Safe Enclaves, Political Enclaves and Knowledge Working

by

Niall Hayes

Before 14th July 1999:
Manchester School of Accounting and Finance,
Oxford Road,
The University of Manchester, UK.
Tel. (44) +161 275 4022,
Fax (44) + 161 275 4023,
E-mail: niall.hayes@man.ac.uk

After 15th July 1999:
The Department of Management Science,
The Management School,
Lancaster University,
LA1 4YX, UK.

&

Geoff Walsham
The Judge Institute of Management Studies,
Trumpington Street, University of Cambridge, UK.
Tel: (44) +1223 339606
Fax: (44) +1223 338076
E-mail: g.walsham@jims.cam.ac.uk

To be presented at the First International Critical Management Studies Conference,

Information Systems Stream
Safe Enclaves, Political Enclaves and Knowledge Working

Niall Hayes and Geoff Walsham

Abstract

This paper contrasts the dominant accounts of knowledge working, which have portrayed it as being relatively unproblematic, with a more critical perspective, and suggests that groupware technologies are highly political in their application. Specifically, this paper critically examines the implications arising from employees in the UK selling division of a multi-national pharmaceuticals company, harnessing the visibility that shared databases provided to politicise, whilst also showing how some use of the shared databases was deemed safe. Knowledge production is conceptualised from a communities of practice perspective, requiring the ability to make strong perspectives within a community, as well as the ability to take the perspective of another into account. This paper further analyses the empirical work with reference to Goffman’s distinction between front and back regions. The principles underlying ethnography underpinned the longitudinal research process. The paper concludes by suggesting that, rather than groupware technologies being viewed as democratic, their use should be viewed as being historically contingent and inherently political.

1. Introduction

Commentators on contemporary themes of organising have suggested that organisations have increasingly become dependent on the exercise of specialist resources and on workers that ply their trade through their cognitive abilities and their specialist knowledge[Blackler, 1993; 1995]. Riech(1991) terms these ‘symbolic analytical workers,’ whose intellective abilities are varied, difficult to duplicate and who frequently command high rewards. Contemporary organisations which comprise of a high proportion of qualified staff who trade in knowledge itself through peer to peer collaboration are referred to as knowledge intensive firms(KIF’s)[Blackler et al,1993; Blackler et al.,1997b; Boland & Tenkasi,1995]. Dominant
accounts in the knowledge work literature portray knowledge as being an entity that can be possessed and traded, viewing learning as a process by which a learner internalises knowledge, whether ‘discovered,’ ‘transmitted’ from others or ‘experienced in interaction’ with others[Bell, 1973; 1978; Nonaka & Takeuchi, 1994]. In contrast to this, the less dominant relational view adopted in this paper portrays knowledge as being provisional and context bound[Lave, 1988; Orr, 1990]. Relational writers view knowledge as residing in an evolving, continuously renewed set of relations of persons, their actions and the world, and thus in contrast to dominant accounts, they contend that knowledge can not be divorced from its context[Tsoukas, 1996; Lave & Wenger, 1991].

Several relational writers argue that many ‘expert dependent’ organisations are increasingly going through a shift to becoming communication intensive[Barley, 1996; Blackler et al., 1997a]. This shift, in part, is attributed to the emergence of ubiquitous, low cost distributed technology[Ruhleder, 1995; Blackler et al., 1997b]. Zuboff(1996) concurs with this view, by noting that as technologies become more ubiquitous, they are: “fully imbuing tasks of every sort and providing ever more powerful opportunities for the kind of learning that translates into value creation.” Indeed, some scholars view knowledge work as being inseparable from the development of contemporary technologies[Knights et al., 1993; Star and Ruhleder, 1994; Ruhleder, 1995].

Several writers within the relational tradition view power/knowledge as being inseparable. Critical writers such as Alvesson(1993) indicate that organisations lay claim to knowledge rather than possess knowledge[Willmott, 1995]. Alvesson(1993) further argues that the notion of knowledge intensive firms is no more than an institutionalised myth, which seeks to ensure employee conformity with the institutionalised expectations of their environments. At present, accounts of the political and normative issues in the main stream knowledge working literature, particularly with reference to the role of information systems, are not as plentiful as these issues warrant.

