

Researching the multinational corporation: contributions of critical realist ethnography

SHARPE, Diana http://orcid.org/0000-0003-1876-321x

Available from Sheffield Hallam University Research Archive (SHURA) at:

http://shura.shu.ac.uk/20993/

This document is the author deposited version. You are advised to consult the publisher's version if you wish to cite from it.

Published version

SHARPE, Diana (2018). Researching the multinational corporation: contributions of critical realist ethnography. Critical perspectives on international business. (In Press)

Copyright and re-use policy

See http://shura.shu.ac.uk/information.html



Researching the multinational corporation:contributions of critical realist ethnography

Journal:	critical perspectives on international business
Manuscript ID	cpoib-08-2014-0038.R4
Manuscript Type:	Academic Paper
Keywords:	critical realist ethnography , researching the multinational , methodology in international business research

SCHOLARONE™ Manuscripts

Multinational corporations (MNCs), have been conceptualized as venues of interlinked relations (local, national and international). Located at the cross roads of ideas, knowledge, interests and values (Van Maanan, 2011) they are places where meanings of various origins converge, mix, blend and clash (Blazejewski, 2012). They therefore provide challenging contexts and interfaces for the researcher to explore. Recent literature has argued that these challenges require a nuanced epistemological approach (Birkenshaw et al., 2011; Brannan and Doz., 2010). This article therefore provides a timely opportunity to consider methodology in international business research and within the context of the MNC.

The article draws on the example of research on the transfer of management practices within the MNC to discuss the potential of critical realist ethnographic approaches to respond to the methodological challenges faced in research within the MNC. In attempts to transfer management practices across the MNC, practices and processes can converge, mix, blend and clash often with unintended consequences. The transfer of management practices thereby provides a useful context to demonstrate the strengths of an ethnographic approach underpinned by a critical realist ontology, which encourages a focus on agents as active and reflexive, having the powers to deliberate and respond to the structures and cultural contexts in which they find themselves (Rees and Gatenby, 2014). A critical realist ethnographic approach sensitizes the researcher to consider analytical narratives in which the interplay of agency, structure and culture is examined over time and to address questions such as under what conditions and how managerial practices may be transferred, sustained, resisted and adapted across the MNC. The stratified 'depthful' ontology of critical realism encourages attention to a search for underlying causal mechanisms and contingencies that can explain the outcomes from attempts to transfer management practices within specific conditions.

In the following sections the article firstly introduces ethnography as a research approach in the field of international business and management. It then examines the features of critical realist ethnography and the contributions it can make to research in the MNC by drawing on the example of research on the transfer of management practices across contexts within the MNC. Finally, implications for researchers working from a critical stance are discussed.

Ethnography as a research approach

In the inaugural issue of the journal "Ethnography", Willis and Trondman (2000) refer to arguably the first ethnographer Herodutus who said, in possibly the first ethnography "The History" (trans. 1987, p.171). "So far it is my eyes, my judgement, and my searching that speaks these words to you", in this way "this-ness" and "lived- out-ness" is central to the ethnographers' account. Willis and Trondman (2000, p.5) define ethnography as... "a family of methods involving direct and sustained social contact with agents, and of richly writing up the encounter, recording, respecting and representing at least partly in its own terms the irreducibility of human experience. Ethnography is the disciplined and deliberate witness – cum recording of human events". As noted by Hammersley and Atkinson (1997) ethnography is in many respects the most basic form of social research. Not only does it have a long history, it also bears a close resemblance to the routine ways in which people make sense of the world in everyday life. As argued by Rosen (1991), an individual conducts ethnography because the problems that interest him or her are believed to be best mined by the machinery of ethnography and conveyed in its product.

The roots of ethnography are often seen to lie in European cultural anthropology. Malinowski (1922) with his research on New Guinea is often cited for his writing on the method of ethnography. Early ethnographers have sometimes been described as "naive realists" who considered immediate sensory experience as enough to precisely record the truth. The Chicago School of sociology further stimulated an ethnographic approach to research in the 1920's-1930's that sought to study industrialized society "as it is". Ethnographic studies of workplaces grew during this time (Rees and Gatenby 2014). In contrast to the Chicago School, later ethnographic studies tended to be influenced by a more phenomenological or hermeneutic ontology and an erasure of "structure" from the ethnographic imagination (Porter, 2002). Critical Realism provides a basis for re-introducing structure into the ethnographic imagination. The following sections consider the significance of this in the context of the study of the cross-border transfer of management practices within the MNC.

An underlying premise guiding much qualitative research including ethnographic research in the hermeneutic tradition is that the subject matter of the social sciences is fundamentally different to that of the natural sciences. Human action has an internal logic, which must be understood, to make action intelligible. The social world cannot be understood in terms of causal relationships that do not take account that human actions are based on actor's interpretations of events, intentions, motives, attitudes and beliefs. Research in the social sciences is seen to require emic analysis in which the meanings and interpretations of those being studied is important rather than placing an etic external logic on the behavior. In this way the task of the social scientist is to understand the framework of meaning out of which behavior arises. The nature of the social world must be "discovered" and this can only be achieved by first hand observation and participation in "natural settings". The researcher typically becomes an observer within the social setting being studied. Ethnography has often been described as a longitudinal research method, geared towards a "process based" understanding of organizational life. Ethnographic studies in the hermeneutic tradition consider analysis of reasons, purposes and rules as more appropriate to the study of social processes than cause, effect and law (Winch, 1958), thereby requiring a study of the culture in which these are embedded.

For Geertz (1973, p.21) ethnography is microscopic, involves thick description, it is interpretive, the ethnographer "inscribes" social discourse, writing it down. Further the essential task of theory building is not to codify abstract regularities but to make thick description possible, not to generalize across cases but to generalize within them. Classic organizational ethnographies (for example of Roy, 1952; 1955; Lupton, 1963; Burawoy, 1979 and Kamata, 1982) have demonstrated the contribution that ethnographic approaches can make in gaining insights into social processes in organizations. For example, the work of Kamata and Roy provided detailed ng υ. analysis of manufacturing companies shop floor processes in specific contexts, by focusing on worker behavior within factory settings.

The relevance of ethnographic approaches in researching the cross-national transfer of management practices

Within the MNC, empirical and theoretical attention has been given to examining management practices, work organization and control strategies and the nature of subsidiary headquarter relations (see for example Powell and Rhee, 2016; Kostova, Marano and Tallman, 2016; Kostova et al., 2008) The vast majority of research publications in these areas still do not however draw on qualitative research methods (Doz, 2011) and more specifically on ethnographic research. Within handbooks of qualitative research methods for international business (Marschan-Piekkari and Welch, 2004) ethnographic approaches have been located under the section on "alternative methods and methodologies". More recently reviews have noted that research publications based on qualitative research methods have primarily drawn on case study research and interviewing (Piekarri, Welch and Paavilainen, 2009) and that qualitative methods remain marginalised in the field of International Business and International Management (IB/IM) mirroring the broader trend towards more positivistic empirical methods in the social sciences. Similarly, recent work has sought to open-up discussions on the plurality of approaches that can be used in case study research that go beyond positivistic assumptions (Piekkari and Welch, 2011; Morais, 2011).

Much research on the MNC has been shaped by an "economic view of the world" that includes assumptions of rationality, goal- directed action and the determinant nature of market processes. It can be argued that research still tends to leave unexamined or unproblematic a huge part of the social life of multinationals. Moore (2011a) points to the need for studies to be able to explore and elucidate ambivalence in MNCs for example of conflicting practices and processes. Ambivalence still tends to be under-analyzed even in the more context and power sensitive research to date (see for example Boussebba and Morgan, 2014 for a discussion). Studies of the internal organization of the MNC today are still comparatively rare and tend to be guided by conceptualizations of the MNC that downplay informal processes that can significantly contribute to outcomes (Birkenshaw et al, 2011).

