

Exploring Surveillance: The Case of Organizational Drug Policies

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By

Charlotte Sanderson Msc. BA Hons

School of Management

University of Leicester

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Abstract

In light of the increasing proliferation of organizational drug testing in both the US and the UK, this thesis explores employee responses to this managerialist mechanism with specific reference to the ‘social order’ of drugs, surveillance, discipline and work-life balance. As Brewis *et al.* (2006) suggest it is important to consider this topic *prior* to it becoming an established practice in the UK in particular. My research questions are therefore concerned:

1. To examine the extent to which employees accept, accommodate or resist drug testing policies.
2. To consider what the ethico-political implications of these policies may be for individual employees, organizations and society at large.

Importantly this thesis makes a significant contribution to Organization Studies (OS) and Critical Management Studies (CMS) literature alike. Although the issues of surveillance, discipline and work-life balance have been given significant attention by these scholars, to date the literature has remained resoundingly silent on the issue of employee drug testing. Methodologically negotiation of access to an organization for the purpose of researching this extremely sensitive topic was also successfully achieved.

Based on the data collected, the thesis contends that respondents’ understandings of the drug test as more or less legitimate tended to vary with the level of their personal experience of drugs and drug takers. Concerns were also expressed about the impact of drug policies on the private sphere of leisure and the home. However, despite its obvious panoptic intentions, my data also indicate that in practice the drug test is a flawed surveillance technology, limited to the time of its physical enactment and affected by various factors including the frequency with which it is conducted. The data likewise indicate the possibility of beating the test via the use of masking agents, for example. Overall, although methods of resistance did seem to develop alongside increasingly stringent testing procedures, due to its apparent flaws respondents were relatively apathetic towards the test and it seemed to have little substantive impact on their behaviour.

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Introduction

In the beginning

My initial interest in the topic of organizational surveillance was inspired by a lecture on Michel Foucault and the Panopticon delivered by Gibson Burrell (who later became my second supervisor) as a component of my MSc in International Management at Essex University. I found fascinating the possibility of creating disciplined individuals by rendering them permanently visible, and thus continuously subject to judgement. As I began to read more about this idea I became increasingly intrigued by the phenomenon of the ‘all seeing eye’ - panopticism - beyond the physical structure characterised by Bentham’s Panopticon. Furthermore, in viewing television programmes such as ‘Big Brother’, I also began to notice the apparent *lack* of discipline displayed by individuals who were subject to the vision and judgement of the nation. The apathy towards (or indeed complete disregard of) their audience seemed to bring into question the effectiveness of surveillance and visibility as disciplinary tools. Subsequently, and tying these themes together, it was through a discussion with Joanna Brewis (eventually my first supervisor) that I first became interested in the issue of *drugs*, organizational surveillance and employee visibility. Thus, this thesis is concerned with the development of employee drug testing programmes in the UK, particularly the surveillant capacity of the test as invasive of conventionally private spaces – the body itself, and the sphere of home/ leisure.

Unlike the previous empirical research on organizational drug testing which in itself is very limited and which has focused on management attitudes to this type of initiative (eg, Independent Inquiry into Drug Testing in the Workplace [IIDTW], 2004) this thesis is concerned with exploring *employee* understandings of and responses to these policies. This focus has been explored through a conceptual framework founded on some of the key concerns of Critical Management Studies (CMS), from the discursive construction of the workplace through the development of workplace surveillance to issues pertaining to work-life balance (WLB). The research questions outlined below reveal the specific areas of interest that I sought to explore during this thesis:

1. To examine the extent to which employees accept, accommodate or resist drug testing policies.
2. To consider what the ethico-political implications of these policies may be for individual employees, organizations and society at large.

In this introduction, I shall point to the particular contribution that this thesis makes to Organization Studies (OS) and CMS alike. I shall also outline the structure of the thesis, summarising the key concerns of each chapter and contextualising the discussion in each of these chapters.

Making a contribution

The most essential point to make when introducing this thesis is the contribution it makes to the OS literature and CMS in particular. Importantly and as suggested above there has been almost no empirical work exploring employee drug testing in the OS literature and what *has* been done focuses on the nature of the drug testing policy itself and managers' justification for instituting policy rather than employee understandings of or reactions to these initiatives (see for example; Draper, 1998; Wood, 1998; IIDTW, 2004). Likewise CMS as a critical and defamiliarizing reflective subset of OS has little to say about the development of drug policies or testing at work (exceptions include, for example; Cavanagh and Prasad, 1994; Warren and Wray-Bliss, 2003; Brewis *et al.*, 2006) which is surprising in light of their increasing proliferation and the fact that these policies seem to be underpinned by some of the managerialist assumptions CMS has sought to problematize.

Workplace drug testing is also a particularly topical area of research. As shall be explored later, it is already an established practice in the US with over fifty percent of businesses utilising some form of employee drug testing which equates to roughly fifteen million people being tested each year (IIDTW, 2004: 41). This practice is also set to become ever more prolific in the UK. As the IIDTW (2004: xi) reveal, a MORI poll carried out for them in 2003 showed that of 200 companies surveyed four percent utilized some form of testing and a further nine percent said they were likely to introduce tests during the following year. This

evidence was established by a major study into the development of drug testing in the UK: however, and to reiterate the point above, this research focused on the costs and benefits to organizations, interviewing managers rather than employees. Thus my research seeks to move on from this work to explore employees' understandings of and responses to these policies.

Moreover there has been a plethora of CMS work using Foucault (1977) and specifically his book 'Discipline and Punish' to explore the development of organizational surveillance of employees (eg Poster, 1990; Sewell and Wilkinson, 1992; Townley, 1993). The more critical end of management studies has also explored the breakdown of conventional barriers between the work and the home, notably the increasing intrusion of work into the private lives of employees and the effects on employee WLB (eg Hochschild, 1997; Connell, 2005; Hughes and Bozionelos, 2007). The practice of employee drug testing undoubtedly raises important concerns in both these areas. However, the drug test seemingly goes beyond conventional surveillance technology. Rather than observing individuals' *external* commitment to organizational norms it extends surveillance beyond the naked eye to see beneath the skin revealing bodily data and the 'testee's' *internalization* of these norms. The undoubted disciplinary (panoptic) and regulatory (biopolitical) intentions of the workplace drug test, which seeks to control and regulate individuals and the mass workforce alike, makes the dearth of CMS literature on this issue all the more unexpected. This is a gap which this thesis seeks to address.

In addition, unlike other contemporary surveillance technologies, the drug test reveals individuals' *previous* and *unseen* behaviour. The capacity of the test to reveal employees' behaviour in their leisure time signifies the further extension of 'work' into 'life' – such that organizations are apparently no longer simply concerned with how individuals spend their work time but equally how they spend their free time. Thus the development of employee drug testing is in conflict with the rhetoric advocating greater WLB for employees. Once again though the development of workplace drug testing and its implications for WLB have largely been ignored by CMS.

Finally, this thesis not only makes significant *empirical* and *conceptual* contributions but also a methodological one – that I successfully negotiated access to a drug testing organization for data collection. Gaining access was one of the major hurdles in this project given the sensitive nature of my research interests. In exploring employees' understandings of and responses to workplace drug testing I was hoping to look at the 'success' of the test, namely whether it identified drug users and deterred drug use. As Easterby-Smith *et al.* (2002: 4) acknowledge the attendant controversies resulting from the fact that any such information potentially has negative implications for the employer and employees alike. For the employer my research could reveal the *failure* of employee drug testing to both identify and deter use, which may have important implications for health and safety in the workplace and indeed contradict organizational justifications for introducing drug testing programmes. For respondents, data collection of this type potentially makes their private drug taking habits known to the employer which would have negative career implications. As shall be

discussed later these concerns were incorporated within my research design and led to the development of an additional snowball sample. However, ultimately these problems were overcome and I was successful in my pursuit of access to a drug testing organization, and subsequent data collection.

Having established the three fold contribution of this thesis, the following sections give a brief chapter by chapter overview of its contents to act as a routemap through the rest of the material.

Exploring employees' understandings of drug use and drug testing via the Labour of Division

The paired chapters' one and two develop a conceptual discussion which forms the first of three in my literature review, seeks to explore understandings of drugs and drug testing. They begin with a discussion of the complex and multifaceted social history of drugs utilising cannabis, cocaine and thalidomide as exemplars. Moving on from this these paired chapters I utilize Cooper's (1997) concept of the Labour of Division as a means of exploring the 'social order' of drugs in contemporary western society. The Labour of Division as conceived by Cooper seeks to articulate how we negotiate and make sense of the world around us, suggesting that the world is understood through either/ or binary oppositions such as good/ bad, legal/ illegal, healthy/ unhealthy etcetera. Thus the Labour of Division seemingly articulates the consistent ways in which we see the world, the

ways that we simplify it to render it knowable and navigable. These two chapters also suggest that the concept of the Labour of Division has empirical value in terms of the concerns of my thesis, as these binary divides are reflected in the formal classification of drugs as legal *or* illegal - categories which *infer* their inherent 'goodness' or 'badness' and prescribe how individuals *should* know and understand them. Thus these pre-existing categories mediate individuals' perception of a complex and dynamic world by filtering information, shaping understandings and attributing meaning to the world around us. In this sense the Labour of Division determines the boundaries of knowledge, limiting it to the remit of these binaries.

However, these chapters also question the reified nature of these divides as implied by Cooper (1997) utilising the previous examples of cocaine, cannabis and thalidomide to suggest that the social position of these drugs has changed over time and acknowledging the inability of the Labour of Division to account for these transitions. Moreover, the Labour of Division is also unable to account for drugs that fail to fit neatly into its either/ or categories as the present position of cannabis in the UK illustrates. Although cannabis is not legal, individuals are no longer prosecuted for possession for personal use. To elucidate this further these chapters utilize the work of Geertz (1983) and his distinction between 'common' and 'local' knowledges to reveal the limitations of the Labour of Division in understanding actual practice. The binary divisions of the Labour of Division are representative of 'common' knowledge, and the prevailing social order. Geertz, however, offers us important insights into the role of first hand experience or 'local knowledge' in nuancing these divisions. Individuals are

likely to draw on ‘common knowledges’ when they have little or no experience of a phenomenon. ‘Common knowledge’ therefore enables members of a community to live together with some form of success but, individuals’ opinions are, through lived experience and the development of ‘local knowledge’, likely to deviate from this simplistic order. Thus I suggest that individuals’ thoughts and opinions of drugs and the drug test may well change depending on their direct personal experience of the same.

As the above discussion and paired chapters one and two illustrate, then, the Labour of Division is useful to some extent in articulating social praxis around drugs. However, I also argue that it is superficial and fails to account for understandings which do not fit within these divides. Nonetheless, it is evident that the workplace drug test is founded on these simple categorizations of drugs and their users in which drug use is understood as deviant and undesirable.

Having offered a brief outline of the first pair of chapters of my thesis I shall now move on to consider the second paired discussion in chapters three and four, concerned with the drug test as a contemporary surveillance technology.

The drug test as surveillance technology

The development of workplace surveillance is a key concern for OS and CMS alike as research into computer based performance monitoring and closed circuit

television (CCTV) surveillance in organizations reveals (eg, Poster, 1990; Ball, 2000, 2002). In light of this interest in and concern for the development of workplace surveillance it is, as already argued surprising that the development of employee drug testing has received little attention from CMS scholars. These chapters - the second paired discussion in my conceptual review - utilize Foucault's (1977) discussion of the Panopticon, from its formal architecture to the disciplinary principles it exemplifies, to explore the changing nature of surveillance in contemporary society. In this context these chapters explore the ideal architecture of the Panopticon and how its various disciplinary principles of visibility, individualization, normalization and judgement are reflected within the physically defined space of institutions such as the prison, school, hospital and workplace. They then goes on to explore the significance of the Panopticon beyond this material architecture, exploring how the disciplinary principles of 'panopticism' function *throughout* western society beyond the physical boundaries of any individual institution or workplace.

The paired discussion of chapters three and four suggest that the extension of surveillance from the disciplinary mechanism of the Panopticon to disciplinary relations of panopticism has been both facilitated and necessitated by increasingly mobile populations, migrating between towns and cities or across country borders. Surveillance technology, much like its subjects, must therefore traverse space. Indeed, these principles of panopticism, which like their architectural origins of the Panopticon seek to render individuals' behaviour visible and subject to judgement, are visible in the workplace. Indeed, these two chapters argue that employee drug testing is an exemplar of panopticism and disciplinary

power, revealing workers' behaviour both within and outside the workplace and rendering it subject to management judgement against organizational norms. These chapters also argue that the drug test is a technology of biopower. Biopower, like panopticism, is concerned with the regulation of the individual body. But it also intends to regulate the masses, in this case the workforce population as expressed through the development of an organizational drug policy and the norms of behaviour it prescribes. Thus the regulatory effects of drug testing policies are achieved through the disciplinary/ individualising mechanism of the drug test.

Paired chapters three and four also suggest that the drug test goes beyond other contemporary surveillance technologies such as CCTV, being able to see beneath individuals' skin and reveal their internalization of organizational norms, rather than simply being concerned with outward behaviour. The discussion utilizes the work of Virilio (1997) to further elucidate this, exploring the drug test as a technology of 'infowar' as perhaps epitomized by the UK government's 'war on drugs'. It is suggested that the drug test is yet another technology of what Virilio refers to as the militarization of society, the deviant drug user being the enemy of organizations. Thus the drug test reduces the worker to their bodily data and identifies the previously hidden enemy of the drug-using employee where relevant. Moreover, the capacity of the drug test to rewind time and reveal previously unseen behaviour reveals it as a technology of Virilio's Dromology and blurs traditional boundaries between work and home, enabling organizations to survey individuals' 'private' conduct. In light of this it is argued that the test

seemingly extends organizational surveillance of employees beyond the physical workplace and further into each worker's biometric makeup.

However they also acknowledge that the surveillant capacity of the drug test is dependent upon its accuracy and capacity, which in practice are limited. Indeed, following the IIDTW (2004), I consider various flaws of the drug test and the implications of these for its surveillant capacity. Firstly, these two chapters explore the problems of the technology of drug testing, from the lack of regulated laboratory standards and the varying sensitivity of testing equipment to the influence of human error on the accuracy of test results. It also suggests that the test may be influenced by the bodily fluid used (the most common fluid being urine for which the technology is also the most established) and the 'window of opportunity'¹ that is afforded by various drugs. For example cannabis may be identified in an individual's system for weeks or even months, whereas cocaine may only be identified for between two to five days. This means that the cannabis user is more likely than the cocaine user to be identified through a drug test.

Moreover, the urine test is only able to identify drug *metabolites* – the substances into which drugs are converted by the body – rather than parent drugs. Thus this test is unable to identify individuals at the point they are *impaired* by the use of drugs. This has additional implications for the accuracy and capacity of the test as many licit substances produce the same metabolites as their illicit counterparts, and are thus likely to result in false-positive test results. The pre-test interview

¹ The time during which a drug is identifiable in an individual's system.

may reduce this problem, offering individuals the chance to discuss any food they have eaten or medication that they are taking which would impact on test results. However this equally extends the surveillant power of the drug test, requiring individuals to disclose further personal information to ensure its accuracy.

