay and even then they didn't work when they arrived. Andy had to call a friend in the UK to test out our game on the phones*' (Alf). Andy remembered that he had helped '*with trimming the graphics*' at a late

stage, and had taken out the gambling mini-game featured in 'Revolution' in order to ensure that the product ran appropriately on the lower-end 64KB phones. Don's narrative incorporated a lengthy account of how he had made important alterations to the original 'BTL' code, such as reducing the number of 'tiles' from 90 to a standard 35 per 'map' and ensuring that each tile was used at least once (and often twice) to free up file space. Gayle, by contrast suggested that no substantive action had in fact been taken to deal with the fundamental issue that the game art had been fundamentally compromised by poor management: '*It* [was] *quite a vibrant game and then they toned it down*' (Gayle).

Evaluation. While all the participants agreed that a product which met ZMedia's minimum specification had been delivered on time, each member of the project team evaluated it somewhat differently. Alf said that although the client was not dissatisfied with 'Revolution' and CGS had '*made some money*', he considered the product sub-standard: '*I think the client was OK with the game in the end. Well, having to accept mediocre Art is pretty hard to swallow*'. Gayle, who had no direct contact with ZMedia, agreed with Alf that the product was fundamentally problematic, but noted that '*I guess they're* [ZMedia] *happy since they have asked us to make another game*'. Don, who like Gayle had no interaction with ZMedia, recognized that the game was a little disappointing, but thought that the project could reasonably be described as a commercial success: '*…although we weren't that happy with it, the office gossip gave me the impression that the Irish client was happy with it*'. Andy's narrative was the most up-beat, suggesting that Gayle had '*produced an excellent piece of splash page* [artwork]' which ZMedia had specifically praised. Moreover, he was insistent that '*ZMedia were very impressed with the 'Revolution'*

game' and with the professionalism of the development team '*…since we added in some new features, graphical and design-wise, to the game, - we managed to accommodate some of their last minute feature requests to the game*'.

Learning. Based on their account of how the project had unfolded each team member spun a narrative that incorporated a unique key learning point. Alf maintained that to have improved matters '*I would have preferred to have brought in a more professional pixel artist*', but that in this instance because '*the budget wouldn't allow* [this]', '*so I had to make do with Gayle*'. Gayle's narrative did not mention Alf's critique of her work, and indicated that she believed that she had delivered (initial) artwork which other team members appreciated. Her version cited poor overall management of the project as the primary constraint: '*It's not about the hand phone restrictions. I think its more like the planning. The programmers themselves they should know the limitations and what file size they are targeting. Things might have been better if I had been involved in the planning for the game*'. Don's narrative emphasized a quite different aspect of the project, namely the importance of sufficient 'play-testing' throughout the development phase of a new game development in order to ensure that the product delivers a well balanced and enjoyable experience for end-users: '*Yeah, play testing. Because that time actually we should have got new blood in to do the testing. I actually believe that programmers should not test their own games. I should have got someone else*'. Finally, Andy, whose diagnosis was that the game's problems reflected Don's limitations as a programmer, said that the main learning for him was '*I should have been more involved in the game design… And I realised maybe I should have raised this up earlier on. Instead of him* [Don] *working all the way until the project is almost completed*'.

Discussion

What our case study suggests is that a basic shared storyline may be appropriated, modified and embellished by individuals to make idiosyncratic sense, retrospectively, of equivocal actions and outcomes. Theorizing of sensemaking as '…a way station on the road to a consensually constructed, coordinated system of action' (Taylor & Van Every 2000: 275) thus disguises as much as it discloses about processes of understanding and organizing. Rather than sensemaking always involving a trajectory which leads from equivocal action-based processes toward agreed facts and epistemological closure (Patriotta, 2003a: 351), individuals' efforts to filter, edit and re-sort experiences into emplotted sequences based on hindsight can result in notable disagreements. While our case clearly illustrates that much sense is shared, it also reveals that organizational actors have considerable latitude, and are strategically motivated, to determine their own highly personal interpretations of what has occurred.

