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Detailing Spaces and Processes of Resistance: working women in Dundee's jute industry.

Abstract

Recent and ongoing calls within labour geography and social and cultural geography have highlighted the importance of resistance, its spatial productions and manifestations. However, within these, the geographical history of the factory system has been largely overlooked. Drawing upon Foucauldian theorisings in the fields of management and organisation, together with recent writings on the geographies of resistance, this paper takes Dundee's jute industry at the turn of the twentieth century as its focus and explores how the workplace itself, and the very workplace discipline used to ensure a productive, efficient and hardworking workforce, engendered workplace protest among the industry's working women. Writing through a number of modes and scales of protest within the workplace, within and between work groups, departments, mills and factories, and across the city, this paper adheres to an approach that carefully details the spaces and processes of resistance, paying careful attention to how union and non-union resistances operated and the geographies they worked through and created.

Key words

Dundee, jute industry, geographies of resistance, working women, Foucault, trade unionism

Introduction

Labour geography has now become a well-instituted subdiscipline within human geography (Herod 2001 and 2003) and in recent years greater attention has been afforded to forms of work resistance, notably trade unionism (see Savage and Willis 2004). The geographically situated and embedded nature of workers' lives and the spatiality of trade unionism is now clearly recognised and, amongst others, Andrew Herod's writings on the geographies of the labour process have demonstrated the shift to understanding the spatial strategies used by workers and trade unions and the ways in which they use and create space, actively shaping economic landscapes (Herod 1994, 1997, 1998 and 2001). Indeed, a far greater engagement between geographers and industrial relations scholars has been called for (Herod 2002).

The spatiality of resistance has also become a central theme in social and cultural geography over the past decade. Many of the papers in the collection *Geographies of Resistance* (Pile and Keith 1997) highlight that resistance not only occurs in place, but also seeks to appropriate space and create new spaces. By this, various acts of protest and resistance are shown to take place in spaces presumed to be saturated with, or to open up alongside or as a result of, dominating power. Rather than mapping resistance by attending to its outcomes or the particular locations where it 'happens' this text encouraged a greater appreciation of the *processes* of resistance and their spatiality.

Although the geography of the factory system has been discussed (see for example, Spain 1992 and Stein 1995), except for the work of Wright (1997) and

Ong (1987) to which this paper contributes, little attention has been paid to the spaces and processes of resistance that operated in tandem with procedures of social and spatial control. For example, writing about factory life in Cornwall, Ontario in the mid to late nineteenth century, Stein (1995) suggests that space was important for two reasons: first, because of its role in implementing social control; and second, because the tending of machines had implications for the way space itself was conceptualised. Although Stein hints that social control was not all embracing, he stops short of suggesting how space was used to enable various forms of factory protest. Therefore, to his two reasons, I would add a third: the role of space for enabling resistance, and it is the use of space in this way that this paper explores further.

In addition, I want, more explicitly, to tie the gendered dynamics of the workplace and the spatial contingency of mill and factory work to the operation of resistance. There is now a detailed and sophisticated historical literature on women and mill and factory work (see for example, Canning 1996 and Rose 1992). However, within this, resistance either remains hidden or the focus is placed on women's strike action. For example, in the foreword to Canning's work on female factory work in Germany, Jarausch notes that "[t]here are a few suggestive pages on female forms of contestation of factory discipline and some hints at efforts of collective rebellion against excessive exploitation, which imply a mixture of accommodation and resistance. But this remains tantalizingly tentative ..." (Canning 2002, xii). And, where resistance is discussed (for example, Gordon 1991; Parr 1990), the spatial is often denigrated in favour of the temporal and a detailing of the outcomes of protest.

This paper works to fill these gaps by particularising resistance among working women in Dundee's jute industry. I am not talking here about a linear account or the outcomes and spatial goals of unionisation or protest, but the processes and spaces through which resistance takes place. I suggest that the geographies of the workplace were central in creating and enabling protest and, in spite of tentative forays into these other geographies of resistance in Dundee (Smith 1996), a geographical history of women's strategies and practices of protest remains to be written; in particular, with respect to how women workers and their union used, manipulated and shaped the industrial landscape of the city.

To detail a range of different spaces and processes of resistance, I draw upon a range of contemporary sources, including newspaper reports and trade union and company records, taken mainly from the late nineteenth and early twentieth century. To these sources, I bring ideas shaped largely by Foucauldian theorisings in the fields of management and organisation, together with more recent writings on the geographies of resistance. I look not only at trade union sanctioned protest but also at non-union forms of resistance. As Herod (1997) has stated, whilst trade unions are certainly powerful workers' institutions, they do not hold a monopoly as instruments of the expression of workers' interests.

The paper begins by setting out the theoretical framework within which this work is placed and by providing background to the peculiarities of Dundee's jute industry and labour market. It then works through a number of modes and scales of protest within the workplace, within and between work groups, departments,

and mills and factories and across the city of Dundee. By focussing on the locations and geographies through which resistance was negotiated and forged, this paper advocates a more geographical approach to the study of the workplace, particularly in a historical context.

The space of/for resistance

In historical scholarship, the factory system is associated with time-discipline (Thompson 1967), which has been re-worked into time-space discipline by geographers (Stein 1995). However, with these discipline-orientated readings of the workplace, questions arise over the theoretical space given to resistance. As Clegg (1989, 200) has suggested, "organizational locales will more likely be loci of multivalent power than monadic sites of total control: contested terrains rather than total institutions". A chief interest of this paper is how the workplace itself, and the very discipline used to ensure a productive, efficient and hardworking workforce, actually engendered protest. So, taking Clegg's ideas, this paper begins with the notion of the workplace as a 'contested terrain'.