The potential for ethnography to play a larger role in management studies and in the field of IB/IM research has been noted in recent discussions. (for example, by Watson, 2011; Moore, 2011a; Moore, 2011b; Westney and Van Mannen, 2011). Ethnographic studies are well suited to explore ambivalent situations (Moore, 2011a) such as the adjustment of managers and workers to new ways of working and cultures within an MNC, and to examine contradictions within social practices. Ethnographic approaches may enable access to the informal as well as the formal practices (Watson 2011). They can for example capture the process of how the transfer of management practices within the MNC takes place and the ways in which new work systems impact on social relations in different contexts and conditions. Ethnographic studies can examine the unintended as well as intended outcomes surrounding attempts to transfer management systems across contexts and explore the ways in which different social groups may adjust or resist new systems. Research themes which are arguably less easily researched, understood and explained using other approaches. Ethnographic studies in the hermeneutic tradition seek to provide thick descriptions of the context in which management practices are introduced and examine the ways in which different groups may make sense of and respond to the practices. In this way ethnographic approaches provide an opportunity to study and portray the diversity of

cultures in an organizational context and to provide a rich appreciation of the organization as a social and political arena. Rather than seeking to identify discrete taxonomies of control systems, such approaches seek to for example examine the social relations and social processes surrounding the control systems. This can include exploration of worker's commitment and / or resistance to new systems through the researcher providing a thick description of the cultures studied.

Having discussed some of the features of the ethnographic approach and the hermeneutic tradition that has tended to inform much ethnographic research the article will turn to the potential of drawing on a critical realist underpinning to inform ethnographic research in IB/ IM research.

The potential of a critical realist ethnographic approach to re-introduce structure into the ethnographic imagination

Whilst ethnographic studies of MNC's in the hermeneutic tradition work with an ontology encouraging focus on agents' conceptualizations (Yagi and Kleinberg 2011), there is a relatively smaller number of studies in the field of organization studies and IB/IM premised on a critical realist ontology (for example Porter, 1993; Delbridge, 1998; Reed, 2001; Sharpe, 2006). The potential of a critical realist philosophical foundation to address methodological challenges in the IB/IM field has not been widely considered yet within conversations of philosophical assumptions informing methodological choices.

A significant differentiating feature of an ethnography with critical realist underpinnings is the premise that subjects' own accounts are the starting point but not the end of the research process. Realist ontologies therefore seek to go beyond agents' conceptualizations of events and seek to look at social structures thereby offering the potential to re-introduce structure into the ethnographic imagination. Within a realist ontology social phenomenon are seen to be a result of a plurality of structures. Human action is conceived as both enabled and constrained by social structures. This action in turn reproduces or transforms those structures (Bhaskar, 1979). Ethnographic investigations within this context can be used to explore the relationship between structure and agency. A realist approach to ethnography aims not only to describe events but also to explain them, by identifying the influence of structural factors on human agency. Explanation also focuses on how agency maintains or transforms these structures. Ethnography when located within a critical realist perspective has the potential to examine how stability and change take place within specific structural, cultural and power relations. Therefore, it potentially provides a transformational ontology and model of social action (Brown, Fleetwood and Roberts, 2002). This will now be explored with the example of research on the transfer of management practices within the MNC.

As discussed in the literature the cross-national transfer of management practices is complex. There is an array of possible outcomes pointing to a critical role for in-depth case studies to enable deeper exploration of processes of transfer and how practices are implemented in the routine life of the subsidiary (Ferner et al. 2012). It is with such a conceptual and analytical challenge that critical realist ethnographies are well suited to explore the ongoing social processes at the individual and work group level and provide a more nuanced analysis of 'actors'

at the micro level. Critical realist ethnographies offer a lens to examine the ways in which power is exercised through for example the management of meaning by different groups and the intended and unintended outcomes of practices (Boddewyn et al., 2004).

Further, the focus on structures as well as agents' conceptualizations encourages attention to the social, economic and political structures within which the transfer of management practices is being attempted. (Rees and Gatenby, 2014). Critical realism is helpful as a sensitizing tool and means of conceptualizing the phenomenon studied encouraging attention to the day to day micro level social relations and processes that are both impacted by changes in social structures and that may in turn change social structures.

In exploring ambivalence surrounding power relations and political processes within multinationals critical realist approaches access the micro-foundations of organizational power relations and the role of agency and micro-politics within MNC's. They can explore the unintended as well as intended outcomes of new management practices whilst working with a sensitivity to the ways in which macro and meso level structures may influence but not determine agency. (Ybema and Byun, 2009; Geppert and Dörrenbächer, 2014; Mir and Sharpe, 2009)

A large amount of research on multinational organizations has used survey style research and structured questionnaires to address research questions of what management practices and work systems have been transferred from headquarters to subsidiaries within the multinational. Framed within positivist epistemologies and nomothetic research designs such surveys often are pitched at top management and require an acknowledgement of whether a practice has been transferred. For example, whether quality circles or teamworking has been introduced. Such analytical survey design is less suited to an understanding of how management practices are introduced, received, responded to, adapted, resisted or transformed in different contexts. Ethnographic approaches can provide an in-depth insight into how management practices translate across different social contexts and the ways in which different social groups and individuals may make sense of and respond to the practices. It can be argued that the how questions are of much significance for an understanding of why particular management strategies within a subsidiary may have unintended outcomes and why performance may be less than anticipated.

Adopting a critical stance to an ethnographic study the researcher will problematize current, dominant and common-sense understandings about for example the implementation of new management practices and would rather see the social world as multilayered, complex and marked with ambiguous contours (Houston, 2010).

How critical realist ethnography responds to methodological challenges in researching the **MNC**

The following section discusses how critical realist ethnographic research can respond to four central methodological challenges faced in researching the MNC. These include firstly researching structures and processes (Edwards et al., 2013), secondly developing explanations and understanding the role of agency (Reed, 2001), thirdly dealing with the issue of representation and the role of the researcher (Wray-Bliss, 2002) and fourthly responding to the

challenges of linking the local to the global (Burawoy, 2001). For the critical realist ethnographer of the MNC these challenges are responded to through the 'depthful' ontology of an ethnography informed by critical realism. This provides a conceptualization of the multinational embedded in its wider context. It provides a basis for firstly examining the relations between local, national and supranational structures and the micro-level processes within the subsidiaries, secondly, for seeking explanatory analysis of how social structures can condition action and thirdly for research on how actors' experience and challenge structures in specific conditions and contexts and with what outcomes.

Researching structures and processes

Research, on the transfer of management practices within multinationals, (Edwards et al. 2013; Fichter et al, 2011; Sharpe, 2006), notes how organizations adopting similar structures may have different outcomes. The implication of this for the researcher is that the researcher is encouraged to study and understand process as well as context. Comparative critical realist ethnographic case studies are well suited to examine how managerial control systems are introduced and adapted and with what outcomes in different contexts. This article will draw on my own research on this topic as an example to discuss methodological issues raised. I aimed to look at the implementation of management practices as ongoing social processes, moving from analysis solely of structures to an analysis of processes within and across structures. This is important in addressing the theoretical question of "under what conditions" and "how" managerial practices may be transferred, sustained, resisted and adapted within the context of the MNC.

