

On The line
Thresholds, Boundaries and Resistance in a Japanese Manufacturing Organization in the UK.

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Abstract

Purpose

The paper explores the experience of shop floor work in a Japanese manufacturing organization in the UK as new work practices and systems of managerial control are introduced. The paper examines experiences of transition and liminality as workers move between different shop floor work systems and analyses the nature of worker resistance that was present under different forms of technical control.

Design /Methodology/Approach

A comparative ethnographic study across two sites of a Japanese multinational in the UK is drawn upon. Four work groups are focused on to examine and compare managerial control systems and the nature of worker resistance.

Findings

The liminal experiences of the ethnographer, transitioning between different social groups on the shop floor is examined. The emotional as well as physical demands and coping strategies of doing the ethnography are discussed. Shop floor workers responses and coping strategies are examined with insights into the active and passive forms of resistance on the shop floor. The concept of boundaries is used to consider how individuals on the shop floor transition over time between the old and the new work systems and their experience of this.

Practical Implications

For the ethnographer conducting ethnographic research within and across work groups the emotional and practical management of transitions and boundaries can be considered drawing on the examples given. The research highlights the contribution that ethnographic research can make to an understanding of shop floor social relations and practices including shop floor resistance to new management systems.

Originality/Value

Multinational organisations are interesting sites in which to explore the transfer of management systems across contexts and the responses of workers. Comparative ethnographic approaches are well suited but relatively ignored as a means to explore this cross roads of contested frames of reference and ways of doing. Where ethnographic studies are used to research international organisations they tend to focus on one site or group. The paper provides reflection on the

process of managing a comparative ethnographic field study involving transitions across the boundaries of different work groups and sites. It provides a window into the day to day experiences of work on the line, coping strategies used and the nature of worker resistance which is analysed across work groups operating in different contexts.

key words: comparative ethnography, boundaries, liminality, resistance

Multinational organisations are interesting sites in which to explore the cross roads of different cultures and institutionalised practices. The cross roads can be conceptualised as liminal spaces (Thomassen 2009) of contested frames of reference, ways of thinking and doing where the multinational may attempt to transfer management practices across contexts and where host context workers are confronted with planned efforts to manage and change work cultures and practices. Whilst ethnographic studies are well suited to explore these processes (see for example Marcus 1998, Van Maanen 2011) as noted in recent assessments of this field of study in International Management (see for example Moore 2011a, Moore 2011b, Sharpe 2014) ethnographic approaches remain largely under-utilised as do qualitative approaches more broadly (Piekkari et al 2009, Birkinshaw et al 2011). Ethnographic approaches can provide a means of discovering the social processes and practices within the multinational and address questions of how individuals and groups within the organization experience work and how they respond to attempts at the introduction of new ways of working. For the researcher doing comparative ethnographic studies this provides an opportunity to reflect on how the researcher experiences the movement across boundaries transitioning into and out of different social groups. This paper draws on an ethnographic study and provides insights into how workers respond to new management control systems and work practices including an understanding of different strategies and processes of resistance and the ways in which workers construct their own identities and territories on the shop floor during a process of change. The concept of boundaries is found to be useful in considering how individuals on the shop floor transition over time between the old and the new work systems and their experience of this. This paper provides insights into understanding the liminal experiences of doing comparative ethnographic research in the context of multinational organisations. Field notes made during the research are examined to look at these processes.

The researcher spent fifteen months as a shop floor worker in two UK factories of a Japanese manufacturing organization in the UK. Six months were spent working in the new greenfield site of the company followed by the remaining time in the brownfield site. The two sites were very different with the greenfield site having been built from scratch for the FDI and the brownfield site having had a long history under local UK ownership before being purchased by the Japanese multinational. The author worked in six teams across the two sites. This paper explores the authors experiences of working in and transitioning across teams on the greenfield and brownfield site.

The following sections present the authors own liminal experience within and in the process of transitioning across boundaries working on the shop floor. Shop floor teams are then compared in terms of how workers responded to the new control systems

Extract from field notes. Assembly .

