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Some 'real' problems of 'virtual' organisation

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This paper presents an ethnographic study of organisational change in a retail bank considering issues surrounding the supposed emergence of the 'virtual team' and 'virtual organisation'. It outlines emerging problems in organisational work as a consequence of the shift toward 'virtuality' and questions the explanatory value of such theoretical stances.

Introduction: the 'virtual organisation'

> 'VO's (virtual organizations), refers to a new organizational form characterized by a temporary or permanent collection of geographically dispersed individuals, groups or organization departments not belonging to the same organization—or entire organizations, that are dependent on electronic communication for carrying out their production process' (Travica, 1997 in Sieber and Griese 1998, p. 67)

The notion of the 'virtual' bids fair to become one of the most over-used concepts of the decade as its use spreads as quickly as the growth of the Internet (that is, in large part, the occasion for the growing popularity of the term). It is also a concept which is receiving some attention in organisation theory and in management science with the notions of the 'virtual organisation' and 'virtual team' gaining some currency. (Zimmerman, 1997; Sieber, 1998). The concepts are intended to denote organisational forms which, it is claimed, address major transformations in the social, economic and technological environment in which organisations currently operate and will increasingly have to operate in the near future. These 'virtual' organisational arrangements consist of networks of workers and organisational units linked by information and communication technologies (ICTs), which will flexibly coordinate their activities, and combine their skills and resources in order to achieve common

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goals. This will, apparently, be accomplished without very much by way of traditional hierarchical modes of central direction or supervision. Such arrangements will form and reform as problems arise so providing a flexibility of response to changing circumstances and organisational needs.

The impact of these new forms on other aspects of organisational behaviour is a matter of some debate. Zuboff (1988, p. 6), for example, writes of such forms as involving 'more intricate, collaborative' relationships in which 'mutual responsibilities to colleagues' rather than to the larger organisation itself become more prominent. In a similar vein, Casey (1995, p. 109) argues that the new forms of teamwork 'in which people share knowledge, skills and resources and work co-operatively in the manufacture of their products' will eventually displace 'identification with an occupation and its historical repository of skills, knowledges and allegiances'. In its place will appear a 'relationship to a product, to team family members and to the company'. Such teamworking, 'less fettered by the constraints of traditional hierarchies and spheres of responsibility, engenders a heightened sense of empowerment, commitment and collective responsibility' (Casey, 1995, p. 45).

There are other, and less sanguine, views concerning the beneficent consequences of such organisational forms for effecting transformations in skill, team working, identification and empowerment (Kunda, 1992), and it is certainly too early to write the obituary of more traditional hierarchical organisational forms. In any event, it is clear that many of the claims involved in the debate are in need of somewhat closer empirical scrutiny. While in this paper we cannot hope to achieve this to the extent which is required, what we intend to do is throw some light upon these matters by drawing on material from an ethnographic study of some organisational changes in a retail bank. In this context banking organisations are seen to be at the sharp end of global economic transformations including processes of 'deregulation' and the emergence of 'universal' banking (Canals 1997; Smith and Walter, 1997); transformations in employment legislation and the emergence of flexible working patterns (Knights and Tinker, 1997); changes in the nature of consumerism (Burton, 1994); the growth and deployment of new theories of change management such as Business Process Re-engineering (BPR) (Cowling and Newman, 1995); and the development and widespread implementation of new technological infrastructures (Spinardi, Graham and Williams, 1996). The combined result of these factors is that banks are now at the forefront of change from Fordist to Post-Fordist organisational structures and exemplify the move away from the manufacture of product to the provision of knowledge. Moreover, banks are at the leading edge of institutions that are catering for and indeed encouraging the fragmentation of consumer demands. The overall effect of these multifarious changes has, according to some observers, combined to make employment in the financial services sector a prime exemplar of the new form of work to be found in the idea of 'virtual organisations'. This paper is then about the relationship between one particular strand of contemporary organisational theory—the consequences of the emergence of the 'virtual team' and 'virtual organisation'—and the lived realities of work inside an organisation that such theoretical concepts are deployed to illuminate and explain. Accordingly, the paper points to the ways in which the 'transformations' in work taking place in a large banking organisation as a consequence of its shift toward a degree of 'virtuality' in its teamworking and management are not necessarily those that the theory would have us expect. In doing this we are not so much interested in generating any sense of the relative 'success' or 'failure' of these transformations, but rather in assessing what, if anything, is to be gained through adopting such theoretical stances in understanding work in contemporary organisations.

Background to the study

The organisational changes, referred to above, involved concurrent changes in the bank's organisational form, its working culture and its technologies. Financial institutions have long been in the forefront of the deployment of distributed computer systems. The bank which was the focus for our research has been exploring the use of ICTs to support decision-making, quality control and customer services as part of a long term strategy to transform its business processes in order to address increased national and international competitive challenges. As Channon (1998) observes, the developing impact of IT facilitated reorganisation of retail banking services in the reduction of back office costs and the introduction of ICT driven delivery systems.

> 'after half a century of relative stability information technology was a major contributor to transforming and forcing convergence of what were previously a series of segregated industry segments . . . organisations that wish to survive and prosper in a rapidly changing environment must . . . open their eyes to a broader horizon in which information technology is a key driver of corporate strategy.' (Channon, 1998, p. 197)

To meet the commercial and organisational challenges of the deregulated and increasingly globalised financial services sector the bank embarked on a series of organisational, cultural and technological changes. The main elements of the changes can be summarised as follows:

- **A shift from the older 'administrative' working culture to a 'service and selling' culture**
  The bank took the view that it needed to expand into other markets, including insurance and mortgages, as well as refine its traditional markets of lending and managing money. Such a shift would require a change in the conception of itself as responsible for the 'good husbandry' of customers' financial affairs toward a more proactive 'selling' culture.
- **The establishment of Specialised Functional Centres**
  This was the most significant organisational development which involved the centralisation and standardisation of 'back office' processing and placing them into larger and more specialised centres responsible, for example, Lending, Services, and Securities, each of which would service a number of 'high street' Customer Service Branches.
- **The provision of distributed decision-support**
  Although the bank, as with other financial organisations, has been using distributed computer systems for a long time, it is now developing and using systems for more decision-making support, work representations and quality control. IT is seen as crucial to the changes it proposes.