Moving on from this, these chapters then consider the issue of resistance which according to Foucault (1979: 96) is “inscribed on power as an irreducible opposite”. Foucault does not accept a dualistic understanding of power versus resistance, nor does he suggest that the disciplinary and regulatory effects of power may result in completely subjugated bodies, but rather suggests that there are many competing power relations acting at any one time in any given place. Thus power and resistance continuously define and re-define their relative boundaries; the one impacting on the other. For Foucault power and resistance may compete contradict and reinforce one another. Following Foucault (1977, 1979) we would expect there to be resistance to the power of the drug test, resistance which reinforces the need for ‘better’ testing. Indeed, in discussing the development of drug testing and resistance in sport these chapters suggest that we should also expect drug testing procedures to evolve *alongside* resistance, the one necessitating modifications in the other.

Indeed it seems that there are a number of ways to beat the test, from various methods of consumption which may affect the speed at which the drug passes through the body and the time during which it is identifiable in the system to the use of clean urine (available for purchase over the Internet) which may be used to fool a test (Voet, 2001). The list of methods of resistance continues, including

the use of masking or cleansing agents claiming to clean hair follicles or flush urine of toxins, the limiting of consumption of drugs to holidays or weekends and changing the substance of choice to reduce the aforementioned window-of-opportunity for a positive test.

In light of this discussion of the drug test as a contemporary tool of surveillance, extending the observation of employees beyond the workplace and into their homes, as well as its potential flaws and deficiencies the next chapter in the thesis considers the test with respect to the issue of WLB.

Work-life balance and the organizational drug test

Much like the issue of surveillance, issues pertaining to WLB have received extensive attention in the CMS literature. However the literature is almost silent on the issue of drug testing, which is seemingly *antithetical* to WLB initiatives in its *blurring* of the boundaries between work and the home, enabling organizations to dictate how individuals should spend their private time. Although traditionally focused on a concern for gender equality (Connell, 2005), having its origins in the increasing uptake of employment by women post World War II, and founded on customary gender order in which balancing the demands of work and the home was a woman's problem, WLB now encompasses a broader remit. As the re-titling of these policies from 'work-family' to 'work-life' seemingly reveals, they have moved from an emphasis on equal opportunities and enabling women to

balance their work and family commitments to a concern for how employees balance their work and non-work commitments regardless of their gender, family situation etc. (Hughes and Bozionelos, 2007). Embedded in this development of WLB policies is a related concern for employees being 'fit for work' which sits alongside the importance of 'life' over 'work' as a form of Corporate Social Responsibility (CSR).

But despite the apparent change in focus of these policies to include a broader range of issues, there is less evidence of their uptake by employees or support for them by middle managers, who are often responsible for administering these initiatives. Indeed the evidence suggests that, despite moves to make WLB policies gender neutral, in reality these policies remain highly gendered and those employees who do utilize these policies do so at the risk of their career progression (eg Hochschild, 1997).

Moreover, contrary to calls for greater WLB the drug test seemingly tips the balance in favour of 'work' over 'life', being concerned with and able to reveal what individuals do in their private time. However, and ironically these two antithetical initiatives can also be seen to be founded on the same principles, notably the dual concerns for employees being 'fit for work' and CSR. As employees are now understood to be the primary means through which organizations achieve competitive advantage, ensuring the health and ability of the workforce to perform is of particular importance. Thus the surveillant practice of drug testing has its origins in concerns for employees being 'fit for work' – but also arguably free from the 'detrimental' effects of drugs in their

private lives. The drug test also seemingly reflects organizational concerns for health and safety, if you accept the suggestion that employee drug use results in increased workplace accidents – a key premise underpinning and justifying testing.

Finally this chapter - the last of the conceptual discussions - suggests that it is WLB rather than drug testing which is incompatible with contemporary western organizations. Utilization of these policies is contrary to the image of the high achiever who prioritizes work over life and organizations within which commitment is measured by time spent at work. Moreover with 24 hour global trading employees are increasingly required to work unsociable hours to service world markets and WLB policies may therefore have detrimental consequences for organizational competitiveness.

Through these five conceptual chapters I have sought to contextualize the issue of workplace drug testing in light of some key concerns in CMS and to clearly establish the gaps in the current literature. The fourth chapter of the thesis outlines my methodology, what I wanted to do empirically speaking, how it changed and what I was actually able to achieve.

Methodology: the ideal versus the possible

Through my two methodology chapters I hoped to explore my research questions and the various themes that emerged through my conceptual review. I was interested in researching employees' thoughts about, experiences of and responses to workplace drug testing, with particular reference to the assumptions upon which drug testing is founded and issues pertaining to surveillance, resistance and WLB. In doing so I hoped to assess whether concerns about drug testing that arose through the literature review were in practice identified or experienced by respondents. To reiterate then my research questions were:

1. To examine the extent to which employees accept, accommodate or resist drug testing policies.
2. To consider what the ethico-political implications of these policies may be for individual employees, organizations and society at large.

One of the key concerns when embarking on this project was its aforementioned sensitivity - the obvious controversy surrounding drug use. As Renzetti and Lee (1993: 4) acknowledge, sensitive research in some way potentially threatens those being studied, a problem exemplified by my research which asked respondents to reveal the very information sought by organizations via testing – their drug use – and which if discovered may result in their dismissal. This problem as well as a concern for management reactions to my research (i.e. the potential it had to

identify 'failed' drug testing policies) were of paramount concern at all points during my research design.

My initial plan to fulfil my research intentions was a comparison between two organizations. Not only did I believe that this would provide me with the richest form of data on drug testing, but I equally thought it would help to minimise the problem of sensitivity, making it far more difficult for respective organizations to identify 'deviant' employees. I considered a number of different possibilities of comparison. For example, one was the possibility of comparing an American firm in which drug testing was well established with a UK firm in which testing was a relatively new initiative. Another possibility for comparison was between 'justified' and 'unjustified' testing, utilising the distinction made by the IIDTW (2004) who identify drug testing on the grounds of health and safety in a safety-critical organizational environment as justified and drug testing in the absence of these concerns as unjustified. Due to the limitations of time and resources the option of a comparison between a US and UK firm was deemed unfeasible. Moreover, the second possibility for comparison could, I concluded, be explored through a single organization if it utilized blanket testing of all staff regardless of the nature of their job. This would help to minimise the problem of access requiring negotiation with one rather than two organizations. As such British Airways and Network Rail were identified as appropriate organizations.

I intended to gather my data through the use of semi-structured interviews. This technique not only reflected my understanding of social reality as constructed within specific temporal, cultural and social circumstances but equally allowed

me to speak to my research interests, which sought to explore individuals' opinions of drug testing within a specific social context rather than utilising a representative sample and making generalizations. Although a number of other qualitative data collection techniques from focus groups to ethnography were considered and are discussed in some detail in paired chapters six and seven, I decided that semi-structured interviews were the most appropriate and feasible in this instance, providing me with some uniform data but equally allowing me to explore nuances in individuals' opinions. Importantly there was no secondary data for me to access beyond those produced by the IIDTW (2004) whose focus was on employers and the justifications for and development of testing rather than on employees. Consequently I was unable to draw on the experience of other researchers which may have afforded me some insight into the methodological problems I encountered. In developing my interview schedule I tried to predict and minimise the various concerns of both the testing organization and individual respondents alike. It was at this point and in light of both the sensitivity of the topic and concerns for access that I decided not to ask my more controversial questions to respondents regarding drug *use*. This change limited organizational concerns about the negative repercussions resulting from any research – that the drug test failed to deter employee drug use.

In fact access to an organization for the purpose of empirical data collection was *the* primary obstacle to the success of this project and, as expected, a number of problems were encountered. Both British Airways and Network Rail were approached to participate in this project and both refused. In total these rejections took roughly eleven months and resulted in further compromise to my research

design. Thus the decision to develop a snowball sample was taken as this would both enable *some* data collection to take place and also provide the opportunity for me to ask my more controversial questions.

Having failed to gain access to either British Airways or Network Rail I pursued my third choice and ‘fall-back’ option of access to telecommunications provider ‘Delta’ - a pseudonym - within which I already had a pre-existing contact. Delta’s drug testing policy was far less extensive than either British Airways or Network Rail’s being limited only to those working in one safety-critical environment and necessitated through its contract with an external organization. Moreover, despite my pre-existing contact, negotiation of access to Delta took roughly ten months from my initial request in July 2005 to Delta employees being notified about and agreeing to take part in my research in May 2006. This time span resulted from the bureaucracy at Delta and apparent reluctance by managers to be ‘responsible’ for my research. These problems continued with the geographical dispersion of my respondents, which much like my snowball sample required me to travel to various places in the UK from Glossop to Felixstowe to Cardiff. In total however forty respondents were eventually interviewed - thirty from Delta and ten from my snowball sample.

However, although Delta’s bureaucracy delayed initial access to respondents, it equally had resounding benefits for my research and particularly my interview schedule. The aforementioned reluctance of managers to be involved in my research meant that Delta had no influence over any of my respondents who self-selected as participants via a private email sent directly to me. The fact that Delta

were unaware of who was involved in my research and also expressed no interest in seeing my data analysis enabled me to ask my controversial research questions to my snowball sample and organizational sample alike. This resulted in better data than I expected. My research may have been influenced by a number of other factors, however, including the predominance of male respondents and their individual motivations for involvement in the project so I would still agree that “[i]n the conflict between the desirable and the possible the possible always wins.” (Buchanan *et al.*, cited in Saunders *et al.*, 2007: 165). Moreover, I successfully gathered data in an area in which I have been unable to find any pre-existing empirical research.

Finally, paired chapters eight and nine, the last substantive chapters in the thesis, outline the key findings of these data, how they answer my research questions and how they reflect or contradict the literature reviewed in chapters one to five.

Data analysis: what I found

My two data analysis chapters reflect the structure and central themes of the thesis as outlined above. It begins by exploring data concerning respondents’ understandings of drugs and the extent to which these reflect the dominant social order, consequently focusing on the capacity of the Labour of Division to articulate these thoughts about and opinions on drugs. The data reflect some of the key themes discussed in the literature review and in doing so echo the reified

nature of the legal/ illegal, good/ bad categorization of drugs. This was not only revealed through respondents' acceptance of these binary categories upon which drug testing regimes are founded but equally through their acceptance of the link between drug use and workplace impairment – an association which is utilized as a means of justifying testing. Many respondents were also pro drug testing at work for all the above reasons. This further indicates the utility of the concept of the Labour of Division in understanding our social praxis around drugs.

Thus, in short, 'common knowledge' or the social order of drugs informed many respondents' opinions of both drugs and drug testing. After saying this, however, there was some evidence that these opinions were nuanced by first hand experience or what Geertz (1983) refers to as 'local knowledge'. These experiences resulted in more complex and multifaceted opinions of drugs and the test, including increased *acceptance* of drug use, greater *dislike* of it and a multitude of opinions about the appropriate organizational response to a positive test result. My data therefore imply that the Labour of Division may to some extent be useful in articulating social praxis around drugs. However they also suggest – as the literature review also argued – that this concept fails to account for more complex, nuanced 'local knowledge'.

These two paired chapters then go on to explore the surveillant capacity of the drug test, from its actual disciplinary and biopolitical effects to resistance. The data certainly suggest that the drug test can be interpreted as embodying various disciplinary principles, with respondents reporting being subject to individual supervision and visibility during the test, from specific procedures including

emptying pockets and the pre-test interview to the more explicit surveillance of being watched while they urinated. Moreover, some data implied that the pre-test interview *could* extend management surveillance beyond a search for illegal drug use, and reveal other private behaviour. However, vital to the disciplinary capacity of the drug test is its ability to identify drug use, and of my forty respondents only two reported knowing anything about a positive test result. This apparent dearth of positive test results may indicate the disciplinary and indeed biopolitical *success* of the test or equally its *inability* to identify deviance.

Moreover, the drug test as we have seen seemingly goes further than other surveillance technologies, invading individuals' bodily privacy. This was identified by only one respondent as being problematic. A more marked concern was for the test's invasion of the private sphere of the home, dictating acceptable behaviour there as well as at work, realized through its ability to reveal what an individual has consumed in the recent past. Respondents also raised a number of concerns about the legitimacy of testing, with particular reference to this capacity to reveal individuals' behaviour out of work time, and thus the spilling over of work into life. Some views were actually paradoxical, simultaneously expressing concern for the invasion of work into life while accepting managerial justifications for testing. There was likewise some evidence of respondents disciplining their behaviour to accommodate testing, most notably reducing their evening alcohol consumption where testing for consumption of this substance existed. Here then there is an indication of how testing can contradict contemporary rhetoric on WLB. But despite this apparent influence on

consumption habits, other respondents continued to use drugs, thus to some extent illustrating the limited disciplinary effects of testing.

In addition, and unlike other surveillant technologies, the vision of the drug test is interrupted, possible only at the moment of enactment. Thus for its disciplinary intentions to be realized individuals must be subject to regular testing. My data, however, suggest drug testing to be infrequent in the relevant organizations, and only one respondent reported being tested even as frequently as once a year. In light of this respondents suggested that some colleagues felt that they would never be tested and subsequently made no changes to their out of work behaviour. Further to this respondents had various experiences of notification periods of an impending test from two days to two weeks. This also has important implications for the capacity of the test to identify drug users, particularly those who utilize substances that leave the system quickly. Moreover, a number of my respondents questioned the capacity of the drug test to identify impairment which has important implications for the legitimacy of testing as it is founded on this assumption.

Moving on from this, my data collection also explored resistance to the drug test. Although the conceptual review highlighted a number of possible areas of resistance, the data identifies a more limited range. Respondents did express knowledge about various means to beat the test, and suggested that a number of techniques had been utilized by their co-workers, from the use of masking agents to disguise the presence of drugs to the smuggling in of clean urine. Moreover, there was evidence that testing procedures developed alongside resistance, the

one necessitating modifications of the other. In addition respondents noted various more 'passive' methods of resistance that they themselves had employed, including reducing the regularity of their drug use, confining it to weekends and special occasions, and their use of drug holidays to clear their bodies prior to a test.

Having introduced, contextualized and summarized this thesis on workplace drug testing, outlining the various conceptual ideas it draws upon, the methods used to explore my research questions and the themes revealed in the data, I shall now go on to elucidate this in greater detail, beginning with paired chapters one and two on the Labour of Division and the social order of drugs.

CHAPTER ONE

Destabilizing Divisions: Drugs and the Labour of Division: 1

Introduction

As shall become evident in the forthcoming discussion, the social history of drugs has been somewhat transient, and subject to continuous change. To illustrate this, attention is given to the key cases of cannabis, cocaine and Thalidomide. Although many more drugs could also have been discussed, these three not only epitomize the complex and multifaceted social positioning of drugs but equally, the degree to which each drug has been re-conceptualized over time, make them particularly interesting. To develop this discussion and further illustrate the diversity of their social history, the role of drugs within sport is also briefly considered. Moreover, this particular case offers unique and important insights into the justifications for, and development of drug testing, an interest that, with respect to contemporary organizations, lies at the heart of this thesis.