Researching from a critical standpoint the focus on process sensitised me to view the organization as a political arena in which social interaction, power and political games become more central in the analysis and understanding of organizational life (Karreman and Alvesson, 2009; Fichter et al., 2011; Geppert and Dörrenbächer, 2014; Dörrenbächer and Gammelgaard, 2011). Social processes may be shaped by the wider institutional context (Morgan and Kristensen, 2006; Schneider and Soskice, 2009) but not determined by them, as argued also by researchers working within an actor centered institutional perspective (example Scharpf 1997) drawing on a relational perspective seeing actors and institutions as mutually constitutive. my own research within MNC's, critical realist ethnography was seen to be well suited to empirically explore the nature of internal micro-political processes and active agency. These ongoing micro-level social processes within specific micro level contexts were also interrelated to meso level (i.e. subsidiary, headquarters) and macro level (societal and transnational institutional) influences that were explored in the research. As noted by Ferner et al. (2012) a multinational's micro-institutions are full of ambiguities, complexities and inconsistencies. These can be unpacked and explored with ethnographic approaches of how subsidiary actors interpret, challenge and counter- interpret management practices that are attempting to be transferred. This is captured in the following extract from field notes I took during the study of the transfer of management practices within a Japanese multinational to the UK subsidiary operations. I became a participant observer in the UK subsidiary operations for around fifteen months - working as a shop floor worker across different departments, work groups and factory sites enabling a comparative study of how workers responded in different contexts and in different social and technological conditions. The extract provides an insight into workers'

experiences of transitioning boundaries between old and new ways of working in the factory. Such rich descriptions by the workers are a starting point for the critical realist but not the endpoint of the ethnographic study. These are examined in relation to changes in underlying structures, contexts and contingencies.

(extract from field notes: 'Aluminium' department)

Daisy: I've been all over I have. I was in the new section before (new extension built following the Japanese purchase where the shop floor social systems/ work practices from the parent company were being attempted to be transferred alongside the transfer of technology) It's better in there than in here. A better atmosphere. They are really strict in there. Always pushing for more output. I mean it's not that the people in there are not friendly, it's just that there is pressure all the time to work that you have no time to talk. People are too concerned about getting the work out. In the breaks you are not allowed to have a few minutes over- it's not like in here. You sit with your supervisor and so you can't. I mean it shouldn't be like that these days. I mean today. It is cleaner in there and there isn't the smell, but I prefer being in here. They want quality and output in there. They pushed me to get the output and then were criticizing me because I had made some faults. You can't have it all ways.

Paul- In there you are just an extension of a machine.

Zed-. Ten years ago people wouldn't stand for what we put up with in here. But times have changed. It's the economy – its bad now. People can't find work elsewhere so they put up with all this here. The managers giving all their shit. You know there is a pyramid. This is the class system. There are a few at the top that give all the orders and a lot at the bottom that have to follow. You know this Japanese system it says more decisions by the workers, the managers to be more democratic. But this is not working here. We have a bottle neck with the teamleader. The English managers go around telling everybody what to do and it is left to the teamleaders to run things.

Author: Has it changed much in Aluminium since you started working here? (Aluminium is a department in the older established part of the factory that existed prior to the Japanese purchase).

Bob: Oh Yes. It used to be a real dirty place to work. There was rubbish everywhere. People would just throw things in the direction of the bin and leave them on the floor. You would put your hand down a tube and find chewing gum, tea bags, food, anything. It was terrible. You would be working in oil everywhere on the floor. On the night shift there was a man that just made scrap all night. We would have to take the things to pieces on our shift. There used to be units stacked all down this side of the factory-going nowhere. There were millions of pounds of units just standing on tables around.

Author: *So what happened.*

Bob: Well it was the Japanese. They changed everything. They gave the managers in here about three months to tidy the place up. After that time the English managers thought it was really tidy but the Japanese thought it was still a mess. The Japanese used to come in at weekends and put white lines down on the floor.

Author: *So is it better now?*

Author: So is a bear.

Bob: Its much stricter now.

The intensity of the work and the transition workers were experiencing was frequently talked

The workers on the shop floor.

(extract from field notes Aluminium department)...

Author. Who is that?

Brenda: It's the time and motion man

Author, What does he do then?

Brenda: He stands with a stop watch timing you

Author: Do you go slow then?

Brenda: You try to, but they know if you are going slow, they can tell. They stand over you for

an hour.

Author: And then do they change the times? Does it get faster? Brenda: It can go faster or slower, but it always goes faster.

As discussed earlier, several methodological issues are faced in research on the MNC, including the relation between structures and processes- the connection between the micro level and the macro level. Neo-institutional research approaches have been giving increased attention to a more situated, actor-centred stance (Jackson, 2010) that is prompting empirical inquiry into how embedded actors respond to institutional complexity and the interplay between actors and institutions rather than seeing institutions merely as constraints that largely determine actor behaviour. Critical realism is seen to be helpful as a sensitizing tool and means of conceptualizing the phenomenon studied through a depthful ontology. In this way "process" is seen as being influenced by structures but not determined by them. Within a critical realist layered ontology (Delbridge and Edwards, 2013) social structures serve as "generative mechanisms" that give rise to action, manifest not in the form of deterministic outcomes, but rather as empirical tendencies. Observed empirical associations and the actions of agents can only be understood by reference to these underlying generative mechanisms which can account for and contextualize the discourses of specific agents being investigated (Rees and Gatenby, 2014). Further, actors do not experience structures uniformly, rather they have different perceptions and depth of knowledge of their contexts. From a critical realist perspective social structures reveal 'a prior distribution of interests vested in social positions which antidate their holders' (Archer, 1995, p.130).

This can be considered through reflection on the above example of the study of the transfer of management practices within a multinational. In critical realist ethnography the rich descriptions by the workers given above are supplemented by examination of the underlying structures and mechanisms. In the above example the research sought to examine the importance of context and contingencies in influencing the implementation and evolution of shop floor managerial control systems across two sites of a Japanese subsidiary in the UK. The research began with an awareness of the "ideal typical" Japanese and English work organization and control systems and how these were embedded in broader social and institutional arrangements. The research was interested in examining the following areas. Firstly, the various means of managerial control on the shop floor within the UK subsidiaries of the Japanese multinational, including formal and informal, social and technical. Secondly in addressing process as well as structure and connections between the two the research also wanted to learn how the control systems were sustained, adapted and resisted in the local context over time. Thirdly the implications of these processes for the outcomes, including the experience of work and organizational performance.

Such research questions therefore required micro level and macro level analysis and a link between the two in studying cross border interactions within the firm (Edwards *et al.*, 2013). The research questions were also put forward from the standpoint that the study of the experience of changes in organizations and institutional contexts at the level of the "individual" are important both for theorizing about change and for developing policy implications on change. The specific research questions were addressed by adopting critical realist ethnography, which enabled the micro level study of processes to be linked to underlying structures, generative mechanisms and contingencies influencing outcomes.

Porter (1993, p.596) outlines how: 'exclusive concentration on and uncritical acceptance of subjects' own accounts is the Achilles heel of phenomenological ethnography. Understanding actors' viewpoints may be a necessary condition for social knowledge, but it is not a sufficient one. For critical realists the ontological assumption that individual interactions and interpretations are ultimately all there are leads to analytical superficiality. A realist ontology considers social reality as the result of a plurality of structures with human action being both enabled and constrained by social structures. This action in turn reproduces or transforms those structures (Bhaskar, 1979; Morais, 2011). A realist framework thereby provides a sensitizing tool and means of conceptualizing how the actors' experience within the transnational social space can best be examined by a macro regress to the social structures shaping and constraining individual action. Using ethnographic approaches, analysis can be developed away from oversocialized conceptions of actors to empirical studies of the interests and identities of individuals and the analysis of the ways in which collective action within and between groups and subgroups is constructed, sustained and resisted (Geppert and Dörrenbächer, 2014; Morgan and Kristensen, 2006). This is particularly interesting in the case of research on the cross -border transfer of management practices given the comparative institutional contexts across which the MNC operates which provide a context for action. During attempts to transfer new management practices the contextually embedded practices within subsidiaries may be challenged. The stratified ontology of critical realism guides the researcher to study the duality of structure and agency looking for the underlying structures and mechanisms that may be operating in specific conditions and how actors engage with these.