Fairly obviously, the kinds of changes in which the bank is involved necessitate significant adjustments in work practices and skills as well as major alterations in attitudes toward work. Indeed, these are the objectives of the changes. However, major organisational changes of this scale are rarely smooth and there are nearly always tensions between the desired changes and the actualities.

As part of these organisational innovations the bank is moving towards using ITC to support shared work across organisational divides; that is, 'virtual teamwork' in which organisational function or process is seen as more important than organisational location. 'Virtual teams' are an organisational form established in the various specialised centres of the bank and are designed to replace the more traditional hierarchical administrative work organisation. The organisational objective was to replace the permanence of administrative structures with the flexibility of task oriented teams which bring skills and expertise together as and when required, and promote the development among workers and managers of a new variety of skills, competencies and responsibilities.

The overall objective of the study was to examine the work of a variety of employees in the bank as 'real world, real time' work activities in order to throw light on the day-to-day problems of managing innovation of the kind sketched earlier. However, in what follows we report on some ethnographic fieldwork (see Button and King, 1992) in the bank that has a bearing upon the utility of the notions of 'virtual teams' and 'virtual organisations'.

The notion of the 'virtual'

> 'Benjamin Wooley once described the word virtual as "a huge vessel of semantic vacuity waiting to have meaning poured into it". Virtual organisations are no exception.' (Gristock, 1997)

The obvious contrast of 'virtual' is with 'real' which, in its current usage, owes much to the fictionalised celebration of 'cyberspace' in novels and short stories as well as the playfulness of journalism and futurology. The gist of the conception is that future computer technologies will allow users to become acting elements in a space engineered and defined by the technology; elements and spaces which need bear little relationship to how we understand our present embodiments and their spatial location. Of course, such visions, if they can ever be realised, are for the far future.

Our concern in this paper is with what the notion of 'virtual' provides in the context of organisations and the use of technologies, including ICTs. In this context, the contrast with 'real' is a less obviously helpful one. The explicit difference is with what are seen as traditional forms of organisation which involve, *inter alia*, a hierarchy of authority, a high degree of centralised control, specialised roles and responsibilities within the structure, and a bureaucratic stiffness of performance. But why such arrangements should be implied to be more real and the proposed alternatives 'virtual' eludes us. Be this as it may—and it may be that we are being too pernickety here—there can be little doubt that a growing number of organisations are certainly doing more than just flirt with the notion of virtuality in reshaping themselves in response to what are regarded as very real changes in the social and economic environments in which they operate (Scott Morton, 1991). Researchers have employed various terms to describe these changes, ranging from 'the permanently new economy' (Ritzer, 1989) to 'postindustrial capitalism' (Heydebrand, 1989) and 'the new rules of competition' (Hage, 1988) to indicate the phenomenon of increased competition, the rise of a quality conscious consumer population, rapidly changing product markets, deregulation and the increasing deployment of new technologies.

The difficulty we have is not so much with the effectiveness or otherwise of the proposed changes to organisational forms—these must be judged according to the relevant organisational criteria of effectiveness—but with what the idea of the 'virtual' offers to organisational analysis. For us, the answer is very little and, what is more, it almost conceals elements of virtuality—if we want to retain the term—which are familiar aspects of organisational life and which *are* currently being affected by the widespread introduction of ICT. What we have in mind here are the prevalent and utterly mundane ways in which organisations represent their activities by records of all kinds, work flow diagrams, job descriptions, cash flow accounts, and so on. Such representations are designed to index aspects of organisational processes as a means of, to put it generally, supporting decision-making and evaluating the performance of various aspects of the organisation. Such representations can have, we would want to argue, a virtual aspects to them in that their representational function means that they 'stand for' persons and processes and are not, so to speak, the 'real' persons and processes which they index.

As we have said, these are features of organisational life which have long been identified. Indeed, as has been noted by a number of commentators (Yates, 1989; Harper and Sellen, 1995), features such as these are closely related to the kind of problems organisations come to face. As Yates' (1989) work illustrates, the formalisation of record keeping procedures—memos, written records, etc.—arose in the US railroads in order to provide structure in a context in which ambiguity could result in serious accidents. However, it will be our contention that there is an uneasy fit between the rhetoric of virtuality and the day-to-day problems of running an organisation. As Gristock (1997) suggests,

> 'the key to understanding the changing organisation of work lies not in the search for the definition of "the virtual organisation", but in understanding how the use of advanced information and communication technologies surmount the communication barriers that exist when activities are organised "virtually".'

As we shall see in the case of the bank, the move toward specialised centres has increased the scale of operation and necessitated the development of systems that impart a 'virtuality' to many of the activities of supervision and control. Nevertheless, this renders problematic the connection between the representation achieved by the procedures and the 'real world' work that is the daily diet of organisational decision-making.

The focus of the paper is then on the extent to which certain features of 'virtual organisation' or 'virtual teamwork' such as non-colocation and the increased use of electronic technologies for communication, monitoring and control bring about changes in work: specifically 'managerial work'. Our empirical research suggests that despite the hype surrounding virtuality, managerial work, managing personnel, resources, customers and so on remains very much 'business as usual' and that the problems that typically and persistently preoccupy managers do not simply disappear with the move towards the virtual organisation or the virtual team.