In *Discipline and Punish: the birth of the prison*, Foucault (1977) draws upon Jeremy Bentham's panopticon to demonstrate how power works. In a now familiar passage on the spatial layout of the panopticon, Foucault (1977, 200) set out his theory of power that "has as its principle not so much in a person as in a certain distribution of bodies, surfaces, lights, gazes; in an arrangement whose internal mechanism produce the relation in which individuals are caught up". With space considered 'fundamental' in the exercise of power (Foucault 1991a,

252), particular architectural sites and their spatial technologies became central to his writings on disciplinary power and the constitution of the subject.

For well over a decade now, geographers and others have drawn upon Foucault's ideas to explore the geographical histories and disciplinary strategies of a number of institutions, including the poorhouse (Driver 1993), the asylum (Philo 1989), the prison (Philo 2001), the reformatory school (Ploszjaska 1994) and the college (Tamboukou 2000). However, in spite of the recognition that Foucault has done much to 'breathe new life' into labour process theory (Carter et al, 2002), workplace organization and, in a specifically spatial-historical context, the factory system, have been somewhat neglected from this disciplinary appraisal (Wainwright 2005). For example, Stein (1995) notes that the factory is not a 'total institution' in the Foucauldian sense as it does not hold its inhabitants permanently captive and, therefore, he chooses not to fully engage with Foucault's ideas. There are good reasons for this; in contrast to 'total institutions' conceived to correct 'deviant' populations and bodies, factories and mills were and are primarily spaces of production and capitalist accumulation. Further, Foucault himself did not devote much attention to the factory system, although industrial dynamics were a "persistent sub-text" in his work (Jackson and Carter 1998, 53). Another reason and a standard criticism of Foucault's work, is that he leaves too little space for resistance; resistance can seem impossible and futile, as people appear trapped by a "constant disciplinary gaze". Foucault's claim that "power is 'always already there', that one is never 'outside' it, that there are no 'margins' for those who break the system to gambol in" (Foucault 1988: 85), can be read to mean that power (as dominating) is all pervasive. Certainly, in Discipline and Punish, a text based on the selective reading of a limited range of sources, Foucault can be construed as giving room solely to the official narrative of the prison; he provides no space for human agency and no voices of dissent. As McKinlay and Taylor (1998, 184) put it, "[o]n the question of power and resistance Foucault is at his most ambiguous, his most wilfully elusive". Without doubt, this elusiveness and lack of direct engagement with the disciplined, subjugated and repressed, and the complexities of resistance, have hindered a more widespread use of his ideas in relation to the different processes of industrial production (Jermier, Knights and Nord 1994).

However, the notion of a disciplinary society must not be confused with a disciplined society (Miller 1987, 196). It is the former that Foucault explicates and, in his account, the disciplinary society that emerged in Europe involved both power and resistance or, as he famously, if vaguely, remarked, "where there is power, there is resistance ... a multiplicity of points of resistance" (Foucault 1979, 95). Indeed, it is to his *History of Sexuality, vol. 1* that we must look for a preliminary discussion of resistance. For Foucault, power is a 'force field' of relations that has a transformative capacity, enabling it to be both dominating and resisting. Thus he remarks that points of resistance are present everywhere in the power network:

"[T]here is no single locus of great Refusal, no soul of revolt, source of all rebellions, or pure law of the revolutionary. Instead there is a plurality of resistances ..." (Foucault 1979, 95-6)

This conceptualisation of power breaks away from dualistic thinking about power and resistance and gives rise to a 'domination/resistance' dyad. This dyad acknowledges that domination and resistance do not exist independently but instead, in conjunction with one other – producing and reproducing one another. Sharp, Routledge, Philo and Paddison's (2000) appraisal of the theoretical space of resistance usefully fleshes out some of Foucault's tentative references to resistance and suggests it is better to talk of 'entanglements of power' where resistance and domination are conceived as mutually constitutive. This builds on Foucault's (196) words that resistances are distributed in an irregular fashion, with "the points, knots, or focuses of resistance ... spread over time and space at varying densities..." It is this irregularity – the various focuses of resistance – and more 'entangled' approach that, in the detailing of resistant spaces and processes, this paper extends in relation to mill and factory organisation and resistance.

Scale and geography are important in exploring the processes of workplace domination and resistance. According to Jermier, Knights and Nord (1994, 21), we should "abandon traditional perspectives that restrict the study of resistance to those struggles among large-scale entities whose members share a common cause" and, instead, "explore how concrete local situations interact with the subjectivity of agents involved in complex power-resistance relations". Extending this theme to ideas of place, Knights and Vurdubakis (1994, 175) remark that power and resistance, "are best understood when examined in specific sites with definite socio-historical conditions of existence and means of operation". Recognising this situated construction requires a need to investigate resistance at the local and place-specific scale, enabling a microanalysis of resistant strategies and actors.

This microanalysis tallies with feminist appraisals that advocate a close reading of resistance in order to appreciate its complexity and diversity. As Thomas and Davies (2005, 711) note, "feminist theory problematises but ultimately enriches and revitalizes conceptualisations of resistance within organisation studies". The critique from feminists has focused on three points of challenge: the subjects of resistance, what counts as resistance, and when resistance counts (Thomas and Davies 2005); recognising difference within the resisting group and seeing a wider range of resistant acts. I argue that by working implicitly with these ideas and drawing on the words of Foucault and the overtly geographical work of Sharp et al (2000) allows a wider appreciation of the spaces and processes of resistance amongst the working women of Dundee's jute industry. This paper therefore sets out to demonstrate how worker, notably trade union, resistance can itself be interpreted through the lens of disciplinary power aimed at producing an organised and homogeneous workforce. Further, it explores how the predominantly female workforce and their trade union took advantage of and used the closed, segregated and regimented nature of the mills and factories and the disciplinary practices of their managers to enable forms of protest to occur. However, before turning to the detailing of these spaces of resistance, I first provide some context to Dundee's jute industry, the specificities of its workforce and the geographies of production.