In an attempt to conceptualize this ‘social order’ of drugs (their legality/ illegality for example) I utilize the notion of the Labour of Division, understood by Cooper (1997) as a process of stabilization through which we make sense of the world and which allows for the possibility of normalization and judgement. In doing this I hope to reveal the utility of the Labour of Division to exploring western social praxis around drugs. However, I shall also question the seemingly reified

nature of the divides, and their subsequent naturalization, revealing them to be unstable over time and not the clearly defined and persistent binaries that may be suggested by the concept of the Labour of Division.

The discussion will focus on examples from western society, concentrating on the social history of drugs in wider society before considering the specific case of sport. As suggested, attention is given to the cases of cocaine, cannabis and Thalidomide whose chequered histories provide ideal examples consistent with the diverse history of drugs in general.

Introducing drugs: a variegated history

As suggested above, cocaine is an especially pertinent example of how western society's perceptions of drugs have changed and developed over time. This drug originates in South America. It is an alkaloid found in the leaves of the American coca plant, the leaves of which have been a component of Andean life for some 5,000 years. They have been both chewed and consumed as tea for their stimulant and appetite-suppressant qualities (Burchard *et al.*, 1992; Joralemon, 1995; Aguayo, 2006). As Burchard *et al* (1992: 1) tell us, this practice endures to the present day:

“Millions of people, especially in Peru and Bolivia, chew 4 -5 g of coca leaf, together with one of several alkalines, at regular intervals throughout

the day and throughout their adult lives. Coca chewers also consume the leaves in the form of a hot infusion (mate de coca), and millions of non-chewers consume them only in this form.”

Further to this, Burchard *et al* (1992: 22) suggests that the consumption of coca may reduce the feeling of coldness facilitated by the high altitude work undertaken by many in these countries and also results in the consumption of beneficial nutrients that the Andean diet otherwise lacks. Burchard *et al* (1992) argue that those who chew coca leaves eat more than those who do not, countering the suggestion that the appetite-suppressant qualities of coca may facilitate malnutrition in these workers. In this context coca consumption may be conceptualized as positive rather than negative.

Moving into a western context, the coca alkaloid cocaine produced by synthetic means also has anaesthetic qualities, as demonstrated by Karl Koller’s 1884 announcement that he had used a solution of cocaine hydrochloride to anaesthetize the surface of a human eye which facilitated its use in surgery (Friman, 1999: 84; Kort, 1999: 125; Spillane, 1999: 22; Biscopig and Bachmann-Mennenga, 2000). Theodor Aschenbrandt also experimented with it as a stimulant for soldiers in field manoeuvres during this time (Friman, 1999: 84)². Indeed, by the late 1890’s cocaine was utilized in a variety of therapeutic

² This is paralleled by the continued use of amphetamines within the US military for the purpose of performance maintenance - to restore ability after periods of extended sleep deprivation – and performance enhancement – to improve strength and endurance. This practice has been commonplace during wartime since World War II (Bower and Phelan, 2003). However it has not been without controversy as illustrated by the recent conviction of two US pilots of manslaughter for the dropping of bombs on Canadian soldiers in Afghanistan in 2002 while under the influence of ‘go-pills’. These pills are otherwise known as the amphetamine dexedrine which is utilized in the armed forces as a fatigue management tool (CNN, 2003).

products including toothache drops, haemorrhoid remedies and decongestants (Friman, 1999: 86). Coca was also used in small amounts in a variety of everyday consumer products, from Coca Cola which derives its name from the coca plant and whose fluid extract was originally an important ingredient in its production and responsible for its unique taste, to wines such as Vin Mariani (Spillane, 1999). With the proliferation of cocaine during the late 19th century manufacturers of these products sought to differentiate coca from its refined counterpart, promoting it as natural, more subtle in its effects, safer for the user, and so preferable to its competitor cocaine (Spillane, 1999: 25). Latterly, the development of public concerns for the health risks posed by heavy cocaine use meant coca failed to maintain its distinct identity.

This very brief history of coca/ cocaine thus far demonstrates not only its generalized use in various medicinal and consumer products but equally the proliferation of its consumption in the late nineteenth century in the west. However, the early twentieth century regulation and restriction of cocaine and its subsequent classification as illegal, marked the beginnings of its transition from ‘miracle drug’ to ‘global menace’ (Friman, 1999: 83; Kort, 1999: 125). For example, as early as 1907 Californian law limited the sale of cocaine to a physician’s prescription (Spillane, 1999: 35), US cities more generally sought ways to restrict sales to ‘legitimate’ use in therapeutic doses³ and products containing cocaine were newly required to carry the label ‘POISON’ as a ‘caveat emptor’ warning paralleled by contemporary warnings on tobacco products such as ‘Smoking Kills’. In the UK, Kohn (1999: 105) suggests that cocaine’s

³ Although these restrictions failed to distinguish clearly between a legitimate sale and an illegitimate sale (Spillane, 1999: 35).

transformation into ‘social menace’ originated in a six month period “starting at the end of 1915, and culminating in a few weeks during which concern turned to moral panic. At that point, possession of cocaine was made a criminal offence”. This was exemplified by the Defence of the Realm Regulation 40B (DORA) edict issued on July 28th 1916 in which possession of cocaine for everyone except doctors, pharmacists, veterinary surgeons and holders of prescriptions was outlawed (Kohn, 1999: 118) ⁴.

Kohn suggests that the beginning of this transition can be attributed to the double suicide of ‘wannabe’ actresses Ida and Edith Yeoland in 1901 and the resultant media coverage, in which the habitual use of cocaine was depicted as a terrible and dangerous vice responsible for their tragic deaths. Moreover, during this time when the health and performance of the armed forces was of particular concern, drug use was also identified as a threat to soldiery. This concern is exemplified by the arrest of a man called Horace Kinsley in early 1916 for supplying drugs to the military. Kinsley was charged with “selling a powder to members of HM Forces, with the intent to make them less capable of performing their duties” (Kohn, 1999: 113). Thus, as early as 1916 drug use was discursively associated with the impairment of individuals’ performance. Horace Kinsley was convicted and sentenced to six months hard labour. However, and perhaps most importantly, his case further signifies the development of concern about the detrimental health effects of cocaine use, described by *The Times* as a “more deadly [threat] than bullets to soldiers” (cited in Kohn, 1999: 113).

⁴ DORA 40B was introduced under the auspices of emergency wartime regulation and a state of national emergency.

This developing problematization of cocaine in wartime Britain culminated in the death of well-known actress Billie Carleton following the use of cocaine after a November 1918 victory ball and the subsequent scandal in which her friend Reggie de Veulle - also her supplier - was charged with her manslaughter (Kohn, 1999: 118). Indeed Kohn acknowledges that prior to this tragedy the influence of DORA had been limited, failing to deter clandestine use. Significantly, the death of Billie Carleton and the subsequent publicity created the personal tragedy of an identifiable 'cocaine victim'. It also signified an attempt to categorize 'victim' and 'culprit' in the drug supply and consumption relationship. Importantly, Kohn not only draws our attention to the specific war-time conditions within which DORA 40B was initiated but equally the previous prolific availability of cocaine - through which its transient history is again revealed:

“At the inquest, the coroner acknowledged that the jury might “not feel inclined to press hardly” in a case where the illegality [of cocaine] arose solely from emergency war regulations, or might feel that such regulations ought not to be the basis of a constructive manslaughter charge. Nevertheless, the case occurred after a decisive split in both the public perception and the control of drugs such as cocaine. Before jailing de Veulle on a secondary charge of conspiracy to supply cocaine, the judge observed that it was “a strange thing to reflect that until quite lately these drugs could be bought by all and sundry like so much grocery.” (Kohn, 1999: 118-119)

Here we can clearly trace the transition of cocaine from ‘wonder drug’ to more contemporary understandings of it as dangerous and the subsequent development of notions of and concerns for addiction. Today it is classified as an illegal Class A drug in the UK, and a Schedule II⁵ substance in the USA as a result of its medical use so both its possession and consumption are a criminal offence for all but a very limited number of people. Indeed, although the recent call by UK government advisers for change in the classification of drugs on health grounds argued that many drugs were incorrectly classified with respect to their potential health consequences, cocaine remains demonized. This research recently commissioned by the Royal Society of Arts and carried out by David Nutt, a senior member of the Advisory Council on the Misuse of Drugs, and Colin Blakemore, Chief Executive of the Medical Research Council, analysed twenty substances for their addictive qualities, social harm and damaging physical effects, producing strikingly different results from the Government's current drug classification system. Indeed, alcohol and tobacco were judged more damaging than cannabis, ecstasy and LSD. The Nutt and Blakemore (2007) paper suggested that the current ABC⁶ classification system has no relationship to the relative amount of harm caused by anything from a hit of heroin to a pint of lager (Morris, accessed 28/2/07) and requires a radical overhaul⁷. However heroin, followed by cocaine, topped the table determining relative harm.

⁵ Drugs listed in Schedule II of the Controlled Substances Act are those substances that have a high potential for abuse with severe liability to cause psychic or physical dependence, but have some approved medical use (Glossary of terms, accessed 12/20/2007)

⁶ This was initially designed to control drugs with respect to their apparent harmfulness to individuals and society (House of Commons Science and Technology Committee, 2006: 7). Although this system was created through the Misuse of Drugs Act (1971) it failed to specify why drugs were placed in particular categories (House of Commons Science and Technology Committee, 2006: 8).

⁷ A suggestion confirmed by the recent admission by Richard Smith, former editor of the medical research council, that guidelines concerning the safe limits on alcohol consumption are not based on any firm evidence (Norfolk, 2007: 6)

Interestingly, the Nutt and Blakemore paper also recognises no difference between crack cocaine - also known as cocaine base (which is generally smoked) - and cocaine hydrochloride (which is generally snorted, but can also be taken intravenously) or the impact that this may have on social and physical addiction. Hatsukami and Fischman (1996) acknowledge that the speed of absorption by the human body, which is greatly affected by the method of consumption, has repercussions for the addictive quality of cocaine, altering the immediacy, magnitude and duration of its effects. Intravenous and smoked cocaine achieve their effects most rapidly, and Hatsukami and Fischman (1996) concluded that both intravenously taken cocaine hydrochloride and smoked cocaine base were likely to result in a greater potential for abuse. Although they did not demonstrate a pharmacological difference between cocaine hydrochloride and cocaine base, these issues are reflected in the differing classification of amphetamines whose classifications vary in reflection of their alternative modes of administration (*Drug Classification: Making a Hash of It*, 2006: 30). Moreover, despite cocaine's status as social menace, cocaine and cocaine paste are still utilized by ear, nose and throat specialists as a surface anaesthetic, echoing Koller's original use in the late nineteenth century (Browning *et al.*, 1997; Lee *et al.*, 1997; Benjamin *et al.*, 2004).

To further elucidate the social history of drugs and our ever changing and developing understandings I shall now consider the case of cannabis. Mechoulam (cited in Robson, 2001: 107) tells us that "The first formal report of cannabis as a medicine appeared in China nearly 5000 years ago, when it was recommended for

malaria, constipation, rheumatic pains and childbirth, and mixed with wine as a surgical analgesic”. Thus cannabis, like cocaine, has historically been utilized for various medicinal purposes. Moreover the proposed treatments above imply cannabis’s potential as a painkiller, which is of particular contemporary interest in light of recent discussions concerning its use by the sufferers of multiple sclerosis (Chong *et al.* 2006). Cannabis is also now one of the most widely consumed illicit drugs in British society with two-thirds (63.1 percent) of young people responding to a 2004-2005 MixMag survey claiming to have used it in the last month (IIDTW, 2004: 59). Moreover the Advisory Council on the Misuse of Drugs ([ACMD], 2002: 4) suggests that “British Crime Survey (BCS) data show[s] that, in England and Wales, lifetime use [of cannabis] between 1981 and 2000 amongst those aged 20 to 24 years rose from 12 per cent to 52 per cent”. Further to this, Brown and McMinn (2004: 135) reported that 3.5 million people in the UK use cannabis regularly (Brewis *et al.*, 2007). It is also argued that cannabis use is a safer alternative to its legal counterpart tobacco smoking as it is less likely to cause cancer (Melamede, 2005; *Science Daily*, accessed 8/2/07) supporting the aforementioned suggestion by Nutt and Blakemore (2007) that tobacco is more damaging than cannabis.

Furthermore the relative ‘safety’ of cannabis is supported by its UK reclassification in January 2004 from a Class B to Class C drug. However, initial suggestions by the ACMD that cannabis should be downgraded began as early as 1979 on the grounds that it was less harmful than other Class B drugs (House of Commons Science and Technology Committee, 2006: 22). In 2000 the report of The Police Foundation Independent Inquiry Into The Misuse Of Drugs Act,

chaired by Viscountess Runciman, not only called for a change in the classification system for drugs but also suggested that police resources could be more effectively utilized with respect to other, more dangerous drugs. This position is further emphasized through the debates that informed cannabis's eventual downgrade, which decriminalized possession of the drug for personal consumption. Importantly, and in contrast to the case of cocaine, this signifies that cannabis use and possession has become increasingly more acceptable in the UK at least. Moreover, this downgrade suggests a re-thinking of the apparent harm that cannabis consumption may cause, as also reflected by the previously mentioned and more wide ranging call for a change in the classifications of drugs with respect to their relative harm. Despite this, as illustrated below, the re-classification of cannabis and suggestions that its consumption is safe are still subject to contestation.

This ongoing controversy centres on the apparent health consequences of the consumption of cannabis for individuals and society and what constitutes the most appropriate use of police resources respecting drugs. Despite the ACMD's (2002: 7) acknowledgement that extended cannabis consumption may have detrimental consequences for individuals' health and that it may also affect individual performance with respect to motor control and attentiveness, they equally acknowledge that, unlike alcohol, cannabis does not increase risk-taking behaviour or aggressiveness. But the key emerging argument suggesting the danger of cannabis use purports a causal link between consumption and mental illness, most notably psychotic illness and depression (Jockers-Scheruebl, 2006; Rey and Tennant, 2002; Strakowski *et al.*, 2007). The ACMD (2002) argue that

this link is anecdotal and has yet to be proven – something made more complex by the effects of cannabis intoxication, which can lead to temporary psychotic symptoms that may be mistaken for schizophrenia. Further, despite the fact that this link between the smoking of cannabis and the onset of, or worsening in, mental illness was identified prior to its downgrading, the downgrade continued. This could perhaps be attributed to the focus of the aforementioned research on ‘chronic’ or ‘habitual’ use/ abuse rather than ‘recreational’ use of the drug. However, it is true to say that after the downgrade, new research making stronger links between cannabis and mental illness was revealed (Di Forti and Murray, 2005; Van Os, 2005). This resulted in a further review of policy by the Labour government considering whether it should once again change its position. Thus cannabis may be subject to further shift, with new UK Prime minister Gordon Brown suggesting a reversal of the current law which makes the possession of cannabis a non-arrestable offence in the future (*BBC News*, 2007)⁸.

