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Citation

Carlisle, Ysanne and Baden-Fuller, Charles (2004). Re-applying beliefs: an analysis of change in the oil industry. *Organization Studies*, 25(6) pp. 987–1019.

URL

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OS Paper 199/029B February 2003

RE-APPLYING BELIEFS: AN ANALYSIS OF CHANGE IN THE OIL INDUSTRY

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Acknowledgements

We gratefully acknowledge the support and help of all the managers, drivers and other staff from our major oil company, who gave so much of their time to us, and allowed us free access to all the documents we asked for. We would also like to thank those who have commented upon earlier drafts of this paper, in particular, Marshall Scott-Poole, David Manning, Alison Dean, Roland Calori, Sebastian Green, Mary Hatch, Michael Lubatkin and our former colleagues at Bath University and Royal Holloway School of Management. Finally, we thank the editor and reviewers of *Organisation Studies*.

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RE-APPLYING BELIEFS: AN ANALYSIS OF CHANGE IN THE OIL INDUSTRY

ABSTRACT

Beliefs and values are hard to alter; yet they strongly influence employee's attitudes towards strategic changes. Using a longitudinal case study in the oil industry, we show how to distinguish between ideological beliefs (justified by ethical values) and mundane beliefs (substantiated by knowledge structures). We explain that the willingness of workers to participate in change was promoted by a dynamic interaction between these interdependent belief sets. More critically, we show that acceptance of change did not require a change in values, but rather a change in the way that values were applied. We develop propositions that move theory forward and point to future directions for research.

DESCRIPTORS

Strategic Management; Qualitative Research; Change; Beliefs and Values.

RE-APPLYING BELIEFS: AN ANALYSIS OF CHANGE IN THE OIL INDUSTRY

INTRODUCTION

Strategic management is in a state of flux because it lacks a full understanding of the change. According to Pettigrew, Woodman and Cameron (2001), the cause of the problem is a lack of attention to the dynamics of change processes. They point out that too much research has relied on *comparative statics* and there has been a lack of attention to context (Pettigrew 1990).

Regarding strategic change, an important context that has often been overlooked is strategic change by large organisations that do not face an obvious crisis. Most studies of large scale change, such as Beer, Eisenstat and Spector (1990), Grinyer, Mayes and McKiernan (1988), Baden-Fuller and Stopford (1994), and Calori, Baden-Fuller and Hunt (2001) have examined organisations that face the possibility of some kind of extinction if they did not take action. Only a few studies have taken up the challenge raised by Greenwood and Hinings (1996) to look at processes of change in a variety of contexts, paying special attention to values and change dynamics. For example, Barr, Stimpert and Huff (1992) studied the long-term evolution of two railroads and Burgelman (1994) investigated change at Intel. The latter is particularly interesting because Intel has been a remarkably successful organisation. In this paper our context is change in one of the worlds most successful and most profitable oil companies. In the institutional context of this well-established, highly integrated global industry, change is not the norm.

Strategic change is a vast canvas, and the area we choose for investigation relates to the acceptance of change by those inside an organisation. Beliefs play a central role in rewarding the behaviour of those who work in organisations, and it is widely held that beliefs and intrinsic values affect the acceptance of change. Altering beliefs and values is thought to be very difficult, but considered to be necessary when profound changes in behaviours are required, such as when roles and responsibilities are restructured leading to new ways of competing. Of course some change is always occurring (Bate 1994), but the usual view is that where beliefs and values are opposed to the direction of change, it will not take hold easily (Hannan and Freeman 1977 and Greenwood and Hinings 1992). One of our key findings is that beliefs and values do not need to change when beliefs can

be reapplied. Re-applications of beliefs and values do not take place instantaneously, but can be detected during the course of longitudinal study.

BELIEFS

In a recent article, Meglino and Ravlin (1998) reviewed the literature on values in organisations. In looking at past studies that relate values (and beliefs) to behaviour and performance, they noted that there are indeed a very large number of studies but few are dynamic. They found only one study that looked at how values changed over time between adolescence and adulthood, and none that appeared to integrate the organisation context. This lack of dynamics points to an obvious gap that needs to be fulfilled. We therefore set out to examine how beliefs and values interact with change processes from a dynamic perspective.

At the outset of our research, the literature provided us with various hypotheses about how beliefs can be linked to values, attitudes and behaviours. A key idea running through the literature (e.g. Schein 1984 and 1985) is that ‘basic assumptions’ are often ‘non-confrontable and non-debatable’ (1985:18). Many see beliefs as hard to change (Argyris 1976). How then can change be implemented when it appears to go counter to beliefs? Our research will suggest that some kinds of beliefs change more readily than others. More important, it is in a dynamic process of applying the beliefs that changes attitudes and behaviours.

Markoczy (1997) observes that there has been a tendency for researchers to address beliefs indirectly. Even when addressed directly, Meglino and Ravlin (1998) note, there remains a degree of controversy over how to classify them and order them. Here, beliefs have been classified in terms of their different ideologies (e.g. Manning and Carlisle 1995), their relationships to attitudes and behaviour (Rokeach 1967) and in terms of the relationship between the psychological motive, the cognitive act and social reality (Edwards and Potter 1992). It is against this backdrop that we explore how different types of belief interact in the process of organisational change.

Our paper examines the dynamics of how beliefs are applied in organisations undergoing change. We develop ideas from carefully documented case research using analytic induction to offer potentially testable propositions of the kind which some would argue is the *raison d'etre* for qualitative research (Turner 1988 and Pettigrew 1990).

METHOD

Our paper focuses upon drivers in the distribution business of a major oil company. It explains how drivers applied and reapplied their beliefs in evaluating working practices following a new strategy, and how their evaluations influenced their attitudes towards participation. Our analysis is dynamic; we look at patterns and changes over an 18 month period.

We use data from longitudinal observation and recording of discourse from drivers which spans the 'before', the 'during' and the 'after' of change implementation to develop our model and propositions. We use longitudinal data from key senior managers and terminal managers and cross sectional data from management at a range of other levels to contextualize our driver study.

Our research began with relatively unstructured senior management interviews focused on the topics of competitiveness and organisational change. We used the interviews with the MD and his immediate reports in the transportation division to identify changes which were being planned in distribution and projects which were on-going or had just been executed, all of which were intended to facilitate a change in strategy.

We then organised a series of in-depth, semi-structured interviews over a period of nearly eighteen months starting at the end of 1993 and running through to the Spring of 1995 with 34 of the 380 drivers employed at the time. For a variety of reasons, such as holidays or sickness, we were not able to obtain a continuous set of interview data for 9 of these. The core of the findings we report is therefore based on serial interviews with 25 of the drivers. This design allowed us to capture the changing nature of their attitudes to participation. During and after these interviews, we conducted further rounds of interviews with management to assess the strategic consequences of the changes we witnessed. The same management was involved in some of the discussion processes, which led to the development of a case study. The case study was written to illuminate both competitiveness and attitude change issues. It was eventually circulated more widely in the organisation to form the basis of two discussions with management, who commented, filled in gaps and noted inconsistencies and inaccuracies with other data they held and showed us.

Blending theory with data is the method suggested by Denzin in: *The Research Act* (1978: 5). It allows the researcher to arrive at an inductive understanding of processes involved and, as research progresses, develop a conceptual framework. We undertook an analysis of a small data set consisting of audio-tape transcriptions and contextual field notes. From this data we formulated our initial distinctions between different types of belief in conjunction with existing theory, along with a tentative model to describe their interactions in reasoning. Repeated comparisons with additional data led to changes and refinements in the definitions and model until we were able to identify "recursive rules". These rules were descriptions of how the two different types of belief interacted in evaluations to impact upon modes of participatory behaviour, and provide an explanation encompassing all the changes in attitudes and participatory behaviour in the driver interview data set. We developed our propositions and scanned our data for exceptions, which led to modifications and refinements.

Before we go further, we explain how our approach to data fits in with that of previous writers. Various researchers have focused upon the analysis of written or verbal communications in organisations (e.g. Sussman et al. 1983; Ewald and Stine 1983; Fiol 1989; Gioia et al. 1989). Like them, we follow in the footsteps of Austin (1965), Searle (1969) and others who have developed and elaborated the 'speech act' concept of use in empirical research. This is a unit of analysis which has been deployed in 'script analysis' (Schank and Abelson 1977) and textual interpretation which is regarded by some researchers (Gioia et al. 1989) to be the most elementary unit of communicative interaction. Our analysis focuses upon evaluative and explanatory statements and draws on the techniques of 'analytic induction' originally described by Znaniecki (1934). His method has been summarised by Goetz and LeCompte (1981)¹. Within this analytical framework, our analysis deployed an approach described by Hugh Mehan (1979:16-22), which can be used to construct models.

Although we have drawn upon comparative analytical techniques described by Glaser and Strauss (1967), our research is not pure grounded theory in their sense. Glaser and Strauss differentiate aspects of their approach to qualitative study with aspects of Znaniecki's, (Glaser and Strauss: 103-105). Our analysis was faithful to the analytical induction technique which involves making changes to the analytic schema to account for exceptions to the emergent framework until all data is encompassed. Other forms of

analysis explain exceptions with reference to additional variables (Mehan 1979). Finally, our research in distribution was subsequently followed by case research on change in a manufacturing division of the same organisation. We do not describe this research here because it is not the concern of our paper. We did, however, take the opportunity to 'tentatively test' the transferability of our model on a sample of audio taped interviews and transcripts evaluating change. We found no exceptions in the reasoning processes of these respondents and/or evidence that our definitions of the two types of belief were inadequate. In Appendix One, we provide a digression on our approach considering issues of rigour, credibility, transferability, dependability and confirmability, as suggested by a helpful reader.