Dundee's jute labour market

This paper is located in the city of Dundee at the turn of the twentieth-century. At this time, women dominated Dundee's jute labour market and in 1905 the epitaph 'woman's town' was given to the city, reflecting the high proportion of women

workers (Lennox 1905). Between 1871 and 1911, the city's jute works employed between two-thirds and three-quarters of Dundee's working women (Gordon 1991, 141). The 1901 census, for example, showed that 31 per cent of the female population of Dundee was employed in the city's mills and factories and, in the same year, "the proportion of married women who had remunerative occupations was exceptionally high" – at least 24.1 per cent compared with 6.1 per cent in Glasgow and 5.6 per cent in Edinburgh (Walker 1979, 86-87).

Jute, a course flax-type material, became, the "world's carrier" with the rapid expansion of the carrying trade, and its manufacture in Dundee grew into "one of the most spectacular boom industries in nineteenth-century Britain" (Turner 1966, 34). At its simplest, jute production was split into two processes (spinning and weaving) and two buildings (the mill and factory), with a range of connecting procedures and ancillary buildings. The mill was where the jute fibre was prepared for weaving and was split between two buildings and stages. The Low Mill housed the preparing stages (where the jute was softened, carded and drawn out), and the High Mill was where the yarn was spun, twisted, reeled and wound. The jute yarn then left the mills and was taken to the factory where weavers wove it into cloth.

The gendered dynamics of this production process were unique, as women were employed in both mill and factory work, and primarily confined, through a rigid vertical segregation, to the respective tasks of spinning and weaving (see Gordon 1991). This is in contrast to other textile towns and cities across Britain where women were restricted to the latter, the former remaining the preserve of men

(Joyce, 1980; Morgan, 1997; Winstanley, 1996). Dundee as a 'woman's town' (Lennox 1905) resonated with social commentators, factory inspectors, jute company directors and trade union leaders as they converged upon the city's working women. Indeed, a whole range of discourses arose around the figure of the 'working woman', making her both an object of concern and the subject of thorough scrutiny (Wainwright 2002). In contrast, "[m]any men, stripped of the patriarchal power which they could elsewhere assume with their bread-winning function, were reduced to the status of 'kettle-bilers'" (Whatley et al 1995, 114). Such definitions of the working woman and redundant man resonate through the local literature on Dundee, with the woman crucially scorning the 'angel in the house' role.

Trade unionism among the jute industry's working women had a cautious start, with a particularly patriarchal form of unionisation taking hold through the efforts of the Reverend Henry Williamson, a Unitarian minister, who was to become president of the Dundee and District Mill and Factory Operatives Union (DDMFOU). In 1893, prior to the formation of the union, Williamson reflected on the city's 'impetuous' working women:

It is not easy to know what to do with women. They are governed by impulse...all at once, without notice 50 or 100 of them are in a state of rebellion, and it requires someone to come in just to advise them, for as a rule neither master, manager nor any other official can get anything from them (Royal Commission on Labour, 1893).

Comparing women to "a flock of sheep without a shepherd", he suggested that the usual outcome of strike action was a return to work without redress to their grievances (Royal Commission on Labour 1893). But, in 1885, after 12,000 operatives went on strike over a five per cent reduction in wages, Williamson

became the 'shepherd' when he formed the DDMFOU (Ward 1979). With its membership made up of women textile workers, the union represented a break from traditional male-centred craft-union organisation. Established "with the view of finding a remedy for the evils of strikes" (Dundee Mill and Factory Operatives Herald, May 1889, cited in Gordon 1991, 184), the union provided victimisation, accident and funeral benefits for an entrance fee of 3d. and a subscription of 1d. per week.¹

However, resistance through the DDMFOU was not unified. Although it had almost 6,000 members by 1891, it found little favour with established labour groups. In 1906, a spontaneous and unorganised strike and eventual citywide lock-out led to the founding of the city's second trade union for working women, the Dundee and District Jute and Flax Workers Union (DDJFWU), which received the support of the Women's Trade Union League and the General Federation of Trade Unions.² Over the next twenty years, the relationship between the two Unions deteriorated as they fought for membership of the industry's women workers, with the ultimate demise of the DDMFOU.

Part of my argument here is that the patriarchal form of unionisation implemented by the DDMFOU was overtaken by a union that relied on a more diffuse working of power amongst its members. However, by covering the period from the 1890s

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¹ In contrast to the burgeoning national trade union movement, the policy of the DDMFOU was resolutely conciliatory and had as a guiding principle the prevention of strikes at all costs:

[&]quot;The Mill and Factory Operatives' Union was organized for the purpose of preventing strikes, and any workers who take matters into their own hands and leave their employment, thus causing serious mischief to their fellow-operatives, are acting entirely contrary to the wishes of the union". Dundee Advertiser, 23 February 1906.

² The Union's constitution was written with the help of the Women's Trade Union League and had the unique distinction of reserving 12 of the 24 executive seats for women.

to the 1930s, this paper provides details of both union and non-union strategies of resistance. Its purpose, in so doing, is to reflect upon the multiplicity of resistances and to follow through a range of operating scales and spaces, which created, were created by, and couched, various forms of protest.

Resistance through segregations

Resistance was played out at various points across the geography of the mill and factory. Here I reflect first upon the importance of work gates in the division between different regimes of power, the multifarious workings of these power relations and what this tells us about how space was conceptualised both 'outside' and 'inside'. Then, moving inside the mill and factory, I consider how resistance to workplace disciplinary regimes was also forged through internal workplace segregations. Punitive rules and regulations that ensured the workplace was an enclosed and partitioned site were central in shaping workers' strategies of protest.

In 1893 a general strike occurred across Dundee against a five per cent reduction in wages. The strike had originated at the city's Tay Works and, according to the *Dundee Advertiser* (5 May 1893), "it was here that the most violent scenes were witnessed":

On Monday at 6 o'clock...the employees who had agreed to stand by the resolution assembled outside the gates, and amused themselves by hooting at their fellow workers who felt it their duty to continue at their work. Before breakfast the strikers numbered 500, after breakfast 2,000 ... It was observed that many of the younger workers, both male and female, had come provided with wooden laths. The 10 o'clock whistle began to sound and as the shrill notes were heard a few antistrikers made their way towards the entrance. They were immediately set upon by those armed with sticks, and ran the gauntlet under a shower of hearty blows.