To complicate the picture further, recent research has also been concerned with cannabis’s medicinal, effects - notably pain relief in diseases like multiple sclerosis, as noted earlier (Trebst and Stangel, 2005; Chong *et al.*, 2006). Howard *et al.* (2005) suggest that further research is needed into the use of cannabis for sufferers of sickle cell disease and Robson (2001) discusses its use in the alleviation of sickness resulting from the treatment of cancer with chemotherapy. In sum, then, the above discussion illustrates that western social and medical

⁸ At the time of writing this the House of Commons is awaiting a further report from the ACMD due in May 2008 concerning the classification of cannabis. Current indications suggest that the report will support the position of cannabis as a Class C drug rather than the upgrade suggested by Gordon Brown.

opinions about cannabis alike are multifaceted and competing and that a consensus has not yet been reached, consequently its position remains in flux.

But movement in western understandings of drugs is not confined to those which are illegal. The case of Thalidomide is another interesting example, illustrative of the ever-changing conceptualizations of drugs over time. First synthesized in 1954 by Kunz, a chemist at Chemie Grunenthal laboratories, Germany, low doses of Thalidomide were revealed to have marked sedative effects superior to its counterparts. Moreover, high doses failed to show lethality in rats, resulting in a perception of it as a safe and virtually non-toxic drug (Botting, 2002). When it was commercially launched in 1957, Thalidomide was advertised as a sedative or tranquillizer and useful for the treatment of morning sickness in pregnancy (Diggle, 2001; Eriksson *et al.*, 2001). However, in 1961 a link between the consumption of Thalidomide in the first trimester of pregnancy and the malformation of babies was suspected by the physicians McBride and Lenz. In the same year the drug was withdrawn from the market. As we now know, it was at the centre of a medical tragedy resulting in over 10,000 babies born with various abnormalities (Eriksson *et al.*, 2001). Moreover, the case of Thalidomide initiated the development of various regulatory bodies to ensure effective and thorough research was performed by drug companies, subsequently signifying a substantial change in the drug approval process (Botting, 2002). But despite this concern over the side effects of Thalidomide, its therapeutic potential has continued to be explored. In 1965, it was identified as an effective treatment of erythema nodosum leprosum, an inflammatory complication of Hansen's disease – commonly known as leprosy. This research has facilitated further exploration

of the drug (Calabrese and Fleischer, 2000; Diggle, 2001). As Combe (2001: 582) acknowledges,

“Gradually, thalidomide was reintroduced for the treatment of a few skin diseases including leprous erythema nodosum, several mucosal ulcers (eg associated with HIV infection or Behcet’s disease), lymphocytic skin infiltrations, cutaneous lupus erythematosus, and chronic graft-versus-host disease⁹ ... Several open-label studies and case reports have described the effects of thalidomide in Crohn's disease [and] rheumatoid arthritis... The anti-angiogenic effects of thalidomide may make this compound valuable as single-drug therapy or as an adjunct to chemotherapy in patients with cancer ...”

Similarly, Moehler *et al.* (2006) suggest that Thalidomide is one of the most active drugs in the treatment of multiple myeloma (a cancer of the plasma cell) and that it has been found to be as effective as aggressive chemotherapy when used as an initial therapy in the treatment of this disease (see also Abdel-Razeq and Mousa, 2004). Moreover Combe (2001) also suggests that, research has also explored the effect of Thalidomide in HIV positive patients. This reveals it to be useful in the treatment of “oral aphthous ulcers, HIV-associated wasting syndrome, HIV-related diarrhoea, and Kaposi’s sarcoma” (Calabrese and Fleischer, 2000: 487). Thus Thalidomide, much like our previous examples of cocaine and cannabis, has had a similarly chequered history.

⁹ Here, Combe is talking about leprosy, ulcers in or on the nostrils, lips, ears, the genitals or the anus, skin lesions associated with leukaemia, various arthritic conditions and a disease where the body’s immune cells attack donated bone marrow, a common side effect of transplants.

We can also see the transitory positioning of drugs over time when we consider the arena of sport. In introducing this, we are able to preface the discussion of drug *testing* – both here and in other more ‘conventional’ occupations. Drug taking in sport has a long social history. As Waddington (2000: 98) tells us, for example, “[t]he Greek physician Galen, writing in the third century BC, reported that athletes in Ancient Greece used stimulants to enhance their performance”. Moreover in Ancient Egypt athletes consumed specific substances to improve their capabilities and Roman gladiators used stimulants to enable them to continue combat after injury. Indeed Waddington (2000: 98) notes that the use of performance enhancing drugs in sport has only recently become regarded as unacceptable - as signified by the introduction of anti-doping regulations and doping controls by various international sporting bodies with the support of their regional counterparts since the 1960’s in particular. These concerns over drug use and the subsequent implementation of testing programmes are justified by a number of arguments. These are usefully summed up by UK Sports Council (1996) commentary:

“The Sports Council condemns the use of doping substances or doping methods to artificially enhance performance in sport. *Doping can be dangerous*; it puts the health of the competitor at risk. *Doping is cheating* and contrary to the spirit of fair competition.” (Sports Council, cited in Waddington, 2000: 97, emphasis in the original)

But not only does the argument of the Sports Council emphasize a concern for athletes' health and concern for cheating/ fair sportsmanship alike, it also implies that doping is harmful to the *image* of sport. The premise that drug use within sport may create an unfair *advantage* for a competitor is especially important, for this conception is a principle that underpins and justifies testing in this arena. But it directly *contradicts* conventional understandings of drug use in wider society and concern for the relative *threat* drugs pose to individuals' health and performance – as we have already seen. These are also the understandings which justify testing within more conventional occupations. The discussion now turns to this dis-juncture more specifically.

Introducing drug testing: sport and the 'mainstream' workplace

Although a recent phenomenon, the development of anti-doping regulations and subsequent development of drug testing within sport is more established than its organizational counterpart. Drug testing in sport was preceded by the banning of doping by the International Athletics Federation (IAAF) in 1928, albeit with limited effect due to the lack of drug testing or enforcement technology. Some decades later the death of Danish cyclist Knud Enemark Jensen - whose autopsy revealed traces of amphetamines - during the 1960 Olympic Games in Rome drew attention anew to the danger of drug use in sport (World Anti Doping Agency, accessed 8/02/07). The drug test was first introduced by the International Cycling Union (ICU) and Fédération Internationale de Football

Association (FIFA) in 1966 for competitors in their respective World Championships, although it was aimed predominantly at the identification of stimulants (Verroken and Mottram, 1998). Subsequently testing was used at the winter Olympic Games in Grenoble in 1966 for the first time, and latterly in the 1968 summer Games in Mexico City (Fraser, 2004). This caused the first disqualification for a positive test result when Gunnar Liljenwall, a Swedish pentathlete, tested positive for excessive alcohol (*Olympic Committee*; accessed 12/1/07). At this time however, drug testing technology was still not well developed and consequently subject to various inaccuracies:

“Early testing methods were relatively unsophisticated: the technology available to analyse an athlete’s urine resulted in inaccurate findings that failed to deter the use of drugs. Athletes realized that a clearance time between drug use and testing was all that was needed to avoid traces of banned substances, particularly the metabolites of substances, being detected. At that time athletes were being tested after a competition and had little difficulty in calculating clearance times.” (Verroken and Mottram, 1996: 235).

The limitations of the technology at the time reduced the ability of the drug test to identify individuals who were using stimulants¹⁰. Today, drug testing is well established in the sporting arena, and testing is becoming more sophisticated and

¹⁰ These limitations remain a paramount concern today, as highlighted by the case of tetrahydrogestrinone (THG) – a designer steroid. In 2003 a number of world class international athletes including 100 metre American sprinter Kelli White and British 100 metre sprinter Dwaine Chambers were banned from competition after testing positive for THG. This steroid was undetectable prior to the United States Anti Doping Agency (USADA) being alerted to its use and also being supplied with a sample of the drug which enabled them to develop a new test through which it could be identified (*CBC News Online*, 2003).

prolific in an effort to limit the effects of clearance times on the identification of drug use. Indeed the World Anti-Doping Agency (WADA) tested 3,114 athletes in 2005, compared to 1,848 athletes in 2004 – numbers which exclude the testing performed by various individual sporting federations and the International Olympic Committee (IOC). Sportsmen and women are subject to random testing procedures involving the collection of and testing of urine. These tests may be carried out at a sporting event or in the individual's home and usually involve the observation of a sample being given. This is done to reduce the possibility of doctoring the sample in some way, which has also become an increasing problem. However, despite its proliferation, the recent confession to drug use by US sprinter and long jumper Marion Jones further illustrates the limitations of the test. Jones who won five medals at the 2000 Sydney Olympic Games has been suspected of drug use since the conviction of her former coach Trevor Graham, and (now ex) partner track athlete Tim Montgomery for steroid use.

“The clear, also known as THG, or tetrahydrogestrinone, is a powerful anabolic steroid that was at the center of the federal investigation into the Bay Area Laboratory Co-operative, or Balco. More than one dozen track athletes have faced punishment for their use of the clear, which drug testing authorities were unable to detect until Graham sent a sample of it to the U.S Anti-Doping Agency in 2003.” (*Marion Jones Admits to Steroid Use*, accessed 5/11/2007)

Thus the drug test is seemingly unable to identify a drug that it does not have prior awareness of, or that it is specifically testing for. Moreover, despite its

increasing use in the sporting arena, the test failed to identify Marion Jones as a drug user; rather suspicion was confirmed by her own confession *not* technology.

It is also evident that drug testing programmes are proliferating throughout the realm of ‘conventional’ employment. The IIDTW (2004) suggests that between 40 to 50 percent of American organizations drug test their employees, meaning that roughly 15 million people are tested each year. Although the drug test is often implemented with a policy of instant dismissal, it may also form a component of Employee Assistance Programmes (EAPs) designed to identify and assist troubled employees (Hartwell *et al.*, 1996). EAPs utilize drug testing as part of a broader concern for employee well-being, and thus promote rehabilitation and support rather than dismissal of an employee in the event of a positive test result. EAPs often require identified drug users to commit to regular testing and counselling in order to monitor them but also to ensure individuals’ recovery (Bennet *et al.*, 1994). In the West, testing is also currently most established within the US: indeed the Office of National Drug Control Policy note in this regard that “[e]mployee assistance program enrolment has risen steadily over the past decade. In 1993, there were 27.2 million individuals enrolled in EAP programmes. By 2002 there were 80.2 million. The total EAP enrolment of 80.2 million represents a 194% increase since 1993” (Office of National Drug Control Policy, accessed 8/02/07).

Organizations utilize various testing methods including pre-employment, random, for-cause or/ suspicion or post-accident testing. These different procedures determine when and under what conditions employees may be tested. Pre-

employment testing, often referred to as screening, takes place as part of the recruitment and selection process, often as part of a routine medical (IIDTW, 2004: 9). Random testing requires individuals to submit to testing throughout their employment, at regular or irregular intervals. National Insurance numbers are often used to select candidates (IIDTW, 2004: 9). For-cause or suspicion-based testing will be carried out when there is thought to have been drug use at work (IIDTW, 2004: 9) and post-accident testing is, fairly obviously, often a component of the process of investigation after an accident in the workplace (IIDTW, 2004: 9).

Although testing in sport tends to use urine, mainstream employers utilize a variety of testing procedures. Bodily substances tested include hair, saliva, blood, sweat and urine, however urine remains the most commonly used and is conventionally thought to be the most advanced procedure. It is also the only procedure endorsed for the testing of the US federal workforce - despite the 2004 proposal by the Substance Abuse and Mental Health Services Administration ([SAMHSA] accessed 8/2/07) that, in light of scientific advances, specimens of hair, saliva and sweat should also be used. Each of these specimens identify drug use in different ways. For example 'parent' drugs are unidentifiable in urine. Rather, the urine test identifies metabolites, "substances into which drugs, including alcohol, are converted by the human body" (IIDTW, 2004: 9). These metabolites reveal that a drug has been consumed in the recent past. However, the molecules of parent drugs *are* identifiable within saliva, and both parents and their metabolites are seemingly identifiable in hair (Cairns *et al.*, 2004).

In addition, unlike the case of sport, the remit of organizational drug testing is generally physically confined to the workplace. My review of the literature has failed to reveal any UK law officially regulating drug testing in this way. But there are a number of examples in which US organizations have invaded the home - arguably an even greater infringement of Fourth Amendment rights (which guard individuals against unreasonable searches) than testing within the workplace, although this amendment has failed to prevent the development of drug testing per se. In the UK, the Human Rights Act (1998) may conceivably act to protect individuals' right to privacy in this regard but this has yet to be put to the test.

As has also been pointed out above, the premise that drug use will have detrimental effects on individuals' workplace performance is reversed in sport. Workplace drug testing is justified on alternative grounds, noted by the IIDTW (2004: 10) as being safety, organizational efficiency, employee welfare and damage to reputation¹¹. Therefore workplace drug testing is founded on the assumption that employee drug use results in substantial costs to organizations, costs that can be minimized by drug testing programmes (Blaze-Temple, 1992). Rothman (2001: 24), for example, concerned with safety, discusses the alleged association between on-the-job drug use and train accidents in the US which have resulted in the death of innocent people. This example equates drug use with 'real life' tangible tragedy - the loss of life - which reinforces the belief that there is a serious problem which drug testing can and should address. Rothman also points out, however, that it has subsequently been suggested in *Wall Street*

¹¹ It should be noted however that a similar concern for reputation and individual welfare is also raised by the UK Sports Council.

Journal articles that these results - which suggested a clear link between drug use and increased risk of train accidents - were fabricated.

But the presumed costs of employee drug use go beyond a concern for safety, ranging from absenteeism to on-the-job performance. These various justifications of drug testing are considered by Brunet (2002), who notes that there is only a small body of research exploring the various motivations for the implementation of employee drug testing programmes, and that these are largely rooted in social control theory (Brunet, 2002: 194). From moral righteousness (O'Malley and Mugford, 1991) to State and corporate concern for workers (Gerber *et al.*, 1990; Blaze-Temple, 1992), including the extension of disciplinary control and technological surveillance of individuals originating in scientific management (Hecker and Kaplan, 1989; Brunet, 2002:194), it is evident that organizations' purported justifications for testing are multifaceted – but regularly underpinned in general by a concern for some form of control of the workforce¹². These justifications for testing are discussed by a number of authors including Shepard and Clifton (accessed 10/01/07):

“An important rationale for implementing drug testing is to assure a drug free work force, to protect against accidents, mistakes, or errors in judgement and enhance worker productivity. There may also be other reasons motivating firms to implement drug tests, such as reducing health care or insurance costs, or promoting societal goals. Proponents of drug

¹² This discussion foreshadows the analysis of the drug test as a technology of panopticism in Chapter Two.

testing often provide claims about benefits to productivity and protection against workplace accidents and associated costs.”