While it has occasionally been noted that organizing is a fragile activity, and it is well attested that sensemaking is anchored in identity construction, recognition that these two observations are connected is much rarer: it is because each individual's sensemaking is intimately concerned with the preservation of their preferred identity narrative that social organizations are inherently vulnerable assemblages. A focus on two aspects of identity maintenance, 'impression management' and 'attributional egotism' helps to explain diversity in sensemaking and cast light on the sometimes fractured and discontinuous nature of organized activities. Although these identity processes are enmeshed, for ease of analysis we shall here consider them separately in

terms of the sensemaking narratives that people author for themselves and those that they tell for others.

Narratives for the Self

Social actors tell stories of and for themselves in order 'to make things rationally accountable to themselves' (Weick, 1993: 635). The stories that the team members told about their and others' duties, responsibilities, successes and failures, were means of endowing the world - objects and people – with capabilities that made it seem predictable. They were *pragmatic* means of framing their experiences in ways that built-up coherent 'repertoires of understanding' that retrospectively 'fixed' events in space and time, *legitimating* a set of perspectives, and anchoring their selves. They constituted individuals' efforts to capture adequately enough of the complexity of their social condition to function effectively as socio-economic actors in CGS. Such accounts effectively reduced participants' *uncertainty* regarding their history and capabilities, the actions of others and project outcomes, all of which defined their selves, revealing their narratives to be not just casual personal statements but significant autobiographical accounts (cf. Boltanski & Thevenot, 1996). Moreover, they were narratives that permitted people to attach themselves to 'desirable' ends, think well of themselves in moral terms, supported their needs for autonomy and control, and promoted feelings of self-worth (cf. Baumeister, 1986: 322-5).

Thus, in their efforts to relate narratives that preserved and enhanced self-esteem each individual authored a version of events that was noticeably self-serving i.e. the developers tended to attribute what they considered to be positive outcomes to the self and negative outcomes to external factors, a phenomenon generally referred to as

attributional egotism (Brown & Jones, 1998; Heider, 1958). Alf claimed credit for the initial good 'look' of the game and blamed Gayle for her lack of commitment to the project and poor quality final artwork. Gayle said that she had produced high quality artwork for the game but that this was not used because of problems caused (or not dealt with effectively) by the others. Don claimed to have provided Gayle with the best possible platform to produce her artwork, but that unforeseen (and possibly unforeseeable) problems then arose which necessitated compromises which negatively affected the product. Andy argued that 'Revolution' had been adapted from his code, that he had given Don invaluable assistance throughout the project, and that it was his decision to implement special effects animation. While he did consider that he might have been more involved in the game design process, his view was that the game's limitations reflected Don's shortcomings as a Java programmer. In sum, individuals' 'reflexive monitoring' (Giddens, 1984: 191) led them to deal with their memories of past actions and events by developing plots which imposed a formal coherence on equivocal happenings in ways which supported preferred versions of their selves, supporting self-esteem and perceptions of self-efficacy. Concern for the self thus helps to account for variation in actors' sensemaking (as each person had their own identity narrative to protect).

Narratives for Others

Variation in team members' narratives can, in part, be understood as the consequences of ties between their sensemaking and their concerns regarding others' opinions of them: '…Who we are lies importantly in the hands of others…' (Weick, Sutcliffe & Obstfeld, 2005: 416). A considerable literature suggests that people engage in various forms of impression management, especially by offering stories, explanations or

accounts, in order to influence the images and opinions that others have of them (Garfinkel, 1956, 1967; Goffman, 1969; Rosenfield, Giacalone & Riordan, 1995). Social psychologists have long argued that people present accounts ('a linguistic device employed whenever an action is subjected to valuative inquiry' (Scott & Lyman 1968: 46)) to explain potentially problematic situations, events or behaviours (cf. Orbuch, 1997). Perhaps the best known description of this phenomenon is Goffman's (1967) analysis of how individuals engage in 'face work' (both verbally and non-verbally) through which situations are explained, interactions smoothed and tensions mitigated. Social relations, then, are governed by what Gougen (1997: 40) refers to as a 'principle of accountability' and this is most easily satisfied by telling plausible stories that render sensible 'the equivocality (complexity, ambiguity, unpredictability) of organizational life' (Brown & Kreps, 1993: 48).