At the same time they were loudly hooted and subjected to remarks of a far from complimentary kind. In this way, about 100 workers, chiefly men found their way in.

Citywide strikes over pay, as well as specific mill and factory strikes over local workplace grievances were frequent in Dundee and, as suggested above, the gates of various jute works were a common location for their organisation and precipitation. Accounts of strike action along with the mode and geography of strike organisation provide insight into relations between employers, employees and trade unionists, as well as amongst the workers themselves.

For example, in March 1908, John Sime, the leader of the newly formed DDJFWU suggested to the Management Committee that, to raise the profile of the Union, he address meetings at various work gates during dinner hour to give out handbills "bearing no day or date" (DDJFWU General Meeting Minutes, 3 March 1908). With the idea finalised and a list of works at which he was to speak drawn up, Sime delivered lunchtime 'lectures' four days a week (DDJFWU General Meeting Minutes, 23 June 1908). As all workers had to file through work gates on entering the mills and factories, they became an important point of contact between workers and trade unionists. Physically, the gates were the closest union officials could get to the workplace without receiving permission to enter, potentially precipitating a very visual and visible form of protest. With this in mind, managers and directors, as well as the police, were keen to keep the gates – a vulnerable point in the workplace – under close scrutiny in case of trouble (Philo 2001 makes a similar point in relation to the prison). Symbolically too, the gates represented a transition of power relations: between the seemingly 'free' space of the outside and the space of 'capitalist exploitation' on the inside. Indeed, the trade union traded on this very public form of protest among working women and the perceived dichotomous 'free' versus 'exploited' power relations. However, it is this understanding of power that I want to question more closely here.

Although the work gates were represented in dichotomous terms by the Union as a boundary between the 'free' and the 'disciplined', I suggest that, through a Foucauldian lens, a disciplinary power operated on both sides. Once through the gates and at work, discipline was forged through various rules and regulations, codifying the strict spatial and gendered divisions of labour. Enforced by (male) foremen, managers and directors, these rules and regulations were aimed at ensuring a productive and hardworking workforce (discussed in Wainwright 2005). Beyond the workplace, however, the DDJFWU adopted its own disciplinary strategies. The gates were not only points of contestation between employees and employers but also between the employees themselves, notably unionists and non-unionists.

During periods of industrial grievance, it was common for workers to turn up at work gates at the start of the day without any intention of entering. A letter from the largest jute works in the city, Cox Brothers, in 1916, noted that, due to Union meetings at their work gates, "the number of absentees in the mill increased from 1065 at 3pm yesterday to 1203. At 3pm this afternoon it was 1233" (Cox Brothers' Letter Book, 4 April 1916). The work gates became a point at which Union officials and members coerced (or bullied) those workers who intended to

enter and defy strike action. An incident reported by the local newspaper from 1916 demonstrates this:

A case which had a direct bearing on the jute strike was heard in the Sheriff court on Thursday, before Sheriff Neish, when three millworkers, named John Morgan or Duffy, 26 Whorterbank, Lochee; Rose Fitzpatrick or Keenan, 3 East Whorterbank, and Jessie Scott or Burke, 6 West Whorterbank, were charged with assaulting Mary Brady or M'Kearney, 23a Athol Street, Lochee at the entrance to Camperdown Jute Works, on 28th March (People's Journal, 22 April 1916).

The fracas that ensued can crudely be seen as a case of "domination in resistance" (Sharp et al, 2001, 21), disputing the notion that resistance is pure and untainted by conflicting power dynamics. Through a disciplinary gaze, instilled by Union membership, a process of coercion was effected through the workers themselves. In this way, Foucauldian thinking can provide useful insight into how employees constructed their identity in relation to discourses of domination *and* resistance operating in and beyond the workplace (Knights and Willmott 1989; Knights and McCabe 1998). This self-monitoring of workers through union intimidation attempted to produce a cohesive and homogenous protesting group with a clear identity position. By looking at resistance in this way, work gates can be seen as sites of conflicting regimes of disciplinary power – venues of very public protest against the disciplinary factory system, yet venues whereby a self-disciplinary gaze was cast among and between the workers themselves. This point is returned to later in this paper.

Moving away from the gates, resistance to workplace disciplinary regimes was also forged through the internal divisions in the workplace. Within the mills and factories, the workforce was split into identifiable groups that did the same job, worked under the same conditions and were paid the same. However, this

segregation encouraged tight group networks and identities to form among the workers and, ultimately, engender solidarity and resistance. Thompson remarked that "[i]n mature capitalist society all time must be consumed, marketed, put to use; it is offensive for the labour force merely to pass-time" (Thompson 1967, 90-91). The 'passing of time' was deemed both frivolous and dangerous as it allowed networks and conversations to be forged amongst workers: a space, it was perceived, for discontent and indolence to thrive, counter to the expected time-discipline.

In Dundee's jute works, wary of these moments of stoppage, employers attempted to break up informal workplace gatherings. For example, in a letter from the DDJFWU to the management of West Dudhope Works in 1928, the Union articulated the frustrations of the shifting piecers who, the company had decided, could no longer sit together during their waiting spells or 'pass' (DDJFWU Letter Book, 13 October 1928). Although it is difficult to ascertain the meanings of these spaces of respite (Moss 1997) for the women themselves, what is clear is that managers considered them to be unregulated, unproductive and hence dangerous, and were anxious to minimize the time workers had to converse with one another. At the same time, though, trade unionists recognised the opportunities such networks presented. In June 1930, the DDJFWU wrote to a weaver at Kings Cross Factory about workers' concerns over wages:

Yours is the only name I know amongst the weavers at Kings Cross Factory and I have therefore sent this note to you. Will you please pass this note round or let the weavers know that I would like to meet them in our hall to-morrow (Friday) night, say about 7.30, in connection with our call on the firm to-day regarding Weaving rates (DDJFWU Letter Book 5 June 1930).