This paper explores how the political and normative context was implicated in knowledge working in a UK selling division of a multinational pharmaceuticals company. Compound UK(the selling division) introduced Lotus Notes, a leading groupware product, to assist employees to work more qualitatively within and between functions. Employees used Lotus Notes to share views and perspectives with members of their own and other functions.
Specifically, this paper will consider why it was that some shared databases had more of a political air than others, and how the political and normative context was implicated in influencing the character of interaction of employees working within and between functions. Furthermore, this paper will draw on, and extend, Boland and Tenkasi’s(1995) communities of practice approach, which conceptualises how communication technologies are implicated in knowledge working with reference to political and normative issues.

This paper will first outline the particular communities of practice approach drawn upon in the study, as well as the conceptualisation of power that underpins the analysis. Following this, the principles underlying ethnography will be explained to have informed the methodological approach. Section four will introduce Compound UK. Section five will discuss how the visibility Lotus Notes provided was implicated in influencing the character of interaction within and between boundaries. Section six will explore how the political use of Notes was implicated in knowledge working. The final section will discuss the implications and conclusions arising from this study.

2. Conceptualising CSCW and Knowledge Working

The communities of practice school is largely attributed to the work of Lave and Wenger(1991), Brown and Duguid(1991) and subsequently Chaiklin and Lave(1993). Boland and Tenkasi(1995) have subsequently drawn on these foundations specifically to conceptualise the role of communication technologies in the knowledge work process. They see organisations as being characterised by a process of distributed cognition in which multiple communities of specialised knowledge workers, each dealing with a part of an overall organisational problem, interact to create the patterns of sense making and behaviour displayed by the organisation as a whole[Boland et al.,1994]. Each community of knowing consists of specialised knowledge workers, and includes divisions, functional areas, product lines, professional specialities, project teams and issue-based committees. These communities interweave with each other across various levels of the organisation as: “individuals will find themselves as members of several communities of knowing operating within a firm and its environment.”

Boland and Tenkasi(1995) developed the concepts of perspective making and perspective
taking to refer to the ability to reconfigure the knowing of experts. *Perspective making* refers to the process whereby a community develops and strengthens its own knowledge domain and practices. As a perspective strengthens, it complexifies, which involves a shift from a global and undifferentiated construct to a more precise explanation, and a more coherent structure of meaning is created than the preceding ones. The process of *perspective taking* refers to the process of collaboration between experts working across boundaries, when they are able to appreciate and synergistically utilise their distinctive knowledge[Blackler et al.,1997c]. Boland and Tenkasi(1995) suggest that making their own understandings visible for self-reflection is vital to the perspective taking process, and advocate communication technologies to support this process. They further note that perspectives need protection from other demands whilst they are forming. They suggest that a new expanded sense of activity and community needs to emerge, born of an awareness of the changing context and a willingness to construct new meanings and methods.

No accounts from a communities of practice perspective have explicitly explored how the political and normative context is implicated in knowledge working, though both Boland and Tenkasi(1995) and Lave and Wenger(1991) do indicate that this indeed is an important consideration. To develop the analysis of the political character of interactions within and between boundaries, this paper has drawn on Goffman’s(1959) work on front and back regions to develop a conceptual distinction between safe and political enclaves, to explore the implications of the political use of co-operative technology. Political enclaves are akin to what Goffman terms ‘front regions.’ He likens these settings to being front of stage where actors portray a public facade. Political enclaves in this study are portrayed as being used as a resource by all politically orientated actors who seek to further their own agendas.

Safe enclaves are akin to what Goffman terms ‘back regions’ which he likens to being the back of stage where employees feel safe to express their own underlying views of an activity. These settings are conducive to discussion and reflection surrounding the on-going activities and events. However, a cautionary note surrounding this distinction between safe and political enclaves needs to be mentioned at the outset. The distinction refers to the character of the use of the shared databases and other encounters between employees, and consequently, safe enclaves are political in so far as they are shared social spaces. For example, opting out of political enclaves in preference to safer ones is itself a political act.
3. **Methodology**

This section presents the ethnographic methodological approach that has been drawn upon to undertake this research. An ethnographic account seeks to produce detailed descriptions of the everyday activities of social actors within specific contexts. It is a naturalistic method relying on material drawn from the first hand experience of a field worker in some setting [Skeggs, 1994]. Its main concern is to present a portrait of life as seen and understood by those who live and work in the domain concerned [Steier, 1991]. Ethnographers believe in the power of their questions and the use of representation to construct the lives of the people they are studying [Steier, 1991]. By doing this, an ethnographic account provides access to the everyday ways in which participants understand and conduct their working lives.