There was a difference between how I experienced work on the line and elsewhere. On the line things were happening around you. The lights, people running around, the music, co-ordinated work down the line, it was a sense of rhythm and action.. There was the sense of things being OK when the task on the unit was finished and almost of contentment when it was finished ahead of time allowing a small break of a few seconds. There was the pressure, I felt the challenge to catch up when behind. Other people that I spoke to on the line confirmed my experience that working on the line was better because the time went quicker. You could also talk to people around you on the line when you were on top of your work.

Extract from field notes Aluminium

I decided to just keep quiet and try to understand how people dealt with it, if they saw it as a discomfort and to simply say I could not work near it anymore if I started to feel ill. I felt like going to the directors and asking them what they thought they were doing but I doubt if it would have had much effect and I would have had a diplomatic answer that they were doing something about them. I have felt alright since. The vapours do make me feel weak and a little dizzy.

Extract from field notes. Press Shop .

I felt very conscious of being a woman in the press shop as there were only five other women in a workforce of seventy two in the press shop across three shifts . I wasn't encouraged by Ron's remark at our first meeting ...

'Was it the press shop where you were going to work? There are two women in there but they don't have your build .They are built like oxes.'

In the following sections the social relations on the shop floor are examined exploring how I and other workers make sense of and respond to the pressures of the changing shop floor environment

On the Heater Assembly Line

Field notes day 9 ..Heater 1

Today was a very hard day for me. I was placed on station thirteen again. As we waited for Debbie to tell us to stand up in the hot corner, she held up a newly prepared chart of performance on Heater 1. Station 13 had the most defects, She told this to the whole group. I felt annoyed. Of course i would have defects. It was my first day on the job. I don't see how anyone can be expected to go straight into a job on the line and not have defects. I was apprehensive as I had only being doing half the job. Valli had been putting the brackets on. I tried all day to put the brackets on as well as the half job I had mastered, Putting brackets on was very difficult for me. I reasoned it was because I was left handed. I was disadvantaged. My fingers got in the way of the screwdriver and every time I tried the screw didn't go in properly. And Valli patiently removed it for me and did it herself. I got very agitated. She made it look so simple. I kept trying. I had spare time from my half of the job and could imagine that it may be humanly possible to actually do both parts of the job in the time given. I didn't succeed.

Field notes day 12 Heater 1

As I sat at my table (back in my rented room near the factory) the table seems to be moving to my left at a steady pace. It is the pace of the production line. My neck and shoulders are aching, My wrists and finger joints are swollen and aching also. I started work at 7.30am again. Today I was on station 13 alone. Now I found myself keeping up with the line. However this sense of ease was not to last. The aircon units began to be assembled. This required adding another task on to my job.

Ds: oh no I will not be able to keep up

‘You will have to’ said Stacy on line 12 I have to put an extra screw in which is very difficult. The first lot of air cons lasted about half an hour. I got behind once and Linda came to help me keep up. I was really struggling. It needed 100% effort and concentration to keep up. No mistake could be allowed for as there was no time for re-work.

Friday week 3 on heater line ..

Friday was a very good day. We had only two defects from Warren up until 3oclock. The line ran smoothly all day. When we had stopped at lunch Linda had said it was excellent. To keep it up. Everyone seemed in good spirits. I was in good spirits. The weekend was coming and I wanted to finish on time. When there was a third mistake people were saying ‘what was it? so near to the end. ?’ I think we were all concentrating and I was not feeling so bored. I was checking for faults. I didn’t want to be the one to spoil the good performance. Before we went home we were told to sit in the hot corner. Malc came and said well done, it proved we could work well if we put our mind to it.

Friday week 9 heater line..

Bev and Kal working next to each other on the line had an argument in the morning. Bev told Cal she was lazy. Kal told Bev she was lazy too. Kal was told to go and speak to Malcolm (section leader) by Linda. She came back not looking very happy. Sharon tried doing some of Kals subassembly packing and so some of Kals work was taken off the line. Kal and Bev didn’t seem to be bothered by the disturbance later on. Bev was her usual ebullient self. Kal had her back to Bev as usual due to her job and her head down in her work.