THE HISTORICAL BACKGROUND AND CONTEXT OF THE RESEARCH

Our company is one a multi-billion dollar division of Europe's largest major multinational oil company, and we observed a process of change in the UK distribution business. The group had been successful, having been voted as one of the best companies in the world by stock analysts, but this division faced new competition in retailing from supermarkets that had gained market share from the integrated oil firms. This competition had little impact on overall group sales as the group sold its oil in its own outlets and to supermarkets, but it affected margins and profits in the downstream business. Therefore, the competitive threat was not strategic to the group, but had some tactical importance.

To ascertain managerial perspectives on the competitive picture of the business, we interviewed each member of the senior management team of the UK downstream business for at least an hour. We also interviewed other relevant senior managers in this operation. Key members of the management team, senior managers and terminal managers were interviewed more than once. We reviewed expert reports on the industry and interviewed three group executives. **All** interviews were tape-recorded. Senior managers were impressed by the achievements of UK distribution. Costs had been reducing at a rate of 15% in the two years from 1989 to 1991, which was seen as an excellent rate of progress. Most of this was done in the context of incremental improvements in scheduling, order processing and capital utilisation. Local bench marking with other integrated oil majors placed the organisation in the upper half of all firms in efficiency.

In late 1991 a new managing director engineered a crisis, by suggesting that the group consider contracting out all transportation activities to a unionised sub-contractor. This would have put the costs of the business on the same level as the supermarket retailers, who used unionised subcontractors. After a careful study, the MD rejected his option in favour of a series of radical internal changes involving new working practices. These (he argued) would achieve greater cost savings and flexibility. These changes depended upon a considerable 'attitude change' amongst drivers towards their terms of employment. Divisional management perceived that de-recognition of the union involved in distribution was a pre-requisite, but this provoked considerable higher management opposition and led to doubts about the package of change proposed.

It is important to spell out why the proposals of the managing director were so radical. A major industry debate was between organising the distribution in-house versus outside subcontractors (reflecting the classic debate explained by Williamson 1975). The general trend across many sectors was to outsourcing. Had management outsourced physical distribution it would have been engaged in expected mimetic behaviour (di Maggio and Powell 1983). Outsourcing would have probably meant that many of the existing employees would have kept their roles as drivers but would be working for the new owners. The managing director chose to put forward a plan that was quite contrary to this, it was to maintain the division in-house but with different working arrangements which removed the union from the collective bargaining and work practice arena. This move was akin to changing the historic trajectory of competencies (Grant 1991; Barney 1991). These proposals represented a new strategic approach as no other major oil firm in Europe had contemplated such a move.

Group executives told us that they had been sceptical that the changes would work and questioned their wisdom in meetings and in memoranda. (We were given access to the board level documentation in this matter.) They argued that either the status quo of incremental change or the full contracting out to unionised subcontractors was preferable. They lacked confidence in the ability of the relevant employees to take on the new working patterns. Managers at lower levels also needed persuading that the changes could be achieved without industrial conflict. The union, whose representatives we also interviewed, showed us papers that argued (not surprisingly) flat rejection of the need for new work practices. Despite severe opposition from all except his own management

team, the managing director gathered organisational support for his entire package of change by lobbying and other means of persuasion.

In June 1992, the workforce, to the surprise of many, voted to de-recognise the union, accept new work practices and take an effective pay cut in favour of other work related benefits to be described. The change package also called for the removal of two layers of management and from first discussions the key changes took less than two years to implement. There was no industrial action and productivity rose by 35% per annum over the period we studied. Since that time, many other firms in the industry have followed suit, but our managing director was a leader.

In summary, the changes were not a disguised salary cut, nor a simple efficiency drive. In the language of strategy, they represented a strategic shift. They required the building of new competencies and capabilities in both the individuals working in the organisation and in the organisational routines described by Penrose (1959), Barney (1986; 1991), Grant (1991), Rumelt, (1991) Peteraf (1993) and others. These differences were very similar to those described in a subsequent case of major strategic change at Novotel (Calori, Baden-Fuller and Hunt 2001):

- New competencies required by the workforce who had to operate more flexibly, more autonomously, and more efficiently;
- New competencies by HR managers, who had to manage without a union;
- New competencies for the organisation that wanted a more profit oriented, customer focused and responsive transportation, so that wholly owned stations could be more competitive with supermarket retailers.

Most of the change management literature, such as Grinyer and Hayes (1994) argues that a firm will only change in such a radical manner when it faces a financial crisis. Voluntary change, engineered by focusing attention on an outside threat is typically perceived as more difficult. In the case of our oil company, there were alternative courses of action that were much less threatening. We believe that these changes were radical in the context of the company at the time. The management also perceived them as radical and they led to significant work practice changes for drivers which, as we will show, altered their experience of working life and forced many to re-evaluate pre-existing assumptions. Moreover, writers such as Van de Ven (1993) suggest that company history (here interpreted as a company wide tradition of unions and

inflexible use of capital and labour) is hard to overcome, and that radical change away from such a history will usually be superficial. It is in this context that we studied what this division achieved and sought to assess how deep-rooted the changes were.

MICRO DATA ON CHANGE

Our 25 participant drivers represent both large and small terminals, different age groups and former junior managers (terminal operators) who had re-trained as drivers. Because we sought to comment in our case on how deep-rooted or superficial the changes were, we were concerned to ensure a broadly based sample. From the standpoint of this paper, which concerns the nature of their attitude change *processes*, the representative nature of our sample may not be considered crucial. We supplemented individual interviews with group discussions. The composition of the groups relied upon the ‘art of the possible’ given who was available. They varied in size from 5 - 8 individuals and experimental consistency was achieved by repeating these exercises at three locations. Some drivers were involved more than once. In all, we held 7 group discussions.

Our preliminary interviews with managers in conjunction with an informal discussion with drivers in a large terminal canteen suggested that drivers had to deal with the practical repercussions from seven recent strategic change-initiatives. These are listed and described in Table One. The earliest initiative of the driver ambassador concept (1) was unsuccessful and abandoned before we arrived. We did not study this specifically, but we mention it because drivers cited it to explain their concept of customer service. Of the other six initiatives, from a senior management perspective two were in progress or almost complete at the start of the interviews, but work practice changes implemented as a result of these initiatives could be traced (longitudinally in our study) as their impact evolved. It is important to note that our driver study focused on the implementation of work practice change associated with initiatives by the drivers. We expand on this point.

Although legally agreed a year before we arrived, specific changes to working practice enabled by the staff status change (2) were still being executed. In transferring from unionised to staff status, drivers were required to participate as staff in meetings, accept staff rules, and undergo staff appraisal, a change to which some drivers were being introduced for the first time when we arrived. Likewise, the administrative changes (3) were planned before we arrived, but we were able to study their implementation

longitudinally because they were still being executed whilst we were undertaking our study. Therefore, although initiatives 2 and 3 were in some sense past events, some aspects of them were contemporaneous to the drivers we interviewed. (The time lag between the planning of change and the final implementation is consonant with the mistaken view of top management that changes had occurred earlier.) In contrast, the shift pattern change (4) was planned, introduced and accepted during the interviewing process. This was a bonus to us because it provided us with a reliable benchmark of contemporaneous data covering all the stages from planning through to the final implementation of specific changes. The other three changes cited in table 1 were restructuring (5), communications (6) and continuous improvement (7). These were ongoing and incremental, having a continuing nature spanning the period of study.

Insert Table 1: Change Initiatives here

All observations relating to initiatives 3, 4, 5, and 6 (administration, shift change, communications and restructuring) concerned events, which were contemporaneous to drivers. Our data relating to initiative 2 (the de-recognition of the union) is in part contemporaneous - concerning changes perceived by drivers to be associated with staff status change which they were experiencing for the first time (e.g. staff appraisal) - and in part an historical reconstruction by our subjects. Our use of initiative 2 is subject to the obvious criticism that historical interpretations are often formed in retrospect (Weick and Daft 1983; Weick 1988) and may be post-hoc rationalisations. However, drivers' retrospective sense-making of staff status change was contextually important to their evaluations of other ongoing changes. In addition to our driver interviews, we gained access to a wealth of contemporaneous correspondence and documentation from both management and former union representatives. These included minutes of meetings held by management with shop stewards, copies of letters and memoranda from both sides, copies of research reports carried out on behalf of the union, and management's competitive data including benchmarking studies. We compared these papers with our drivers' re-constructions. We detected no particular bias and gained a better appreciation of their rationalisation process.