Managing virtual teams: from management by 'walking about' to management information systems

> A virtual team, like every team, is a group of people who interact through interdependent tasks guided by common purpose. Unlike conventional teams, a virtual team works across space, time, and organizational boundaries with links strengthened by webs of communication technologies. (Morriset in Sieber and Griese, 1998, p. 12)

The reorganisation of the bank, particularly the redistribution and centralisation of functionality, was initiated by strategic plans—first through the 'Delivery Strategy' and then through 'Building the New Retail Bank'. As the scale of the functional units—the Specialised Centres—increased, issues of monitoring, management control and information became paramount, particularly in the identification and calculation of labour costs among other requirements, such as providing quality customer service. The provision and quality of management information became a major topic in management meetings. Management information served a variety of purposes and had been, hitherto, collected in a variety of ways. But as the move toward larger and more geographically dispersed units got under way, various forms of electronic monitoring became increasingly important.

In the early stages, following a consultancy report, the bank had instituted the Productivity Management Programme (PMP) designed to realise a number of benefits, including the measurement of productivity and efficiency and assist management in the allocation of staff to work tasks. However, PMP was very time consuming. Even in those units involved in routine, machine driven work, such as entry handling, a number of calculations and document entries had to be done by hand. Tallying the work, using a formula (and calculator) to calculate the amount of time required to complete it, and examining each section member's work management sheet to see how much of the work had been done was a lengthy business. As might be anticipated, there were inevitable problems in approaching accuracy in the calculations, as indicated in this excerpt from the fieldnotes, '*Went through worksheet with X . . . and calculated that 12 hours work done yesterday. Only in for 9 hours so had to recalculate it*.' On the whole, there was little enthusiasm for the activity. What little support there was for the PMP was couched in terms of what it indicated for those 'above', those at a higher management level, about how hard the staff was working. However, among the managers who had to use the technique, there was widespread scepticism about whether it was 'really needed' as 'in an office of this size' one could see when someone is 'slacking' without the need for the over-engineered PMP. It was also suggested that PMP was only of much use to 'poor managers'. 'Good managers' could make decisions about the allocation of work tasks because they were familiar with and involved with the work force under them. To 'good managers', PMP was seen as time consuming, telling them little that they did not already know by 'walking about' the office.

Having said all this, as the process of centralisation continues, some electronic forms of monitoring are becoming increasingly important. One example of this is the varied reports available via sophisticated monitoring software used in the telephone 'call centres'. The monitoring kit, positioned on the manager's desk, provides a real-time display of inbound, outbound, available and unavailable phones with time attached to each. Each 'operative' is represented on screen by a block—the colour of the block indicating their present status as inbound, outbound, unavailable, etc.—while on the manager's screen a series of calculations and indicators appear. These change in accordance with the state of the service, for example: 'grade of service' (a calculation based on speed of response, waiting times; calls abandoned, etc.), 'queuing time' (in seconds), 'calls abandoned', 'calls recorded', 'average answering speed' and so on. Each indicator can be examined in more detail. The equipment will show, for example, how long the caller was waiting before they abandoned. On the walls of the office an electronic message board continuously displays the current status of the phone team—the grade of service; how many calls are waiting; the average response time in seconds, and so on.

Management information is initially provided in the form of a number of computer generated reports. An 'agent report' provides details of what individuals are doing throughout the day in terms of whether they are available or unavailable for calls, how many calls they took, average time of calls, and more. The reports are then used to create spreadsheets which effectively summarise the information and form part of a 'management information pack' for those higher in the management hierarchy. This process is outlined in the simplified fieldwork extract below:

> X & Y have gone upstairs to the 12th floor to 'get some quiet' and avoid interruptions whilst they devise a 'Management Information Pack' that can be used by the manager of the Lending Centre at a meeting at Regional Office next week. The manager has already, in a previous managers' meeting, forcefully emphasised the importance of this information and of the time frame within which it has to be produced.
>
> Y is talking about what management information is required and looking at a hand written outline of the kinds of categories and calculations he thinks they should include. On one sheet of paper he has written a number of ideas; 'non-utilisation periods'. R/E (reasonable expectancy) how many calls could we have taken?', 'what does the productivity gap equate to in man hours', 'speed/quality/control', 'industry comparisons' and so on. On another he has divided the sheet into columns as the precursor for producing a spreadsheet. Heading the columns are categories such as 'calls offered', 'staff required for 100% calls handled', 'staff required for 90% calls handled'. A series of comments are written down the side—these are later to form the basis of their discussion—'figures as at certain date with customer base of X'; 'do subsequent charts/spreads for take-on of Centres for rest of year . . .'; 'do we want to put in model numbers of staff to see divergence?'. A final sheet has a complicated calculation by which they might obtain a measure of effectiveness.
>
> Whilst this is going on X is looking at the Balanced Business Scorecard (BBS) as it will be important that the measures reflect elements of the BBS, both for the section and him personally. He also looks at a basic set of management information spreadsheets that they produced last week for the managers' meeting which forms the basis for this current MI pack.
>
> Y uses the computer to get an Excel spreadsheet on screen—'AOBT accuracy' (advice of borrowing terms)—they then chat about the layout of the spreadsheet. The talk centres on how much information they need to display and how to present it; the emphasis is on 'totals', totalling columns because '. . . all he'll (the centre manager) be interested in is that (pointing at total)'. They then work together setting up the various 'macros' (calculations) for the various parts of the spreadsheet, talking about its use for making predictions with the suggestion that '*that would be good for "Hours by Design"* ' (a new initiative on hourly working within the Bank). They then turn to the MI figures they produced last week—'*these are great . . . but I think we need the graphs and a comments box . . . he (the manager) doesn't need all that (the detailed figures)*'. They then use the computer to access the spreadsheets they produced last week.