Workplace networks and gatherings among specific groups of working women enabled the trade union's reach to extend into the mills and factories, and around the millworkers and weavers respectively, to circulate their own information and encourage organisation.

These examples demonstrate how the workplace – a site of strict time-discipline – was also a forum through which trade unionists furthered their own cause. By using the geography of the workplace, both its external boundaries and internal divisions as prescribed by managers and directors, the DDJFWU could employ various methods of coercion and information distribution to keep account of and inform its members of Union activities and protest.

Creating and extending workplace networks

The DDJFWU widened its influence by creating and extending networks amongst workers, and adopting a range of strategies that facilitated a citywide project of protest and made the workers more governable. The Union's second meeting on March 17th 1906 was devoted to dividing the city into districts and appointing collectors. The role of collector was central to the effective functioning of the Union and was monitored through a number of Union rules.³ With instructions on collecting and bookkeeping scrupulously set out, collectors were closely scrutinised by the Union with books and membership cards investigated by the

³ These included:

^{1.} The Collectors must collect weekly, and enter, in ink, Members' names, with date of entrance and all contributions, before leaving the house and shall fill up spaces in their books and Members' cards with a cross thus X, when Members neglect to pay their contributions.

^{2.} They shall bring their books to the office not later than Wednesday. The office will be open on Tuesday and Wednesday evening, from 7.30 to 9, for Collectors to pay over to the Treasurer all money collected. They shall ascertain, if possible, when any Member removes from their district where such a Member has removed to. They shall, at the close of each month, give the numbers of their Members, amount of weekly subscriptions and total amount of arrears. See DDJFWU (n.d.) Rules.

management committee. Indeed, if a collector was absent for more than two weeks, they would thereafter be accompanied by a committee member and, the Union's Management Committee Minutes for January 8th 1907 called on Union members to collect and report information about the conduct of the collectors (DDJFWU, General Managers Minutes, 26 Nov 1907 and DDJFWU, Management Committee Minutes, 8 January 1907). This geographic division of the city, recruitment of collectors and distribution of membership cards, enabled the Union to cast its own specific disciplinary gaze across workers as identity could be immediately revealed by reference to district and card number (DDJFWU, Rules). This is an example of the trade union's own form of governmentality (Foucault 1991b) operating through the working population. The use of membership cards both served to 'totalise' the workforce into unionisation but also to 'individualise' (Gordon 1991, 3), marking out errant members or non-members.

A further example of this disciplinary power came in 1916 when a strike among workers for a 15 per cent pay rise led to the publication of a new union paper, The Dundee Textile Workers Guide. It was established in response to what was perceived as unfavourable press coverage in the local newspapers. The newspaper stressed that workers should "not destroy or throw it away; [but] pass it around among your fellow workers, see that it has good circulation. So shall you help us and help yourselves" (The Dundee Textile Workers Guide, Vol. 1 No. 1, 7 April 1916).

Initially the mouthpiece of the combined textile workers' unions in the city, 4 the paper cost a half penny and was published weekly until the strike drew to a close. After the strike, it was taken over exclusively by the DDJFWU, renamed The Jute and Flax Workers Guide (The Guide) and published on a monthly basis. The Guide became a central component of the DDJFWU's strategy of resistance; it was used to disseminate information and tap into and extend workplace networks. For example, it instructed readers to find out whether their neighbour at work was a member of the Union by asking to see their membership card. In so doing, the Union used workplace networks to get its members to cajole and intimidate fellow workers into joining the Union. The Guide also encouraged its members to complain when fellow workers were not striking, as a letter it printed in 1919 demonstrates:

Will you kindly take some action with our weavers in Heathfield works as they came in last Saturday in fairly large numbers, while not one of our mill hands were in. None of the workers in Belmont Works (the same firm) were in. Many of those who were in were at the meeting on Friday, 10^{th} January, and I felt so keen on this matter that I went into the factory at Heathfield and examined their cards and give you some of the numbers and their collector. You will be able to get their names (The Guide, Vol. 3, No. 41, Jan 1919).

With weavers unhappy at their counterparts in the mill, the millworkers, this letter demonstrates that workers were willing to play an active role in the trade union's own process of surveillance. By extending the Union's gaze over the workplace The Guide reprimanded non-members and non-compliant members by requesting the presentation of membership cards and numbers, making visible those who did not participate in Union activities or on the Union's terms.

⁴ The Mill and Factory Operatives Union, the Powerloom and Tenters Union, the Calender Workers' Union, and the Jute and Flax Workers Union.

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Another example of this process came at the end of a six-month strike in 1923 when The Guide published a photograph of Elizabeth Low, a 'female scab' (Figure 1). Should anyone be uncertain of her identity, the paper explained "Mrs Low was one of Messrs Cox 'loyal' work-people during the strike" (The Guide Vol. 7, No. 94, September 1923). It also located "a number of female scabs residing in or about Wilkie's Lane" and chastised workers for helping the 'Fisher Girls' who came to Dundee to blackleg:

What we are surprised at is that any Dundee jute workers take them as lodgers, and we are further surprised that any jute worker gives them any assistance at the work they do (The Guide Vol. 1, No. 11, July 1916).

In this way, The Guide effectively encouraged workers to drive out other women who came to Dundee looking for work in the jute industry during times of industrial unrest. Not only then did The Guide enable the Union's gaze to be cast over the workplace but also extended it into workers' homes. As a vehicle of knowledge dissemination, it relayed an array of information between the workers of different mills and factories, making them aware of what was going on elsewhere. With a 'guaranteed' circulation of not less than 10,000 copies of each issue among the mill and factory workers, it became an important forum for making public various letters, disputes, wage differences and comments from the press; a space to make things visible and a point of connection between mills and factories.