In the individual interviews, we probed drivers' experiences of change, how they felt about participating in the new practices they associated with the initiatives, what they thought about them and why. Interviews were semi-structured around the strategic initiative categories as drivers themselves categorised specific changes in relation to initiatives. From these interviews, beliefs and belief changes were distinguished and related to drivers' evaluations of change initiatives and modes of participation. We also probed how changes in attitudes had come about, how these affected subsequent *re-evaluations* of the change and whether or not this had changed modes of participation. In this context, their 'retrospective sense-making' of the staff status change was important. Our group discussions were semi-structured in the same way as individual interviews. Their primary purpose was to gain an insight into group processes. They affirmed some of the particular changes that were evidenced amongst individuals, but they also made us aware of the social processes within which new individual commitments took place. Interviews and group discussions were coupled with our observations of working life in the terminals gained in the course of day-long visits and less formal interactions with drivers at coffee machines and in terminal canteens. This provided further affirmation of their collective interpretations of the changes at the time and the dominant modes of participation within the driver subculture.

Our analysis involved an ongoing interaction between data and theory. Data collected was compared and contrasted with that deployed in existing conceptual models of knowledge, such as that constructed by Ryle (1947) to distinguish between knowing how to do something and knowing that something is the case. We focused upon speech acts (Austin 1965; Searle 1969) in which expressions of ideological beliefs 'in' and mundane beliefs 'that' are readily distinguishable as statements performing an evaluation or justification, or simply containing a reference to factual information respectively.

CONCEPTUAL FRAMEWORK

Bem (1970) defined beliefs as *conceptual relationships that are held to be true*, but the grounds upon which beliefs are held to be true can differ. Some beliefs are derived from knowledge structures (Mohammed et al. 2000). These beliefs can change as knowledge changes, but as Markoczy (1997) points out, it is not necessary to factually justify beliefs for them to be held true. Some beliefs cannot be challenged on grounds of fact. How are

they justified and how do they change? Such beliefs are often justified in the light of strongly held *values*, which colour expectations, preferences, perceptions and desired states. A key idea running through Schein's (1984; 1985) work is that 'basic assumptions' derived from strongly held values are unquestioned and therefore 'non-confrontable and non-debatable' (1985:18). This means that they do not change readily. Similarly, Argyris (1976), and Argyris and Schon (1974) have talked of 'theories in use' being relatively immutable.

Writers in the field of social psychology (e.g. Rokeach 1968; 1973) distinguish between two types of *value*. We refer readers to the review by Meglino and Ravlin (1998) for a more detailed discussion. These types of value, termed 'extrinsic' and 'intrinsic', are distinguished in terms of their instrumental and ethical orientations respectively. Writers in the fields of the philosophy of action, sociology of knowledge and political studies distinguish two types of *belief*. For example: Hampshire (1965), Trigg (1973), Benewick, Berki and Parekh (1973), Manning, (1989), Graham, (1989), Adams, (1989), have long noted that beliefs differ in kind. Some are pragmatic and depend upon factual substantiation while others are ideological and depend upon conviction. These writers distinguish different types of belief in terms of their respective bases for substantiation in the minds of those who hold them. Values and beliefs are clearly linked.

In the light of our research, we have taken this analysis one step further and linked these concepts. Values are held. Facts are known. They influence our thinking, but they are not action oriented in the way that beliefs are. Beliefs can be *applied* to evaluations and explanations, which motivate action. We therefore make a conceptual distinction between two types of belief, which integrate insights from the fields of scholarship noted above. Mundane beliefs about matters of fact lend themselves to a pragmatic orientation linked to instrumental values. Ideological beliefs lending themselves to conviction are linked to ethical values and justifications. The first type (we label X) are knowledge based factual beliefs *about* circumstances of the type '*that*' something is the case, for instance something which is reported to be a matter of fact. The second types (we label Y) are beliefs '*in*' values or commitments to an ideology. (Here, we use the word values in the sense defined by Trigg, 1974, which conveys the simple idea of commitment.) The first type, (X) we call mundane beliefs. They are instrumental in their orientation and constitute the informed intention. They are readily changed when confounded by new

information and experience. For example, I may desire to go to my office on a particular day. I believe that my car will start in the morning and can be relied upon to fulfil my intention to drive to work. If it does not start my belief is confounded and my intention unfulfilled. I change my belief that my car will take me to work that day.

The second types of belief (Y) we term ideological beliefs. They are ethical in their orientation. They arouse and orientate motivation and are action oriented because they can be related to evaluations of activities, such as work practices, and explanations for behaviour in organisations. Ideological beliefs, unlike mundane beliefs, are not so readily changed. For example, when my car fails to start, I may telephone my employer to say that I will be late. This I do because I value punctuality, but I do not stop believing in this value because my car fails me on any number of occasions, even though I may stop believing that I can depend on the car.

We define mundane beliefs as instrumentally oriented beliefs about circumstances; and ideological beliefs as ethically oriented beliefs that arouse and orientate motivations.

Our conceptual distinction between these two types of belief is not articulated as such in the management literature, but is implied by some strands of research². In the next section of our paper, we show how drivers applied them to evaluate change and explain their modes of participation in changed working practices.

BELIEFS, EVALUATIONS AND MODES OF PARTICIPATION: CATEGORISATIONS AND INTERACTIONS

As our research with drivers progressed, it was obvious that analysing the interplay between different kinds of belief, attitudes and behaviour patterns required a more complex analysis than the one promoted at the outset. Our context was driver evaluations and explanations of how they felt about operating new working practice. Our analysis required us to evaluate factual belief statements about change, committed 'ideological belief' statements evaluating change, (for better or worse), and social psychological statements explaining attitudes towards operating changed working practices revealing a range of modes of participation varying between enthusiasm and mere compliance. Belief statements were initially listed and categorised as either 'Y' reflecting an ideological belief 'in' or 'X', reflecting a mundane belief 'that'. We

subsequently realised that we needed a further sub-classification. In the context of evaluations and explanations, some ideological belief statements (Yc) related values perceived by drivers to be intrinsic and centrally relevant to their actual experience of the activities we were considering. Others, (Yp) related values perceived to be extrinsic and peripherally relevant to their experience of these activities, only effecting an instrumental orientation towards them in the light of mundane beliefs about them. For example, one driver believed in the value of autonomy. He told us that on the road 'I'm my own boss'. His belief in the value of autonomy was clearly perceived as intrinsic and *central* (Yc) to his job as a driver. In contrast, his belief in the value of time spent fishing, 'I'm a fisherman. I go fishing on my days off', (Yp) although ideological, was extrinsic and *peripheral*. It was not relevant to his experience of driving, but it was not irrelevant to his attitude towards proposed shift pattern change because he believed that this change would give him extra days off to fish (X). He did not see the shift pattern change negatively in the light of any intrinsic work related ideological belief which he could centrally relate to this particular practice and was therefore instrumentally oriented towards participating in it³. We later discuss a key point to emerge - that over time, re-evaluations of changes took place in which the central/peripheral status of ideological beliefs in evaluations of work practices could change.

Our discourse analysis revealed that all our drivers evaluated changes in work practices positively or negatively (E+ or E-) in the light of their ideological beliefs. Our analysis has enabled us to understand the interplay between ideological and mundane beliefs in drivers assessments of changes in their job situation. For example, some drivers, such as the one cited above who was attracted to driving as he could be his 'own boss', approved of administrative change because they believed that it enhanced their autonomy. They believed in the value of autonomy and held mundane beliefs that led them to see that this ideological belief was relevant to administrative change and that it had a positive impact upon their autonomy at work. Drivers who approved of new shift arrangements because they believed that they gave them more full days off, believed in the value of non-work activities which required full days off and did not perceive the changes negatively in the light of any ideological belief seen to be central to the operation of new shifts. Given that drivers perceived particular ideological beliefs in their 'belief sets' to be relevant to an evaluation of a changed practice, their mundane beliefs

determined whether the practice would be evaluated positively or negatively in their light (See endnote 3 for illustrations).

Drivers spoke extensively about their reactions to change and how they had engaged in the new work practices. After our fieldwork was finished, we were able to classify their modes of participation into five categorisations.

- Enthusiastic (M1),
- Active Resistance (M2);
- Passive Resistance (M3);
- Instrumental Participation (M4);
- Reluctant Participation (M5).

Three of our five modes of participation (M1, M4 and M5) are similar to the ‘moral-normative’, ‘remunerative-utilitarian’ and ‘coercive-alienate’ ‘forms of involvement’ in organisational activities that were identified by Etzioni (1961). But we found that it was additionally necessary to distinguish between active and passive forms of resistance to change in order to encompass all the nuances in our data.

It was obvious that we needed to both distinguish Yc and Yp and these five different modes of participation to make sense of what we heard. For example, one driver, who was instrumentally oriented (M4) towards new shift patterns because he believed that they give him more clear days off (X) and valued time spent fishing (Yp), is quite different from another driver, who was enthusiastic about the new shift patterns (M1) because he believed that they enabled drivers to give customers a better service (X). The latter held a work-related value in which he believes strongly (Yc) and was able to apply it to an evaluation of shift pattern change. When probed, it was revealed that the driver who spent his time off fishing *also* believed in the value of customer service, but did not apply his belief in this value to his evaluation of the shift pattern change because he did not see that it was relevant⁴. We note that all 25 drivers professed to believe in the value of customer service, but they did not all apply this belief to their evaluations of change⁵.

Table Two, and the accompanying Figure One, shows the framework which emerged from our investigations to explain how applications of belief, evaluations of change and modes of participation in change were linked. Table Two summarises and defines its components. No counterfactual examples were found.