The primary research in Compound UK was carried out in two phases over a two and a half year period. However, one of the authors had previously conducted an action research project over a six month period in the year previous to the primary research period, which though not directly related to the focus of the subsequent study, did provide valuable background and awareness of the context of this study. Phase One lasted between October 1995 and February 1996. During this phase, 33 in-depth interviews were carried out, lasting between 1 to 3 hours each, as well as considerable informal interaction. Between February 1997 and May 1997, 21 follow up interviews were conducted in order to try to understand the use of co-operative systems over time, and to provide the longitudinal element that is seen as highly desirable for ethnographic research.

In the first phase, interviews were relatively structured. They sought to glean the changing perceptions and work practices that had emerged as a result of the introduction of Lotus Notes. As an increased awareness about both Compound UK’s operations and a provisional understanding of the emerging issues was gathered, the interview questions were not followed as rigidly as they were at the outset of the research. In the second phase of interviews, any emerging themes and issues that remained unresolved from phase one were pursued in a more unstructured way. This flexibility allowed for the modification of the research design in the light of emergent or unanticipated analytical problems thrown up by the context or the data [Layder, 1993]. In addition, interviews were confidential and conducted in private. The initial part of the interview would be spent explaining the identity
and purpose of the researcher(s), and reassuring interviewees that no attribution would be given to their views in any subsequent discussion or reports. Relatedly, detailed field notes were preferred to the use of a tape recorder, as it was thought that tape recording would have led to more candid responses.

Interviews were supplemented by social interactions in the cafeteria and during drinks in the evening with employees. The aim of this social interaction was to gain a feel for what it is like for the people in the situation being studied. In particular, by undertaking these social interactions at every possible moment, it allowed a way to compensate for any limitations arising from undertaking interviews. These extensive interactions were intended to further reveal a ‘rich under life’ that is usually seen as being masked to quantitative researchers[Geertz, 1973], and to those qualitative researchers that place their emphasis on solely undertaking interviews.

4. Compound UK

Compound UK is concerned primarily with selling products to hospitals and general medical practices, whilst also undertaking clinical trials of new drugs with participating doctors in Great Britain and Northern Ireland. The selling division had undergone considerable change over the decade prior to the restructuring as a response to reforms in the UK health care sector, as outlined below.

During the late 1980’s there was an acceleration in the reform of the UK National Health Service(NHS)[Connah & Pearson, 1991]. Government controls on public expenditure meant that for a number of years the health care budget had not kept pace with inflation, and thus had reduced in real terms. To try and achieve cost savings, the NHS attempted to mirror market principles by introducing an internal market place[Robinson & Le Grand, 1994; Flynn & Williams, 1997]. This led the NHS to rethink the purchase of pharmaceuticals products; the criteria for purchasing such products no longer concentrated solely on their efficacy, but also on their cost and efficiency.

The introduction of these market reforms has split the health care sector between primary care and specialist care. The primary care sector covers general practices, while the
specialist care sector covers hospital markets. Since the reforms, many primary care doctors are fund-holders. They have budgetary responsibilities for drugs, hospital referrals, staff as well as for their fixed costs. Hospitals are also more autonomous from the Department of Health, and are responsible for their own budgets. As a consequence, specialist care doctors are part of a large group of decision makers, including managers and accountants. From the point of view of Compound UK at the time of the research study, not only had the criteria for purchasing pharmaceuticals products added cost savings to drugs efficacy, sales situations had also become far more complex, since client groups such as hospitals now included a wider range of actors in their purchasing decisions.

Much of this paper focuses on the commercial function of Compound UK. In 1993, this was reorganised into eight regions. It was thought that this would provide each region considerable autonomy to plan and respond to their own locality, and thus to make the organisation more responsive to the new market place. In 1996, the commercial function consisted of its director, Tom Saunders, eight regional managers, twelve area managers, and around 150 sales representatives(reps). All members of the commercial function, apart from the director, worked from their own homes, while employees working in other departments were located at the head office, Compound Square.

As part of the response to the environmental changes in Compound UK, senior management felt that the organisation could become more competitive by encouraging employees to draw on all areas of the organisation to work and share information and knowledge across functional and geographic boundaries. Lotus Notes was seen as a software package that could assist with sharing information and improving group working.