The point about this rather lengthy, even if simplified, extract—although it actually covers only a small amount of the time spent on producing a Management Information Pack—is the recognition of the 'work' and decision making involved in the accomplishment of management information. Despite the use of relatively sophisticated monitoring software, the bald figures produced need considerable interpretation before they can have any value as 'management information'. So, for example, one manager (in a different centre but using the same call-monitoring software) pointed to some of the figures and commented; *'his % time was low because he kept wandering round the office. I came in with a ball of string and tied him to his chair . . . his times are better now'*, *'her time on the phone was low because she came in and then went out to work with another team'*, or commenting on the figures for grade of service, *'we try to keep it above 90 per cent . . . last Monday it fell to 72 per cent—. . .—three staff were on holiday and three were sick . . . we couldn't answer the phones any quicker . . . last week I promised them cakes if they got the GOS up to 94 per cent . . .'* Above all, the main point to make about the decision making process and the usage of information (whether on paper or computer) is concerned with appreciating the careful consideration that needs to be given to what the figures mean in terms of the actual events and circumstances which they index. That is, it is not a question, as Harper (1989) points out in his ethnography of accounting, of 'just any old numbers' but that making sense of the information, and any decision making based on that information, is dependent on certain 'nuanced' understandings which are themselves a product of 'management by walking about' or, to put it more generally, local knowledge of the personnel and the particular circumstances of their work. The task here is one of producing some representation of the work done for the purposes of management support. In more practical terms it is producing summations of the performance of the team for those managers who were not, and could not be, witnesses of the actual work done in the period covered. However, despite the constraints of the categories and calculations provided, there is an effort to make entries at least bear some 'reasonable' relationship to the actualities of the local circumstances of work. Similarly, while Fuller and Smith (1991) might regard this as yet another manifestation of a 'customer control mechanism', used by management to further limit the autonomy of service workers 'management' views within the bank are, not surprisingly, rather different. 'Management' views of the information generated generally emphasised its importance in terms of training or dealing with complaints rather than as a mode of surveillance. One manager, for example, gave an example of a customer who wrote in complaining about a particular operative and how long they had been kept waiting. The software provided the means whereby they were able to check and prove that the complaint was unjustified—whereas in the past the operative would *'simply have got bollocked'*. Others suggested that the system could be used to 'help' the team by enabling them to go to their managers/supervisors to argue for more assistance, for the release of extra team members and so on.

Human relations, technology and the virtual organisation: working the division of labour

Fieldwork Transcript:
On phone to Business Centre—'no you can't . . . because its past three o'clock and the cut-off time and they won't accept the instructions.'
'. . . thats why you've got a cut off of 12 o'clock . . . so that we've got three hours to get the paperwork and phonework done.'
'. . . sorry about that but it is the rule . . .'

One of the main purposes of examining 'real time, real world' work is that it directs attention to the manifold ways in which divisions of labour are achieved as day-to-day activities (Anderson *et al.*, 1989). The rules and procedures which formally specify a division of labour as a process of work have to be applied 'here and now' in *this* organisation at *this* time using *these* resources. The notion of a 'working division of labour' points to the division of labour not so much as an abstract specification but to the actual course of activities as they are socially organised and understood by parties to the work. It is intended to capture the sense of work as it is experienced by parties to the division of labour. The orientation of the individual within the social organisation of work is not primarily 'to the work as a whole' but rather to the tissues of connections and separations as they fan out from the particular position which s/he occupies. The orientation is an 'egological' one (Anderson *et al.*, 1989) concerned with engaging one's own activities, and their boundaries, with those of others along with the resources 'to hand', in terms of 'decisions-that-I-can-make' and 'actions-that-I-can-take' as against those that others deal with. Working through the stream of tasks means 'doing-what-I-can-do' and passing on tasks to others 'so they can do what they do'. 'Gearing into the work' (Gurwitsch, 1979) is about having the resources of knowledge and relevant practical skills to 'insert oneself into the flow of work' and, as a consequence, render the division of labour silent and invisible.

Our observations in the bank and elsewhere have consistently identified the extent to which the accomplishment of work tasks is associated with informal teamwork, or 'constellations of assistance', which sometimes depend on various forms of 'local knowledge'. Close teamwork and informal team discussions result in a commonly accepted 'view of the world' and facilitate the rapid exchange of information about particular cases or correct procedure. Amongst the usual office banter, advice and training is dispensed in an informal fashion. However, the organisational and geographical dispersal that has accompanied 'delivery strategy' has had some unfortunate side effects for teamworking across the different functional units of the bank. This is most notable in the potential for the emergence of a 'blame culture', a culture of 'passing the buck', with poor communications leading to the lack of a consistent, customer-centred approach—and the espoused organisational goal of identical treatment in 'Glasgow or Southampton'. This clearly impacted on teamworking between the different functional units—that is, between different parts of the 'virtual team'. Manifestly, collocation creates and encourages particular, often very fierce, group loyalties, loyalties to the particular unit (lending centre, service centre etc), or sections within each unit, rather than to 'the bank' as a whole. It fosters the development of a 'them and us' attitude, in which 'we do it right but they do it wrong' becomes a common, if not constant, refrain and the other functional units have the resulting opprobrium heaped, more or less randomly, upon them. As one assistant manager commented;

> 'We piss a lot of people off because we do things right . . . in the old days of the branch . . . a big customer could phone up for money . . . and whenever they phoned it was singing, dancing and taking your clothes off . . . when we came here and they phoned up and said can we have £2 million today I said "No" ' . . . 'We do things right, we do things by the book and it upsets people . . . particularly people in Corporate . . . they can't use their superiority and clout to do things . . .'