Wednesday week 13 heater line

The other lines were starting to wind up for Christmas shut down. Sharon started to mumble that we would be the only line working in the afternoon. The factory started to seem eerie as lines began to close. By 3pm ours was the only line working. Sharon was getting annoyed now, saying everyone except us had stopped working. I found it quite funny to see the red Christmas hat on the associate sticking up from another hot corner but this was just more evidence for Sharon. Bev started a sing son at the end of the line. ' show me the way to go home, I'm tired and I want to go to bed..' I felt sentimental it was my last day on this line. I did one more unit to perfection. Then I went to pick up a broom. Kal asked me to go to the toilet with her but I was not interested in skiving now. I wanted to clean the line. I felt I had given a part of me on that line. That it had changed me. That it had been a shared ordeal. Maybe like fighting a war together or an outward bounds exercise. Then we sat in the hot corner and Debbie had arranged chocolates to be shared out amongst us.

I moved on from the heater assembly line to the condenser line at the greenfield site.

On the Condenser line:

Day 1 on the line I found it strange that there was no moving line giving a fixed amount of time to each unit. I wondered how people maintained the required pace. I thought that it would require greater self discipline and monitoring. Janek worked alongside me for about 90 minutes until she left me. I didn't feel the pressure to keep up and do the job correctly or the whole team would be forced to stop. There were no andon lights flashing above the workstation to show who was in trouble. Janak taught me what to do and how to speed up. By the end of the day I was able to lay about six fins at a time rather than the one I had started with.

Day 4 on Condenser I didn't find the work as monotonous as on the assembly line, but the smell was the worst thin to cope with and the oil on my clothers. I feel as though I have made something, a meaningful piece of work when I have assembled a Condenser.

Day 6 Condenser ..I was given Tipo B to start with. I did 28. I was told to fill in a chart with my name and next to it the model I was working on and how many I had completed. I also did 38 Honda cores. A total of 66. My target was 98. I worried when John explained that 98 was the base number that you had to complete and if you didn't you had to give the reason why.

Day 9 Condenser... I didn't feel so out of my mind with monotony in this job. It is not as repetitive. The demands are to physically keep going at a constant pace to meet the output targets.I find that I slow down with fatigue before dinner and sometimes

My first hour is slow as well until I warm up. I think i did 58 in total. I did have half an hour of lost production. I noticed Lee was the quickest amongst us and made about 95 units. Roger made about 75. Janek about 78 and Sandra 68.

Day 15 My output control chart for the day

	Target	Actual
8am	10	5 (breakdown of machine)
9am	14	10
10am	10	8
11am	14	11
12am	14	10
1pm	8	6
2pm	14	12
3pm	14	10
.....		
	98	72

Coping Strategies on the Condenser Line

The field notes below highlight how I managed the transition into a new work group and control system away from the assembly line technology to a self- paced system.

Day 16 I worked really hard to improve my performance today. I think I must have wasted about one minute throughout the day being idle. I really counted every one I was doing- the target for the hour in a way acts as a motivation.

Day 19 I am coming to respect the ideology of continuous improvement. Where it goes wrong is to limit the financial returns to the workers from this. I feel the workers on the Condenser line do not relate to continuous improvement. Attitudes of Sandra and the others is around 'a fair days pay for a fair days work. She doesn't give or have an interest in giving any more or improving herself.

Day 24 Sandra will say at twenty to ten at night ' *make that your last one* ' I find it soul destroying when I have been working all day to beat my output record and keep to the expected output and she will cut me short in my tracks with such a negative attitude. I was in my continuous improvement frame of mind this week. I find it impossible to have the shop floor 'do what you are paid for and no more' mentality work side by side with the continuous improvement mentality. I find myself drifting to the Continuous Improvement philosophy as my way of coping with the dullness and soul destroying nature of the job. I was trying to increase my output as a way of feeling some sense of satisfaction and also possibly recognition from others. A continuous improvement attitude leads someone to do their job as best they can, even if it is boring. The nature of the job doesn't matter.