In addition to an electronic mail(e-mail) facility, there were three main uses of Notes after its introduction in Compound UK. First, it was used to create a database to support the co-operative activities involved in strategic selling. This database allowed employees to input their views and information onto the strategic selling databases in a structured way with the aim of bringing together the employees’ shared knowledge so that they might contribute to a successful sale. These issues were recorded on electronic strategic selling sheets. A second use of Notes was the provision of a wide variety of discussion databases which focused on issues, products or a particular role. The final and most prevalent use of Notes was the contact recording database. This database provided a shared resource for employees to
record details of customers. This is a widely used practice in selling companies, and had been present in various paper and electronic forms in Compound UK since the early 1970’s. We will focus on contact recording and strategic selling as the empirical basis for much of the rest of the paper. It was the use of these aspects of the technology that displayed the themes of this paper most clearly.

5. Visibility and Invisibility

This section will discuss the differing ways that employees responded to the visibility that the introduction of Lotus Notes brought to their activities. The visibility arose from employees working discursively on Lotus Notes’ shared databases and provided a means for much more of the employees’ day-to-day work lives to be made transparent to managers. This transparency provided a resource for senior managers to co-ordinate and control employees, as had happened with the previous contact recording system.

Though contact recording on Lotus Notes had considerably more scope for sharing perspectives and details than the previous contact recording system, it still provided the facility to monitor the number of contacts that reps made with doctors. Not long after Notes was introduced, the commercial director instructed the Lotus Notes developer to devise a league facility which could indicate centrally how many contact records and strategic selling sheets had been completed by each sales representative. Once the contact records had been collated centrally in the form of league tables, Robert Cross, the strategic selling manager, would send out electronic messages to field force managers to inform them about the number of contact records and strategic selling sheets each rep had completed. Area managers felt obliged to inform members of their sales team that their low contact recording rates had been noticed centrally. This confirmed many of the reps’ suspicion about the intention behind the reintroduction of an electronic contact recording system.

Extended capacity to monitor and control

However, contact recording on Lotus Notes not only allowed reps to represent the number of calls they made; unlike its predecessor, it also had the scope to record employees’ observations and comments. Some senior managers would regularly review not only the
league tables, but also the detailed comments and observations that reps had recorded, so that they could gain a deeper insight before meeting particular doctors or other stake-holders. It also provided an insight into how their products were faring. This meant that with reps recording not only the number of visits, but also the content of their visits, the storage capacity of Lotus Notes expanded the degree of authoritative resources that senior managers could draw on to sanction reps than existed with Jaguar, the previous contact recording system.

Many of the more cynical reps were negative about the use senior managers made of the details stored on Lotus Notes. They suggested that it had intentionally brought senior management located in Compound Square into their own homes. This point is best explained by one primary care rep, who reacted angrily when the author asked if he felt closer to what was going on in Compound Square as a result of the introduction of Lotus Notes, saying:

“It is the people based in head quarters who feel isolated, this is why they use technology, so they can monitor what people in the field are up to. The computer allows them a handle on what we do. How would they have known that I was sat in a hotel meeting you before they introduced Notes? Now I will put it into my contact recording database.”

The introduction of the strategic selling database similarly extended the ability for senior managers to exercise tight control over sales reps. All employees, but most notably the sales reps, were required to input details discursively on the shared database, to structure their visits, and to draw on the expertise of other employees. Strategic selling sheets represented a simplification of the selling process; they provided a way to visibly structure their more complex work in the form of standardised strategic selling sheets. By visibly developing strategic selling sheets, reps could prove to senior management that they were following guidelines by planning their more difficult sales in a way that senior management, and the strategic selling manager in particular, could monitor and control. As one area manager mentioned:

“Robert Cross looks randomly at everyone’s strategic selling sheets to check up on the quality of them. Robert will send me a note saying that the reps use of the strategic selling sheets was either appropriate or not appropriate! Sometimes he will
Prior to the introduction of Notes, there was more reliance on area managers to supervise and control much of the reps’ work due to the limited awareness that those in Compound Square had of a rep’s day-to-day activities. The only direct information that senior managers could draw on to monitor the reps’ activities, were the contact rates recorded on Jaguar. However, as discussed above, Notes not only indicated the number of contacts made, but also allowed senior managers a more detailed indication of the activities that reps were undertaking through the detailed fields that reps completed on the contact recording and strategic selling databases. This allowed senior management in Compound Square to co-ordinate more of the reps’ day-to-day activities, which had previously been exercised locally by area managers. Consequently, the authority of senior management was increased and the autonomy of the field force management was reduced.