Further to this, as Brunet (2002) discusses, organizational drug testing is justified on various grounds including those of performance, health, and safety; deterrence; rehabilitation; symbolic technology; and conflict, these ideals reflect the role of the test in both ensuring and revealing an individual’s conformity to various ‘rules of behaviour’. Moreover these justifications are also noted by Coomber (2004) in his literature review for the IIDTW and are also recounted in the actual research findings of the Inquiry (2004) as reasons given by employers for introducing drug testing. Significantly the US, Executive Order No 12564 (1986) identified drug testing as the primary method of ensuring a drug free workplace – thus providing the legal authority for the drug testing of the federal workforce. Moreover, it offered four different justifications for drug testing policy:

“First, the policy will improve worker productivity and absenteeism rates. Second, the policy will create a national model for others to follow—“show the way towards achieving drug-free workplaces.” It also protects the “special trust” placed in employees as servants of the public. In this regard, drug-free federal workplaces and workers serve a symbolic function, an aspirational standard for other public and private sector organizations and citizens. Third, the threat of detection via drug testing will deter future drug use. The policy demonstrates “to drug users and potential drug users that drugs will not be tolerated in the Federal

workplace.” Fourth, the policy will protect the health and safety of the public as well as the well-being of federal workers.” (cited in Brunet, 2002: 199-200, quoting in part from the executive order no 12564)¹³

These various foundations for drug testing are reiterated by Draper (1998) and Wood (1998), who suggest that many companies have introduced drug testing programmes for people working in safety-critical environments, and as a means of increasing worker productivity. Indeed Wood (1998: 136) suggests that managers simply see the development of these surveillance technologies as an extension of already existing managerial practices. These justifications clearly reflect a managerialist concern for the cost incurred by the organization as a result of employee drug use (see also Blaze-Temple, 1992), and assume that the drug test as a form of social control is an effective means of identifying, deterring and preventing drug use and subsequently reducing this cost. Furthermore, these justifications promote the importance of public trust and CSR - ensuring the health and wellbeing and safety of both the workforce and the public whom they serve.

Rothman (2001: 24) underlies a concern for corporate image in this regard, that “[n]o business wants to be known in its community as being “soft on drugs”. This social pressure is both reinforced by and reflected in discourses proclaiming a ‘war on drugs’, such as those characteristic of the Reagan Administration in the mid 1980’s (IIDTW, 2004: 35) and the subsequent claim by Tony Blair that the trade in illicit drugs funds terrorism (Spiked-politics, accessed 9/2/07). This

¹³ As implied earlier, this order was nonetheless the subject of extensive legal challenges, most notably on the grounds that drug testing without suspicion constituted an unlawful search and was subsequently a violation of Forth Amendment rights.

analogy seemingly justifies the arguably invasive actions taken to eradicate drug use both by government and employers (Brunet, 2002: 194), as explicated by Justice Scalia commenting on US policy: “What better way to show that the Government is serious about its “war on drugs” than to subject its employees on the front line of that war to this invasion of their privacy and affront to their dignity?” (cited in Rothstein, 1991: 86). It can also be argued that employers’ *failure* to implement a testing programme seemingly condones drug use (Rothstein, 1991: 84). This again speaks to the issue of workplace drug testing as one of wider social responsibility, related to the apparent concern for safety and employee welfare. However, the International Labour Office ([ILO] 2003) emphasizes that the central focus of drug use prevention programmes is performance, suggesting that first and foremost the drug test is a managerial control mechanism, rather than an example of CSR.

The available managerialist literature on employee drug testing, then, assumes that drug taking is both prolific and problematic amongst the workforce and subsequently correlates this to accidents and loss of productivity. Draper (1998) offers some interesting critical reflections on these justifications, suggesting that drug testing makes employees responsible for accidents, stress, and management practices, thus moving the loci of responsibility for the work environment away from the employer. Similarly, Wood (1998) suggests that these practices are used to identify individuals who may represent a potential insurance risk, of particular importance in the US as many organizations provide health insurance for their employees.

Thus, it is evident from the above discussion that the development of the workplace drug test is justified on the premise that drug use by employees is undesirable, having negative implications for workplace safety, efficiency and productivity, organizational reputation and employee health. In the following two chapters the concept of the Labour of Division will be introduced and used to explore social understandings of drugs and justifications for testing.

CHAPTER TWO

Destabilizing Divisions: Drugs and the Labour of Division: 2

Negotiating sameness and difference: the stabilization of di-vision and the either/or of drugs

Following Spoelstra (2005), it is evident that much of Robert Cooper's work has been concerned with the distinction between organization and disorganization, characterized by the themes of 'otherness', 'representation' and 'visibility'. All three ideas also underpin his concept of the Labour of Division and its explanation of our constructions of the social world (Cooper, 1997, 1998). This concept is, of course, rooted in earlier discussions concerned with the social construction of reality (eg Berger and Luckmann, 1967) – notably the idea that social order is not founded on an inherent nature of things, but rather that it exists only as a product of human activity/ interaction. Subsequently the concept of the Labour of Division seeks to articulate how we negotiate and understand the world around us. It is concerned with the processes through which we make sense of the world, and with organization as social praxis or rather “the production of the visible in the stabilized forms of social knowledge, social objects or social objectives” (Spoelstra, 2005: 112). Thus the Labour of Division as conceived by Cooper is a sense making tool through which the world is both realized and revealed – ‘rendered’ visible. Munro (1997) describes Cooper's (1997, 1998) work as suggestive of the stabilization of the social world, or rather the

stabilization of binary divides – such as good or bad, legal or illegal, healthy or unhealthy – through which social order may be created and equally understood. Indeed the Labour of Division represents the routemap through which we understand a world with no innate or inherent meaning.

The Labour of Division is likewise prefaced by Wittgenstein's suggestion that we can characterize "our experience [through] three principles of division expressed by three pairs of opposites, Clarity and Vagueness, Order and Disorder, the Good and the Bad" (Wittgenstein, 1968: 103), which again reveals the importance of divisions in shaping our understandings of the social. Thus, divisions enable the simplification of experience into preconceived categories and have utility in facilitating the understanding of the social through the act of *di-vision* - of making something seeable and knowable. This creates the possibility for identification and knowledge through pre-existing categories which mediate and filter information about the world and subsequently shape our understandings – creating and enabling visibility. This mediation, in which the act of division not only creates the world but equally acts as a lens through which the world is perceived and subsequently ordered, acts to produce and reproduce the social world as we know it.

Thus, Cooper (1997) suggests that it is through the process of the Labour of Division that human beings are able to give direction to their lives. "Vision, says Cooper, is intrinsically *di-vision*. That is, *through acts of division we are able to see, we are able to create meaning and we are able to find purpose.*" (Spoelstra, 2005: 112 emphasis added). The binary divide itself is the creator of order, of

defined categories – it attributes meaning to what we encounter around us. The world occurs or is realized in the ‘cut’ of division – within and through systems of organization. These divisions act to simplify the world, making it easier to apprehend, process, sort and subsequently to understand the vast amount of stimuli we confront during every moment of our lives. Through these divisions the world is simplified, rendered knowable and navigable.

Evident in the above discussion is the double movement inherent within the Labour of Division, as academic concept and descriptor of praxis. The Labour of Division as praxis is a discursive mechanism that we utilize to negotiate the world. Conceptually it goes some way to articulating and revealing the assumptions upon which social order - epitomized by binary oppositions - is produced and re-produced, revealing how these divides simultaneously enable and restrict our ways of seeing (Cooper, 1997). In this sense the Labour of Division articulates the seemingly consistent divisions through which we view the world, assuming the stability of these social divides, separating the good from the bad and subsequently refuting the possibility of alternative ways of seeing. Moreover, this concept has undoubted value in praxis, as order founded on binary divisions is self-evident throughout western society. Embedded within these categories are, of course, various expectations – eg the perception of the ‘goodness’ or ‘badness’ of a thing conveyed through the category it inhabits. Integral to Cooper’s discussion, then, is that the logic of division may be revealed through the notion of hierarchy - systems, “social or otherwise, are structured around binary oppositions (good/ bad) in which one of the terms dominates [or governs] the other.” (Cooper, 1997: 33). Thus, implicit to the construction and

maintenance of these binary divides is the *desirable* norm/ anterior, and the *undesirable* other/ posterior.

When applied to drugs, although the Labour of Division does not hold that these binary categorizations represent any inherent characteristics of a drug, it is evident that various expectations are intrinsic to them, formulated as the anterior (positively-valued) term and posterior (negatively-valued) term. According to this thesis the legality or illegality of a drug would be *real-ized* through the characteristics of the category they inhabit. Illustrative of this is the example of cocaine. As we have seen, inherent to contemporary understandings of cocaine and its position as illegal social menace is the assumption that its consumption is both dangerous and undesirable – it has been attributed the various values inherent to the posterior category. Moreover, despite its chequered history, the recent reconfirmation of cocaine as dangerous by the ACMD (2002) report reinforces the legitimacy of cocaine's contemporary social position - a position that ignores or fails to allow space for any other possible constructions. These divides both create and limit our realm of knowledge to this simple categorization which prescribes and proscribes not only our perception of cocaine but equally its users. In this instance, the social order of legal and illegal is synonymous with that of normal and abnormal – prescribing what we should know beforehand, and how and what we should see (Munro, 1997: 11-12). So the aforementioned stabilization of social divides and the naturalization of binary categories are undoubtedly reflected in social perceptions of drugs: to this extent the Labour of Division as praxis enables and justifies the practice of dividing drugs and allotting

them to alternative categories. Conceptually it also allows us to *illuminate* this praxis.

Importantly these divides and the phenomenon which we assign to the opposing categories they create become reified as truth rather than invention. Subsequently they appear to be naturally ‘given’ and authentic - to stand in faithful representation of the world. This apparent naturalization is facilitated by the stabilization of these categories. As Cooper (1997) suggests, the foundations of the dualisms and the boundaries they place on our knowledge are largely taken for granted. In this light, definitions of drugs as good or bad, such as the example of cocaine above, appear concrete and natural, suggesting that cocaine is *inherently* bad by categorising it as illegal. But, as already established, these binaries are unable to account for anything material, anything inherent to a thing/substance or experience – they do not reveal any essential properties of that which they seek to articulate. Instead they become ‘frozen’ through social convention and their role in the production and reproduction of social order. Subsequently, and bringing the discussion back to drugs, these divisions fail to reveal any ‘essence’ of drugs. Rather, they are simply representations, and consequently *ascribe* an essence to the drugs they represent.

Furthermore, the poles of these binaries do not exist independently from their ‘others’ - good does not exist without its opposite, bad - but rather are realized through the existence of that ‘other’ (Munro, 1997: 28). Thus the binaries are interactive: good is good because it is not bad, and vice versa. These oppositions

facilitate and enable the process of differentiation. As expressed by Cooper (1997: 33, quoting in part from Derrida)

“In interaction, as Derrida¹⁴ reminds us, there is a continuous double movement *within* the binary opposition so that the positively-valued term (for example, good) is defined only by contrast to the negatively-valued second term (for example, bad). In fact the relationship between the apparently opposing terms is really one of mutual definition in which the individual terms actually inhabit each other. In other words, the separate, individual terms give way to “a process where opposites merge in a constant undecidable exchange of attributes”.

Thus, the Labour of Division facilitates perceptual selectivity by reducing the possibility for ambiguity, enabling individuals to see ‘good’ and ‘bad’ through this process of interaction. Illustrative of this is the divide of drugs as legal or illegal – formally underpinned by the law – through which drugs are organized into either or categories on the basis of predefined knowledge/ understanding of how the legal should be constituted with respect to its other. Thus, drugs are judged against broad standards - from how and for what purpose they are used to perceptions of their relative harm - and from this they are categorized.¹⁵ “In this way, the general process of the ‘labour of division’ enables greater control over

¹⁴ Although I am aware that the Labour of Division as a concept is highly influenced by Derrida, an exploration of deconstruction is beyond the scope of this thesis. Rather than a focus on deconstructive readings of how text constitutes drugs, I am concerned with the material, social effects of these constructions and constitutions, notably how they inform the workplace drug test.

¹⁵ Although as aforementioned recent research by the Royal Society of Arts commission on drugs (see Nutt and Blakemore (2007)) suggests that the British ABC classification system fails to represent the relative harm caused by various drugs, it was on this premise that it was built and is subsequently being defended.

the social and material world through enhanced clarity, transparency and visual certainty *at a distance*” (Cooper, 1997: 33). It enables knowledge, visibility and *subsequently judgment* of the world.

This possibility of judgement is enabled by the creation of identity/ identification (i.e. sameness) *within* the opposing binary poles, and difference between them. Categories resulting from these binary divides are visible throughout western social order. Thus the Labour of Division enables normalization and judgement, creating the norm and its other through the act of division and creating social standards and expectations against which individuals may be judged.

Perhaps unsurprisingly, Cooper (1997) also utilizes Foucault’s (1977) discussion of the Panopticon in his consideration of the organization of perception and pursuit of visibility. Here, normalization and judgment of the individual are vital to the creation and maintenance of order. Indeed

“Foucault...notes, through the introduction of the ‘examination’, a technique which combines the power of an ‘observing hierarchy’ with that of a ‘normalizing judgment’. The examination ‘is a normalizing gaze, a surveillance that makes it possible to qualify, to classify and to punish. It establishes over individuals a visibility through which one differentiates them and judges them.” (Cooper, 1997: 35, quoting in part from Foucault)

This Foucauldian ‘order’ is not restricted to the physical institution but rather it extends to the social world at large, permeating the minutiae of individual

understandings - ideas that are explored further in paired chapters three and four in a discussion of panopticism.

Also implicit to and foreshadowing the above discussion is the notion of deviance. Deviance or ‘otherness’ is always associated with the posterior term in the Labour of Division binary. Thus for deviance to occur there must be a norm - an anterior from which deviation is possible. A condition of this is a preconception of what the norm is, enabling the classification of that which is different as simultaneously deviant:

“[Thus] *social groups create deviance by making the rules whose infraction constitutes deviance*, and by applying those rules to particular people and labelling them as outsiders. From this point of view, deviance is *not* [an essential] quality of the act the person commits, but rather a consequence of the application by rules and sanctions to an “offender”.
(Becker, 1963: 9, emphasis added)

These ‘rules’ are produced through the social process of dividing the world into good and bad, a process articulated by the concept of the Labour of Division as a ‘way of seeing’. These divisions are epitomized by the legality/ illegality divide of drugs in which sale, possession and consumption of illegal drugs is deviant and may have negative repercussions such as imprisonment.

Moreover, the belief in the ‘inherent’ danger of drugs – the naturalization of divisions – reinforces the rhetoric of deviance, an identity that is transferred onto

those individuals who use drugs, resulting in their being labelled as morally undisciplined, idle and self-indulgent (Young, 1971: 95). Thus, through the process of continual division and subsequent categorization, these binaries are reinforced, reproducing both norm and the undesirable other. The above discussion thus reveals how the Labour of Division underpins the identification and judgement of the drug-using individual, revealing social rules, creating the norm and subsequently those who deviate from it. And of course the development of workplace drug testing is therefore justified by the Labour of Division as praxis, or rather the negative-valued interior pole creating the drug user/ deviant, for it is the existence of the deviant that necessitates the test, as a means of identifying or deterring deviance. The test itself is founded upon principles of *di-vision*, of identifying and separating the non-user from the user.