Insert TABLE TWO and FIGURE ONE near here:

Figure 1 shows how ‘mundane beliefs’ (X) enabled drivers to perceive a change (Z) in the light of particular ‘ideological beliefs’ in values which were seen to be either central (Yc) or peripheral (Yp) to the operation of the change. In the light of these ideological beliefs they formed positive (E+) or negative (E-) evaluations of particular changes which motivated particular attitudinal modes of participation in them (M1 - M5). For example, drivers who expressed enthusiasm for a change (M1) held mundane beliefs (X) about the change (Z) which enabled them to perceive it in the light of central ideological beliefs. (Yc) In the light of these beliefs they evaluated the change positively (E+) and were enthusiastic about it.

The interconnections between types of belief, evaluations and modes of participation in the change initiatives are shown in Figure One and illustrated by quotes in endnotes 3 and 4 as well as in the later discussion section. We are also able to illustrate how changes in mundane beliefs, which occurred in the light of experiencing change enabled drivers to perceive the implications of their ideological beliefs differently. This enabled them to *re-evaluate* changes. These re-evaluations led to different attitudes towards participation in them. For example, one driver had voiced his opposition to shift pattern changes (Z) at a terminal meeting. We inferred that speaking out at a meeting represented something significant, in other words active resistance (M2). When we interviewed him at the start of our study, he had believed that drivers were more likely to have accidents through driving longer hours (X₁). He believed in the value of safety (Yc) and believed that longer hours would lead to more incidents (X₂). For this reason he thought that the new shift patterns were a bad idea (E-). When drivers were subsequently asked to volunteer, 'sign up to work the shifts' he still held these beliefs and still evaluated the change negatively, but could passively resist by not signing up (M3). Not signing up for these shifts was not a highly visible form of opposition, and did not involve any personal risk. In short, his mundane (X) beliefs led him to perceive the consequences and implications of the change (Z) in the light of his ideological belief in the value of safety which he perceived to be centrally relevant to his evaluation of shift patterns (Yc). In its light his evaluation of this change was unfavourable (E-) and his attitude towards it was

negative. Although he was able to actively voice his disapproval at the terminal meeting prior to the introduction of the change (M2), once the changes were implemented he opposed passively by not volunteering to work them (M3).

The way in which the shift pattern change was introduced was interesting. This avenue for passive resistance was left open to drivers for a considerable time. This allowed time for the experiences of those who did 'sign up' to impact in the course of social interaction upon the mundane beliefs of drivers who did not. The drivers believed that the change would eventually be mandatory, and at the outset of our study this driver, claimed that he would leave when they were 'forced' to work the new shifts. Other avenues for resistance had been closed by the new contracts. At the end of our study, this driver re-evaluated this change. He believed that the old shift pattern was better because some of the other drivers who had signed up for the new shifts (Z) had found them more tiring. He had adopted this belief (X3). His evaluation of the change remained negative (E-), but he no longer believed that the new shift pattern posed a significant threat to safety. He said he wasn't 'going to rush' to put his name down, but because he had to work somewhere 'for the money' (Yp) he would work the new shifts (M5). During the course of our study, the unfolding of circumstances had allowed him to see that his belief in the value of safety was no longer centrally relevant to his old evaluation of the shift pattern change.

Drivers who participated reluctantly in some of the changes could be enthusiastic about others. As individuals they participated in different initiatives in different ways depending on their mundane beliefs about them and their negative or positive evaluations. For example, at the end of our study, one driver, enthused about the new direct communications between drivers and management. (M1) 'They're a definite improvement', even though he bemoaned the passing of the union consequent upon the staff status change (M5) 'the union did other things, like check out information management gave us. Individuals can't do that'. He was also enthusiastic about administrative change, which he saw as having given him a valued new skill 'we're more skilled and that can't be a bad thing'. (M1) Restructuring was seen as necessary to the implementation of these changes. He said it was something they had to accept, or in his words 'go along with', but he was fearful that it would lead to further job loss 'if more jobs go its not in our interests' (M5). New shift arrangements had not at the time become

mandatory at his terminal and he was passively resisting them by not volunteering to work them (M3). ‘I’m one of those who isn’t going to volunteer’. He also thought that the company policy of continuous improvement in employee performance was a threat to drivers jobs and told us ‘we’re not likely to accept improvements which will lose us our jobs’ (M3).

Over the period of our study, all 25 drivers *re-evaluated* one or more of the changes they were experiencing in the light of new information or experience or both. These re-evaluations enabled them to perceive the relevance or significance of their ideological beliefs differently in relation to those changes. As a result their *applications* of ideological beliefs to their evaluations changed and this was reflected in changes in their modes of participation. When we finished our research, a high proportion of our driver group had become enthusiastic about two of the initiatives we studied and only one continued to elicit any resistance. We give the end state of the driver’s situation in Table Three with more details in appendix 2. We stress that Table 3 gives an end state, and does not portray the dynamic of change. That dynamic is discussed in the next section.

Insert Table 3 near here

DYNAMIC ANALYSIS AND PROPOSITIONS

Appendix 1 identifies continuous improvement as the only initiative which continued to elicit any form of resistance from drivers at the end of our study, but static analyses of this kind do not allow us to appreciate the dynamics which can effect a change. Our interviews did allow us this insight, and it is to this that we now turn.

In the previous section we described how one of our drivers re-evaluated the shift pattern change. New information about it from his colleagues changed his mundane beliefs. As a result, he no longer perceived his belief in the value of safety as being centrally relevant to his evaluation of shift patterns. He still believed in the value of safety. All drivers believed in this value and they all saw it as central to the performance of their jobs, but not all drivers believed that it was centrally relevant to their evaluation of every specific change initiative. In our earlier conceptual framework section we argued that ideological beliefs apply values held to evaluations. We therefore find strong support for Hatch’s (1993) view that values are hard to change although they can become re-

aligned. Our drivers did not relinquish ideological beliefs in values. They merely stopped seeing some ideological beliefs which had once been central to their evaluations of particular changes as being so relevant to them. We take Hatch's analysis one step further in suggesting that mundane belief-change provides the platform upon which the re-application of ideological beliefs (and therefore the re-alignment of values) occurs. Based on our appreciation of the dynamics of change from our findings which is outlined above, we frame the propositions stated below.

Proposition 1: Changes in ideological Y type beliefs are not a necessary requirement for effective radical change.

Our finding that ideological Y type beliefs are not relinquished accords with the generally accepted view that such beliefs are hard to change. But we also find (in sharp contrast to some of the change literature) that it is not necessary for ideological beliefs to change for radical organisational change to be effective. Mundane beliefs change readily and this is often all that is required. We demonstrate this proposition further in relation to the staff status change, an event that was historical. We point out to the reader that although we also found this proposition to apply to an analysis of administrative changes, shift pattern change, communications changes, restructuring and continuous improvements which were contemporaneous, we have particular reasons for discussing staff status change. First, it offers especially vivid examples. Second, it helps to further illuminate the organisational context and climate in which contemporaneous initiatives took place. Thirdly, driver retrospective interpretations of staff status change were an important factor in their evaluations of ongoing changes which they perceived to be a subsequent consequence (communications changes and staff appraisal in particular). Lastly, this change can be defined as radical (even transformational) in the light of established theory in the change literature⁶.

Before this change, drivers believed that they were different from other workers, and that under the old union arrangements their jobs were secure. In the changed climate they no longer believed that their jobs were secure, but that their own actions (not those of the union) affected their future. Their mundane beliefs have changed. Staff status changes have meant that drivers no longer see themselves as a special interest group.

Because the union no longer negotiates the terms of their work and pay, drivers' mundane beliefs about the union and their status in the company have changed.

The following quotes reflect their attitude towards their changed employment: '...in the old days (before staff status change) everyone was in the union. The union had its say in the things that affected us.' This driver also expressed the view that 'now it's down to us....If the company makes money they'll keep us they'll get rid of us if they think we cost too much'. Another said 'I used to think the union looked after our interests. Now I think they were like the man in the middle'. 'Management used to communicate with the union. If communications are right we can communicate with management ourselves, look after our own interests'. Another said 'I think we just took it for granted that the union would look after our interestswhen I think about it, the union also had interests which didn't really have much to do with us'.

Contrary to the rhetoric of union officials, it became apparent that some drivers had never held an *ideological* belief in unions. Their orientation towards the union had in the past been instrumental. They had simply regarded it as fulfilling a function. It conducted negotiations with management on their behalf and was perceived as the means by which drivers could make their opinions known and secure the best terms and conditions of work from the company. They believed in the value of having their views considered - 'The union was a way of having our say and having management listen'. The ideological belief in the value of having their views considered did not change. The mundane belief that the union was the only way to achieve this did.

In their experience of change, most told us that they did not believe that the new staff status arrangements offered them a better alternative. As a result they still evaluated staff status change unfavourably in the light of a variety of ideological beliefs. But many had come to believe that some of the subsequent changes, such as direct communications with management, were an improvement upon the old ways of doing things. For this group, the status change was perceived as a major change, but it did not offend against any pre-existing deeply held beliefs in the value of union 'solidarity'. Some were able to re-evaluate the previous role of the union unfavourably in the light of beliefs in other values. For example, one driver, told us that at present management communications with drivers were made 'in the management interest', and that in the past the union had told drivers what it wanted to tell them 'in the union interest'. He had come to the view that

the direct communications with management were an improvement because ‘now we make up our own minds’. He told us that in the past, drivers had listened to the union because they had believed that it was acting in their interests. Now he believed that ‘in some ways it wasn’t’. He stressed that he valued his independence at work and thought that drivers ‘should’ be given the opportunity to ‘decide things’ for themselves.