Foucault (1991b, 96) spoke of points of resistance that are mobile and transitory: "fracturing unities and effecting regroupings, furrowing across individuals themselves, cutting them up and remoulding them". The promotion of Union activity and normalisation of Union membership, whether through the use of

membership cards or the dissemination of The Guide, operated across and moved through the mills and factories and the industry's working women. Unionisation was mobilised by the development of tight networks and conversations that were used to identify and locate difference among working women, constructing the unionised worker as the workplace norm.

The Union also drew upon workplace networks and norms to inform the array of 'experts' that had increasingly converged upon the factory after the First World War. In 1933, for example, the Union wrote to H.M. Inspector of Factories, David Young, about the South Anchor Jute Works:

[W]e are informed that Preparing operations will be carried on to-night (Tuesday 6th June 1933). We are definitely informed that the Lodge door is always locked when this working is going on. The Night watchmen is attending to the boilers, knocking at the door is useless. There is, however, a door in Anchor Lane which is not locked. Entrance would be obtained there and access to the mill is obtainable by going through the factory. We are informed there will be 6 or 7 boys working who are under 18 years (DDJFWU, Letter Book, 6 June 1933).

In other words, workers informed the trade union who then used official discourses and institutions to reprimand employers. Similarly, the Union would work in conjunction with employers to highlight the misdemeanours of foremen. In 1928, for example, the Union wrote to Jute Industries Ltd. with regard to the dismissal of Jane Orchison who had been employed at Camperdown Works for 56 years. She had fallen ill on May 4th 1928 and, despite telling her foreman, was replaced by another worker. The reply from Jute Industries Ltd., about reinstating Orchison, read:

We are obliged to you for having brought this matter to our notice, as the management of Camperdown were unaware of the incident. Instructions have been given to the Foremen to bring similar cases to the notice of the Management before taking action (DDJFWU, Letter Book, 22 May 1928).

Through this reading, the two typically opposing groups of employers and employees needs to be re-entangled as the power relations between them operated in more complex ways than can be depicted with simple polarities of 'us' and 'them' (Jermier, Knights and Nord 1994, 4). Instead, as shown in this example, the Union could and did use the hierarchy and discipline of the workplace to further its own project of labour protection.

'Hidden' spaces of communication

Beyond the official accounts and gaze of management, women workers created their own private and hidden spaces of communication. Scott (1990) stresses the importance of analysing what he terms the 'hidden transcripts' of resistance; the 'hidden' acts of protest that take place 'offstage' and beyond the direct observation of those in authority. This could be as 'trivial' as the making of faces behind the foreman's back to the stealing of jute to be sold on the black market (Stewart 1967). However, this section focuses on the ways in which the details of the work space itself enabled women to develop various practices of resistance against the regime of production.

In 1881, the People's Journal series 'Sketches of Life in a Jute Mill' claimed that "[s]o much rudeness, duplicity, and profanity, hidden by the noise and activity of work, afford anything but a good school for the morals of young persons" (People's Journal, 28 May 1881). Although the noise of the machinery hindered normal communication, it opened up a private space for working women to converse with their neighbour; a space that the foreman could not reach. Additionally, for communication beyond the immediate neighbour, the weavers

were notorious for their lip-reading skills and repertoire of sign language that enabled communication to continue:

Oh you couldn't hear over the machinery an' when you wanted the time you did that (gesticulating). There were a lot a signs that you had, you know – you had a sign language (Dundee Oral History Project tape 023).

This enabled an alternate means of communication to be developed, above and beyond the noise of the machines and the knowledge of the foremen. In this way, workers were able to manipulate and take advantage of the working environment, imbuing it with their own meaning and conversations.

However, employers could manipulate this same opening for resistance. In 1916, a letter from the DDJFWU, after a consultation with the management of Camperdown Works, reported to an employee that a promise of a return to work had been reneged:

He said that there was no trace of any promise that week about, or turn about, was to be given to the workers transferred along with you. I said the only trace of such a promise would be, if it was written, as, in the noise of the mill, the person to whom the promise was given would be the only to hear it, and the foreman could deny the promise five minutes after it was given if he cared (DDJFWU, Letter Book, 15 December 1916).

As the working environment was used by workers' to their advantage, so too could foremen use it to disguise the maltreatment of workers. Beyond the public performance of domination and resistance, hidden transcripts could be used by both foreman and mill and factory workers to subvert prevailing meanings and regulations of workspace.

Spaces of communication among workers were not concordant and there was no one homogeneous resisting group; to suggest there was would fall into the trap of romanticising resistance. Abu-Lughod (1990) has cautioned against this

tendency, to read all forms of resistance as signs of the ineffectiveness of systems of power and of the refusal to be dominated. One way of overcoming this tendency or impulse is to look more closely at the resisting group itself and its internal politics. According to Ortner (1995), the absence of analysis of these forms of internal conflict gives many studies of resistance an air of romanticism. Following Ortner, I suggest that a reading of the fragmented nature of the resisting group is necessary in understanding the complexity and pluralities of resistance (Foucault 1979).

This has already been hinted at with regard to trade union tactics of identifying and naming members and non-members alike. But in addition to the channels of scrutiny the DDJFWU opened for its members, antagonism amongst workers was common. This was used, in part, to construct and police an 'ideal', with workers regulating their own and their fellow workers' behaviour, leading to specific workplace performativities (after Butler 1990). For example, Mrs MacIntosh, a former mill worker recalled that in 1918, when she had moved from one mill to another, one "lassie" constantly mocked her Fife accent. She explained, "it got on ma nerves", and so one day on going into work, "Ah went tae ma machine, took off ma coat, and a went over tae her." When her antagonist laughed at her complaints "I just took ma hand and bashed her, she started greetin [crying], and the gaffer went tae ask how she wis greetin" (Smith 1996, 191). Likewise, Jessie Mitchell recalled that when working in a weaving factory in the 1930s, an older woman who had "an awfy spite at me, made meh life a misery, an Eh had tae gie up meh job" (Smith 1996, 192). Communications both within and outside the knowledge of the management reflected the fractious reality of work with women themselves constructing a form of workplace behaviour from which deviations were not tolerated. This type of behaviour also indicates the likely effectiveness of policing union membership through workplace groupings that the Union relied upon, with workers willing to challenge one another and actively construct certain forms of workplace behaviour and expectations.