In sum, the Labour of Division as both discursive tool of interpretation and a descriptor of social praxis has value both in enabling and revealing our simple conceptions of the complex, multifaceted world. However, this conceptual lens on social order can be found wanting, unable to articulate or reveal the complexities and anomalies of individual understandings. The Labour of Division fails to account for the role of lived experience in shaping knowledge and understanding of the world. The anthropologist Geertz (1983) offers important insights into the role of experience - 'local knowledge' - in informing, developing and nuancing these dualisms. According to the Labour of Division as concept, these dualisms result in a 'stylized' society, representing and pertaining to the maintenance of order (Geertz, 1983: 85). But Geertz suggests that they are unable to account for the influence of lived experience. Geertz (1983: 29-30)

recognizes that these presuppositions form a “particular conception of what status, power, authority and government are and should be: ...The state enacts an image of order that – a model for its beholders, in and of itself – orders society.” He further suggests that that which is seen and subsequently ‘known’ is not what the ‘clear mind’ (empty of divisions) would apprehend, but rather is what the mind filled with suppositions - with discursive divisions - concludes (Geertz, 1983: 84). This is illustrated by the formal, government-mediated legality and illegality of drugs - and their subsequent labelling of norm and other/ deviant – through which citizens’ views of drugs are broadly and superficially informed.

But Geertz denies the universality of such understandings - which he refers to as ‘common sense’ or ‘common knowledge’ - recognising the value and influence of lived experience upon these distinctions. In other words, “the populace at large does not merely view the state’s expressions as so many gaping spectators but is caught up bodily in them” (Geertz, 1983: 30). This suggests that, although common sense is a cultural system ostensibly drawing its authority from unspoken premises – premises such as those we have been discussing as products of the Labour of Division, premises that are underpinned by conceptions of right and wrong, normal and abnormal - it is impossible to catalogue its content at the level of the individual, as it varies widely both across and within societies. In other words, it (common knowledge) is altered through the context of individual experience, through ‘local knowledge’ (Geertz, 1983: 77). This is further illustrated by Brewis and Linstead (2000: 242) and their discussion of Geertz. They describe his work as arguing that

“the social anthropological study of particular communities tends to surface knowledges which are specific to the conditions in which those communities subsist, and which are concrete and pragmatic, helping members of those communities to live their lives successfully in the community’s milieu, wherever that may be.”

Thus, it is apparent that ‘local knowledge’ creates discrepancies which nuance dualisms, such that individuals demonstrate opinions which go beyond simplistic social ordering. As Geertz (1983: 77) says,

“If we look at people who draw conclusions different from our own by the mere living of their lives, learn different lessons in the school of hard knocks, we will rather quickly become aware that common sense is both a more problematical and more profound affair than it seems from the perspective of the Parisian café or an Oxford Common Room.”

This is aptly illustrated by the previously discussed opinions about and use of cannabis, with 63.1 percent of respondents to a 2003 MixMag survey reporting having used cannabis in the previous month at a time when it was still classified as a Class B drug, meaning that possession was an offence (IIDTW, 2004: 59). Furthermore, the British Crime Survey suggested that use of cannabis by 18-24 year olds rose from 12 percent to 52 percent between 1981 and 2000 (ACMD, 2002: 4). ‘Local knowledge’ thus brings into question such simple divisions as the depiction between the ‘normal’ (drug abstainer) and the ‘abnormal’ (drug user). Following this, it is likely that what is experienced at a distance, or rather

not experienced directly, will be understood via broad social stereotypes, as depicted by the Labour of Division - stereotypes that bring a complex world into focus. This argument can be further illustrated by Baudrillard's (1995, 2006) discussion of the mediated image of the Gulf War; conflict and killing translated into media simulations appropriate for mass consumption, a virtual war of information or reality show. In contending that the Gulf War did not take place, Baudrillard (1995) is suggesting that the media representation of war constructed our vision, that what we saw/ were allowed to see *as* the Gulf War never happened. In this instance our knowledge was mediated over distance and through technology, rather than being informed by lived experience.

As is evident from the above discussion, despite the apparent naturalization of and taken-for-granted nature of dualisms (Cooper, 1997), and their utility as a way of seeing the world, they do not have universal power or influence. Instead, these divisions are mediated and informed by lived experience. Thus, stereotypical divisions arguably have greatest value in the *absence* of lived experience, when things are known and experienced at a distance. So there are various limitations to Cooper's discussion of the Labour of Division as a stabilization thesis, revealing 'local knowledge' to inform individuals' acceptance of and commitment to these divides. In the next section the examples of cocaine, cannabis and Thalidomide will be utilized to illustrate these arguments.

Nuancing divisions: complexity and the both/ and of drugs

As has previously been explored Cooper's (1997) characterization of the Labour of Division as a process of stabilization is undoubtedly useful, revealing the stereotypes and dualisms that inform our various understandings of drugs, - the substances themselves as good *or* bad, their consumers as normal *and* deviant and the social order of legal *and* illegal - establishing knowledge in advance, prescribing the way in which we know 'beforehand' (Munro, 1997: 11). Despite its apparent value, though, implicit to Cooper's take on the Labour of Division is the assumption that these divisions are always either/ or and stable over time. It is suggested by Munro (1997: 12) that in Cooper's analysis the Labour of Division is a 'general process', a look, a vision which cannot be questioned, a way of seeing that "escape[s] interaction and re-inforces hierarchy". Moreover, Munro suggests that the Labour of Division conceptualized in this way is both branding and blinding, suggesting that individuals are "blind to what is literally before them and attuned to 'see' that which has been made ready in advance" (1997: 12). Thus, this labour is simultaneously a way of revealing *and* hiding the world. As such, as a conceptual framework to articulate praxis, it can only go so far as it fails to account for history, culture and lived experience (local knowledge).

As revealed by the previous discussion, the drugs cocaine, cannabis and Thalidomide have had a somewhat transitory status throughout the history of

western society. Each drug's history reveals that dualisms of good/ bad, licit/ illicit and so on have not remained static or uncontested. From the proliferation of coca use by Peruvian workers, cocaine's anaesthetic qualities, and its use in various consumer and medicinal products to concerns for the health consequences of use and its subsequent illegality, this drug has had a complex and multifaceted history. Whereas, in recent history cannabis has experienced an unprecedented move from Class B to Class C , a downgrade that reflects both the proliferation of its use and equally the strength of public opinion in support of this move. Thalidomide on the other hand, which was originally licensed as a medicinal sedative, was revealed as responsible for foetal deformities. Despite this, the drug has recently experienced renewed interest as a possible aid in the treatment of cancer.

Not only do these histories reveal the *instability* of divisions over time, it is also evident that the divides of either/ or do not necessarily apply at any given juncture. Munro (1997) criticizes Cooper's stabilization thesis for failing to allow for interaction between divides - in which we may re-frame our ways of seeing. Instead these divides seemingly account for the essence of a drug, its inherent 'goodness' or 'badness'. Both cannabis and Thalidomide are primary examples of the blurring of boundaries in this regard. Understandings of cannabis are certainly multifaceted, contested and unstable. One could in fact assert that at present, cannabis occupies neither category – it is not illicit *or* licit but both/ and. Although not legal in the UK, it is partially decriminalized, and individuals will not be prosecuted for possession for personal use. This also reveals these

divisions to be subject to the cultural context in which they occur.¹⁶ Thus, cannabis is seemingly an anomaly in the context of the dualisms created by the Labour of Division which leave no space for undecidability, something that is further illustrated by the case of Thalidomide. Like cannabis, Thalidomide fails to fit neatly into either/ or categories of the ‘good’ or the ‘bad’ drug. It is a drug that has disastrous consequences when consumed by women during pregnancy - consequences so profound that they altered the standards of drug licensing - however, despite this danger and without it dissipating, new research suggests the value of Thalidomide in the treatment of cancer. Thus the drug is simultaneously constructed as social ‘good’ and social ‘menace’. Even cocaine, which is still utilized in ear, nose and throat surgery, reveals the permeability of these seemingly fixed boundaries.

In sum, although Cooper’s argument of Labour of Division is useful, it is also flawed, as it fails to account for the multiple, shifting and contested versions of what drugs are, what they do and how we should know them. Such shifts are revealed through the discussion of cocaine and its transition from common everyday use to illegal social menace, and of Thalidomide and its original role as a medically approved sedative, to its ‘fall’ in a medical disaster, and its subsequent function as cancer treatment. Moreover, the Labour of Division as stabilization thesis fails to account for the possibility of a drug being *both* good *and* bad, assuming that it is only possible to be the ‘norm’ or the ‘other’. This is most aptly demonstrated by the case of cannabis, whose downgrade to Class C in

¹⁶ For example in the Netherlands, consumption of cannabis is legal, and the drug is openly sold in licensed coffee shops

the UK was shrouded in controversy as counter-arguments continue to suggest that it, at the very least, facilitates if not causes, mental illness such as psychosis. The possibility for a drug to occupy both binary poles simultaneously is enabled by 'local knowledge' (previously discussed with respect to Geertz, 1983). Indeed, both those supporting the downgrade of cannabis and those refuting it are likely to have founded their opinions on more detailed 'local knowledge', stemming from personal experience of the drug's effects to systematic and active research.

It is evident that our apprehension of the world is informed by the extent of our knowledge and experience of it – knowledge and experience that will be reflected in our understanding of, adherence or challenge to the simple divides of 'common sense'. This assumption that divisions are in fact contested and transient is also implicit to discussions offered by both Parker (1997) and Watson (1997). Parker suggests that divisions may be both ordering and disordering, as individuals negotiate these divides and themselves in relation to them – creating multiple and contested identities – indeed, an individual may be a manager, employee and friend or all three simultaneously. Watson (1997) also acknowledges the fluidity of divisions in his discussion of the identity-work of managers and their transcendence of division – the maintenance of their identity as manager - through continuously dividing and un-dividing self as manager and managed. Thus, divisions are spaces of traffic, through which we continuously identify and re-identify the world. Although Cooper's thesis has value in articulating how we construct and divide the world, and subsequently our 'common knowledge' of drugs, it equally fails to entirely reveal the multifaceted and fluid way in which these divides operate in practice. Hence, an understanding of the Labour of

Division that extends beyond Cooper's analysis and subsequently makes space for personal experience and 'local knowledge' could offer us a more complex and detailed view of the world – offering explanations and insights into the complex history of drugs and our relationship with them in the West.

Summary:

These two chapters have utilized the cases of cocaine, cannabis and Thalidomide to illustrate the multifaceted and contested nature of drug histories, from past to present constructions including the development of drug testing initiatives within the sporting arena and more conventional forms of employment. Cooper's (1997) concept of the Labour of Division has been utilized as a lens through which contemporary understandings of drugs may be explored. From a sense-making tool through which the world is rendered visible, knowable and navigable, to a concern for the reification of binary divides which facilitate and enable the possibility of normalization and judgement, it has been argued that these various notions are useful in articulating how we relate to drugs. Geertz (1983) has also been used to add value to this discussion, with parallels drawn between his 'common knowledge' - universal, remote understandings - and the stylized society produced through the Labour of Division and its social stereotypes. In an extension of this discussion, the importance of 'local knowledge' in inflecting, deepening and altering the broad understandings characteristic of 'common knowledge' was also explored. Thus it was argued that first-hand experience of drugs and their users would impact upon individuals' acceptance of these social

stereotypes. So, although the utility of the Labour of Division as a stabilization thesis was acknowledged, its inadequacies were also explored. Utilising the aforementioned social history of drugs it was suggested that the Labour of Division fails to articulate the instability of constructions of drugs over time, while its inherent assumption that drugs will neatly fall into either/ or categories is found to be wanting, aptly illustrated by the debates concerning cannabis and Thalidomide.

In the next two paired chapters the case of organizational drug testing shall be explored in more depth – indeed in light of the above discussion it shall be contended that testing is a material instantiation of good/ bad constructions of drugs and subsequently a material effect of the discursive Labour of Division – founded on assumptions concerning the inherent properties of various drugs. The paired chapters three and four, then, explore the implications of the drug test as a contemporary surveillance technology and how we might respond to it, taking Foucault (1977) seriously in his claim that ‘everything is dangerous’.

CHAPTER THREE

Panopticism, Discipline and Workplace Drug Testing: 1

Introduction

These two paired chapters seek to explore organizational drug testing in light of Foucault's (1977, 1979) analysis of disciplinary and biopolitical power. The initial discussion focuses on the physical architecture of the Panopticon – the archetypal disciplinary machine – and how its principles are reflected within other, less austere institutions. From here they seek to explore the changing nature of surveillance in contemporary society, suggesting that the development from disciplinary architecture (Panopticon) to disciplinary relations (panopticism) has been facilitated or indeed necessitated by an increasingly mobile and transient population. These paired discussions will argue that the intentions of the workplace drug test (like other contemporary surveillance technologies) reflect the principles of panopticism, seeking to control and regulate individuals through visibility, normalization, individualization and judgement. Moreover, it is equally suggested that the objective of the employee drug test is to regulate the entire workforce, thereby revealing its intentions to be both disciplinary (panoptic) *and* regulatory (biopolitical).

Indeed, the drug test seemingly extends the principles of panopticism, from its ability to see beneath individuals' skin and beyond the confines of the naked eye

to its capacity to reveal past and previously unseen behaviour. Following from this it is suggested that the drug test reflects contemporary society's fascination with information and is thus another technology of Virilio's info-war attempting to mediate the image of drugs and their users, while its capacity to conflate time and reveal the past equally reveals its dromological capacity. However, the limitations of the drug test as a contemporary surveillance technology are also exposed, as not only is the relatively new science of the drug test shown to be flawed and subject to various problems concerning its accuracy and capacity, but equally the drug test may be subject to various forms of resistance.

The utilization of the Panopticon as a lens through which to consider the development of organizational drug testing nonetheless offers valuable insight into the role and implications of this contemporary surveillance tool, as I will now go on to explore.

The Panopticon and the organization

The Panopticon, originally designed by Jeremy Bentham in the eighteenth century arguably signified a change in understandings and performance of discipline and punishment in the west. Foucault (1977) suggests that this is manifest in a shift from the spectacle of punishment to discipline, exemplified by the principles of individualization, normalization, visibility and judgement embedded within the Panopticon. As Foucault's discussion of the execution of the regicide Damiens

illustrates, the ‘spectacular’ act of punishment was a very public and overt demonstration of power:

“After these tearings [of the flesh] with the pincers, Damiens, who cried out profusely, though without swearing, raised his head and looked at himself; the same executioner dipped an iron spoon in the pot containing the boiling potion, which he poured liberally over each wound. Then the ropes that were to be harnessed to the horses were attached with cords to the patient’s body; the horses were then harnessed and placed alongside the arms and legs, one at each limb.” (Foucault, 1977: 4)

This highly visible demonstration of punishment is in stark contrast to more contemporary forms. In *Discipline and Punish*, then, Foucault discusses the changing nature of punishment and conceptions of discipline, which developed from the aforementioned spectacle to the disciplinary mechanisms of surveillance that proliferate throughout contemporary society. In discussing this transition, Foucault considers the archetypal disciplinary machine - the Panopticon - which consisted of a central watchtower from which the superintendent could observe the behaviour of institutional inmates. It was initially intended as a penitentiary for the incarceration and observation of convicts and paupers, although Bentham also acknowledged its potential use in other institutions such as schools or hospitals. Foucault describes it thus:

“We know the principle on which it was based: at the periphery, an annular building; at the centre, a tower is pierced with wide windows that

open onto the inner side of the ring; the peripheric building is divided into cells, each of which extends the whole width of the building; the two have windows, one on the inside, corresponding to the windows of the tower; the other, on the outside, allows the light to cross the cell from one end to the other. All that is needed then is a supervisor in a central tower and to shut up in each cell a madman, a patient, a condemned man, a worker or a schoolboy. By the effect of backlighting one can observe from the tower, standing out precisely against the light, the small captive shadows in the cells of the periphery.” (Foucault, 1977: 200)

The Panopticon therefore created the possibility of continuous visibility and surveillance of its inmates. Foucault suggests that this creates the self-disciplining subject, ensuring the “automatic functioning of power” and creating surveillance that is “permanent in its effects, even if it is discontinuous in its action” (Foucault, 1977: 201). Inmates were not only continuously visible, but equally unaware of when they were subject to surveillance. Thus, the expectation is that an inmate of the Panopticon would discipline their behaviour accordingly – as though they *were* being continuously watched. So the physical presence of a watchman was not in fact necessary for the effective working of the Panopticon.