Another driver put it this way: ‘The union was a way of having our say and having management listen it put our side of things to management . . . agreed terms and conditions’ He explained that at the time of the staff status change, some of his own concerns were due to the fact that ‘we were used to the union doing these things for us, we weren’t used to doing them directthere’s no reason why we can’t speak for ourselves, suppose there wasn’t then, but like I say, we weren’t used to it’.

For many in this group, the once favourable evaluations of the union, which they reported to have held had been linked to ideological beliefs in values such as the value of having their views considered. This belief was (and remained) central to their evaluations of their working experience. They had come to see that it was relevant to their evaluations of communications, rather than the union, because with the benefit of hindsight they believed that the union had only been a *means* to a desired end, which could be achieved in other ways.

A few drivers, mostly older men, *did* believe *in* unions and have a commitment to them. They accepted the *fact* that the union no longer had a role in negotiating changes, but thought that drivers *should* have ‘proper’ union representation. For example, one such driver said that working people ‘should have a union to look after their interests’. He believed in union solidarity and told us that management generally had ‘taken advantage’ of their workers in the past that is ‘why unions came about in the first place’. He felt that the trends towards de-recognition in the UK was a bad thing, even though he accepted that it was a fact that drivers could do nothing about. He could not approve of the status change, and argued that the change would do drivers no good in the long run. He summed up his feelings in the following way: ‘I’m pleased I’m not a younger driver, I’ve only got a couple more years to do before I can take retirement.’ Another older driver told us ‘its all very well not to have a union if management treats people properly ... without a union there’s nothing to stop them pushing people to the limit ... In the past management

pushed workers over the limit. That's why we should keep the unions. If they go there'll be nothing to stop this happening'.

A number of the older men who shared this belief in the union accepted the fact *that* it was no longer relevant to their changed work situation. They continued to regard the status change as a definite change for the worse. They continued to believe in the value of unions and bemoaned their loss as a change to which they acceded because they had 'no choice'. But most could also appreciate that direct communications had 'some good points'. It would appear that making their ideological belief in the value of the union marginal to the work situation had paved the way for other beliefs to become more centrally formative of attitudes towards other changes. At the end of the day, staff status change alone would not have led to the improved performance we detailed earlier. It was a prerequisite for the other changes, which were required to make organisational change work.

Proposition 2: *Changes in mundane belief can provide the psychological platform for re-applications of existing ideological belief, leading to an attitude change.*

As we mentioned above, ideological beliefs do not easily change, but their relevance can be marginalized by managerial actions and they can be re-applied in evaluations. These processes are quite simple. Management can marginalize strongly held ideological beliefs by challenging and confronting employees' old *mundane* beliefs 'that' this or that is the situation with disconcerting evidence. Such a challenge can lead to changing mundane beliefs amongst the workforce. (This was illustrated above by the changes in mundane beliefs about the union that occurred amongst the drivers when old mundane beliefs were challenged by the staff status change.) These changes in mundane beliefs coupled with the experience of change can provide the occasion for an ideological *re*-evaluation of change. We use the notation developed earlier to connect the reader from the comments to the framework.

One driver reported that he had opposed shift pattern changes at a terminal meeting (M2). He told us 'longer hours mean you're more tired. Accidents are more likely when you're tired – any driver, not just us'. (X₁). 'Safety really matters' (Yc) 'this is dangerous stuff we're carrying'. 'Most incidents aren't too serious, but they can be'.

‘stands to reason, longer hours mean more incidents’. (X₂). ‘I don’t agree with the new shift patterns’ (E-) ‘I haven’t signed up for them’. (M3). This driver subsequently re-evaluated shift changes. ‘the old pattern was better’ ‘some of the drivers who’ve signed up say they’re [i.e. the new patterns] more tiring’. (X3) ‘I still don’t think the new shifts are a good idea’. (E-) ‘Safety is important, but they [the new patterns] don’t seem to have meant more incidents’ ‘We’ve all had the training. We know what we’re doing, but they’re pushing us to the limits’. ‘I’m not going to rush to my put my name down for them, but I’ve got to work somewhere for the money’ (Yp). ‘When the time comes I’ll work them, its either that or leave’ ‘If I still thought the new shifts were dangerous, I’d leave’ ‘like I said, they’re pushing us to the limits, but so is everyone else these days. Its no better anywhere else’. (M5)

Resistance can be changed to reluctant participation once an organisational change has been accepted as inevitable. Reluctant participation may change to instrumental participation or enthusiastic participation as happened with some drivers in the case of administrative change as mundane beliefs change in the experience of change. For example, a driver who expressed enthusiasm (M1) about administrative change told us that ‘drivers don’t have to wait around for someone else to do their bits and pieces of paper work anymore’. ‘there’s been a knock on effect. Its cut down the queues at the gantries’. These are factual mundane beliefs (X) grounded in his experience of operating the change. ‘most drivers are independent blokes. Having your independence on the road is one of the good things about it’. ‘The administrative changes make us more independent’. These statements reflect his ideological belief in the value of autonomy. His mundane beliefs enabled him to see the relevance of this Yc belief to his evaluation of administrative change. In the light of this belief it was evaluated favourably (E+). This is because the experience of change leads to a mundane belief change that enables employees to re-evaluate a changed practice in the light of an ideological belief which was not previously seen to be relevant to it.

All 25 drivers re-applied ideological beliefs in evaluations of one or more of the changes we studied. Moreover, the process was detected amongst others in the periodic group discussions. In the case of shift pattern change, 10 formerly reluctant participants came to see the new shift patterns as serving a utilitarian external interest because they led to more clear days off and 2 even became enthusiastic about them (See table 3).

Changes in mundane beliefs do not always result in a re-application of ideological beliefs which leads to enthusiasm, but we found that instrumental participation in organisational change, may be sufficient to make change work. It is however, fragile. Such support can easily evaporate. Because mundane beliefs are readily changed, employees can at some future date, in the light of new events, information or experience, come to believe that their participation in a changed practice no longer serves their utilitarian interests. When this occurs, their participation reverts to reluctance. For example, one driver told us that before he had worked the new shifts, he had thought they were a good idea. 'I thought it would be handy to have a few extra days off here and there.' His family owned a caravan and he enjoyed spending time with them in it. He was also keen on working about his house (DIY) But his initial experience of the new shift patterns was unfavourable. 'The longer shifts are more tiring. You need your extra days off to recover'. He accepted that he had to work the new shifts, but because he now believed that he could not make such good use of the extra days off, he no longer perceived the new arrangements as serving his external utilitarian interests and had ceased to evaluate them positively, hence his change of attitude.

When mundane belief changes enabled employees to re-evaluate change in the light of ideological beliefs which were newly seen to be centrally relevant, they became enthusiastic about participating. In these cases, existing ideological beliefs were not changed, but were re-applied to a different arena of experience.

We identified two types of re-application. First, an ideological belief that is already centrally related to some aspect(s) of the work experience can be more broadly applied to encompass a change. As one driver told us 'we fought the change as long as we could. At the end it was either go along with it or be out of a job. I couldn't afford to be out of a jobI don't like it. I'm not going to change my mind, but I would say that some of the things that have happened since are a definite improvement'. Second, an ideological belief that was previously not related to evaluations of any work practice, can become central to the evaluation of a change. These types of re-application may be illustrated in relation to administrative change.

All the drivers, bar some of the former terminal operators, believed in the value of autonomy. Many had broadened their application of this belief to administrative change and developed an enthusiasm for it. Not one of the drivers we interviewed advocated a

return to the old ways of doing things. One driver, whose views were fairly typical, told us that he had at first thought that administrative change would be a way to ‘lose more jobs’ and ‘get drivers to do more work for nothing’. But once the changes were in place, he found that he no longer had to ‘wait around for someone else’ to print his tickets off, and felt that he was as a result more independent. He had always believed in autonomy, citing it as an attraction of driving. For him, changes that enhanced his autonomy at work were a good thing.

Other drivers believed in learning and had a commitment to it, but this belief had previously been seen as peripheral and irrelevant to their work. One driver told us that he had encouraged his children at school and believed in the value of learning in relation to out of work activities. But at work this belief had not been seen to have an application because ‘drivers were just drivers, nothing else’. He told us that he had initially been suspicious of administrative change, but once he realised that drivers would learn new skills he began to ‘see things differently’. The belief he had always held in the value of learning found a new work related application in the context of his appreciation of administrative change. His new attitude was definitely positive⁷.

Proposition 3: Re-applications of ideological belief amongst individuals can gather momentum when the mundane belief changes which support them are underpinned and re-reinforced by employees collective experiences of organisational change.

We noted above how re-applications could occur individually. Now we stress group dynamics. We found that re-applications of ideological belief amongst individual drivers could gather momentum amongst the driver collective. When drivers’ experiences of change underpinned the changes in mundane belief that led to new perceptions of reality, re-applications of ideological belief were fostered.