In my example given above the Japanese company in response to the challenges it faced in transferring management practices into a brown field site and managing changes in work practices on the shop floor, followed an alternative approach of opening on a Greenfield site where it arguably could mitigate the influence of prior ways of doing things and recruit workers who had no prior experience of working within the traditional UK shop floor context. However, whilst this enabled some practices to be transferred with less resistance- such as the introduction of associate meetings to replace the traditional practice of trade union representation within the subsidiary the research adopting a critical realist ethnographic approach was able to highlight how workers responded to new structures and with what outcomes. Whilst the ethnographic narratives of workers such as Daisy help capture how workers experienced the transfer of management practices the placement of these within the critical realist underlying analysis of structures enables an explanation of how workers resisted control systems in different macroinstitutional and meso socio-technical conditions on the shop floor. This is illustrated firstly in table 1 which shows a comparative analysis of the outcomes from technical controls across

different sections of the greenfield and brownfield site researched. For example, Daisy and her colleagues in Aluminium actively engaged in peer pressure to not rate bust on the shop floor. They stockpiled and fiddled output reports as a routine practice. Such individual acts of resistance were possible within the specific socio-technical system that Daisy was working in. In contrast at the Greenfield site studied on the Heater line which was an assembly line context the specific combination of social and technical controls within that context led to different forms of resistance taking place such as for example the strategic use of "andons" by the workers to protect friends and expose others.

Explanation and the role of agency in maintaining and transforming structures.

A realist ethnography aims therefore not only to describe events but also to explain them, by identifying the influence of structural factors on human agency. Explanation also focuses on how agency maintains or transforms these structures. Drawing on critical realism the researcher can examine changes in institutional structures and the relationship between structures and agency in processes of change. Ethnographic investigation can explore the changing nature of generative mechanisms that impact on the transnational social space of the multinational. Critical realist ethnographies are thereby sensitive to the ways in which agency can potentially seek emancipatory change in structures. Social structures serve as generative mechanisms that give rise to action, manifest not in the form of deterministic outcomes but as Delbridge and Edwards (2013) note, empirical tendencies. Human actors do not create structures from nothing, they reproduce or transform them. The stratified ontology of critical realism encourages researchers to examine *how* social structure conditions action and how actors may in turn transpose and challenge institutional logics, scripts, rules and norms in specific contexts. Therefore, critical realism provides a stratified and potentially transformational ontology (Brown, Fleetwood and Roberts, 2002).

In the research work outlined above the critical realist underpinnings allowed for the recognition of the role of structure and human agency in the analysis of shop floor practices under changing forms of managerial control. The 'structures' referred to in the realist analysis can be considered as sets of internally related objects or practices. The manager, trainer, associate "internal relations" in the Japanese work organization form a social structure for example. Even though social structures exist only where people reproduce them, Sayer (1992, 2000) outlines how in the case of internally related objects (for example team leader and team member), emergent powers are created because this type of combination of individuals modifies their powers in fundamental ways. Thus, although social structures exist only where people reproduce them, they have powers irreducible to those of individuals. In this way, explanation of the actions of individuals in my comparative study of managerial control systems required supplementing of agents' conceptualizations with a "macro-regress" to the social structures in which they are located. In examining the transfer of management practices within the multinational a contrastive explanatory approach can build on a critical realist ontology to examine how causal mechanisms, structures and contingencies operate in different cases such as the subsidiaries of the MNC following attempts to transfer management practices.

In this way critical realist ethnography provides a means of examining and theorizing about the connections between micro-practices and macro-structures. Realists note that research in the social world must acknowledge the nature of social systems as open systems, and that theory

development cannot be approached in the same way as in closed systems. (Sayer, 1992; Layder, 1993). For realists, the impossibility of constructing the conditions of closure in the social sciences means that the social sciences are primarily explanatory and not predictive. Explanation and prediction are symmetrical only under conditions of closure. For the critical realist ethnographer, the intellectual journey in the field moves on two tracks (Tsoukas, 1989). On the first hand it is "up in the clouds", dealing with abstract and theoretical conceptualization of the issue at hand. By contrast, the second track is "down to earth" looking for the specific differences within and across cases, investigating the existing contingencies and their interaction with the postulated mechanisms within a depthful ontology. In the example of my own research described earlier, I was examining how the managerial control systems were introduced, experienced and with what consequences across different work environments including different institutional contexts and technological/ social contexts. Empirically, ideographic studies help elucidate the specific, contingent manner, in which a certain mix of causal powers has been formed and activated. In my own research the critical realist ethnographic approach enabled a study of how resistance to new control systems played out in different contexts and conditions as demonstrated in table 2.

Representation of and relations with those we research.

As ethnographers seek to delve into and share with the reader of the ethnographic text the nitty gritty of social life, there is considerable debate over the ways in which representation is made in the text (for example Abu-Lughod, 2000). The "nitty gritty" of everyday life cannot be presented as raw unmediated data argues Willis and Trondman (2000), this is the empiricist fallacy- that data in some way speaks for itself. The principle of reflexivity recognizes that texts, do not, simply and transparently report an independent order of reality. Rather the texts themselves are implicated in the work of reality construction. In this way the ethnographic text requires a reflexive awareness of its own writing, the possibilities and limits of its own language and a principled exploration of its' modes of representation.

Burawoy et al. (1991) note that the purpose of fieldwork is not to strip ourselves of our biases, for that is an illusory goal, nor to celebrate these biases as the authorial voice of the ethnographer, but, rather to discover and perhaps change our biases through interaction with others. In this way an "I-You" relation between observers and participants replaces a "we" relation of false togetherness and an "I- they" relation in which the "I" often becomes invisible. A similar argument is made by Wray -Bliss (2002) in a discussion of reflexivity of the researcher in interpretive research and by Michailova et al. (2014) in their discussion of the process of exit from fieldwork and the ensuing writing process. Wray Bliss (2002) highlights the power infused relations of the researcher with those researched and points attention to the need for a critical interpretive stance to give "voice" to those being researched, enabling alternative voices to be heard in the text rather than assuming an interpretive omnipotence. From a critical standpoint analytical concepts from postcolonial analysis can sensitize the researcher and writer to the issues of power relations between researcher and researched and can be drawn upon in a critical realist analysis. In examining interpretive practices, Wray Bliss (2002, p.3) sensitizes the researcher to the dangers of "appropriation" in which citing Opie (1992, p.56) "the experiences of the "colonized" are interpreted by a (more) dominant group to sustain a particular representation or view of the 'Other' as part of an ideological stance". For example, in representing "the Other", one strategy to avoid such concerns is to provide the opportunity for

those being researched to write their own texts or contribute to shaping the texts produced by the ethnographer, reading through drafts and giving voice to their own interpretations of events. Such a relational approach can be seen to "break the silence about exiting fieldwork" (Michailova et al., 2014) with reflexivity around the process of exit, separation and distancing with those being researched in the writing of texts.

Analytical concepts from postcolonial theory can also enrich the analysis of ethnographic studies of the transfer of management practices and control systems within organizations by sensitizing the analysis of control "systems" to the dynamics and processes of domination and resistance within and across the fields of the multinational, and the "hegemony" of one group over another within the transnational space of the multinational. For example, drawing on postcolonial analytical concepts in my own research encouraged attention to the discursive processes by which headquarter-subsidiary relations were played out through the expatriate managers and subsidiary employees. It encouraged attention to the ways in which the subsidiary was "readied" for the transfer of management practices and the ways in which various constituents of the subsidiary hybridized, transformed and indigenized demands from the headquarters to create a space for local agency. It also encouraged attention to the ways in which processes of ambivalence to headquarter control played out in day-to-day resistance, and to the contested terrain in which the internationalizing organization operates as argued for example by Prasad (2012), Westwood and Jack (2007), and Boussebaa and Morgan (2014).