Implicit to the Panopticon then, is the development of a technique of discipline to which Foucault (1977) refers as ‘dressage’. Its objective is the *internalization* of the gaze of surveillance, or rather the *performance* of discipline as external expectations become inscribed onto an individual’s behaviour. Dressage is concerned with an individual’s outward displays of behaviour, and most notably

ensuring their conformity with accepted 'rules'. Much like dressage within the equestrian community, it focuses on the minutiae of movement, movement which is then subject to judgement against norms of desirable behaviour. Thus, the performance of dressage is dependent on the principles of normalization, individualization and judgement, embedded in the Panopticon. First, this focus on rendering visible and subject to judgement the minutiae of individual behaviour has various normalizing effects. As Foucault (1977: 183) notes: "The perpetual penalty that traverses all points and supervises every instant in the disciplinary institutions compares, differentiates, hierarchizes, homogenizes, excludes. In short, it normalizes." Indeed these various techniques seemingly define the realm of desirable and acceptable behaviour- the norm and its inverse, which attracts retribution. So, "[t]he Normal is established as a principle of coercion" (Foucault, 1977: 184) - it enables disciplinary power. Moreover, the norm is reinforced by practices of surveillance which reveal individuals behaviour, making them observable and subject to judgement and punishment against that norm.

This concern for individuals' outward displays of discipline or commitment to the norm, reveals the body of the individual as the object of control. This is illustrated by Foucault's (1977: 145) discussion of the workshop which reveals that vital to the effective functioning of disciplinary power, to dressage, is the principle of individualization:

"By walking up and down the central aisle of the workshop, it was possible to carry out a supervision that was both general and individual: to

observe the worker's presence and application, and the quality of his work; to compare workers with one another, to classify them according to skill and speed; to follow the successive stages of the production process...each variable force – strength, promptness, skill, constancy – would be observed, and therefore characterized, assessed, computed and related to the individual who was its particular agent.”

Thus, disciplinary power intends to differentiate the individual from the masses, locating them in space, making them simultaneously visible and accountable for their behaviour, by making judgements concerning “who he is; where he must be; how he is to be characterized; how he is to be recognized” (Foucault, 1977: 199). In doing so it brands individuals against social expectations of normal/ abnormal e.t.c distinguishing them from their counterparts. Thus the performance of conformity to the norm is seemingly a response to the individualizing and normalizing effects of power.

Following from Bentham's own ideas, Foucault agrees that the principles of visibility, discipline and judgement embedded in the Panoptic penitentiary as a surveillance machine are reflected in other institutions - in the school for example, from the physical presence of the teacher and the layout of the classroom (traditionally that of individual tables in rows) to the examination - each technique of power seeking to render the pupil visible and their conduct subject to judgement against accepted norms of behaviour. So, as Burrell (1998: 19) illustrates the principles of discipline may permeate all organizations:

“The implication is that, built into the architecture and geometry of disciplinary organizations, is the distinctive arrangement of observation and close surveillance [...]Whatever the organization, discipline revolves around the minute details of those subjected to it. Discipline soon comes to require a cellular system of locating and concentrating individuals in space, a timetable for activity, manuals for the correct movement of the body and a precise economical system of command. Individuals become ‘cases’ who are measured, described, evaluated, examined and compared.”

The relevance of the Panopticon to contemporary society is thus already becoming evident. As has been suggested, it has an undoubted appeal as a disciplinary machine, namely that individuals who are subject to the watchful eye of surveillance will conform to the various rules and principles of disciplinary society and equally that any failure to conform will not only be self-evident but subject to judgement. Hence the Panopticon encourages individuals to self-monitor. Although the impetus for this stems from the principles of visibility, normalization and judgement, its enactment and indeed the responsibility for monitoring are actually assumed by the individual who is being watched: “[h]e who is subjected to a field of visibility, and who knows it, assumes responsibility for the constraints of power...he becomes the principle of his own subjugation.” (Foucault, 1977: 202)

In many respects Panoptic surveillance and self-monitoring *are* evident in various aspects of contemporary society, with various institutions mentioned above in

existence - for example, prisons, schools and hospitals - in which techniques of surveillance are intrinsic to individual self-discipline and the effective functioning of power. Workplace surveillance and discipline as they relate to employees as opposed to inmates, school children or patients have also been explored within organization studies. These explorations include Sewell and Wilkinson's (1992) study of Just-In-Time and Total Quality Management regimes and their simultaneous reliance on and creation of, workplace surveillance and discipline. Then there are discussions concerned with the surveillant nature of computer based performance monitoring technology and the development of CCTV surveillance in the workplace (Poster, 1990; Ball, 2000; 2002). We can also consider Townley's (1993) discussion of HRM practices as creating an analysable subject through the use of training and appraisals, for example.

It is somewhat surprising that this literature, although concerned with a broad spectrum of surveillance technologies in organizations, remains quiet on the issue of workplace drug testing which, as I will argue later, can certainly be considered Panoptic. This is particularly surprising in light of its increasing proliferation within the workplace as a tool to survey employees' behaviour. As already mentioned forty to fifty percent of all organizations in the US utilize some form of drug testing (IIDTW, 2004: 41). Moreover, testing is becoming an ever more prevalent initiative within the UK, with some four percent of UK firms utilising drug testing procedures in 2004 and nine percent of companies suggesting that they would be initiating drug testing policies within the following year (IIDTW, 2004: 37). This silence in current literature on drug testing is also remarkable when we consider that CMS in particular is an area that seeks to question

managerialist and academic commentary advocating the extension of organizational control over the workforce.

The very well received discussions of Fournier and Grey (2000) who seek to outline what CMS is and might be makes this silence all the more surprising. As Fournier and Grey (2000: 16) articulate “to be engaged in critical management studies means, at the most basic level, to say that there is something wrong with management as a practice and as a body of knowledge, and that it should be changed.” If we follow their suggestion that CMS is broadly speaking critical of the ways in which we organize and that it seeks to re-evaluate taken-for-granted assumptions - including the importance of managerial control mechanisms - then it follows that the development of organizational drug testing as a means of surveying, controlling and judging employees should be a concern for CMS scholars.

Furthermore, Fournier and Grey (2000) highlight important areas that additionally distinguish CMS from its managerialist counterpart. Firstly, they suggest that CMS moves beyond the performative intent characteristic of managerialist research - its concerned with efficiency and production - towards the exploration of how such performativity reproduces problematics around power, control and inequality. The managerialist intent manifest in the implementation of employee drug testing is of course revealed through the various justifications for testing discussed in the previous chapters - the concern for the presumed loss of production and efficiency and the increased risk of accidents associated with drug using individuals. Moreover, these justifications parallel reasons for the

development of other performance and control mechanisms such as CCTV that *have* been a concern for CMS scholars (Poster, 1990; Townley, 1993; Ball, 2000; IIDTW, 2004). Thus in this light the dearth of research on this issue by CMS scholars is again unexpected.

Fournier and Grey (2000) also highlight what they refer to as ‘denaturalization’ - a process of deconstructing the ‘reality’ of organization, or rather a commitment to the proposition that things may not be as they appear. So in this light it would be fair to expect CMS scholars to question the various assumptions about drugs and testing that were discussed in the previous chapters. That is, that drugs are inherently dangerous, that they are a problem within the workplace and that the drug test is able to effectively identify drug users. Further to this Fournier and Grey’s (2000: 19) assertion that “CMS is a political project in the sense that it aims to unmask the power relations around which social and organizational life are woven” makes CMS’s relative silence on the issue of drug testing even more resounding. Indeed, as established later in this paired discussion, from the power of the drug test to reveal individuals’ behaviour outside of the workplace to its ability to see beneath individuals’ skin and reveal their internal conformity to organizational rhetoric, the drug test has extensive implications for the power relations which underpin both organizational and wider social life.

This silence is acknowledged by Cavanagh and Prasad (1994) who both note and develop the contribution of Comer (1994) in bringing into question the desirability, efficacy and justification of organizational drug testing. Further to this authors such as Guerrier (2003) and Warren and Wray-Bliss (2003) have

made notable contributions by questioning the role of alcohol and drugs in the workplace. Warren and Wray-Bliss seek to question managerialist constructions of drugs and their users as dangerous and undesirable and the subsequent justifications for drug testing that emanate from this position. Moreover, Guerrier's (2003: 1402) discussion on the work of holiday representatives illustrates that alcohol may in fact be an important factor to the performance of some work activities and in so doing also breaks with the managerialist norm.

“It [alcohol consumption] takes place in what is clearly a leisure space (a mass-market holiday resort) and it provides opportunities to participate in leisure activities, partying, drinking, hanging around resort hotels, as an integral part of the work itself.”

However this literature is not only sparse but equally there has been a dearth of empirical research (beyond that of the IIDTW) considering the various issues and controversies that underpin these practices - some of which have been mentioned in the previous chapters - including the relationship between drug use and performance impairment, concerns for individuals' bodily privacy and the various limitations of the drug test. Thus, CMS has paid little attention to the development of workplace drug testing *despite* its obvious panoptic intentions and capacity to survey and control workplace employees. Furthermore, the little work that does exist is not founded on empirical research.

The discussion below seeks to explore individuals' increasing mobility within and between nation states, how this relates to Foucault's discussion of the Panopticon

the changing nature of social relations and its implications for the development of surveillance technologies.

Mobile bodies: the changing nature of surveillance

Having considered the role of the Panopticon within organizations of various kinds, in this section I expand on its importance as a means of understanding the development and proliferation of contemporary surveillance technologies including workplace drug testing. Thus far the Panopticon has largely been considered as a physical building, or as a set of principles enacted within a physically defined space such as the prison, school, hospital, individual workplace etc. However, in his consideration of the Panopticon, Foucault recognized its significance beyond that of a physical building, a ‘dream’ prison or ‘ideal form’, suggesting that it was a “political technology that may and must be detached from any specific use” (Foucault, 1977: 205). Furthermore he referred to those principles which it seemingly embodied as those of ‘panopticism’ and the possibility of their functioning *throughout* society: “one may ‘unlock’ the disciplines and get them to function in a diffused, multiple, polyvalent way throughout the whole social body” (Foucault, 1977: 208 - 209). Thus the various disciplinary effects of the Panopticon extend beyond the limitations of physical architecture.

This signals a move from focusing solely on disciplinary architecture (the Panopticon) to also considering disciplinary relations (panopticism), as recognized by Elden (2003: 248-249):

“Although there are various presentations of the new disciplinary society that he analyses, one of Foucault’s most compelling claims is when he suggests that there are two images of discipline – the discipline-blockade, and the disciplinary-mechanism. The first is the enclosed institution, situated on the edges of society, but turned inwards; the second is a functional device or apparatus [*dispositif*] that makes the exercise of power more effective and enables subtle coercion of the society; a schema of exceptional discipline, and a generalized surveillance. The latter of these Foucault designates “panopticism”, but only the former is exemplified by the Panopticon.”

The archetype of the disciplinary blockade, the Panoptic building or ‘ideal’ prison, in which disciplinary power acts within the confines of architectural space, means that the physical structure *itself* creates the possibility of surveillance, and its disciplinary effects. What Elden refers to as the disciplinary-mechanism is aligned to panopticism and the various *principles* of the Panopticon and disciplinary power extended beyond physical architecture.

Elden’s distinction - between Foucault’s conception of the ‘ideal’ architecture of the Panopticon and the principles of panopticism it exemplifies - is vitally important when we consider the mobile contemporary individual and the nature

of surveillance and control practices in contemporary society. Rather than the 'exceptional discipline' epitomized by the Panopticon, Foucault (1977: 209) here identifies the development of more 'generalized surveillance' – panopticism: “a functional mechanism that must improve the exercise of power by making it lighter, more rapid, more effective, a design of subtle coercion for a society to come.”

Importantly in this regard, western society in particular is changing as populations are becoming increasingly more mobile, be this migrating between towns and cities or across the borders of countries. Travel is becoming increasingly cheap and easy and movement internationally is also facilitated by the relaxation of border controls (in the European Union, say). As the Office of National Statistics (accessed 5/09/07) notes in reference to the United Kingdom:

“In 2004 an estimated 223,000 more people migrated to the UK than migrated abroad. This estimated net inflow is much higher than for 2003 when 151,000 more people arrived to live in the UK than left to live abroad.”

Moreover they note that this trend is increasing: “Over the past decade migration into the country increased from 314,000 in 1994 to 582,000 in 2004, with most of the increase to inflows occurring after 1997.” (*Office of National Statistics*, accessed 5/09/07). And we can expect this to continue with European Union member states further simplifying their visa requirements from June 1st 2007 to facilitate inward migration.

This movement is indicative of a change in social relations that is vital to our understandings of the changing nature of surveillance. Individuals who traditionally remained static in space - growing up in, going to school in, working in and marrying within a single community (and so facilitating the working of panoptic *architecture*) - are now travelling to living, working, marrying and residing in places other than where they were born or grew up. Hence communities within which individuals had once known each other well are increasingly becoming 'communities' of strangers; rather than '*knowing*' people we now simply '*know of*' them (Norris: 2003). And in this ever more globalised world in which geographical, cultural, political, economic and social boundaries are becoming more permeable we can equally witness the globalization of techniques of surveillance - much like those it watches, surveillance too traverses time and space (Lyon, 2001). What we seem to be seeing, then, is a parallel movement from the disciplinary-blockade, 'architectural Panopticon', to the disciplinary-mechanism, 'panopticism'. And so we witness the changing nature of surveillance, from personal knowledge and an actual 'watchman' to the use of various and ever developing technologies to enable surveillance at a distance. In light of their intentions to survey, individualize and *know* an individual, contemporary surveillant technologies are revealed as components of a general panoptic schema.