**The career reward structure**

Some reps welcomed the reintroduction of contact recording and the extended surveillance capacity, and harnessed this increased visibility for their own individual purposes. Some reps would record a considerable number of contact records regardless of whether they were relevant, so that they could register a high position on the league tables. They would record all the doctors, managers, accountants and even nurses that they met in general practices and hospitals. This went contrary to the ethos that arose in tandem with the restructuring and the introduction of Lotus Notes that emphasised only recording ‘relevant’ calls. Many non-career orientated reps were quite resentful of some other sales reps and of those working in Compound Square, who they saw as using Notes to try to further their careers. Non-careerist reps were generally those that had been doing the job for some time, and had mostly given-up any hopes they had for career advancement, while careerist reps were ambitious, and tended to be younger.

Non-career orientated reps were generally favourable to the move away from only recording the quantity of calls, and saw this approach to working as being appropriate to the new health care environment. However, they feared that as a result of the activities of the ambitious reps, senior management may revert back to explicitly directing reps to record high contact rates. As one experienced rep noted:
“Younger people just see reping as temporary, as a way to pass through to the head office. They think they can put up with it for a few years, and are quite happy to input loads of contacts, and work flat out; this has an impact on the long term reps, who have to keep up with them.”

Many career orientated reps would seek to gain favour with Robert Cross, Tom Saunders and Martin Garratt (the general manager), by working on a considerable number of strategic selling sheets at any moment in time. As with the contact recording database, many non-career orientated reps felt frustrated with their peers, as they saw them legitimating the extensive use of strategic selling, regardless of if they had any complex sales accounts in their territory at that moment in time or not.

This was particularly the case for primary care reps, who did not see the benefit of having too many strategic selling sheets open at any one moment in time. Primary care was not seen to comprise of as many stake-holders as specialist care, and in effect, primary care reps only had one or two general practices that could be classified as complex sales situations within their territory. Thus, with many primary care reps keeping active a considerable number of strategic selling sheets, non-career orientated reps resented this. They felt they were merely doing this to gain favour with the strategic selling manager who reviewed how well or how poorly the rep had used the strategic selling database. As one rep mentioned:

“There are not that many complex sales situations in my area, and I only need to keep active a few strategic selling accounts at a time, unlike some of the shining stars!”

In specialist care, the extensive use of the strategic selling database was seen as more justified, and less politically orientated, due to the increased complexity of the sales situations since the health care reforms. Also, most specialist care reps had already ‘served their time’ as primary care reps, and generally were the more experienced and less ambitious reps.

A further component of Notes that was used by some employees as a resource to politicise, was the electronic mail facility. Many of the electronic messages that senior managers
received informed them of something mundane that had been completed by lower level employees, and were described by senior managers, and their personal assistants, as being pointless. They saw these ambitious reps as just trying to gain ‘brownie’ points with the senior managers for the amount and nature of work they had undertaken, or planned to undertake. By using the e-mail in this way, they thought that they could be noticed by senior managers, and would be viewed favourably in any future promotion opportunities. One medical liaison manager (MLM) highlighted the political character of the use of Notes saying:

“There are a lot of highly career orientated and cut throat people in Compound UK, and they have taken every chance to portray themselves to the senior managers in a good light. There are a lot of yes men, and this is encouraged in Compound UK by one manager in particular. If you look at the use of the technology, it mirrors their ambitions.”

The discussion databases that had a national and cross-functional audience were also used with similar intentions. Politically orientated employees were aware that the national discussion databases were reviewed and contributed to by many senior managers, including the commercial director and the general manager. Those employees who wanted their comments to be noticed by senior managers felt that contributing to these databases would be beneficial to their career development. The national discussion databases were occupied, in the main, not only by ambitious reps, but also by employees based at Compound Square. Indeed, several reps referred sarcastically to these discussion databases by terming them ‘Compound Square News!’ As one rep mentioned:

“There is a political element definitely. People hijack databases to make political statements. They want to be seen and heard. The national discussion databases are where the political animals are to be found. These include some reps, but mostly those in Compound Square contribute to them. Tom Saunders, Martin Garratt and other senior managers look at the national databases, and these tend to be used the most. The regional databases are not the same. They are about local and regional issues, and are more concerned with sharing than anything else.”

As the previous quotation indicated, a consequence of this political use of the shared databases, was that this often led to employees comments reaffirming the views of senior
management, rather than providing a way to explore understandings and meanings that different groups of employees held across the organisation.

Though the functional or role specific discussion databases did not generally share the same political character, a few had high levels of visibility. For example, on the MLM’s discussion database, all ten MLM’s would contribute and review the changing issues on a regular basis. However the medical director discovered the success of this database, and asked if he could take part in the discussions. Consequently, soon after he had access to this database, its use petered out. As one medical liaison manager mentioned:

“The MLM database was really well used but has petered out now. This happened soon after our boss, the medical director, asked if he could be included in it because he had heard how successful it was. No one felt that they could comfortably share views in the knowledge that he was reviewing the database.”