Within the transnational social space of the multinational, headquarter processes of control over the subsidiary may be conceptually compared with the deep ambivalence of colonial discourse. As Bhabha (1994) notes and as further examined in the work of Becker-Ritterspach and Raaijman (2013), what characterizes colonial discourse is not monolithic homogeneity, but heterogeneity, fragmentation, contradictions, inconsistencies and incongruities. Consequently, colonial discourse fails to establish hegemonic control and opens spaces for resistance in the oppositional space on the part of the colonized. In my own research discussed above a postcolonial reading sensitized analysis to the discursive processes by which the headquarters sought to persuade local managers and workers to adopt new control systems and work practices. The ethnographic study within work teams highlighted the ways in which the team leader was placed between the shop floor and the expatriate managers in the "demand for narrative" by which the managers sought to ascertain the extent to which new values had been adopted. From the shop floor it was clear that whilst the team leader may engage in acts of sly civility and evasions (Bhabha, 1994) to the demand for narrative, the team workers acts of resistance took on a more direct and active form of confrontation. The team meetings provided an interesting event in which to examine "hybridity", the process of cultural "translation" in which messages from the expatriates are translated by local managers and fed down by the team leader to the shop floor. The role of the expatriate manager in "readying" the subsidiary for the transfer of management practices could be seen. Processes of "ambivalence" to headquarters hegemonic control, played out in the day-to-day social relations within the transnational social space. In this way ethnographic approaches are well suited to examine "hybridity". A postcolonial lens in the critical ethnography can encourage attention to the ways in which race, gender, class and ethnicities, shape both identities of self and the experience of work within the MNC.

Linking the local to the global within a critical realist framework

Burawoy (2000) reflects on the challenge of how ethnography can be "global" and how it can be anything more than micro and a-historical. How can the study of everyday life grasp lofty processes that transcend national boundaries? As Burawoy argues global ethnographers cannot be outside the global processes they study. Global ethnographers must rethink the meaning of fieldwork, from being bound to a single place and time. As noted by Burawoy (2000, p. 4) "even when our participants (ethnographers) do not themselves stretch across the globe, and it was only the participants imaginations that connected them to the global, our ethnography was no less multi-sited... we sought to understand the incessant movement of our subjects". As noted by Yagi and Kleinberg (2011) the complexity of global organizations highlights the ability of members to span diverse boundaries. Ethnographic approaches are well equipped to explore the nature of these boundaries and the ways these are constructed, contested and responded to. A critical ethnography can be sensitized to the ways in which boundary construction and boundary spanning are themselves political processes.

Global forces of change within and across institutional contexts become part of the research study in examining the link between micro-level experiences and practices and macro level contexts. In a study of Japanese and Korean expatriate managers as members of transnational communities (Author xxx) the expatriate managers provided a window into the complex set of social relationships that existed between head office and subsidiary and the characteristics of this transnational social space where the interplay of rival groups within the firm took place. The groups in turn drew on resources embedded in local, national and supranational institutional contexts such as capital, skills and knowledge, networks, access to scarce resources and political influence (Morgan 2001). In depth interviews with expatriates provided insights into the meaning of the expatriate assignment for them and the ways in which they perceived themselves as part of social structures that cut across the boundaries of the firm and nation.

For Burawoy (2001, p. 148) global ethnography speaks first and foremost to those left behind on the ground. There is a commitment to showing that time –space compression or time-space distanciation are not universal as the cosmopolites would claim. It shows globalization to be a very uneven process, and most important an artifact manufactured and received in the local. Globalization is produced and consumed not in thin air... but in real organizations, institutions and communities. From this point of view the global becomes ethnographic (Burawoy, 2001, p. 149). Firstly, through its experience, reception or consumption. Here one studies the *experience* of "globalization", to insist that the effects of "globalization" are not homogeneous and ubiquitous but specific and concrete. Secondly from the standpoint of its production, "globalization" can be researched through the way it is constituted in the local, in specific institutions, agencies and organizations such as MNCs and international regulatory agencies.

Global ethnography seeks to understand how the experience of "globalization" is produced in specific localities and how that productive process is a contested and thus a political accomplishment. Gille and O'Riain (2002) note that place still provides a foundation for global ethnographers, but as a location from within which ethnographers can explore the socio-political projects that are remaking social relations and places. Methodologically there is a reconceptualization of place considering the multiple connections cutting across places for example of immigrants, migrants, expatriate managers and transnational entrepreneurs within the

MNC. Places matter in global ethnography, not as self- contained sets of social relations, rather to also understand the social relations that extend *beyond it*.

Conclusions and implications for future research

The purpose of this article has been to discuss the contributions that critical realist ethnographies can make to an understanding of the MNC. The article began by reflecting on the ways in which the MNC has been conceptualized in recent literatures as a complex cultural organization at the cross roads of ideas, knowledge, interests and values. It then discussed the ways in which ethnographic approaches are well suited to respond to the methodological challenges raised in researching such complex organizations. Taking the example of the transfer of management practices within the MNC the article has discussed the potential of a critical realist ethnographic approach to addressing concerns of the critical researcher and to address questions that have been largely unexamined to date.

In summary the implications of adopting a critical realist ethnographic approach discussed in this article point to the possibility of studying both structures and processes within the MNC. From a critical standpoint the sensitivity to process enables the researcher to study the organization as a political arena in which social interaction, power and political games become more central in the analysis and understanding of organizational life. The article has examined how critical realist ethnographic approaches have the potential to provide a processual understanding that brings into focus such issues within MNCs as complex socio-political sites (Geppert and Dörrenbächer, 2014), increasing understanding of conflict, tension, and the experience of work within firms in the "new global context". Drawing on a critical realist ontology helps the researcher explore beyond and below the surface appearance of organizational strategies and practices. It encourages examination of the interaction of agency and structure, in a specific context with a critical realist ethnography looking not only to describe events, but also to explain them. (Rees and Gatenby, 2014). The depthful ontology provides that we seek to explain observable events through consideration of the conditions that enabled these events. Comparative critical realist ethnographies within the MNC can thereby look at the ways in which combinations of structural, historical and operational contingencies may interact, such as the ways in which managerial control systems may be introduced and responded to in different contexts of a subsidiary and with what outcomes.

A further implication is that the researcher has the possibility of gaining a privileged insight into the lived experience of globalization – whether it be for the migrant factory workers around the subsidiaries of the MNC, or the salaried expatriates from the headquarters. As Burawoy (2000) notes, the relevance of such research in the study of the MNC is significant, in terms of the importance of an understanding of "global" processes, the link between the local and the global, and the processes within the transnational social space of the MNC in which ideas, people, resources and practices cross national boundaries and institutional contexts with corresponding conflicts and struggles.

From a critical standpoint fruitful themes for further research relate to the experience of change for example in business systems, internationalization of organizations and "globalization". For the critical realist ethnographer this becomes an empirical question the implications being that

the researcher is required to be sensitive to the ways in which gender, race, ethnicity, and status for example as "colonizer" or "colonized" (Boussebaa and Morgan, 2014) shape the understanding and experience of social relations within the transnational social space of the MNC. The researcher is sensitized to look at the relation between such micro level experiences and outcomes of actors and the macro level structures and processes of continuity and change.