Day 28 I feel angry today. My main motivation was to improve on my current best score. The hours went by counting how many I was doing. When things happened around me like running out of tubes it demotivated me and I feel frustrated. I reflected on Kaizen and I thought how it couldn't really work because the sense of pride stops at the factory gates. What if someone was a good worker but couldn't afford to clothe their children/ I reflected on what I was experiencing. It didn't involve adding more complex tasks as a way of motivating but using the philosophy of 'sense of pride and commitment to the company'.

Day 46 I feel I am not in control of the output I can achieve in a day. There are lots of factors outside of my control which can slow me down. Today I felt I worked and tried as hard as I did yesterday but the difference in output was huge and would probably be looked upon negatively, that I was an erratic worker. 103 yesterday against 73 today. The difference was due to things like no spaces for the Honda cores, bad fins, tubes too close together, changeovers.

Aluminium

I moved on from the greenfield site to the brownfield site. Having spent several months in the press shop I moved on to what was known to everyone as 'Aluminium' I spent sixteen weeks as a shop floor general operative in Aluminium. This was the longest period of time spent during the research in any section. This had some significance. Towards the end of my stay in Aluminium I found I was less receptive to what was happening around me and was taking more things for granted. Having already spent nine months working in a shop floor environment I came with some experience of shop floor cultures and practices. This was to prove very helpful especially in the first few days in the department where I was still learning what was expected of me not just by those in charge but by my workmates also. I found the Aluminium department to be the most challenging to work in. Social relations on the shop floor were very intense and direct between workers and between workers and staff and the working conditions were not very good. I was able to mix in with the other workers and most workers approached me as one more worker. The few in my section who knew I was on job placement also allowed me to hang out on the shop floor in their informal groups. I did have the occasional joke thrown at me that I was there to see how the other half live but most of the time I was dealt with as part of the work group facing the same problems including problems of working conditions and management practices.

Extract from field notes..

'Entering Aluminium is a bit like venturing into a jungle. It seems easy to get lost at first unless you stay on the track or in this case the aisles marked with white paint running across the shop floor. Radiators in various sizes are everywhere to be seen. ..As you walk through the department radiators appear on trolleys, stacked one on top of the other. Trolleys are everywhere. Radiators

hang from hooks, appear on benches and in scrap bins. First impressions are of chaos, disorganisation, untidiness and 'low technologies'. I am comparing things to the Greenfield site. I wondered how long the radiators stood there on the trolleys- hours, days, forgotten?

My own experience is that this is the worst section I have worked in so far in my research because of the vacuum degreaser . The vacuum degreaser gives off vapours .These vapours are really horrible. On my first few days when I was working near the degreaser on the tie bar section I felt weak and sometimes light headed. I told Bob who was our safety rep that the vapours were bothering me and didn't anyone else have the same problem. Bob told me he was all right , that it was stuffy inside the factory , but maybe a mask would help . He told me I was working between two degreaser and maybe I should see the nurse. I felt embarrassed about going to see the nurse. I thought I would wait a day or two and see how I felt . .

... A few days later they were cleaning out the degreaser . The nurse was standing at the side as two men wearing breathing masks went into the degreaser to clean it. The vapours coming out were particularly strong that day.

I wore a mask but the boy working on the degreaser, Paul came over to me and told me not to wear it, it would just make it worse as the mask was to prevent dust and the vapours were liquid particles in the air . He continued :

Paul : '*They have banned these degreasers everywhere else in Europe . Its only in England that they are allowed. I have collapsed. Once they took me outside and it took ages to get me breathing properly again and there was blood coming out of my ears. Really you need a mask like they are wearing (he pointed to the masks that the cleaners were wearing) . '*

He told me that the company had said they would get rid of the degreasers in a couple of years.