Many employees felt less uneasy sharing their view’s on the functional or regional specific shared databases. For example, several of the regional and role specific databases were used extensively to express and share views and comments between colleagues in the same function. This was in contrast to the use of national shared databases, where many employees felt uneasy working discursively with employees that they were unfamiliar with, or suspicious of their motives, and as a consequence limited the opportunities for crossing boundaries in Compound UK.

6. Political and Safe Enclaves and Perspective Making and Taking

This section will draw on the conceptual distinction between political and safe enclaves to consider how the nature of use of Lotus Notes was implicated in knowledge working, and specifically the perspective making and taking process. This conceptual distinction will be further clarified throughout this section through an additional construct of optionality and non-optionality. Non-optionality refers to those shared databases that employees felt that they had to use in order to legitimate their activities, whereas optionality refers to those shared databases that they did not feel normatively bound to use. More specifically, the first sub section will explore how an employee’s optional and non-optional inclusion in, and
optional exclusion from, political enclaves was implicated in knowledge working. The second subsection will explore similar issues for the safe enclaves.

6.1 Political enclaves and knowledge working

The previous section explored in detail the varying ways that employees at all levels of the organisation harnessed the visibility Notes provided as a resource to further their own positions. Table (1) summarises how the individualistic motivations that surrounded many employees’ use of Notes was implicated in limiting the perspective taking process.

<table>
<thead>
<tr>
<th>Concept</th>
<th>Issues stemming from the cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspective taking</td>
<td><strong>Optional Inclusion</strong></td>
</tr>
<tr>
<td></td>
<td>- By senior managers in the contact recording and strategic selling databases in order to ensure that reps worked in the ways they advocated.</td>
</tr>
<tr>
<td></td>
<td>- By career oriented reps to prove that they were working hard and complying with their wishes.</td>
</tr>
<tr>
<td></td>
<td><strong>Non-Optional Inclusion</strong></td>
</tr>
<tr>
<td></td>
<td>- By non ambitious reps, who only made the minimum use they felt they had to of the contact recording and strategic selling databases.</td>
</tr>
<tr>
<td></td>
<td><strong>Optional Exclusion</strong></td>
</tr>
<tr>
<td></td>
<td>- By employees from the national discussion databases that they saw as being optional.</td>
</tr>
</tbody>
</table>

Table (1) Political enclaves and perspective taking

Several senior managers viewed the contact recording and strategic selling databases as a way to ensure that reps worked in the ways they promoted, while ambitious reps harnessed these aspects of Notes, as well as the national discussion databases, to prove to senior managers they were working hard, and complying with their directives. This meant that the nature of the use of Notes merely reinforced the dominance of these senior manager's perspectives. Consequently, much of the use of Notes was driven by individualistic concerns, rather than engaging in collaboration with employees in other communities in order to appreciate and synergistically utilise their distinctive knowledge.

These difficulties were further reinforced due to the optional exclusion of non-careerist reps
from the national discussion databases, and due to the limited nature of their non-optional inclusion in the contact recording or strategic selling databases. Not only did they view the use of these political enclaves as being futile, they also saw contributing their views and recording their activities on the non-optional contact recording and strategic selling political enclaves as being time-consuming. In addition, many employees were fearful that any non-consensus forming contributions that they made to the national discussion databases might be misunderstood or seen as irrelevant. By not contributing, or only contributing in a limited way, they reinforced the political nature of these enclaves. As table(1) indicates with reference to the perspective taking process, the non-optional inclusion, and the optional exclusion led to a homogenising of expressed perspectives that merely reflected the dominant positions in the organisation. Consequently, the dominance of these consensus forming views did not assist others with different expertise to recognise and accept the different ways of knowing of others[1].