In conclusion this article argues for the potential contributions that the sociological imagination of the critical realist ethnographer can make in addressing significant questions facing the critical researcher of the MNC.

Note

- 1. Andons were signal lights sometimes used with accompanying sound that could be turned on to draw attention to a workstation and sometimes to stop production. They were part of a system to manage quality/ process issues quickly by drawing attention to problems in production that could attract maintenance or teamleaders. In practice they were used in a variety of ways on the shop floor by workers.
- 2. '5s' was a term used on the shop floor. It was seen by managers as part of the system of continual improvement. It included Seira (sort), Seiton (set), Seiso (sweep), Seiketsu (standardization) and Shitsuke (sustain).

References

Abu-Lughod, L. (2000), "Locating ethnography", Ethnography, Vol. 1, pp. 261-267.

Archer, M.S. (1995), *Realist Social Theory: The Morphogenetic Approach*, Cambridge University Press, Cambridge.

Becker-Ritterspach, F. and Raaijman, T. (2013), "Global transfer and Indian management: a historical hybridity perspective", *Management International Review*, Vol. 53, pp. 141-166.

Bhaba, H.K. (1994), *The Location of Culture*, Routledge, London.

Bhaskar, R. (1979), *The Possibility of Naturalism: a philosophical critique of the contemporary human sciences*, Harvester Press, Sussex.

Birkinshaw, J., Brannen M.Y. and Tung R.L. (2011), "From a distance and generalizable to up close and grounded: reclaiming a place for qualitative methods in international business research", *Journal of International Business Studies*, Vol. 42, pp. 573-581.

Blazejewski, S. (2012), "Betwixt or beyond the lines of conflict? Biculturalism as situated identity in multinational corporations", *critical perspectives on international business*. Vol. 8 No.2, pp. 111-135.

Boddewyn, J.J., Toyne, B and Martinez, Z.L. (2004), "The meaning of international management", *Management International Review*, Vol. 44 No. 2, pp. 195- 212.

Boussebaa, M. and Morgan, G. (2014) "Pushing the frontiers of critical international business studies: the multinational as a neo-imperial space", critical perspectives on international business. Vol.10 No.1/2, pp. 96-106.

Brannen, M.Y., and Doz, Y. (2010), "From a distance and detached to up close and personal: bridging strategic and cross-cultural perspectives in international management research and practice", *Scandinavian Journal of Management*, Vol. 26 No.3, pp. 236-247.

Brown, A., Fleetwood, S. and Roberts, M. (2002), *Critical Realism and Marxism*, Routledge, London.

Burawoy, M. (1979), Manufacturing Consent: Changes in the Labor Process under Monopoly Capitalism, University of Chicago Press, London.

Burawoy, M., Burton, A. and Ferguson, A. A. (1991), *Ethnography Unbound: Power and Resistance in the Modern Metropolis*, University of California Press, CA.

Burawoy, M. (2000), Introduction: reaching for the global. In Burawoy, M., Blum, J.A., George, S., Gille, Z., Gowan, T., Haney, L., Klawiter, M., Lopez, S. H., O'Riain, S. and Thayer, M., *Global Ethnography: Forces, Connections and Imaginations in a Postmodern World*, University of California Press, London, pp. 1-40.

Burawoy, M. (2001), "Manufacturing the global", Ethnography, Vol. 2 No. 2, pp. 147-159.

Delbridge, R. (1998), *Life on the Line in Contemporary Manufacturing*, Oxford University Press, Oxford.

Delbridge, R. and Edwards, T. (2013), "Inhabiting institutions: Critical realist refinements to understanding institutional complexity and change". *Organization Studies*, Vol. 34 No. 7, pp. 927-947.

Dörrenbächer, C. and Gammelgaard, J. (2011), "Subsidiary power in the multinational corporation: on the subtle role of micro-political bargaining power", critical perspectives on international business, Vol. 7, pp.30-47.

Doz, Y. (2011), "Qualitative research for international business", *Journal of international business studies*, Vol. 42, pp. 582-590.

Edwards, P.K., Sanchez-Mangas- Rocio, Tregaskis, O., Levesque, C., McDonnell, A. and Quintanilla, J. (2013), "Human resource management in the multinational company: a test of system, societal and dominance effects", *Industrial and Labor Relations Review*, Vol. 66 No. 3, pp.588-617.

Ferner, A., Edwards, T. and Tempel A. (2012), "Power, institutions and the cross-national transfer of employment practices in multinationals". *Human Relations*, Vol. 65 No. 2, pp. 163-187.

Fichter, M, Helfen M and Sydow J. (2011), "Employment relations in global production networks, *Human Relations*, Vol. 64, pp.599-622.

Geppert, M. and Dörrenbächer, C. (2014), "Politics and power within multinational corporations: mainstream studies, emerging critical approaches and suggestions for future research", *International Journal of Management Review*, Vol. 16, pp. 226-244.

Gertz, C. (1973), The Interpretation of Cultures. Basic Books, New York.

Gille, Z. & O'Riain, S. (2002), "Global ethnography", *Annual Review of Sociology*, Vol. 28, pp. 271-295.

Hammersley, M. & Atkinson, P. (1997), *Ethnography: Principles in Practice*, Routledge, London.

Herodotus, *The History*. Trans. D. Greene. (1987), University of Chicago Press, Chicago.

Houston, S. (2010), Prising open the black box: critical realism, action research and social work, *Qualitative Social Work*, Vol. 9 No. 1, pp.73-91.

Jackson, G. (2010), "Actors and institutions". In Morgan, G., Cambell, J.L., Crouch, C., Pedersen, O.K. and Whitley, R. (Eds.) *The Oxford Handbook of Comparative Institutional Analysis*, Oxford University Press, Oxford, pp. 63-86.

Kamata, S. (1982), Japan in the Passing Lane, Pantheon, New York.

Karreman, D. and Alvesson, M. (2009), "Resisting resistance: counter-resistance, consent and compliance in a consultancy firm". *Human Relations*, Vol. 62 No. 8, pp. 1115-1144.

Kostova, T., Roth, K., and Dacin, M.T. (2008), "Institutional theory in the study of multinational corporations: a critique and new directions". *Academy of Management Review*, Vol. 33, pp. 994-1006.

Kostova, T., Marano, V. and Tallman, S. (2016), "Headquarters- subsidiary relationships in MNCs: fifty years of evolving research", *Journal of World Business*, Vol. 51, pp. 176-184.

Layder, D. (1993), New Strategies in Social Research, Polity Press, Cambridge.

Lupton, T. (1963), On the Shop Floor, Pergamon, Oxford.

Malinowski, B. (1922), Argonauts of the Western Pacific, Routledge, London.

Marschan-Piekkari, R.and Welch, C. (Eds.) (2004), *Handbook of Qualitative Research Methods for International Business*, Edward Elgar, Cheltenham.

Michailova, S., Piekkari, R., Plakoyiannaki, E., Ritvala, T., Mihailova, I., Salmi, A. (2014) "Breaking the silence about exiting fieldwork: a relational approach and its implications for theorizing", *Academy of Management Review*, Vol. 39 No. 2, pp. 138-161.

Moore, F. (2011a), "Ambivalence, anthropology and business: a review of ethnographic research in international organizations", *Social Anthropology*, Vol. 19 No. 4, pp. 506-519.

Moore, F. (2011b), "Holistic ethnography: studying the impact of multiple national identities on post-acquisition organizations". *Journal of International Business Studies*, Vol. 42, pp. 654-671.

Mir, R. and Sharpe, D. (2009), "The multinational corporation as a system of exploitation", In G. Morgan and S. Collinson (Eds.). *Images of the Multinational Corporation*, Blackwell, London.