This developing 'them and us' culture had an obvious organisation relevance in the early stages of 'delivery strategy', through, for example, the effective creation of two 'cultures of lending' within the bank. Observations of differences in the treatment of lending between the branches and the lending centre suggested that, particularly within the branches, decision-making, despite the range of sophisticated computer support, often came down to 'gut feeling' or as one lending officer put it; '*in the end do you trust him to pay the money back? . . .*' Lending on 'gut feeling' clearly benefits from the kind of detailed 'local' knowledge of the customer commonly found in the branches; ' *. . . we know him quite well . . . the lending centre . . . they take the view that they're a control situation . . . one letter then they bounce. As a branch we take a more practical view—tend to be a little more sympathetic . . . The lending centre . . . (is) much more rule driven . . .*'. This, perhaps, explains some of the differences in lending practice between the lending centre and the branch, with the lending centre being much less free and much less likely to take an idiosyncratic view of lending proposals. It clearly is the case that distributed coordination is achieved through institutionalised plans and procedures. However, rigid adherence to such plans and procedures ignores the extent to which the successful accomplishment of work is dependent on various 'local logics', 'gambits of compliance', the deployment of local knowledge and so on.

It is in this context that 'awareness of work' becomes an important aspect of 'virtual teamwork'. By 'awareness of work' we mean the way in which work tasks are made available to others and the important role that this plays in the 'real world real time' social organisation of work. The various ways in which 'awareness' is developed, in which work is made public and available to others, are essential ingredients in 'doing the work' as part of a socially distributed division of labour. One aspect of 'awareness' that seems of particular importance in highly distributed 'virtual teamwork' concerns having an awareness not only of what has been accomplished prior to the work being handed on to any particular individual, but, importantly, what happens to that work once any individual or team have carried out their own particular task. That is, having such knowledge of what is required of any particular task that it can be accomplished in such a way as to enable others to do their work. Observations of virtual teamwork revealed a number of failures in this respect most notably in the temptation simply to 'get work off the desk' and pass problems on to other units. In the following, trivial but commonplace, example a records clerk has had some work returned from another unit because she had entered the wrong codes; in the course of a number of phone calls she eventually discovers the correct code;

> Chat with colleagues re: SIC codes—have been returned as wrong; looking at Action Sheets and reading out codes;
> '. . . they say its causing inaccuracies to the bank's regulatory and statistical reporting . . . they should tell us what they think it is . . .'
> Still looking at Action Sheets 'what do we do if we think the SIC codes are right?' 'Give them a ring and ask them'
> Phoning . . . explains '. . . so I don't know what you want us to change it to . . . it just says here it should be changed . . . so if I think its right I just leave it?'
> Talking to colleagues . . .
> '. . . have we got time to piss about with this? . . . she says its on Table 3 . . .' Looking at sheets . . . 'Where's Table 3?'
> On phone . . . 'It comes under EU? Even though it says National Bank of Greece?' (Because they do not have offices it comes under 'overseas') Writes number on sheet . . . 'Where's that listed in the SIC codes then? Cos we're going to get loads of these'
> Talking to colleague . . . 'Have we got time for that? . . .' 'What a palaver . . . I don't know why they don't just write it on'.

The extract above and the blame culture that it identifies points then towards an interesting issue in virtual teamworking. This is that ICTs, and hence the organisational programmes such as BPR (Hammer and Champy, 1993) that see technology as providing a solution to change management, appear to do little to remedy the problems of goal displacement and organisational politics common to distributed organisations. Indeed, it may be that they worsen rather than resolve this issue.

Virtual organisation, virtual teams and managing customers

A number of writers have pointed to the growing importance of the 'consumer' or the 'customer' as a significant feature of the movement towards post-Fordist economies. In such economies, 'consumption rather than production is dominant as consumer expenditure further increases as a proportion of national income; . . .' (Urry, 1990, p. 277) While the extent of post-Fordist consumption and consumer sovereignty is a matter of some considerable debate, Burton (1994) argues that financial service producers have gone to considerable lengths not only to retain existing but also attract new customers;

> 'There has evidently been a shift from organisational cultures which were conservative, reactive and cautious, and where the main element of the job was administration. Contemporary financial service personnel are required to be proactive, entrepreneurial and possess a high level of interpersonal skills and marketing expertise.' (Burton, 1994, p. 5)

Similarly, Fuller and Smith note;

> 'As pressures for profitability in the service sector have increased service firms have been forced to search for new ways to compete for customers. One of these has been to stress not only the content of services but also their quality (Hochschild 1983; Noyelle 1987; Hirschhorn 1988). A corporate ideology of quality has emerged, reflected in managerial assertions that customers' loyalty depends on the treatment they receive from service workers . . .' (Fuller and Smith, 1991, p. 2)

As we indicated earlier, a greater emphasis on service to the customer was one of the main planks of the change strategy. As the bank began 'delivery strategy' and the process of centralisation, there was a recognition of some of the tensions that would develop between a policy of centralisation to promote cost reduction and a desire to continue to appear as a local 'high street' bank. There was also an acknowledgement of some of the problems this conflict might subsequently create for the bank's avowed policy of customer service. This tension manifested itself in a number of interesting ways in terms of the working of 'virtual teams', most notably in the conflict between 'relationship management'—in the sense of managing accounts according to what was 'known' about the customer as the product of a longstanding relationship—and management according to expert risk grading and assessment packages.

The bank was conscious that although its policy of functional centralisation might well benefit the customer in all kinds of ways, not least by keeping costs at least stable, it ran the risk of losing the 'personal touch' that was seen as one of the distinctive services offered by the high street branches. An early response was to try to maintain the illusion to telephone customers that enquiries were still being handled by local branches by simulating, at the service centres, that the call was being received locally. A much longer term strategy was concerned with what can be succinctly referred to as 'reconfiguring' the customer and the staff as part of a process of increasing standardisation and consistency in decision making. This involved developing a set of expectations as to how accounts should be handled; a set of expectations that emphasised the application of standard procedure as opposed to the more personalised approaches of the past.