<table>
<thead>
<tr>
<th>Concept</th>
<th>Issues stemming from the cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspective making</td>
<td>Optional inclusion</td>
</tr>
<tr>
<td></td>
<td>▪ Career oriented employees replicate the views of senior management</td>
</tr>
<tr>
<td></td>
<td>Optional exclusion</td>
</tr>
<tr>
<td></td>
<td>▪ Non-careerist employees either excluded themselves entirely, or only contributed minimally to national discussion databases. This reconfirmed the political nature of many of the databases.</td>
</tr>
</tbody>
</table>

Table(2) Political enclaves and perspective making

As table(2) summarises, the homogenising of expressed perspectives that arose from the careerist optional inclusion, and non-careerist optional exclusion of community-wide databases, not only restricted the perspective taking process, but was also implicated in limiting the perspective making process. The consensus forming nature of the views recorded and viewed on the community-wide databases restricted the extent to which each community could make unique representations of their understandings available on the shared databases. Employees based in the differing functions were unable to distinguish how their own community’s views differed to those recorded by members of other functions. Consequently communities were unable to establish their own identity by locating their views within the diversity of perspectives.
6.2 Safe enclaves and knowledge work

This second subsection will discuss the implications for knowledge work stemming from the use of safe enclaves. Table(3) summarises how the use of safe enclaves presented opportunities for the perspective taking process, albeit in a limited way.

<table>
<thead>
<tr>
<th>Concept</th>
<th>Issues stemming from the cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspective taking</td>
<td>Optional Inclusion</td>
</tr>
<tr>
<td></td>
<td>▪ debate in community-specific databases about how they go about their work with others.</td>
</tr>
</tbody>
</table>

Table(3) Safe enclaves and perspective taking

As table(3) indicates, though there were no community-wide databases that were deemed safe, some employees did, as noted above, optionally include themselves in their community-specific databases. On these safe enclaves, those that had experience of working with other functions, would discuss and provide advice to less experienced members of their own community, on how they could best interact with members of other functions.

However, though the opportunities for perspective taking were few, some enclaves did present opportunities for the perspective making process. Table(4) summarises the issues surrounding safe enclaves and perspective making. Though non-careerist reps did not normally include themselves in political enclaves, they did optionally include themselves in the regional databases that they perceived to be safe to express their underlying views. On community-specific safe enclaves, many non-ambitious reps would discuss the ways that they had approached sales situations and other areas of interest that they shared. The safe enclaves allowed for some discussion and reflection to occur about how they went about their work, and for the strengthening of perspectives within communities.
<table>
<thead>
<tr>
<th>Concept</th>
<th>Issues stemming from the cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspective</td>
<td></td>
</tr>
<tr>
<td>Making</td>
<td><em>Optional Inclusion</em></td>
</tr>
<tr>
<td></td>
<td>- Some discussion and reflection leading to the strengthening of perspectives within a community(e.g. regional databases).</td>
</tr>
<tr>
<td>Optional Exclusion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Ambitious reps excluded themselves from the PM process, as they did not see them as beneficial to their career development.</td>
</tr>
<tr>
<td></td>
<td>- Expert’s feelings of safety on some enclaves was only temporary.</td>
</tr>
</tbody>
</table>

**Table(4) Safe enclaves and perspective making**

However, as noted above, some ambitious reps *optionally excluded* themselves from the use of these community-specific safe enclaves, as they did not see their time spent using them as being beneficial to their career development. In addition, due to the resentment of non-ambitious reps for having to use the non-optional political enclaves, and the additional workload this presented, many did not use these safe enclaves extensively. With these employees not taking part, or their participation being marginal, the amount of debate that centred on how a community went about their work was limited, and this restricted the strengthening of perspectives within communities.

The divide between optional inclusion in and optional exclusion from safe enclaves also led to competing views about how members of the commercial function should go about their work. Ambitious reps still felt that they should reinforce management perspectives by making considerable use of the contact recording, strategic selling and national discussion databases, while non-career reps felt that they should work qualitatively rather than quantitatively, and not necessarily follow management perspectives. This led to a competing perspective that members of the commercial function had of themselves. Developing more coherent meaning structures than the preceding ones is vital to the perspective making process, yet due to the optional exclusion of a significant number of reps from the community-specific databases, it left the field force with a weakly developed perspective of themselves.

One further comment on safe enclaves and perspective making is that most feelings of safety on some enclaves were only temporary. For example, on the medical liaison managers’
database, as discussed previously, open and frank discussion was prevalent until the director of the clinical and medical function asked if he could be included in the debate. Following this, the use of this database petered out, as MLM’s were fearful of what they recorded. This again signified the importance of having safe enclaves in which employees are able to express their views.

7. Implications and Conclusions

This final section will consider the implications and conclusions arising from this study. We will first consider the implications and conclusions relating to the theoretical conceptualisation of knowledge adopted in this study, before reflecting on the specific implications arising from the micro-level study of Compound UK.