We have tried to understand how the group processes worked. Driving is essentially a lonely occupation, and in the execution of this task there is only limited interaction with other members of the community. Since 1992, management deliberately structured some encounters requiring drivers to collectively attend regular meetings held at each terminal to discuss administrative issues and voice their concerns. These meetings, it turned out, were important focal points to discuss attitudes and feelings and helped foster changes in attitudes. We spent considerable time observing drivers at work,

and we noted that there was also informal interaction, for example, the gantries where tankers were filled provided a social hub. At some terminals drivers met in the canteen to eat, and they met at the computer terminals where they communicated with the dispatchers who organised their work. The drivers told us, and we observed that these focal points were an important part of group dynamics.

The group effect on belief changes and belief applications, through new dominant forms of participation in work activities, was a gradual process. We noted in the group discussions that, as drivers re-reinforced new perceptions of the reality of change in their interactions with one another, more and more individual drivers achieved re-applications of ideological belief that enabled them to re-evaluate change in a different light. One of the drivers who became enthusiastic said in a group discussion: 'We've all held back over signing up (something which our other interviews confirm) but I didn't think the extra days off would be worth it. I'd be too tired. Thing is, I get a real buzz from customers when they're pleased with us. Its us they thank.' Another driver in the group said 'we also get the flack' to which he replied 'We get less flack now over not coming when they want us.' He went on to say 'didn't think shifts had much to do with customer service, but they do when it makes it easier for us to come when they want us'. The driver who made the original comment concerning the flack replied 'suppose you've got a point'.

We found that as more of the drivers achieved a positive re-evaluation of a particular change, those who were less convinced of its potential benefits could be swept along by the positive majority ethos promoting a favourable ideological shift within the driver subculture. We observed this process in the group discussions about many of the changes, not just that of staff status. For example, some of the drivers we interviewed did not share the enthusiasm of their colleagues for the administrative changes, but they did not express the old fashioned view that some professed to have once held, namely, that the changes were exploitative of drivers. For the most part, they tended to see that, 'on balance', the changes were 'a good thing', and they cited majority opinions, such as increased independence and the value of learning new skills, to support their views. Some expressed qualms of a personal nature. For example, one driver admitted that he had been 'slow' to acquire the new computer skills required by administrative change and told us that he was still lacking in confidence. Another acknowledged the value of learning new computer skills, but claimed that it was only really a good thing for the younger drivers.

He was hoping to take early retirement at the first available opportunity and therefore thought that for him personally, these new skills would be of little benefit. In relation to the ongoing shift pattern changes, it was clear in the group discussions that as more and more drivers experienced the new shifts, the groups became less reluctant to work them and more instrumentally oriented towards them. In these discussions a utilitarian perspective increasingly prevailed to re-reinforce such emergent new perceptions of the realities of this particular change.

Although the management were often unaware of the details of how changes in attitudes occurred, it was apparent that the actions they took (setting up meetings for drivers, abolishing canteen demarcations, having open-door policies) did impinge on the effectiveness of belief changes both individually and through group dynamics. We found that amended practices and procedures, and changes in symbolic aspects of the culture, helped to underpin new ideological priorities and undermine old ones by re-reinforcing the changes in mundane belief which led to new perceptions of reality. For example, the drivers participation in the staff performance appraisal scheme helped to re-reinforce their perceptions of the new staff status reality. It was symbolically significant that all obvious manifestations of the staff - union status division had been abolished. Staff of all grades used the same canteens, there were no longer any reserved car parking spaces, terminal management adhered to an open door policy and everyone was using first names. These changes symbolised the belief amongst drivers that as staff they were no longer 'just drivers'. Our findings are affirmed by more sophisticated change models (e.g. Tichy 1983) which explicitly recognise that beliefs need to change for organisational change to succeed and that this only occurs when new priorities are underpinned by new routines, practices and procedures. These aspects provided strong clues that management practice could be a critical ingredient to effective change processes, a subject worthy of further exploration in future studies.

DISCUSSION

We explored how values and beliefs interact with change processes. In doing so, we examined when and how scepticism can emerge and when it can be avoided so that those involved do not automatically question their participation in change. We found that in our change process *values* did not readily change, this was not surprising. However, what

emerged was that the ways in which the *beliefs* linked to values were applied did change. Essentially, change will be accepted because people are willing to apply their values differently. This, we suggest, is both new and important.

In offering these suggestions we are well aware that our exercise in inductive theorising is exploratory, based upon qualitative ethnographic case research and an analysis of speech act data. It is directed towards the development of theory concerning the *nature* of beliefs, *how* beliefs change, and *how* beliefs influence the attitudes that guide behaviour in work. As we have stressed, ours is not a quantitative study. We did not set out to examine the statistical significance of variables, which we presumed, in the light of an *a priori* conceptual framework, might explain differences in the profile of our driver group between the start and end of our study. We also base our observations on only one case study, and so the attitude changes we observed are context specific. This context was change in a very successful oil company, for drivers who knew they were likely to be better treated inside the firm than if they were employed elsewhere.

From a theory perspective, we have tried to push the boundary further forward. Meglino and Ravlin argue that 'a basic reason why more progress in understanding value processes in the workplace has not been made is that 'a reasonably large proportion of the research ... was not performed with the specific intent of understanding value processes, but with the idea that values or value congruence would explain another phenomenon of interest' (Meglino and Ravlin 1998: 383). Our research was originally motivated with a specific intent of understanding value processes in a context where values *appeared* to be changing. In this respect, we tried to fill an obvious gap.

Our approach was to look at a small piece of the whole: belief systems and related behaviours, undertaking something Hatch (1993) advocated. We found that the *impact* of seemingly entrenched beliefs can be altered to allow effective change, and that in many cases, when taking a micro perspective, there is far more freedom than often supposed. To start, not all initiatives are viewed equally; it seems that employees look quite specifically at each individual one. We suggest this questions the prevalence of organisational inertia in the face of change, even in mature firms. Next, it seems that strongly held ideological beliefs that are central to evaluations leading individuals to oppose change may be marginalized and made peripheral to the change situation allowing

progress. Finally, we note that collective behaviour can create bandwagons for positive reassessments of the relevance of beliefs.

When we started our programme, we had hoped to integrate our work more fully into that of culture research. But today this field of endeavour is in disarray. As Martin and Frost (1996) have indicated in a recent 'state of the art' review, fundamental differences amongst researchers in the field have led to conflicting perspectives and methodological disagreements which have produced contradictory findings and potentially obscure usefulness. We none the less hope that we have provided some frameworks that may help others in this area as well.

We also believe that our findings have practical relevance. Our research provides insights into the ways in which mundane belief change can facilitate the re-alignment of ideological belief through processes of re-application. For example, all of our 25 drivers held a belief in the value of safety. Not all of these drivers saw it as being centrally relevant to the shift pattern change. Quantitative research would allow managers to determine in other change situations which particular beliefs are prevalent, and the different areas in which individuals perceive these beliefs to be most relevant. Our research suggests that values can be shared in the sense that most people hold them, but that they are applied differently. Such an extension could shed further light upon the ways in which individuals with essentially similar cognitive-structures process information differently (Mohammed et al. 2000). It could also enable managers in future to better devise communications to help some employees in the process of making outdated beliefs marginal and help others to perceive the centrality of values they hold to areas of work where they do not currently see their relevance.

CONCLUSIONS

At a simple level, our findings are striking. The underlying assumption in the management literature is that the success of radical organisational change depends upon a change in cultural values (e.g. Silverzweig and Allen 1976; O'Reilly 1989). In other words, it is widely believed that significant cognitive changes are often required to support positive attitudes towards major change and such changes cannot be divorced from values. We suggest that this view needs clarification. Our finding is that fundamental strategic change can take place when only mundane beliefs change, and that

this belief change can provide a platform for re-alignment and re-application of ideological beliefs and lead to collective momentum endorsing the strategic change.

Our research also provides an example of the direction that Pettigrew et al. (2001) have called for, namely longitudinal work that takes note of context. As suggested, we attempt to *identify patterns in the process of changing* by showing how ideological beliefs can be re-applied and re-aligned through time. Our work also benefited greatly from interaction with the organisation, a situation where practitioners helped inform researchers. Clearly, there is more to do. Research on how change processes can be facilitated in other contexts and over longer time frames is necessary. However, we believe we have made a start. From this point of view we have, we believe achieved a legitimate goal of qualitative organisational research of its type. That is to reveal directions in which our existing knowledge of organisational processes might be usefully extended and developed and to indicate where new hypotheses can be devised and tested for this purpose.

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1. Judith Goetz and Margaret LeCompte (1981) have summarised the iterative steps involved in the method of analytic induction. These are 1) scanning data collected in field notes (and in our case audio tape transcripts) to identify categories and attributes, 2) additional scanning for other examples of categories, 3) creating typologies and categories, 4) determining the relationships that exist between categories, 5) creating hypotheses from the relationships discovered, 6) seeking examples that contradict hypotheses, and 7) continually refining hypotheses until all examples are accounted for and explained.

 2. This is implied but not articulated in cognitive research. Cognitive structures are (usually) described as representations of knowledge (e.g. Schneider and Anglemar 1993) and organising frameworks for beliefs *about* particular types of stimulus (e.g. Fiske and Taylor 1984). They are often conceptualised as networks of relationships between concepts (e.g. Ward and Reingen 1990). This conceptualisation, has been operationalised by cognitive mapping (e.g. Huff 1990) and used to reveal different kinds of relationships (although causal relationships have been the most popular) between concepts *of different types* (e.g. Calori, Johnson and Sarnin, 1994; Swan, 1995). Several writers have called for stronger conceptual distinctions and definitions in cognitive theory (e.g. Schneider and Anglemar, 1993; Mohammed et al 2000). Mohammed et al (2000) note that although the majority of cognitive research focuses upon concepts relating to 'knowledge structures', (see review by Walsh, 1995) it also reveals the importance of concepts relating to 'evaluative belief structures' which they consider to be subtly but importantly different.