There was a degreaser at the other factory. It did not give off vapours. I felt very angry that nothing was done about this situation which surely made the operators at least a bit uncomfortable. In terms of my own job placement I decided to just keep quiet and try to understand how people dealt with it, if they saw it as a discomfort and to simply say I could not work near it anymore if I started to feel ill. I felt like going to the directors and asking them what they thought they were doing but I doubt if it would have had much effect and I would have had a diplomatic answer that they were doing something about them. I have felt alright since. The

vapours do make me feel weak and a little dizzy. I actually monitor my breathing when I am working near to the degreaser and try to take small breaths and hold my breath whenever I think that vapours are coming towards me. (the vapours remind me a little of having gas as an anesthetic at the dentist.) In this sense I would say that the working conditions are really horrible. I cannot work effectively when the vapours are bad. My mind is not on my work. I feel irritated and angry. Tie baring itself is not a physically demanding job. With the degreaser nearby however I work really slowly because I don't want to breath quickly.

(methodological note : I think it is important to mention the above because it is a reality of shop floor life that I don't want to go unnoticed) .

Another day Paul on the degreaser said : No one asks to do overtime on this machine .

ds: Don't you all complain through the works committee or something ?

Paul : We are always complaining about the degreaser, a lot of people have left .

ds: How long have you been working here ?

Paul : Five years

ds: On this machine

Paul : No. If I had been working on this machine for five years I would have been dead by now .

(he said it lightheartedly) .

ds: What is it that makes you feel funny then? (referring to the way I felt light headed)

Paul : Tri .

I looked

Paul : Tri , Tride or something like that .

Extract from field notes wk 17-

Today shook me at work. I must not forget this. The degreaser- I am so angry about. I must remember Paul being lifted by the boy of the furnace and by Malcolm outside and being put on a chair. He was left sitting on a chair. As Stewart said later- you could tell he was gone to the world when they took him out of the degreaser. He had been cleaning it without a mask on. I

was so furious. I asked Derek what had happened and he said Paul had collapsed in the degreaser. Stewart went back to cleaning. Everyone else kept working. I asked Paul if he was OK and he said yes he was OK.

A few minutes later Paul was back on his job.

In Aluminium the job is lighter than the work of the press shop, but the working conditions are actually worse because of the air quality from the degreaser and the furnace. Other reasons are the lack of social interaction as a team which also makes the work less sufferable. Tie baring is very very boring.

In Aluminium social interaction takes place around a square rather than a line which was the case in the assembly line. On the assembly line in the greenfield factory people stuck together and didn't really talk to people off other sections. In this brownfield site the work groups were not so tightly knit. The technological controls did not bring people together into tightly knit groups. Here workers developed informal relationships and networks more easily and readily with grapevines all round the section. There is high social interaction in the Aluminium shop floor. It seems like letting off steam to shout hi you alright. Some shout or sing unselfconsciously. The workers are not self conscious about saying they are overdrawn, have no money in the bank, need to pay their bills.

I experienced the shop floor as a place of high emotions as shown in the field notes below.

Extract from field notes week 8

I feel very emotional on the shop floor. People are expressive. It's not like an office where people keep quite. People say 'Hi How you doing, hi ya hey you alright? Loud. Yeh I am alright. Positive pick me ups. Along with this is positive attitude to physical energy- Can't be tired. Be

energetic. There is no mental work really to distract from this. Good work is good physical work, energy and attitude.

Sometimes there was conflict between workers in the section in Aluminium as shown below. I was working on tie bar with Bob-

Extract from field notes week 9 ..

Bob: Watch this now- this man is going to do his nut..

A tall stocky middle aged man came from the furnace and walked over to Bob. He was pulling a face and breathing heavily. I thought he looked like someone pretending to be angry. Then I realised he was angry. The man went over to Paul on the degreaser and started swearing at him. I watched astounded and scared. Paul just stood there quietly. I thought the man was going to hit Paul but he didn't. Finally the man went away. Paul looked at Bob and me amazed. Soon the other workers from around gathered to hear what it was about.