Recognition that the narratives people told were designed to preserve public esteem or 'face' provides some insights on the socio-cognitive dynamics of narratological forms of sensemaking in this instance. As the narratives were strategic constructions designed to manage others' impressions, it is unsurprising that they represented their authors as dedicated (an exemplification strategy) and competent (a strategy of self-promotion). Alf maintained that he was the architect of the game, and crucially involved in all the major decisions and problem-solving activities that meant 'Revolution' was delivered on time and to the client's specification. Gayle said that she had put her 'best design work' into 'Revolution'. Don suggested that he had devoted considerable time and effort to the project, but also recognized that he would have benefited from more technical assistance (a supplication strategy). Andy claimed to have laboured to ensure that Don had all the information he needed to code the

game, to have worked to ‘improve’ elements of it, and to be a more able programmer than Don.

Their narratives were particularly interesting because all admitted that the product they had helped to develop was compromised, and each individual was, thus, potentially open to the accusation that they were at fault. The narratives may be understood as claims both to ‘be’ a particular kind of person – for example, creative, technically skilled and adaptable – and for recognition and of merit in the context of partial failure. What we observe in this case are people acting on the basis that ‘…a person’s worth is established by the opinion of others’ (Boltanski and Thevenot, 2006: 100) and responding by spinning stories that maximize perceived self-value, offering versions of events which nullified or mitigated any negative implications which they felt may be attached to their actions or demeanour. Sensemaking narratives are not just about explanation and self-insight but communication and persuasion. That is, such narratives deal with the politics of meaning, i.e., not only how understandings ‘are selected, legitimized, encoded, and institutionalized at the organizational level’ (Patriotta 2003a: 351), but how residual pockets of contrary sense and alternative versions may develop and subsist in the unmanaged spaces of institutions (Gabriel, 1995). Complementarily, the social order that sensemaking enacts is not always or indeed generally homogeneous, unified or indeed necessarily very consensual.

Sensemaking and Organization

It is an axiom among theorists that ‘…sensemaking and organization constitute one another’ and that ‘…organization emerges through sensemaking’ (Weick, Sutcliffe &

Obstfeld, 2005: 410). For example: ‘Organization is an attempt to order the intrinsic flux of human action, to channel it toward certain ends, to give it a particular shape, through generalizing and institutionalizing particular meanings and rules’ (Tsoukas & Chia 2002: 570). To make sense is to organize, and sensemaking refers to processes of organizing using the technology of language - processes of labelling and categorizing for instance – to identify, regularize and routinize memories into plausible explanations and, indeed, whole narratives. In this instance, everyone’s narrative oriented to processes and outcomes centred on a project with agreed parameters – technical specifications, deadlines, durations, locations, key protagonists, clients etc. The narratives we have analyzed thus served to establish and re-establish the company as a hierarchically ordered, project-centred, productive entity in the computer games industry which, while imperfect as a result of individual failings and externally imposed constraints, was nevertheless (modestly) successful. The micro-level stories of individuals instantiated and reproduced the macro-social order, assigning roles to individuals, meaning to history, and a future trajectory for the organization with a putatively valuable internal skill set and clients desirous for its products.