Conclusion

As Herod (2003) has tried to relay to non-geographic scholars, serious engagement with the spatial is essential for understanding industrial relations. Recent and ongoing calls within economic and labour geography and social and cultural geography have highlighted the importance of resistance, its spatial productions and manifestations. This paper has attempted to both bridge the gap between these geographical sub disciplines and call for greater sensitivity towards the geographical history of the factory system and its workforce. Further, as the influence of Foucault in management and organisation studies (Carter et al, 2002) has been keenly felt, the paper suggests that geographers could do more to engage more thoroughly with and extend spatialised readings of industrial relations, hence broadening the 'resistance landscape' (Thomas and Davies 2005, 733) of both disciplines.

Through an approach that 're-entangles' (Sharp et al 2000) or binds together resisting and dominating power, this paper has tried to tease out how various processes of protest were shaped in relation to workplace organisation. Whether through the (self)disciplinary tactics of the trade union and workers themselves or the use and manipulation of workplace segregations, surveillance and discipline

could be interrupted, subverted and appropriated, enabling various forms of protest to take shape.

The geography of the workplace and city were integral to this. Spatial boundaries and divisions enabled both the trade union's project of 'knowing' the workers, cajoling them into union membership, and the workers efforts in asserting their own identities in the workplace. Whether successful or not, various forms of protest worked through or developed specific geographies operating at both the workplace and citywide level. Importantly, these boundaries were not natural and static, but dynamic and open for negotiation as trade unionists and working women found their own particular means of protest.

This paper further suggests that a Foucauldian reading of power in the workplace does not leave women subjected to and trapped by remorseless disciplinary gaze. Instead, the functioning of power within and around the mills and factories was more complicated. As Foucault suggested, no one is outside of power and so, although women could not step beyond this disciplinary gaze, they could manipulate and stretch it for their own ends by forging their own workspaces or inscribing work with their own meaning. Further, through joining the trade union's programme of protest and setting certain workplace ideals they could generate, propagate and be subjected to, their own disciplinary code. Power viewed in this way offers a reading of protest in which working women in the early twentieth-century actively participated and, by paying attention to the geographies through which protest was forged, we get a glimpse of the complexities of resisting power and resisting groups.

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References

Abu-Lughod, L., 1990. The romance of resistance: tracing transformations of power through Bedouin women. American Ethnologist 17, 41-55.

Butler, J., 1990. Gender Trouble: feminism and the subversion of identity. London, Routledge.

Canning, K., 1996. Languages of labor and gender: female factory work in Germany, 1850-1914. London, Cornell University Press.

Carter, C., McKinlay, A. and Rowlinson, M. 2002. Introduction: Foucault, management and history. Organization 9, 515-526

Clegg, S., 1989. Frameworks of power. London, Sage Publications.

Cox Brothers. Letter Book. 4 April 1916. MS66/II/2/6 Dundee University Archives.

DDJFWU. General Meeting Minutes. GD/JF1/1, Dundee City Archives.

DDJFWU. Letter Books. GD/JF5/1-3, Dundee City Archives.

DDJFWU. Management Committee Minutes, 8 January 1907, GD/JF/1/4, Dundee City Archives.

DDJFWU. n.d. Rules. GD/JF/16/4, Dundee City Archives.

Driver, F., 1993. Power and pauperism, the workhouse system 1834-1884 Cambridge: Cambridge University Press.

Dundee Advertiser. 23 Feb 1906. Local Studies Department, Dundee Central Library.

Dundee Advertiser. 5 May 1893. Local Studies Department, Dundee Central Library.

Dundee Oral History Project. Tape 023, Local Studies Department, Dundee Central Library.

Foucault, M., 1991a. Space, knowledge and power. In: Rabinow P. (Ed.), The Foucault reader. London, Penguin, pp.239-256.

Foucault, M., 1991b. Governmentality. In: Burchell, G., Gordon C. and Miller P., (Eds.), The Foucault effect: studies in governmentality. London, Harvester, pp.98-120.

Foucault, M., 1988. Two Lectures. In Gordon C. (Ed.), Power/knowledge: selected interviews and other writings 1972-1977. New York, Pantheon, pp. 78-108.

Foucault, M., 1979. The history of sexuality, Vol. 1: The will to knowledge London, Penguin.

Foucault, M., 1977. Discipline and punish: the birth of the prison. London, Penguin.

Gordon, C., 1991. Governmental rationality: an introduction, in: G. Burchell, C. Gordon and P. Miller (eds), The Foucault Effect: studies in governmentality. Chicago. Chicago University Press pp. 1-51

Gordon, E., 1991. Women and the labour movement in Scotland, 1850-1914. Oxford. Clarendon.

Herod, A., 2003. Workers, space and labour geography. International Labor and Working-Class History 64, 112-138.

Herod, A., 2002. Towards a more productive engagement: industrial relations and economic geography meet. Labour and Industry 13 (2), 5-17.

Herod. A., 2001. Labour Geographies: Workers and the Landscapes of Capitalism. New York, Guildford Press.

Herod, A., 1998. The spatiality of labour unionism: a review essay. In: Herod A. (Ed.) Organizing the Landscape: Geographical Perspectives on Labor Unionism. London, University of Minnesota Press, pp.1-36.

Herod, A., 1997. From a geography of labour to a labour geography: labour's spatial fix and the geography of capitalism. Antipode 29, 1-31.

Herod, A., 1994. On workers' theoretical (in)visibility in the writing of critical urban geography: a comradely critique. Urban Geography 15 (7), 681-93.