So, for example, a standard set of letters were developed to send to accounts that were 'out of order', accompanied by a 'script' to be used whenever customers complained;

> 'complaint . . . she wants to know why we bounced the same day she paid in . . .' '. . . did we not write back and say same day was too late? . . . take the normal line with her and see how it goes . . .'

Of course this did not guarantee that customers would respond to what were computer generated letters informing customers of the state of their account in quite the same impersonal way, as the following customer's letter illustrates:

> 'Might I enquire as to what particular charm school gave you your wonderful way with sarcasm and barefaced cheek! You were bloody rude . . . I demand, by return, an apology. Your failure to do this will result in my solicitor writing to your head office to take the matter further. May I remind you, the bank is in business to make money, not high handed moral judgements. You have overstepped the mark in a most appalling way and in your position cannot be excused . . .'

It is then evident that such an approach to customers is far from unproblematic. Consequently, one of the skills of team working that appeared of particular importance, and was regularly manifested in the fieldwork observations, was that of 'demeanour work' (King and Randall, 1994; Randall and Hughes, 1994), 'emotional labour' (Hochschild, 1983) or 'quality service work' (Fuller and Smith, 1991). Until recently considerations of 'emotion' have been missing from accounts of organisational life, with its emphasis on the 'rational', and by implication 'non-emotional', actor. While clearly banks are not supposed to be emotional hothouses, 'emotion work'—the managing, control and occasioned display of appropriate emotion—was also clearly part of 'doing the work'. Individuals working in the various sections of the bank are expected, and sometimes have no alternative, as members of a team, to embark on various forms of demeanour work of emotional control (Ogbonna and Wilkinson, 1990; Cowling and Newman, 1995). Such 'demeanour work' is complex and whilst endeavouring to maintain a consistent service workers must also utilize their 'tacit knowledge' to determine exactly what might constitute 'quality service'. As Fuller and Smith note:

> 'For one customer this might be friendliness, for another (or the same one at a different time) it might be speed, for yet another it might mean taking the time to share information and knowledge

> or just to chat, for still others quality service might mean service delivered by an employee who is flirtatious, solicitous or deferent. In other words, to perform quality service labor an employee must tailor delivery to the idiosyncratic and changeable needs of individual customers.' (1991, p. 2)

Demeanour work is not then simply a feature of bank policy, as reflected in comments such as 'smile, your next customer may be the mystery shopper' (taped to the door to the banking hall) or 'a complaint is a sales opportunity' (found taped to the customer service desk). Demeanour work—often translated or interpreted as 'smiling down the telephone'—was a regularly observed feature of customer contact, as in the following example where the discussion concerns bank charges;

> 1. On phone—re: charges—and bank policy;
> 'I'm sorry that you're disappointed with our service . . . if I can be of any further help . . .'
> 2. Using screen while on phone . . . giving details of account over phone . . .
> 'I will pass on your comments to my manager . . . its not so personal as in a branch . . . I'm sorry about that . . . if I can be of any assistance . . .'

Such demeanour work is most easily facilitated by a fund of 'local knowledge' about the customer and their account. Despite the emphasis on routine that attends the implementation of 'delivery strategy', as Suchman (1987) notes, routines are rarely slavishly adhered to and generally and typically involve the use of some form of judgement. Specifically, the circumstances under which the routine is to be strictly followed and the circumstances under which modifications or 'short-cuts' may be employed through the utilisation of informal teamwork or 'local knowledge' is a matter for 'occasioned determination' in the course of the work. Such 'local knowledge' is seen as providing short-cuts to task completion and thereby containing customer dissatisfaction. 'Local knowledge' also often incorporates ideas about methods for facilitating tiresome and time-consuming routines comprising what Bittner (1965) calls 'gambits of compliance'; that is, techniques that enable workers to 'get the work done' whilst giving the appearance of complying with the formal rules.

The move toward the centralisation of function was intended to reduce the dependence on local knowledge of the kind just sketched. Further, each worker was expected to deal with a larger number of accounts that, in turn, created the need for more procedural formalities in dealing with the accounts. However, the use of local knowledge remained a regularly observed feature of the work. The important point is that in the vast majority of cases local knowledge about the customer was used for the customer's benefit in an effort to try to meet the substance of the customer's request even though this might involve negotiating or overcoming standard procedures. What comes across, despite the tales in the literature about the evils of Taylorism, is that local knowledge is still used, and used with judgement and skill, to expedite the subtleties of the work which 'following procedure to the letter' would ignore. Although one might see this as a reconfiguration of local knowledge, the important point to make is that it remains local and derived directly from the experience and knowledge of the work itself. Importantly, it also remains a resource by which the procedures are made to work more smoothly than they might otherwise in avoiding problems that might arise through a strict use of procedure. As Silverman and Jones (1976) (drawing on Garfinkel, 1967) noted some considerable time ago such a range of *ad-hocing* procedures are commonly utilised in bureaucratic (and other) settings;

> 'to make a fit between the particular features of this particular case at this particular time and the normative schemes which provide for the orderly character of the world . . . *Ad-hocing* practices are invariably required to recognize a situated instance, to choose a rule as relevant to that instance and to work out what the rule means in this particular case . . . competent members display their competences in applying rules in recognizably "the right spirit" and hence show their concern for the essential relevance of such considerations as "etcetera", "let it pass" and "*factum valet*".' (Silverman and Jones, 1976, p. 167–168)

The virtual organisation and managerial work: dealing with 'virtuality'

This tension between the customer as a person and the customer as an account number, the 'customer in the machine' as it were, is clearly seen in the work of managers. Managers are members of an organisation that has professedly bought into the 'virtual' ideal. There may well be some dispute over the extent to which managers are 'really' accepting the notion of the 'virtual organisation', rather than merely using the phrase at appropriate times in meetings with consultants. Nevertheless, notions of distributed co-ordination mediated through IT, of empowerment, of product loyalty are an integral part of the plans and procedures that inform their work. However, a number of managers—particularly business managers—would commonly describe their jobs in far more personal and 'traditional' terms as 'relationship management'. For them, everyday working in a 'virtual team' in a 'virtual organisation' remains very much 'business as usual'. A great deal of time is spent in face-to-face interaction with customers, balancing their needs with the needs of the bank, trying to develop and maintain a relationship between them. This relationship is not between abstract organisations, but between the manager and the customer and involves meshing the manager's sense of the work that any particular customer does with the work that the manager does. Much of this is achieved through ordinary everyday practices in interaction, through locating a set of relevances within the work that they do (be it turnover, profit margins, plans or whatever) and making them subject to ordinary everyday work in their conversations. But this work is also about building and preserving a *personal bond* between the manager and the customer.