This, however, is a somewhat incomplete analysis of our case. Scrutinizing in more detail what was agreed by team members and what disputed, as we have done, leads us also to ponder just how ‘organized’ through shared sensemaking this team was. From initial conceptions of the project’s goal, and assessments of problems and solutions, to final evaluations and distillation of key learning points, there were important differences (some subtle, others profound) in the narratives that participants’ told. Less obviously, but perhaps no less importantly, in each

individual's narrative much was left un-said. This may, to some extent, have been a function of choice, but it was also because no one knew all the details regarding who did what, when, where, or how actions and events related to each other. Authorial silences and narrative omissions were the inevitable result of temporal and structural complexity as well as the strategic decisions of individual storytelling bricoleurs. The agreement that was in evidence might best be described as 'circumstantial' or 'contingent' and was potentially inherently unstable, prone as their narratives were to becoming a resource for conversation among team members who might then quickly discover disagreements and lacunae in each others' understandings.

This finding is consonant with the theorizing of other researchers who have argued that, in work situations, what is shared between people are actions, activities, moments of conversation and joint tasks, not 'meaning' (Donnellon, Gray & Bougon, 1986; Weick, 1979, 1995). Nevertheless, equivalent understandings must be developed by participants in order for coordinated action to occur. In our terms, what is required for a team or an organization to behave collegially are sufficiently mutually reinforcing narratives of their and others' task-related actions. Without requisite consonance between actors' narrativized understandings the interlocking routines and habituated action patterns that serve as centripetal forces binding people together around the same activities, and in the same time and place, will dissolve. Such routines and patterns of action are social constructions that build intersubjectivity and generic subjectivity, and these are formed, in part, from the storied constructions that situated actors' author for themselves and others.

Conclusions

In his book on sensemaking Weick (1995: 75) asked the important question '…how does action become coordinated in the world of multiple realities?' His answer is that people share a 'referent', a common experience, about which they may infer different meanings but which continues to tie those understandings together. Our suggestion is that these ties may be regarded as narrative structures which, in order for there to be coordinated action, must exhibit equivalence. It is equally important, however, to recognize that much sense in organizations is not shared. Despite widespread acknowledgement that in seeking to represent patterns of social interaction, and to account for their experiences and outcomes, people author personalized narratives (e.g., Bruner, 1991: 4), most interpretive case-based research still culminates in a single, homogenized account. By attending to individual differences in sensemaking we may ultimately be better able to explain how organized activities emerge from dissensus, ambiguity and disagreement. Our paper is, of course, merely one small step towards grappling with these complex issues. As 'The issue of how agreements are reached is one of the fundamental issues [in]…the social sciences' (Boltanski & Thevenot, 2006: 25), so considerable further research is required in order to deepen our knowledge of how individuals' sensemaking is translated into processes of organizing.

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Table 1. A Comparison of Team Members' Narratives

Theme	*Game Designer (Alf)*	*Lead Artist (Gayle)*	*Junior Programmer (Don)*	*Senior Programmer (Andy)*
Project Goal	To deliver a satisfactory product on time	To deliver a high quality product on time	To deliver a product and to learn about game development	To use BTA as the basis for a new (improved) product
Main Problems and their Causes	The quality of the artwork (Gayle) The lack of time for play-testing (time and resource constraints)	The failure to recognize file space limitations; the failure to design appropriately sized icons (Programmers)	The limitations of the initial BTL code (Andy); QA principles (Vodaphone); the fixations of the lead artist (Gayle); unreasonable client requests (ZMedia); technical difficulties associated with mobile phones (Sharp and Panasonic)	Changing client requests (ZMedia); junior programmer's inexperience (Don); lack of play-testing (time constraints)
Solutions and their Sources	Animations (Don and Andy)	No 'real' solutions generated	Technical innovations to the 'BTL' code; responsiveness to ZMedia requests; hard work; animations (Don).	Animations (Andy and Don)
Evaluation	Despite 'fixes' the product should have been better.	Final product fundamentally compromised	While disappointing, the product was accepted by the client	The client (ZMedia) were impressed with the game
Learning	Need to hire a more engaged lead artist	Lead artist needs to be more involved in the planning stage of projects	Need independent 'play test' of games to ensure quality	Need for the senior programmer to be more involved at an earlier phase