 3. Drivers could hold values which were perceived to be intrinsic to their jobs as drivers, such as the value of autonomy, but not perceived to be intrinsic to particular work practices, such as the work practice change. They could also hold values perceived to be both intrinsic to their jobs and central to the activities/ work practices we were considering. One driver who did not like the new shift patterns told us 'safety's very important ...the new shift patterns aren't safe'. His belief in the value of safety was central to his job and also central to his evaluation of the shift pattern change. For

other drivers, such as the one cited in the text, safety was a value intrinsic to their jobs, but not seen to have a bearing on the shift pattern changes. He told us 'I'd be against them if they weren't as safe'. We have therefore used the terms central and peripheral to denote that values reflected in ideological beliefs were perceived to be either central or peripheral to the particular activity/work practice because this was what proved to be significant in the drivers evaluations of them. Mundane beliefs determined whether or not particular ideological beliefs were seen to be central or peripheral to an activity/work practice. For example, the driver who thought the new shift patterns were not safe said that 'with the longer hours you're more tired' and expressed his belief that being more tired meant that driving was 'less safe'. The other driver told us 'we're used to driving long hours ...its something you get used to ...there are laws about driving unsafe hours ...we're safer after six hours than most car drivers after two'. As these illustrations show, mundane beliefs about activities and practices also determined whether or not they were positively or negatively evaluated in the light of those ideological beliefs perceived as central.

4. The driver cited in this paragraph who did not believe that the new shifts were relevant to customer service told us that: 'The shifts are about the hours we work for the company and when we work them. They've got nothing to do with what happens when we are on the customers' premises'. The driver cited who believed that the new shift patterns gave a better service reasoned that: 'it makes sense that its better for them [i.e. the customers] if we come when its best for them not best for us.' All 25 drivers believed in the value of customer service. They all saw that giving customer service was intrinsic to their jobs. They did not all believe that shift pattern changes could impact upon the service they gave to customers. None believed that the shift pattern change was a factor which would lead to a deterioration of customer service. When the shift pattern changes were initially unfavourably evaluated, unfavourable evaluations were typically arrived at in the light of drivers' beliefs in the value of safety.
5. 'Individuals with the same cognitive structure may not process information in the same manner' (Mohammed et al. 2000, 127). All 25 drivers professed a belief in the value of customer service. All 25 drivers perceived it to be intrinsic to their jobs as

drivers. Customer service was a shared value. Belief in the value of drivers giving customer service was a shared belief. They did not all perceive the relevance of this belief to an evaluation of shift pattern change because they did not process the information which they had all been given about shift pattern changes in the same way. Some had developed mundane beliefs which enabled them to see customer service as centrally relevant to their evaluations of this change. Others had developed mundane beliefs which led them to see it as irrelevant.

6. Tushman and Romanelli (1985) suggest that firms go through periods of convergence and reorientation. Convergence is characterized by incremental change which strengthens internal consistency. Radical discontinuous change involves strategic shifts and major changes in structures, control systems and the balance of power. From a senior managerial perspective, staff status change was considered to be radical for reasons explained earlier.

8. The driver cited said ‘I’ve always told the kids that they’ll get better jobs if they do well at school, but learning didn’t have much to do with work here, drivers were just drivers, nothing else. Course, learning isn’t just about work. I’ve learned a lot about photography for instance, its a hobby, but its nice when you can get new skills at work’. He also told us that ‘When they first introduced it (i.e. administrative change) I thought it’d just be a way of getting more work out of us, but now I see things differently. If being staff means learning staff skills it can’t be a bad thing can it’.

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APPENDIX 1.

RIGOUR

Van de Ven (1989) plausibly argues: nothing is so practical as a good theory. The practical 'core' of the theory we offer lies in our explication of ideological (formative value beliefs) and mundane beliefs (matter of fact beliefs) and how they interact to influence employee modes of participation in changed working practice. We develop three propositions which are potentially amenable to further testing. It has been argued that conventional criteria of reliability and validity are not always appropriate for judging the rigour of qualitative research of this type (Guba and Lincoln, 1989). As Eisenhardt (1989) has rightly affirmed:

...frame breaking insights, the testing of a good theory (e.g., parsimony, logical coherence), and convincing grounding in the evidence are key criteria for evaluating this type of research. (Eisenhardt, 1989: 432)

Later we describe some 'conventional' checks we performed upon our categorizations of beliefs and modes of participation, however, to ensure rigour, we depended less upon conventional criteria than upon Guba and Lincoln's (1989) alternatives:

Credibility

Credibility equates to internal validity. It is crucial to match the realities researchers attribute and represent to the realities respondents construct. Guba and Lincoln cite prolonged engagement, persistent observation; peer debriefing, negative case analysis and member checks as key mechanisms for ensuring credibility. These mechanisms also have a role in meeting other criteria. Our research with drivers spanned 18 months. It provided ample opportunity for persistent observation. We conversed informally and during interviews. Some drivers professed to have told us things that they would not have said to management, therefore we believe that a degree of trust developed. We examined both positive and negative changes in orientations towards specific work practice changes and 'peer debriefings' of the interview data took place regularly after days spent on site. Audio tape transcripts and analyses were discussed by the researchers as work progressed and some discussions involved other members of the broader research community at City University, enabling researchers who were not directly involved in field work to provide feedback. We held workshops involving managers from the organization we studied at which emergent concepts, frameworks and findings were discussed as part of the case

development process. At some of these events managers from other organizations facing similar issues of managing change were present. Finally, we conducted 'member checks' once our research was complete.

Transferability

Transferability equates to external validity. Transferability, of course, depends upon the extent to which conditions in different contexts are congruent with those in the original setting. In discussing our conceptual framework we indicate how our distinctions can be linked to others which have been developed and used in other settings. Within the space constraints we face, we offer both a section describing the history and background of our study and 'thick descriptions' to assist others in making transferability judgements. We conducted our research in more than one distribution site and took the opportunity which another research project in a manufacturing division of the same organization afforded to 'tentatively test' our conceptual framework and model in Zwanecki's spirit of analytical induction. Finally, in our discussion we illustrate theoretically how our conceptual framework might be used in a different hypothetical context. All this suggests that it *may*, at least to some degree, be transferable to other groups and settings.

Dependability

Dependability equates to reliability. This criterion is concerned with how stable the data is over the time period of the study. There were no intentional changes in the way we conducted our research and the same individual researchers were centrally involved from beginning to end. The researchers maintained constant contact throughout all phases of the research and as we noted above, workshops, meetings and discussions took place regularly. During data collection and analysis, data collected and analyses performed were constantly compared to earlier data and analyses to ensure consistency.

Confirmability

Confirmability equates to objectivity. There is always a degree of subjectivity in research of this type, but we are confident that our data and interpretations are derived from the context and subjects we studied. The interviewers involved are trained and experienced in this type of research. In many of the interviews there was more than one researcher present. All interviews were recorded on audio tape and subsequently reviewed more than once and by more than one person to ensure that any statements which could potentially be considered to have resulted from leading comments, researcher opinions

etc. would be identified and omitted.. All data used can be tracked to its interview source and reviewed in the interview context via audio tape. Our workshops, peer discussions and final 'member checks' provided further safeguards against researcher bias.

We followed Denzin (1978) and Strauss and Corbin (1990) in developing coding procedures so that we could tentatively 'test' the transferability of the framework we developed in this research on evaluations of change collected in later research in a different part of the same organisation. We sought exceptions, which it could not encompass, rather than new propositions or hypotheses. We re-coded data from the driver study after a gap of two months and compared the coding. A selection of the transcripts was re-coded by a third party who had first of all listened to the relevant tapes. His coding agreed with ours in every case. Because each statement had a clear context, we did not find any ambiguity in the coding.

Appendix 2

Each one of our 25 drivers evaluated individual initiatives differently, some positively and others negatively. Over time their evaluations of particular initiatives changed. There were differences between the drivers as a group at any given point in time when some would evaluate a particular initiative positively and others negatively. These differences and changes were reflected in their attitudes towards their participation in the changes.

Before we examine changes over time, we present a snap shot profile of our driver group at the end of our research. Table Three shows the predominant mode of participation in each of the 6 initiatives upon which we focused.

Insert TABLE 3 about here

It clearly demonstrates that we cannot categorise any individual as being involved in the organisation in only one way, nor any initiative as eliciting only one response. Rather, every instance of involvement was particular. As a group, the drivers had reached a predominantly enthusiastic mode of participation in communication changes and administrative changes. They were directly related by a high proportion of drivers to ideological beliefs seen to be centrally relevant to the conduct of these activities (reflected by high M1+M2+M3) and a high proportion of drivers evaluated these changes positively. As a result, over half had become enthusiastic about engaging in them (M1). Continuous improvement also directly related to an ideological belief that in almost half the cases was seen to be centrally relevant to the changes themselves (M1+M2+M3), but in this case with a negative evaluation which resulted in passive resistance (M3). In contrast, the action of restructuring was overwhelmingly evaluated negatively in the light of beliefs which were applied peripherally (M4+M5). This had led to passive resistance in 45% of cases (M5). Table 3 identifies continuous improvement as the only initiative which continued to elicit any form of resistance.