Paul: I thought he was going to hit me

Bob: So did I

DS I did too,who is he

Paul: He is the teamleader off the furnace. I wouldn't mind if he just spoke to me nicely but to just swear like that.

Bob: You have nothing to worry about because you can make his life a misery. All you have to do is drop the units off the degreaser, he will have to sort them out before they go in the furnace.

Paul told me later that it was because he was young that he got picked upon and not Bob.

Managing boundaries and liminal experiences in Aluminium

The shop floor cultures were very complex- some very difficult for me to deal with. The verbal abuse on the shop floor and threatening body language scared me. I reflected on how I could step out of the field and leave the job at any time whereas others couldn't. I don't know how I would have coped if I couldn't step out. I would differentiate myself from the others workers in terms

of not following the unwritten norms of behaviour on occasions when I felt that the work and the shop floor culture were oppressive and I would try and distance myself from events as a way of coping. I had to do this sometimes as a way of stepping out of the field while still being in the field. For example I would decide not to sit in the hot corner in one of the breaks but to sit on the steps outside. Other times I didn't see the point of joining in the informal half hour break at the end of the shift as I felt it was only a token show of resistance that left the basic nature of the work unquestioned. On one or two occasions I did mention that I was on a temporary contract when I had been asked to take sides in ongoing disagreements and gossiping between the workers. I tried to keep neutral in the personal arguments on the shop floor but in Aluminium this was difficult. Communication and interaction was intense in the department and workers could not remain in isolation from the ongoing conflicts and discussions that took place.

Field notes week 6 ..

'Its going to go up- its all on fire' said Paul with a flustered grin on his face and a white dust mask.

DS. *What do you mean?* I had seen the hose pipe and the sandbags by the degreaser and the team leader and section leader gathering by it. The cell manager came along and had a look as well. Paul came over again and said that we will see the fire brigade in here in a bit, there is acid all over. I looked on. I mentally planned my exit from the shop floor in case of the big bang, but I had no idea of what potential danger there may be. In the break I sat with Steve, Jacko and Brenda who seemed to take the situation more light heartedly as a possible means of getting some time off work.

Steve: *If the dial rises to eighty- its seventy now- we have to evacuate the building.*

DS *How long does it take to go up to 80 from 70. ?*

Steve: *I don't know.*

Brenda: *Oh we might get a few hours off. I remember the last time the degreaser went up and I went to the tube mill and stayed there for the rest of the shift having a smoke.*

DS: *If it goes up what will happen? Will it take the roof off?*

Jacko shrugged his shoulders.

The section leader came along and Jacko started jokingly complaining about something in his job.

Section Leader: *Jacko I've got a serious situation on my hands. I might have to get everybody out of here in five minutes and you are talking about that.*

DS *Where are the emergency exits just in case we need to know?* I said to the section leader.

It was a small enough place to know where the doors out were but I was trying to make the point that we hadn't been given any safety training for this.

The workers saw the degreaser and the wider department as an uncomfortable place to work but many saw it as preferable to the newer extension to the factory that had tighter technical controls over the workers.

workers perceptions of transitioning boundaries between old and new ways of working in the factory

extracts from field notes:

I was in the toilets. I wondered why they are so cramped and no facility for shower. Just three toilets for all the women in the department. I met Daisy. She'd just finished her shift. Middle aged. Looked worn out from work but had the nervous energy that so many of the workers had on the Shop Floor. I asked Daisy if she is still on Tie Bar. She tells me no. She had been moved to wet test.

Daisy.. *I've been all over I have. I was in the new section before. Its 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 criticising me because I had made some faults. You can't have it all ways.

Paul- In there (new extension) 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. Its 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.

DS Has it changed much in Aluminium since you started working here?

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.

DS 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.

DS. So is it better now?

Bob: Its much stricter now.

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

In Aluminium (field notes week 14)..

DS. Whose that?

Brenda: It's the time and motion man

DS. What does he do then?

Brenda: He stands with a stop watch timing you

DS 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.

DS And then do they change the times? Does it get faster?

Brenda: It can go faster or slower, but it always goes faster.