In these circumstances the range of technological support and decision-making packages that are an integral part of the virtual organisation become a resource that the business manager is expected to draw upon in daily interaction. Whilst the manager is clearly aware of, and makes reference to, the virtual organisational backdrop, in practice most decisions come to be based upon personal knowledge of the customer. In a similar fashion, the technology, commonly viewed as the essential, even defining, characteristic of the virtual organisation, becomes a resource through which he seeks to justify to the 'virtual organisation' the real decisions, based on real interaction, that he has made. In that way, then, he is effectively a locus through which the 'virtual' ideal and the need to practically achieve the 'real' work with 'real' customers gets negotiated. While the manager must engage with customers and arrive at practical decisions, these decisions must be accounted for in the terms (or the 'style') of the organisation. This is made manifest within the forms and procedures, the edicts and notions of 'best practice' that the manager's workaday environment provides. This is illustrated in the following extract where lending judgements are being supported by the kind of local and informed knowledge of the customer that might be regarded as being 'in the spirit' rather than being 'by the letter' of the guide to lending decisions. Here a business manager is considering a very small increase in lending to a doctors' practice which is 'in trouble' and under regional sanction. In this case the manager exercises 'managerial discretion' to make a judgement in favour of granting the loan and then writes a report in a style and a format that will ensure regional sanction.

> *Fieldwork extract:*
> 1. Been to see some Drs who have business account with the bank. Asked for an additional £XXXX for computer—. . . asked to sanction purchase. Outside DP (discretionary power) (since under Regional Sanction—Agreed—because business is entirely satisfactory—GPs with turnover £XXXk—profit £XXXK—not reasonable to tell them to wait for such a paltry sum;
>
> 'I've worked in Regional Lending for 6 years and I know how it works . . . you've got to put into context my background, the amount of the loan . . .'
>
> 2. Looking at report to Region—checking for spellings etc.—report phrased to support decisions

In the context of the bank then, it is very often the 'middle-level' managers—the branch, section and centre managers—who have effectively become the locus of change. They are the ones who have to implement the new proposals. They are the ones who have to negotiate, day in and day out, ways of making changes work in the context of their ongoing routines. They are the ones who have to balance and resolve at a practical level the tensions involved in reconciling the centralisation of processes with the decentralisation of customer service; the centralisation of administration and record keeping with the decentralisation of 'selling'. This issue is epitomised in one CSB manager's comment;

> 'If you take out the non-customers and you take out the business customers, and you take out the runners . . . if you take out that lot, then you take out the customers of other branches, I'm actually seeing very, very few of my own . . . customers. So then we got to say 'where are the rest of them?' because I can produce a printout that says I've got fourteen thousand customers . . . Some of them have credit balances of twenty, thirty thousand pounds. And we never see them. We've never even heard of them . . .'

This CSB manager can see—'in the machine'—that he has 14,000 names, 14,000 customers on a computer printout, but most of them he never sees in the banking hall. Yet the computer tells him that they are his customers so they must be there. The problem, for an organisation increasingly focusing on customer service and sales, then becomes how do you sell your products to someone you never see? To someone who might be characterised as the 'customer in the machine'? In particular, the problem for the manager in the virtual organisation, as indeed for wider organisational policy making, becomes one of delivering a 'cross selling' strategy without the personalised knowledge base of customers that could once be relied upon. Instead it relies upon selling to customers known only through the various relational databases—what might be characterised as the 'customer in the machine'. The problem of managing the customer becomes, under these auspices, a problem of understanding 'distributed data'. Getting to know the 'customer in the machine' relies on the institutionalisation of various kinds of of 'local knowledge'; on the organised, codifiable, *mapping* of what the traditional bank manager or bank employee already knew in detail about their customers.

For the bank one answer to this problem is 'managing local markets' (MLM), a sales approach focused within the bank's customer service branches (CSB) and business centres where face-to-face customer contact has been retained. All of the CSBs and business centres have been involved in progressing through a number of distinct phases in the setting up of MLM. Initially all of the staff were asked to play a part in an 'analysis' exercise. This was partly a matter of sensitisation as to what it actually was they needed to know about customers. However, for the staff in question a great measure of it amounted to going out and finding what lay 'beyond the walls' of the bank. Employees literally went out in the streets on walkabouts trying to assess the character of particular areas and gain some measure of the competition. At the point of application MLM is computer driven with customers being categorised into five basic categories—A+, A, B, C and D—with the A+'s being the 'super accounts' and the Ds being the ones that 'cost money to run'. The knowledge maps developed, based on various kinds of *ad hocery*, are organised by customer categories based upon a thorough knowledge of the customer's dealings with the bank, the nature of their credit balances, the running of their account, credit cards, investments, mortgages, insurance and so on. These categories are then the basis for a targeted selling strategy. Where it was once the case that 'Products in Focus' would be the subject of blanket mailshots the aim now is to develop a 'local market tactic' and to specifically target certain 'unseen' customers. Such models of market segments are effectively being used to devise a whole set of organisational and marketing rationales which underlie an increasing number of management activities and decision making. Not surprisingly, there are efforts underway to arrive at ever better depictions of customers within the machine.