First, due to the inadequacy of the existing theoretical conceptualisations of how the political use of information systems is implicated in knowledge working[Blackler et al,1997a;1997b;1997c], this study drew on Goffman’s(1959) work on front regions and back regions to develop the conceptual distinction between safe and political enclaves. These theoretical concepts acknowledge the importance of looking at the nature of the social performances that are carried out in different shared databases and other encounters. Central to Goffman’s conceptual distinction is the operation of normative sanctions. This study provided further clarification through the distinction between optionality and non optionality. This development demonstrates how pragmatic acceptance is sustained through the control of the front region setting. Though Boland and Tenkasi’s(1995) and Blackler et al’s.(1997a;1997b;1997c) accounts of perspective making and taking do indicate that cultural and political issues are worthy of consideration in this process, they have not indicated how, or what the consequences are for the perspective making and taking process. These theoretical constructs may be drawn upon to sensitize future empirical studies informed by these innovative accounts. More generally, these distinctions may inform future studies that consider how the character of interaction within and between boundaries emerges.
In relation to the specific issues emerging from the micro-level empirical study of Compound UK, the character of interaction varied from enclave to enclave, some having a more political air than others. As is summarised in table(5), safe enclaves were characterised as being shared social spaces which allow one’s underlying views to be expressed, allowing for discussion and reflection on the different ways of working. In Compound UK, all safe enclaves were optional and community specific. However, many careerist reps optionally excluded themselves from the use of community specific enclaves, as they saw their time as being better spent using the community wide political enclaves for their own individualist agendas. This limited the extent and nature of participation. This resulted in the irony that safe enclaves which presented opportunities for the perspective making and taking process were used in a limited way, while the political enclaves which restricted the knowledge work process, were used extensively.

Political enclaves were distinguished as being shared social spaces which were characterised by participation resembling a ‘public facade.’ This study indicated how the career reward structure, the surveillance activities senior managers undertook, and the minimal or non-use that non-ambitious employees made was deeply implicated in influencing the consensus forming character of interaction within and between boundaries. However, knowledge work, from the conceptualisation adopted in this study, seeks to value and integrate the diversity of expertise across boundaries in organisations[Boland and Tenkasi,1995], and the homogenisation of perspectives runs contrary to this. Furthermore we suggest that cooperative technology may well be deeply implicated in the homogenisation of perspectives due to the degree of transparency that super-ordinates and subordinates have of each others activities[Knights & Murray,1993; Zuboff,1988]. Being aware of how the dominance of senior management discourses may limit knowledge working is vital[Bloomfield &

<table>
<thead>
<tr>
<th>Safe Enclaves</th>
<th>Political Enclaves</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Express one’s underlying views.</td>
<td>▪ Portray a public facade.</td>
</tr>
<tr>
<td>▪ Discussion and reflection on ways of working.</td>
<td>▪ Politicising by senior and ambitious employees.</td>
</tr>
<tr>
<td>▪ All-optimal.</td>
<td>▪ Exclude some employees.</td>
</tr>
<tr>
<td>▪ All community-specific.</td>
<td>▪ Optional and non-optimal.</td>
</tr>
<tr>
<td></td>
<td>▪ Community-wide.</td>
</tr>
</tbody>
</table>
Coombs, 1992; Suchman, 1994; Willmott, 1993]. The conceptual distinction between political and safe enclaves is presented as a way to sensitise future researchers and practitioners as to how the use of technology in organisations may be implicated in the character of interaction, and in turn in knowledge working.

A further implication to emerge from the micro-level study of Compound UK relates to the increasing workloads that may be associated with the use of CSCW technologies. Much of the optional exclusion on community specific databases by careerist reps arose because of the extensive use they made of community-wide databases. Conversely, the optional exclusion of non-careerist employees in some community wide shared databases, was not solely due to their frustration with the politicising, but also due to the degree of work that many undertook in completing the detailed fields that they saw as crucial to present and future sales opportunities, often for the benefit of others. This finding concurs with some early CSCW research, which found that often groupware applications may ‘fail’ due to the additional work that is required to be undertaken by one group of employees for the benefit of others in order to ‘keep the network working’[Bowers, 1991; Grudin, 1988; 1990]. Being aware of how the extra workload may limit knowledge working when there is an emphasis on the use of CSCW technologies, is thus an important consideration to bear in mind.

To summarise, this study has indicated that rather than groupware technologies being viewed as democratic, their use should be viewed as being historically contingent and inherently political. Further critical empirical studies are advocated that consider the implications arising from how the use of groupware technologies are shaped by the interests of those that seek to contrive their own desired outcomes at the expense of others.

Bibliography


Taylor and Frances.