Coping strategies

Dealing with the monotony :

DS to Brenda 'I have never seen anyone so totally absorbed in their work as you on build.

Brenda: I like my work on build. I go off into my own world with my own thoughts.

Brenda does work really hard in this state and reaches the output targets. She tells me to stop work early ,, 'you don't work after half past nine, she says to me. She manages to keep up by doing over the requirements in the earlier hours.

Fn wk 16. Brenda thought Build was hard.

. 'you can't walk round if you are on build. She compared this to the degreaser where they get to go to the toilet and have a cigarette every hour.

Brenda.. *Its the foot peddle on build that really ties you to the machine. Its not possible to even walk a little by the machine as you work. Brenda was almost bragging how the boys couldn't work on build- they wanted to walk around- they never helped you when they had spare time they preferred to walk around and talk. Only the women help each other out.*

Winston on the shop floor reasoned how workers coped..

Aluminium week 6

Winston.. *it takes a certain mentality to work on the shop floor. I don't mean you have to be stupid or anything. I don't mean intelligence- I mean temperament. Some people like it. They are able to come here and work but think about things outside at the same time. I don't mean they don't do their job properly, they do. But they are able to take their mind on other things as well- so they don't mind it- no one hassles them and they do their work.*

I reflected

Field notes week 14

I think if you told most people they would be doing the same job but in a room in isolation they would crack up. Brenda seems to be in her own world but many I think go for social relations as an escape and respite from the tedium. As I worked on Build with my back to everyone I thought how I looked around the shop floor every time I had a chance to turn to pick up parts.

Liminal experiences were sustained as I moved between different social groups inside and outside the factory gates. Managing transitions between the shop floor and my identity as a business school student involved distancing and a sense of separation and uneasiness as I felt on the boundaries of both student and shop floor social worlds. I reflected in my field notes..

Week 14 Friday

Rushing to Manchester. In the library reflection. Peace, tranquillity, I realise the noise in the factory. Sunshine, big windows. I realise no daylight in the factory. This is how the other half live. Privilege. Centre of learning? Cut off from the realities of work. Learning in a sheltered cushioned environment. It is easy to study Maslow and Herzberg here but what does it really mean? I see the students in the coffee shop on their mobile phones.

I made few visits to the School during my fieldwork. Only when I needed to. This made it easier as I found the transitions emotionally demanding and disorientating. I felt reflective stepping out of the privileged business school cultures that I had been in to experience and see the factory workers conditions and hear their perspectives on work on the shop floor. Sitting in the coffee bar during my visits to the Business School I kept to myself. This could be reflected on with the concepts of *Betwixt and Between* (Turner 1967) of experiencing feelings of being 'neither here nor there'. I felt at that point that it was hard to bridge the shop floor and business school cultures in any conversation over coffee. For the ethnographic researcher this space 'betwixt and between' at the cross roads of groups in the field and also outside the field are opportunities for taking stock and reflection.

Betwixt and Between - A comparative analysis of worker responses to the managerial control system across sections

In this research I moved between six different teams across two sites. Each entry into a new team presented a liminal situation where I had to learn the culture and ways of doing things, the norms and values and informal practices. Across all sections workers were responding to pressures for changes in work practices and pressures of work intensification.

In my own way of coping with the mundane repetitive work on the shop floor I found the continuous improvement philosophy that was attempted to be introduced by the Japanese managers giving a sense of purpose- seeing my effort as part of a larger project. My worst experiences on the shop floor came from the tensions I felt particularly on the brown field site between the values of continuous improvement being encouraged by communications and the actual reality of shop floor work where leader on the shop floor just wanted to get work out. On the Greenfield site what was missing in the attempts at continuous improvement from my experience were any significant attempts to consider quality of working life on the shop floor as a factor taken seriously alongside performance measurements of productivity, quality and safety would make an important change to the way that decisions on work organisation and production were made.