One of the concerns that arises in these circumstances is the representational nature of such 'virtual customers'—involving issues to do with ensuring standardisation in data entry and use of a massively distributed database. Another concern is how employees negotiate some sort of 'fit' between the 'customer in the machine' and the 'real' customers they see over the counter or talk to on the phone. Our observations of actual customer-facing work suggest that arriving at some sort of 'fit' continues to be a matter of contingent drawing upon whatever interactional competences are required to maintain customer confidence and engage in accountably appropriate conduct, whilst rendering the 'virtual' resources of the database relevant here and now.

Virtual organisation: working to make 'routine' work routine

One final aspect of virtual teamwork consists in the consideration of the 'work' done to make routine work 'routine'; what Silverman and Jones (1976) call 'smoothing the way'. That is, the fact that people are able to respond quickly to customer requests, to process or present information in organisationally relevant ways is itself a product of the routine work of others. The point being made here is that the standardisation of routine that is at the heart of the distributed working within the bank is an accomplishment. This is perhaps most obvious in the work of someone like the technology co-ordinator whose work largely consists of ensuring that people's machines are working adequately, that they can log on, that the relevant applications are functioning adequately and so on (see also Bowers, 1994). It is also apparent in other people's work. The transmission officer, for example, is involved in a range of tasks administering, co-operative operating with and co-ordinating the work of others in the business centre; monitoring 'activity through the account', the turnover in the year and the facilities used. This activity shapes the negotiations over pricing policy and attempts to ensure, in a delicate balancing process, that neither does the bank make a loss nor is the customer overcharged for the use of the bank's facilities. This process, that typically precedes, for example, the annual interview for small business customers, involves the perusal and careful consideration of a wide range of computer printouts and forms.

The various forms of paperwork that are so pervasive in the bank also act to facilitate the coordination of work but the actual process of 'doing the paperwork' itself requires various co-ordinating activities, involving the 'meshing' and 'modal transformation' (Anderson *et al.*, 1989) of other paper and computer information. One example of this is the 'interview notepad'. Designed to be used by business managers as part of the annual review process and for lending interviews, completing the 'interview notepad' involves the business manager's assistant in the lengthy perusal of other records, the 'scorecard', records of past reviews, the computer 836 printout and so on. The assistant then uses a range of information to 'GAPP' the account. In this extract the assistant is talking about this process of accumulating information in preparation for the customer's annual review;

> '. . . its the annual review on Thursday, . . . (getting things ready for the interview) 'I did it yesterday, but I just had to GAPP it, that's ready apart from up-to-date balances which I've put on there) . . . there's a standard . . . now . . . brief that we have to fill in, like an interview note pad, then you get the customer brief off the computer printout one, and then that's it basically, (pointing at printout) GAPP graded, . . . we only do GAPP grading if we've got more up-to-date financial information . . . got data from machine and from reading through the file.'

As the assistant works through the different sections of the 'interview notepad' the processes of administration and control of the account, relationship building and the sales process are linked. The assistant also needs to consider how the information s/he is compiling may actually be used in the review—that is, the linkage between the 'virtual customer', (the customer as represented in various computer printouts and records) and the 'real customer' that the manager will face in the interview.

Conclusion: 'business as usual'

This paper suggests some of the varied tensions involved in attempting to implement a form of 'virtual teamwork', and as a consequence begins to sketch out some of the problems associated with the rush to 'virtualise' contemporary organisational forms in much of the literature. It is our contention that a reliance upon notions of 'virtuality' might too often obscure the very real issues associated with the relationship between ICT and everyday working practices within changing organisational contexts. In particular this paper has focused upon the notion of 'virtual teamwork'. By reporting and presenting ethnographic research that details the interactions between the 'virtual' and the 'real', between organisational change, performance and skill, and by focusing on the ways in which such strategic plans as 'virtual teamwork' are instantiated in day-to-day working practices we have hopefully made it clear that the notion of virtual teamwork is not unproblematic.

Virtual teamwork, it is suggested, places a particular emphasis on communication and the development of 'awareness' skills. With increased geographical dispersal of the specialised centres, however, a 'buck passing' culture may emerge, with poor communications impacting on teamworking across the organisational divide. Colocation by task in itself creates and encourages group loyalties and the development of a 'them and us' attitude, (where 'them' is effectively any other organisational unit). Clearly one of the major problems facing any virtual team is that of 'communication'; ensuring that work proceeds smoothly from one phase of activity to the next, that it is passed on in a timely and coherent fashion, that plans and procedures with their associated paperwork and records are understood and adhered to and so on. However, implementing such improved communications is hardly straightforward and raises a number of other issues connected to 'standardisation', 'legacy' and software development.

Ethnographic fieldwork also reveals how 'virtual' teamwork creates managerial problems in the form of monitoring and control. Despite the prevalence of various management information systems for monitoring organisational activity the value of these systems and their impact on the work itself can be poorly understood. In this instance the introduction of monitoring and targeting systems has proved of dubious value, with the systems becoming ends in themselves, often to the detriment of effective working. The development of forms of 'virtual' teamwork also places a heavy responsibility on middle and lower level managers to manage the concurrent changes in the practical day-to-day work of the teams. Our research suggests that managing innovation of this kind is a complex and difficult business since 'virtual' teamwork involves 'real' workers and 'real' customers and managers are placed at this interface between the 'virtual' and the 'real', attempting to manage the 'real' problems of 'virtual' teams.

To highlight the complexity of these issues in contrast to the apparent simplicity of the transformation implied by the use of 'virtual teamwork' in some quarters is in no way to reject the notion of the virtual team or organisation out of hand. Nor is it to assert the unassailability of the *status quo*. Rather it is to take the notion extremely seriously, to see just what it looks like 'on the ground' and to come to an understanding of just how it works in the lived practice of everyday work.

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