Jackson, N. and Carter, P., 1998. Labour as dressage. In: McKinlay A. and Starkey K. (Eds.), Foucault, management and organization theory: from panopticon to technologies of self. London, Sage, pp.49-64.

Jermier, J., Knights, D., and Nord, W., 1994. Introduction: resistance and power in organizations: agency subjectivity and the labour process. In: Jermier J., Knights D. and Nord W (Eds) Resistance and power in organizations. London, MIT Press, pp. 24-37.

Joyce, P. 1980. Work, society and politics: the culture of the factory in later Victorian England. New Brunswick

Knights, D. and McCabe, D 1998. What happens when the phone goes wild? Staff, stress and spaces for escape in a BPR regime. Journal of Management Studies 35, 163-94

Kinghts, D. and Willmott, H. 1989. 'Power and subjectivity at work: from degradation to subjugation in social relations. Sociology 23, 535-58

Knights, D. and Vurdubakis, T., 1994. Foucault, power, resistance and all that. In: Jermier J., Knights D. and Nord W. Resistance and power in organizations London, MIT Press, pp.167-198.

Lennox, D., 1905. Working class life in Dundee for twenty-five years, 1878-1903 Dundee, Dundee University (unpublished thesis).

McKinlay, A. and Taylor, P., 1998. Through the looking glass: Foucault and the politics of production. In: McKinlay A. and Starkey K. (Eds.), Foucault, management and organization theory: from panopticon to technologies of self. London, Sage, pp.173-190.

Miller, P., 1987. Domination and power London, Routledge & Kegan Paul.

Morgan, C., 1997. Gender constructions and gender relations in cotton and chain-making in England: a contested and varied terrain. Women's History Review 6 367-389

Moss, P., 1997. Spaces of resistance, spaces of respite: franchise housekeepers keeping house in the workplace and at home. Gender, Place and Culture: a journal of feminist geography 4 179-196.

Ong, A. 1987. Spirits of resistance and capitalist discipline: factory women in Malaysia. Albany, State University of New York Press.

Ortner, S., 1995. Resistance and the problem of ethnographic refusal. Comparative Studies in Society and History 37, 173-193.

Parr, J. 1990. The gender of breadwinners: women, men and change in two industrial towns, 880-1950. Toronto, University of Toronto Press.

People's Journal, 28 May 1881 and 22 April 1916. Local Studies Department, Dundee Central Library.

Philo, C., 2001. Accumulating populations: bodies, institutions and spaces. International Journal of Population Geography 7, 473-490.

Philo, C., 1989. Enough to drive one mad": the organization of space in the 19th century lunatic asylums. In: Wolch J. and Dear M. (Eds.), The power of geography: how territory shapes social life. London: Unwin Hyman Ltd, pp50-66.

Pile, S. and Keith, M. 1997 (Eds.), Geographies of resistance. London, Routledge.

Ploszajska, P., 1994. Moral landscapes and manipulated spaces: gender, class and space in Victorian reformatory schools. Journal of Historical Geography, 20, 413-429.

Rose, S. 1992. Limited livelihoods: gender and class in nineteenth-century England. London, Routledge

Royal Commission on Labour, 1893. The employment of women, conditions of work in various industries in England, Wales and Scotland. London.

Savage, L. and Willis, J. 2003. New geographies of trade unionism. Geoforum, 35 5-7.

Scott, J. 1990 Domination and the arts of resistance: hidden transcripts. Newhaven, Yale University Press.

Sharp, J., Routledge, P., Philo, C. and Paddison, R., 2000. Entanglements of power: geographies of domination/resistance. In: Sharp J. Routledge P. Philo C. and Paddison R. (Eds.), Entanglements of power: geographies of domination/resistance. London, Routledge, pp. 1-42.

Smith, G., 1996. The making of a woman's town: household and gender in Dundee, 1890 to 1940. University of Stirling, Stirling (unpublished PhD thesis).

Spain, D. 1992. Gendered spaces. Univeristy of North Carolina Press, Chapel Hill.

Stein, J., 1995. Time, space and social discipline: factory life in Cornwall, Ontario, 1867-1893. Journal of Historical Geography, 21, 278-299.

Stewart, B., 1967. Breaking the Fetters. London, Lawrence and Wishart.

Tamboukou, M. 2000. Of other spaces: women's colleges at the turn of the nineteenth century in the UK. Gender, Place and Culture 7, 247-263.

The Dundee Jute and Flax Workers Guide. Dundee City Archives.

The Dundee Textile Workers Guide, Vols 1, 3 and 7. Dundee City Archives.

Thomas, R. and Davies, A. 2005. What have the feminists done for us? Feminist theory and organizational resistance. Organization 12, 711-733.

Thompson, E. P., 1967. Time, work-discipline and industrial capitalism. Past and Present. 38, 56-97.

Turner, W. H. K. 1966. The concentration of jute and heavy linen manufacturers in east central Scotland. Scottish Geographical Magazine, 82 29-45

Wainwright, E.M., 2005 Dundee's jute mills and factories: spaces of production, surveillance and discipline. Scottish Geographical Journal 21 121-140

Wainwright, E. M., 2002 Gender, space and power: discourses on working women in Dundee's jute industry c.1870-1930. University of St Andrews, unpublished PhD thesis.

Walker, W., 1979. Juteopolis: Dundee and its textile workers, 1885. Edinburgh, Scottish Academic Press.

Ward, J T., 1979. Trade unionism in Dundee. In: Jackson (Ed.), The city of Dundee. Arbroath, Herald Press, pp.247-284.

Whatley, C., Swinfen, D. and Smith, A., 1995. The life and times of Dundee. Edinburgh, John Donald.

Winstanley, M. 1996. The factory workforce. In: Rose, M. B. (ed) The Lancashire cotton industry: a history since 1700 Preston, Lancashire County Books.

Wright, M W. 1997. Crossing the factory frontier: gender, place and power in the Mexican Maquiladora. Antipode 29 278-302.