As shown in table 1 the technical controls were different across the teams studies. These influenced how resistance could be expressed in the different contexts. Table two highlights how shop floor practices under changing forms of managerial control involved workers individually and collectively engaging in acts of passive and active resistance. These can be seen as acts of defiance and coping strategies a space 'in between' the attempts at institutionalising practices by the management (Turner 1967). In this sense they provide a space for worker agency and identity that is not determined by management. The workers resistance might be conceptualised as that of the initiand- in transition between two cultures at the cross roads of different managerial systems but this would suggest that there is a third stage of incorporation (Van Gennep 1960) that the initiand moves into. What this research highlights is how this process during the introduction of new control systems on the shop floor is a political and resisted process with unintended outcomes that cannot be captured using the concept of incorporation. Liminal experiences of uncertainty, ambiguity doubts and frustrations on the shop floor were

present as workers experienced changing forms of managerial control. but the ethnographic approach also enabled study of the relation between structures and agency and provides a lens to look at how agency might also maintain or transform these structures. As Turner (1967) notes liminal experiences may also initiate renewal and change. Worker resistance could be seen as occupying a space 'betwixt and between' - where workers are not solely acting out institutionalised roles.

Table 1.

Comparative analysis of outcomes from technical control systems

Technical control	Heater Greenfield site	Condenser Greenfield	Press Shop Brownfield	Aluminium Brownfield site
1. Andons	yes	Red for breakdown only	Not used	in place but not used
for expression of resistance	yes	yes	-	-
protection of friends	yes	no	-	-
exposure of others	yes	no	-	-
2. Tact times	yes	yes	Yes	yes
peer pressure to not 'rate bust'	no	yes	Yes	yes
stockpiling to build up spare time	not possible	yes	Yes	yes
fiddling of output reports	not done by individual	yes	Yes	yes
informal status for faster worker	yes	yes	Yes	yes
pressure by group to reach standards	yes	no	No	no
informal targets	no	Sometimes	Yes(80% of	no

set			formal target)	
times for jobs informally changed/rejected	no	yes	Yes	yes
3. Monitoring of output quantity	recorded hourly by team leader for line	Recorded hourly by worker	Clocking system for each job	recorded daily by worker
peer pressure to restrict output	no	yes	yes	yes
peer pressure to conform to informal code of work	yes e.g. rest times, cleaning	Yes, eg rest times, cleaning, unofficial breaks	Yes eg. Clocking practices, rest times, cleaning, unofficial breaks	yes, e.g. rest times unofficial breaks
informal fiddling of output records	no	Yes, by carrying work over to next period	Yes by clocking practices	yes, by stockpiling
4. Monitoring of output quality	intense immediate feedback/monitoring by co-worker	Delayed feedback for faults from down the line	Delayed feedback by inspector or worker down the line	delayed feedback from down the line
consequences of quality checks	workers hiding or reporting each others faults	Little pressure to reduce scrap	Concealment of scrap	concealment of scrap

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

Form of resistance	Heater Team— Greenfield site	Condenser Greenfield Site	Press Shop Brownfield Site	Aluminium Team— Brownfield site
1. Active Individual Resistance	1. stopping line	1. being late for work	1. being late for work	1. being late for work
	2. walking away from workstation	2. not doing 5s	2. challenging cleaning or multitasking to teamleader	1. not doing 5S
	3. not doing 5S	3. openly challenging output expectations	3. refusal to do another job eg. Serviceman to work a press	3. leaving
	4. leaving/looking for jobs elsewhere	4. underperforming as an expression of non commitment ie. not making output target	4. verbal 'threat' that they would not work any harder	4. direct questioning of authority of team leader
	5. direct questioning of the authority of the team leader	5. not doing quality checks as instructed	5. finishing early and standing talking at back of presses	5. refusing to do something (finally going along with it)
		6. talking to others openly on the line and not working	6. sitting in the 'pig pen' until told to start work rather than getting up themselves	6. active resistance to suggestions to do work differently or to do extra work
		7. breaking safety rules eg. Not wearing safety clothes/ shoes for a	7. open criticism of continuous improvement and	7. criticism of management

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

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

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