Morais, R. (2011), "Critical realism and case studies in international business research". In Piekkari, R. and Welch, C. (Eds.) *Rethinking the Case Study in International Business Research*, Edward Elgar, Cheltenham, pp.64-83.

Morgan, G. (2001), "The multinational firm: organizing across institutional and national divides", In Morgan G, Kristensen, P.H.& Whitley, R. (Eds.) *The Multinational Firm: Organizing across Institutional and National Divides*, Oxford University Press, Oxford.

Morgan, G. & Kristensen, P. (2006), "The contested space of multinationals: varieties of institutionalism, varieties of capitalism", *Human Relations*, Vol. 59, pp. 1467-1490.

Opie, A. (1992) Qualitative research, appropriation of the 'other' and empowerment. *Feminist Review*, No.2, pp.52-69.

Piekkari, R. Welch, C. and Paavilainen, E. (2009), "The case study as disciplinary convention: evidence from international business journals", *Organizational Research Methods*, Vol. 12 No. 3, pp. 567-589.

Piekkari, R. and Welch, C. (Eds.) (2011), *Rethinking the Case Study in International Business Research*, Edward Elgar, Cheltenham.

Porter, S. (1993), "Critical realist ethnography: the case of racism and professionalism in a medical setting. *Sociology*, Vol. 27 No. 4, pp. 591-609.

Porter, S. (2002), "Critical realist ethnography", in T. May (Ed.), *Qualitative Research in Action*, Sage, London, pp. 53-72.

Powell, K. S and Rhee, M. (2016), "Experience in different institutional environments and foreign subsidiary ownership structure", *Journal of Management*, Vol. 42 No. 6, pp. 1434-1461.

Prasad, A. (2012), Against the Grain: Advances in Postcolonial Organization Studies, Copenhagen Business School Press, Copenhagen.

Reed, M. I. (2001), "Organization, trust and control: a realist analysis". *Organization Studies*, Vol. 22 No 2, pp. 201-228.

Rees, C. and Gatenby, M. (2014), "Critical realism and ethnography", In Edwards, P.K., O'Mahoney, J. and Vincent, S. (Eds.) Studying Organizations Using Critical Realism: A Practical Guide, Oxford University Press, Oxford.

Rosen, M. (1991), "Coming to terms with the field: understanding and doing organizational ethnography", Journal of Management Studies, Vol. 28 No. 1, pp. 1-24.

Roy, D. (1952). "Efficiency and the fix: Informal intergroup relations in a piecework machine shop". *American Journal of Sociology*, Vol. 57, pp. 255-266.

Roy, D. (1955), "Quota restriction and goldbricking in a machine shop", American Journal of Sociology, Vol. 60, pp. 427-442.

Sayer, A. (1992), *Method in Social Science*, Routledge, London.

Sayer, A. (2000), Realism and Social Science, Sage, London.

Scharpf, F. (1997), Games Real Actors Play: Actor Centered Institutionalism in Policy Research, Westview, Boulder Co.

Schneider, B and Soskice, D (2009), "Inequalities in developed countries in Latin America: coordinated, liberal and hierarchical systems". *Economy and Society* Vol. 38, pp. 17-52.

Sharpe, D.R. (2006), "Shop floor practices under changing forms of managerial control: a comparative ethnographic study of micro-politics, power and control in a Japanese multinational", Journal of International Management, Vol.12 No.3, pp.318-339.

Tsoukas, H. (1989), "The validity of ideographic research explanations", Academy of Management Review, Vol. 14 No. 4, pp. 551-561.

Van Maanan, J. (2011), "Ethnography as work", Journal of Management Studies, Vol. 48 No. 1, pp. 218-234.

Watson, T. J. (2011), "Ethnography, reality and truth: the vital need for studies of how things work in organizations and management", Journal of Management Studies, Vol. 48 No. 1, pp. 202-217.

Westwood, R. and Jack, G. (2007), "Manifesto for a post-colonial international business and management studies: a provocation". critical perspectives on international business, Vol 3 No..3, pp. 246-265.

Westney, D. E. and Van Maanen, J. (2011), "The casual ethnography of the executive suite". Journal of International Business Studies, Vol. 42, pp. 602-607.

Willis, P. and Trondman, M. (2000), "Manifesto for ethnography", *Ethnography*, Vol.1 No.1, pp. 5-16.

Winch, P. (1958), The Idea of a Social Science, Routledge, London.

Wray-Bliss, E. (2002), "Interpretation- appropriation", Organizational Research Methods, Vol. 5, pp. 81-104

Yagi, N. and Kleinberg, J. (2011), "Boundary work: An interpretive ethnographic perspective on negotiating and leveraging cross-cultural identity", Journal of International Business Studies Vol. 42, pp.629-653.

Ybema, S. and Byun H. (2009), "Cultivating differences in asymmetric power relations",

International Journal of Cross Cultural Management, Vol. 9 No. 3, pp 339-358.

Table 1. Comparative analysis of outcomes from technical control systems

Technical control	Heater	Condenser	Press Shop	Aluminium
	Greenfield site	Greenfield	Brownfield	Brownfield
				site
1. Andons [1]	yes	Red for	Not used	in place but
		breakdown		not used
		only		
for expression of	yes	yes	-	-
resistance				
protection of	yes	no	-	_
friends				
exposure of	yes	no	- 7	-
others				
2. Tact times	yes	yes	Yes	yes
peer pressure to	no	yes	Yes	yes
not 'rate bust'				
stockpiling to	not possible	yes	Yes	yes
build up spare				
time				
fiddling of output	not done by	yes	Yes	yes
reports	individual			
informal status	yes	yes	Yes	yes
for faster worker				
pressure by	yes	no	No	no