Table One: Change Initiatives Investigated

Initiative 1: Driver Ambassador Concept (1989).

Date: Idea first introduced in 1989, and abandoned before our study.
Description: Drivers to be more proactive in marketing and customer liaison.
Outcome: Driver opposition led to failure. After staff status change, drivers adopted its principles, seeing them as an aspect of continuous improvement.

Initiative 2: Staff Status Change (1992)

Date: Planned and initiated during 1992, still being executed in 1993 and early 1994 at start of our interviews.
Description: Drivers status changed from blue collar unionized workers to staff. Slow procedures for implementing change through union negotiations were abolished.
Outcome: Drivers signed new contracts in June 1992 and agreed to accept the rules and procedures of staff status including subsequent changes required to maintain competitiveness.

Initiative 3: Administrative Change (1993/4)

Date: Initiated in 1993, and being finalised at start of our interviews.
Description: Basic administrative tasks were computerised and drivers trained to carry them out.
Outcome: Popular with drivers. Enabled subsequent terminal restructuring.

Initiative 4: Shift Pattern Change (1994):

Date: Designed, initiated, executed and completed during our fieldwork.
Description: Previous eight hour shifts replaced with twelve hour shifts over fewer working days.
Outcome: Drivers were beginning to adopt an instrumental orientation. Most performance measures showed an improvement over the year, shift pattern changes were argued to be contributory.

Initiative 5: Restructuring (ongoing from 1991):

Date: Major change in structure took place in 1991/2, which was on-going during our fieldwork.
Description: A delayering and empowerment of drivers and junior managers, successively.
Outcome: Drivers accepted restructuring as necessary. Mechanics enthused about their empowerment. Terminals employ less manpower.

Initiative 6: Communications (ongoing from 1992):

Date: Started in early 1992, and on-going during our fieldwork.
Description: Management rather than union communicated with workforce. Ongoing changes have been made to improve clarity, driver user friendliness, driver

input and staff relations.

Outcome: At time of study changes were moderately successful though some drivers and managers were less comfortable with new arrangements than others.

Initiative 7: Continuous Improvement (from 1993 onwards):

Date: Started in 1993, and continued during our fieldwork.

Description: A commitment by management to force workers to accept principles of continuous improvement'. (e.g. further restructuring and communications changes). Drivers see that management would like them to be more proactive in offering suggestions.

Outcome: Some changes have been well received, but drivers were suspicious of the idea.

FIGURE ONE: How Individual Beliefs Motivate Participation In Change

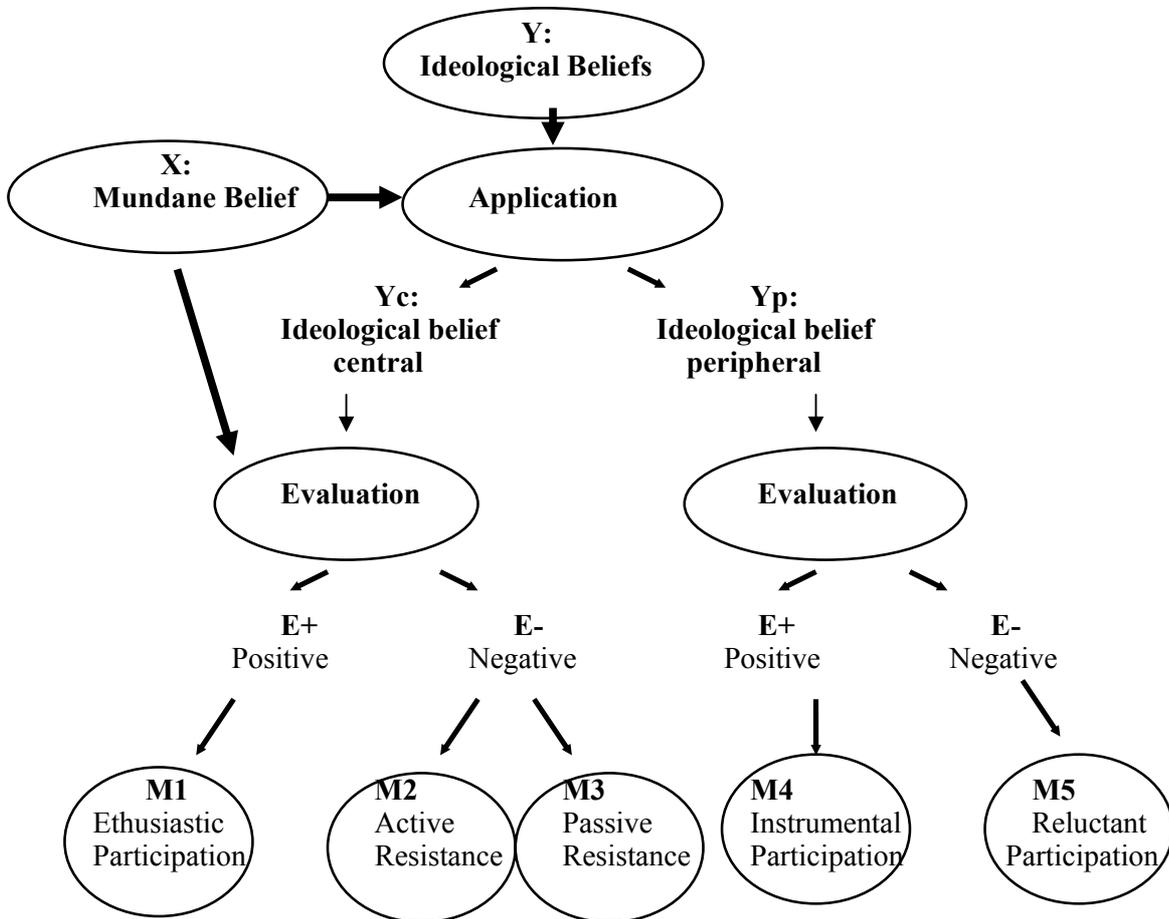


TABLE TWO DETAILS OF CLASSIFICATION SCHEME

Positive Evaluations (E+, M1 and M4)

Y. Ideological beliefs reflecting values held. Ideological beliefs are beliefs in the intrinsic value of something which are applied in evaluations.

X Mundane beliefs reflecting knowledge structures. Mundane beliefs are factually substantiated applications of knowledge in evaluations.

Yc Ideological beliefs perceived to be centrally and intrinsically relevant to an evaluation of a given work experience

Yp Ideological beliefs perceived to be peripherally and extrinsically relevant to an evaluation of a work experience.

M1. When employees believed (X) that organisational change (Z) was centrally commensurate with one or more of their ideological beliefs (Yc), they evaluated it positively (E+) and showed enthusiasm for it. This led to the M1 mode of participation. We will explore if M1 is conducive to persistent motivation and commitment.

M4. When employees believed (X) that organisational change (Z) was commensurate with a belief perceived to be extrinsic or peripheral to the work experience, (Yp), they evaluated it positively (E+) and their mode of participation was instrumental. We will explore if utilitarian motives to support change may evaporate once their goals are attained or fail to materialise as expected. Mundane beliefs linking organisational change to personal utilitarian goals only motivate, so long as the external objectives of its ideological evaluation are seen as capable of being served by it.

Negative evaluations (E-, M2, M3, and M5)

M2. Until change is seen as inevitable, employees may actively resist. (M2). Such resistance will be associated with a negative evaluation (E-) in the light of an ideological belief which is perceived to be centrally relevant to the work experience (Yc). Ideological belief sets are sufficiently coherent to exclude the possibility of firmly believing in opposing values, (Grimes, 1980) therefore requirements for organisational change which challenge existing ideological beliefs can lead employees to actively resist or leave the organisation. We will explore if changed circumstances after the event may close the doors to any form of continued active resistance and make those beliefs seen less centrally relevant (peripheral) to the new work experience.

M3. Other changes which challenge ideological beliefs perceived to be central to the work experience leave avenues open for passive resistance (M3). For example, some drivers who believed in the value of safety (Yc) believed that longer shifts (Z) were not conducive to safety (X) and evaluated them as undesirable (E-). Because the company could not change all its delivery arrangements immediately, it initially asked for volunteers to work the new shifts. Some drivers passively resisted (M3) by not volunteering.

M5. Reluctant participation (M5) in changes which are negatively evaluated can occur when those changes are of the type that preclude the possibility of either active or passive resistance once they are implemented.

Table Three: Dominant Modes of Participation in Change by 25 Drivers at the end of the period of study

Initiative	Modes of participation (from positive M1, M4 to negative M5, M3, M2)					Proportion Central Beliefs M1,M2,M3	Proportion Positive (M1+M4)
	M1 Enthusiastic	M4 Instrumental participation	M5 Reluctant participation	M3 Passive resistance	M2 Active resistance		
Staff Status (2)	3	5	<u>17</u>			12%	20%
Administrative Change (3)	<u>14</u>	7	4			46%	84%
Shift Pattern Change (4)	2	<u>10</u>	7	6		60%	48%
Restructuring (5)	2	7	<u>16</u>			8%	36%
Communications Changes (6)	<u>10</u>	9	3	3		52%	76%
Continuous Improvement (7)	1	4	9	<u>11</u>		48%	20%