group to reach standards informal targets set informal targets set informal targets set informal targets set informal target) times for jobs informally changed/rejected 3. Monitoring of output quantity team leader for line per pressure to restrict output peer pressure to conform to informal ciddling of output records informal fiddling of output records informal fiddling of output records informal fiddling of output quantity feedback/monitoring of output quality feedback/monitoring of output quality output quality feedback/monitoring of output quality checks inform down worker of scrap of scrap informal fiddling or output quality checks informal fiddling or of scrap informal fiddling or of scrap					
informal targets set informal targets set informal targets set informal target) informally changed/rejected 3. Monitoring of output quantity peer pressure to restrict output peer pressure to conform to informal code of work informal fiddling of output records informal fiddling of output quantity informal fiddling of output quality feedback/monitoring of output quality 4. Monitoring of output quality feedback/monitoring of output quality checks worker by es e.g. rest times, clocking rest times, cleaning, unofficial breaks informal fiddling output quality feedback/monitoring of output quality consequences of quality checks worker sometimes yes, yes yes yes yes, e.g. yes, e.g. cleaning, practices, unofficial breaks cleaning, unofficial breaks cleaning, unofficial breaks delayed delayed delayed delayed delayed feedback feedback by feedback feedback by feedback for faults inspector or from down the line consequences of quality checks reporting each informal yes yes yes yes yes, e.g. yes, e.g. clocking rest times, clocking rest times, clocking rest times, cleaning, unofficial breaks delayed delayed delayed delayed delayed delayed feedback by feedback feedback by feedback feedback by feedback for faults inspector or from down the line consequences of consequences of reporting each restrict output yessure of scrap of scrap of scrap	group to reach				
times for jobs informally changed/rejected 3. Monitoring of output quantity team leader for line peer pressure to restrict output peer pressure to informal code of work informal fiddling of output records informal fiddling of output records informal fiddling of output quality peer pressure to informal fiddling of output quality feedback/monitoring intense immediate delayed delayed delayed output quality feedback/monitoring feedback feedback pressure in form down worker of output quality checks reporting each pressure of scrap of scrap of scrap of scrap of scrap of scrap	standards				
informally changed/rejected 3. Monitoring of output quantity team leader for line hourly by worker each job worker peer pressure to restrict output peer pressure to conform to informal code of work informal fiddling of output records 4. Monitoring of output quality feedback/monitoring of output quality checks worker peer pressure to consequences of quality checks sinformal fiddling or output quality checks informal fiddling or output quality checks orecorded clocking recorded daily by worker yes e.g. yes, e.g. yes, e.g. clocking rest times clocking rest times immediate delayed delayed delayed delayed feedback by feedback for faults inspector or from down the line the line consequences of workers hiding or reporting each pressure of scrap of scrap of scrap		no	sometimes	formal	no
output quantity team leader for line hourly by worker system for each job worker daily by worker peer pressure to restrict output no yes yes yes yes peer pressure to conform to informal code of work yes e.g. rest times, cleaning yes, eg yes, eg yes, eg. yes, e.g. rest times unofficial work practices, unofficial preaks unofficial breaks breaks informal fiddling of output records no yes, by or to next period stockpiling 4. Monitoring of output quality intense immediate feedback feedback feedback feedback feedback py to yes, or or from down the line feedback/monitoring for from down worker down the line the line the line consequences of quality checks workers hiding or rest times, clocking work over to next period concealment concealment of scrap concealment of scrap	informally		yes	yes	yes
restrict output peer pressure to conform to cleaning rest times, clocking rest times immediate output quality 4. Monitoring of output quality peer pressure to conform to cleaning rest times, clocking rest times cleaning, practices, unofficial preaks preaks cleaning, unofficial preaks cleaning, unofficial preaks cleaning, unofficial preaks cleaning, unofficial preaks cleaning, unofficial preaks cleaning, unofficial preaks cleaning, unofficial preaks cleaning, unofficial preaks cleaning, unofficial preaks carrying clocking stockpiling work over to next period 4. Monitoring of output quality feedback/monitoring feedback feedback by feedback py co-worker for faults inspector or from down from down worker down the line consequences of quality checks reporting each pressure of scrap of scrap of scrap	_		hourly by	system for	daily by
conform to informal code of workcleaning cleaning, unofficial breaksrest times, cleaning, unofficial breaksclocking rest times, cleaning, unofficial breaksrest times, breaksbreaksinformal fiddling of output recordsnoyes, by carrying work over to next periodyes, by clocking practicesyes, by stockpiling4. Monitoring of output qualityintense immediate feedback/monitoring by co-workerdelayed feedback for faults from down the linedelayed feedback by inspector or from down worker down the linedelayed from down the lineconsequences of quality checksworkers hiding or reporting eachlittleconcealment of scrapconcealment of scrap		no	yes	yes	yes
of output records Carrying clocking practices to next period 4. Monitoring of output quality feedback/monitoring feedback feedback by feedback by feedback by co-worker for faults inspector or from down worker down the line the line consequences of quality checks reporting each carrying clocking practices stockpiling practices delayed delayed delayed feedback by feedback by feedback inspector or from down the line the line concealment of scrap	conform to informal code of		rest times, cleaning, unofficial	clocking practices, rest times, cleaning, unofficial	rest times unofficial
output qualityfeedback/monitoring by co-workerfeedback for faults from down the linefeedback by inspector or worker down the lineconsequences of quality checksworkers hiding or reporting eachlittleconcealment of scrapconcealment of scrap	_	no	carrying work over to next	clocking	
quality checks reporting each pressure of scrap of scrap	_	feedback/monitoring	feedback for faults from down	feedback by inspector or worker down	feedback from down
other's faults to reduce	-	_			

scrap

Table 2 A comparative analysis of the nature of resistance across teams

Form of	Heater Team—	Condenser	Press Shop	Aluminium Team—
resistance	Greenfield site	Greenfield Site	Brownfield Site	Brownfield site
1. Active	1. stopping line	1.being late for work	1. being late for	1. being late for work
Individual			work	
Resistance	2. walking away from	2. not doing 5s [2]	2. challenging	1. not doing 5S
	workstation		cleaning or	
			multitasking to	
			teamleader	
	3. not doing 5S	3. openly challenging	3. refusal to do	3. leaving
		output expectations	another job eg.	
			Serviceman to work	
			a press	
	4. leaving/looking for	4. underperforming as	4. verbal 'threat' that	4. direct questioning of
	jobs elsewhere	an expression of non	they would not work	authority of team leader
		commitment ie. not	any harder	
		making output tarket		
	5. direct questioning of	5. not doing quality	5. finishing early and	5. refusing to do
	the authority of the team	checks as instructed	standing talking at	something (finally going
	leader		back of presses	along with it)
		6. talking to others	6. sitting in the 'pig	6. active resistance to
		openly on the line and	pen' until told to	suggestions to do work
		not working	start work rather	differently or to
			than getting up	do extra work

			themselves	
		7. breaking safety rules	7. open criticism of	7. criticism of
		eg. Not wearing safety	continuous	management
		clothes/ shoes for a	improvement and	
		task or not following the	productivity plans	
		safety procedures for a		
		task		
				8. refusal to work on
				some area
			8. orientation of	9. fiddling the work record
			'them and us'	card
			9. Reference to	
			works committee to	
			help in work	
			conditions	
			10. fiddling the work	
			record card	
2. Passive	1. not offering	1. not showing interest	1. going to the toilet	1. joking about the work
individual	suggestions for	in QC circles,	for a break	and conditions
resistance	continuous improvement	suggestion schemes or		
		other company		
		initiatives		
	2. not doing overtime	2. not listening in hot	2. smoking on the	2. going for breaks in the
		corner meetings	shop floor	toilet
	3. not showing 'positive	3. not following	3. drinking (not	3. not declaring scrap,
	attitude'	instructions for	alcohol) while	hiding it
		personal safety on the	working	
		job		
	4. sarcasm/ joking at	4. complaining/	4. coming late for	4. smoking on factory
	work expectations	moaning	work	floor
	5. 'tuning out'		5. going off sick	5. not showing interest in
				attempts to improve
				practices
	6. complaining/moaning		6. not listening to	6. conditions informal criticism of the team
			team meetings/	criticism of the team

			using it for a coffee	leader
			break	
	7. not checking own		7. negative attitude/	
	work for defects		critical of company and management	
	8. working fast to make		and management	
	time for self, not			
	company			
	9. not applying 5S			
	10. not wearing full			
	uniform			
	11. not cleaning hot			
	corner after use			
	12. not listening in team			
	meetings			
3. Active	1. talking on the line	1. informal agreement/	1. complaints to the	1. peer pressure to finish
collective		peer pressure to stop	teamleader by press	half an hour before the
resistance		work half an hour early	operators resisting	end of the shift
			doing other tasks	
	2. not volunteering for	2. peer pressure not to	2. Works committee	2. peer pressure to get off
	overtime	get up immediately	speaking in team	the shop floor and queue
		when the buzzer goes	meetings (by the
			sometimes	clock-out machine before
			happened)	the end of the shift
	3. standing talking	3. informal agreement	3. queuing up by	3. not paying attention to
	instead of working in off	to have longer breaks	the clock-out	hot corner
	line tasks, e.g. 5S	and not record hourly	machine a few	notices/actively ignoring
		output only the total at	minutes before the	them
		weekends	end of the shift.	
4. Passive	1. not using peer	1. informal agreement/	1. standing talking at	1. using team meetings
collective	pressure	peer pressure not to	back of presses	for a coffee and cigarette
resistance		work over the output		
		target.		
	2. not reporting defects	2. not cleaning hot	2. 'work to rule'	2. break 'work to rule'
	of others on the line	corner- leaving it messy		