This surveillance takes many different forms, including CCTV which replaces the physical presence of the watchman with the use of a camera, key-stroke monitoring, phone call and email monitoring, iris recognition, finger printing,

identity cards, DNA databases, facial recognition technology, anti-social behaviour orders (ASBOs), ‘tagging’¹⁷, and drug testing, each technology seeking to both know and discipline the body, rendering the individual visible and knowable. A great degree of academic attention has been given to the development and use of CCTV technology in particular, especially its role in crime prevention (Lyon, 2001; Cameron, 2004; Gras, 2004; Hier, 2004; Norris *et al.*, 2004; Norris and MaCahill, 2006). Interestingly, its use is more established in the UK than in any other country worldwide. CCTV technology has proliferated throughout British towns and cities, with over 2.5 million cameras used in the country in 2002, escalating to 4 million cameras in 2006 (Wakefield, accessed 4/1/2007). “[This] gives the UK a quarter of the world’s cameras to photograph 1 per cent of the world’s population” (Rees-Mogg, 2006). The utilization of CCTV surveillance is also proliferating throughout the USA in response to the 9/11 terrorist attacks (Parenti, 2002). This is also an example of the growing sophistication of surveillance technologies, as CCTV camera systems are increasingly utilising face recognition technology, which enables individuals to be checked against criminal records databases, for example, developing its capacity to individualize, normalize and judge individuals from a distance (Parenti, 2002; Introna and Wood, 2004).

Flint’s (2006) discussion of CCTV surveillance of population ‘traffic’ in two Scottish shopping centres provides an apt example of its potentially surveillant and subsequently judgemental/ exclusionary power. While he acknowledges the

¹⁷ Tagging involves an individual wearing a tracking device around the wrist or ankle through which their movement is monitored. This enables the individual to be subjected to various restrictions and is usually used to enforce curfews and designate boundaries beyond which they are not allowed to travel, as an alternative or follow up to a custodial sentence.

various benefits of surveillance in this particular instance, Flint also acknowledges the potential danger of the unregulated power of exclusion. One drug-using respondent noted that his habit resulted in the assumption that he would shop lift, for example; “They [the guards] don't like anything to do with drug activities; they don't like your face so they bar you. But the thing is you have a drug problem, it doesn't mean you are into shoplifting” (quoted in Flint, 2006; 60). The panoptic capacity of CCTV is in this instance realized through its capacity to identify known drug users and subsequently enable their removal from the shopping centre. Notably Flint also separates the role of public and privately administered surveillance, suggesting the greater efficacy of public surveillance such as that performed by the police, and consequently questions the legitimacy of exclusion orders administered by or resulting from ‘private’ surveillance of ‘public’ space:

“[T]he private governance processes in [one] centre relating to surveillance and exclusion were not subject to the same degrees of regulation as those of public enforcement agencies. *In particular, the informal and at times arbitrary mechanisms for excluding and subsequently readmitting individuals, confusion over the legality of exclusions, inconsistent linking of exclusion notices to legally proven offences, the lack of advocacy and support to facilitate the readmission of some vulnerable excluded individuals and practices of proactively excluding young people not committing an offence suggest the need for more formalised systems of accountability to be introduced, and greater*

partnership working between the centre management teams, local social work departments and youth agencies.” (Flint, 2006: 66 - *emphasis added*)

Overwhelmingly, this article demonstrates the potential for CCTV surveillance to enable the management of space *and* individuals’ behaviour within the confines of its vision.

As previously mentioned, technological surveillance also extends beyond CCTV to include various other technologies that enable the identification and knowledge of mobile individuals. These technologies not only employ visual techniques other than physical observation but rely on computerized databases as a means to collect, integrate and check information. To use a somewhat obvious example, criminal records databases (to which CCTV technologies may be linked) as we have seen will not only include information on an individual’s past crimes, but also their picture, fingerprints, last known address, family members, and a number of other characteristics to enable the possibility of their future identification through a variety of different media. The capacity of the database to identify an individual responsible for criminal behaviour is seemingly limited only by the breadth of information it contains. Moreover, the general population is now increasingly subject to surveillant techniques previously reserved for the criminal.

Indeed, as Lyon (2003) discusses, the terrorist attacks of 9/11 have facilitated an integration of various surveillance techniques, the development of a surveillance ‘web’ between countries and subsequently the advancement of ‘information

society'. The development of surveillance of the general population using many of the technologies as listed earlier signifies not only its extension but equally a move in surveillance technology to a focus on biometrics or "data extracted from the body" (Lyon, 2003: 667), and their digitization. This is aptly illustrated by Appeal Court Judge Sir Stephen Sedley's recent recommendation that the entire UK population and all visitors should be on the national DNA database for the purposes of crime detection and prevention. Currently individuals' details are only on the database if they have been in contact with the police. However even without this move the UK's 12 year old DNA database is the largest of any other country and is growing by 30,000 samples a month. (*The Independent Online*, accessed 5/09/07).

This move is underpinned by an assumption that the body can provide unique individual identifiers and thus further reinforces surveillance as it is seemingly impossible for an individual to disassociate themselves from their biometrics - their own body (Introna and Wood, 2004). And the increasing sophistication and integration of surveillance technologies is epitomized by the development of the US-Visit - United States Visitor and Immigrant Status Indicator Technology Scheme (Amoore, 2006). This technology seeks to monitor entrants to the US through a variety of different surveillance methods:

"In many cases, US-VISIT begins overseas, at the U.S. consular offices issuing visas, where visitors' biometrics (digital fingerscans and photographs) are collected and checked against a database of known criminals and suspected terrorists. When the visitor arrives at the port of

entry, we use the same biometrics – digital fingerscans – to verify the person at our port is the same person who received the visa.” (*US-Visit: How it Works*, accessed 16/10/2007)

Amoore discusses the use of profiling as a means of governing individuals’ mobility across borders, and the use of biometrics as a form of bodily identification of the terrorist alongside the use of other surveillant technologies as a means through which to identify, classify and judge an individual *independently* of their supposed criminality (eg, for immigration purposes).

From the above, it is evident that, as a result of increasingly mobile populations and ever changing social relations, the nature of surveillance is also continuously developing, introducing new ways to recognize the transient individual and render them fixed and individualised in moments in space, by one, then another or even multiple technologies of surveillance. The principal intentions behind these technologies are to render the individual visible and knowable and thus enable the possibility for them to be judged against preconceived norms and expectations. Thus, the principles of the Panopticon - of disciplinary power and panopticism - are realized in these various technologies.

However, all of this notwithstanding, some authors have failed to recognize the distinction made by Foucault between panoptic *architecture* and the notion of ideal discipline and *panopticism*. Arguments such as those made by criminologist Yar (2003) suggest that the disciplinary effects of the Panopticon cannot be applied beyond its ideal architecture. But from the outset his consideration of the

applicability of Foucault's Panopticon to CCTV surveillance ignores the important distinction Foucault makes between the Panopticon as architecture and disciplinary mechanisms that I suggest are a far more appropriate lens through which to consider contemporary surveillant technologies.

Notably, Yar questions the relationship between visibility, power, subjectivity and discipline, suggesting that "Foucault's rendition of visibility as subjection, and of the Panopticon as a "machine which...produces homogeneous effects of power"...via visibility, in part overlooks the polyvalent and complex nature of our experience of vision." (Yar, 2003: 258, quoting in part from Foucault). This understanding of vision and indeed visibility is one equated with the Panopticon as an archetypal structure, ignoring the obvious development in Foucault's understanding of the disciplinary gaze as extending to panopticism. Further to this, Yar questions the "adequacy of equating visual surveillance with effective subjectification and self-discipline", and further suggests that Foucault claims a subject's relation to visibility within the Panoptic mechanism is one of *domination* (Yar, 2003: 260). This argument fails to acknowledge Foucault's conception of power as both productive and relational, acting by and through individuals within their everyday interactions.

For Foucault power should not be conceptualized as stable: it is not a 'given' identifiable human capacity that can be possessed or centred in abstract structures. Inherent to the notion of domination is the role of the dominator and dominated, dualistic positions that are denied by Foucault's analysis of power and the Panopticon which moves away from essentialist notions of power in which it

is “something the powerful (individuals, groups, classes) ‘have’ and the ‘powerless’ lack” (Knights and Vurdubakis, 1994: 173) and is concerned instead with the *mechanisms* of power, the practices, techniques and methods through which power operates. Here then power creates us as agents (Knights and Vurdubakis, 1994: 170-171). But Yar’s argument equally fails to acknowledge that in Foucault’s discussion of the Panopticon *no-one* stands outside the vision machine:

“In this central tower, the director may spy on all the employees that he has under his orders: nurses, doctors, foremen, teachers, warders; he will be able to judge them continuously, alter their behaviour, impose upon them the methods he thinks are best; and it will even be possible to observe the director himself. An inspector arriving unexpectedly at the centre of the Panopticon will be able to judge at a glance, without anything being concealed from him, how the entire establishment is functioning.” (Foucault, 1977: 204)

Furthermore, Foucault suggests that power is everywhere - that we are never outside relations of power but are continuously subject to them - he equally does not suggest that power is a totalizing/ absolute phenomenon but rather stresses that it is not stable. Instead for him we are subject to a multiplicity of different competing, contradictory and reinforcing power relations. Thus the networks of power relations to which we are subject are continually *re-negotiated*. As Knights and Vurdubakis (1994: 179) state:

“The stability of such discourses is always precarious if for no other reason than they can never capture/fix their referent. The elements present within power-knowledge relations are always open to unauthorised rearticulations. Foucault...illustrates the point by drawing attention to how the nineteenth century medicalization of homosexuality also established its naturalness (albeit as a form of pathology). The same categories of the medical disqualification of homosexuals were then effectively redeployed by the intended targets and their allies, enabling them to construct a ‘counter discourse’ and to affect a form of social requalification.”

So power relations are not only revealed as unstable and subject to change, but equally, the above quotation further reveals power relations to be productive of individuals’ identities. Foucault equally suggests that power relations are productive of resistance because they produce agency/ identity and that resistance may “stimulate technologies of power to reorganize, adapt and multiply” (Knights and Vurdubakis, 1994: 179) revealing its relative failings and creating a mutually reinforcing relationship in which practices of resistance reveal and appropriate relations of power and vice versa.

Having thus acknowledged the important distinction between the Panopticon and panopticism and the various surveillance and disciplinary principles that inform new surveillant technologies, I shall now, in the following chapter, go on to further consider the role of the drug test as a contemporary tool of workplace surveillance.

CHAPTER FOUR

Panopticism, Discipline and Workplace Drug Testing 2

Blurring the boundaries: the organizational drug test as panoptic

Much like other forms of technological surveillance previously discussed, the drug test embodies various principles of panopticism. Significantly it checks individuals' conformity to organizational expectations as formalized through the relevant drug policy – i.e. is an employee 'clean' of drugs? Thus the test seemingly reveals an individual's behaviour, consequently enabling them to be surveyed, compared to and judged against these expectations, and individualized. Further to this, the proliferation of organizational drug testing in the US between 1987 and 1994 and its subsequent migration beyond the workplace to schools to become a universal experience for American youth reveals its potential to extend into all realms of society (Coomber, 2004: 2). By infiltrating an ever larger number of organizations including schools, the sporting arena and both the safety-critical and business-critical workplace the 'eye' of the drug test is becoming ever more pervasive, able to access, reveal and judge the private behaviour of an increasing number of individuals. On a lesser scale this pattern of proliferation is also being reflected within the UK with a number of workplaces and schools utilising testing. As aforementioned, roughly four percent of UK firms utilized these initiatives in 2004 and many more suggested they would be interested in doing so in the future (IIDTW, 2004: 37). Drug testing in UK schools however

remains limited, with only a few schools such as Abbey School in Faversham, Kent, developing these policies (The Press Association, 2005). The small uptake of these policies by UK schools may be the result of various controversies, from concerns that the drug test is an infringement of students civil liberties, to questions concerning its capacity to deter drug use. These controversies are discussed in more detail as this chapter progresses.

As has already been pointed out, various premises are seemingly inherent to the establishment and performance of the organizational drug test. As discussed in chapters one and two, not only is the test founded upon the assertion that drug using is abnormal/ undesirable behaviour but equally it is assumed that it is able to identify drug users, act as a deterrent to individuals using drugs, reduce workplace accidents and improve organizational performance and absenteeism. Thus the drug test is an organizational intervention to facilitate the management of workplace deviance (Borg, 2000). Vital to its efficacy is its ability to identify the deviant employee: it is this ability that seemingly facilitates the effects of improved performance, reduced absence, and fewer accidents. Thus, organizational intentions underpinning the drug test - to reveal individual drug users - seek to ensure conformity to workplace norms of behaviour and deter drug use. This regulation of space and the bodies that inhabit it reflect the principles of panopticism as laid down by Foucault (1977).

In this sense, and as aforementioned, the drug test can be seen to parallel other surveillance technologies such as CCTV cameras and their role within communal areas; namely that of monitoring deviance and thus propagating socially

acceptable behaviour (normalization). These intentions similarly inform other surveillance techniques within organizations such as key-stroke and call monitoring. To elaborate the development and implementation of organizational drug testing intends to instantiate a 'drug-free' norm and in doing so define the realm of acceptable workplace behaviour. The principles of the Panopticon are thus embedded within the drug test, from its capacity to survey behaviour to its capacity to individualize (to separate the individual from the workplace masses) and its intentions to normalize employees to conform to organizational expectations. Hence, drug testing is a disciplinary means through which individuals may be classified as drug abstainers or drug users or, in parallel, as normal/ abnormal. Testing enables the identification and separation of the 'normal' drug-free individual from the 'abnormal' user (Foucault, 1977). Thus, it compares to previously discussed surveillant technologies, because the possibility of identification and classification creates the possibility for judgement.

Further to this, and again like other surveillance mechanisms, the drug test can also be seen to embody various principles of biopower – identified by Foucault (1979: 140) as "numerous and diverse techniques for achieving the subjugation of bodies and the control of populations". Biopower, much like the disciplinary power of panopticism, is concerned for the regulation of the body. However unlike disciplinary power, its intention is to regulate a mass, the *social* body, rather than focusing on the individual. Foucault (1979) suggests that biopower may utilize and encompass various disciplinary technologies. It is my contention that the drug test is biopolitical in so far as it intends to regulate the entire workforce of an organization, achieved via the establishment of certain bodily

norms - in this instance to be drug free/ 'clean' as established by the organizational drug policy. Regulation of the masses is seemingly achieved via the disciplinary technology of drug testing; hence, collective regulation is facilitated by the threat of the individualizing judgment of the test.

The regulatory power of biopower and the disciplinary power of panopticism both rely on social sorting, the defining of good and bad and the subsequent positioning of individuals in one or the other category. Through this sorting against accepted norms and expectations the biopolitical, disciplinary and regulatory effects of expectations and judgments are enabled (Foucault, 1977, 1979). As discussed in chapters one and two these binary divides play an important social role, offering simple constructions of various behaviours (eg desirable/ undesirable), thus enabling the identification of the deviant individual. Hence, the Labour of Division is embedded within the functioning of disciplinary and regulatory technologies of power, like the drug test, given that such classifications are vital in the construction of an acceptable realm of behaviour.

Further, again like other contemporary surveillance mechanisms, the drug test is founded on a western belief in science (Alvesson and Deetz, 2000). Drug testing reflects what Coleman (cited in Junger-Tas, 2005: 148) refers to as “‘scientific’ society, which is a society that uses scientific methods to change itself” in so far as its intentions are to modify individuals’ behaviour in order to prevent drug use. The systematic extraction and later analysis of bodily fluids within a laboratory lends credence to the drug test and its subsequent reliability. Intrinsic to this is the development of scientific identifiers of deviance like levels of drug

metabolites in urine. Importantly, as also established, medical conceptions of drugs promoted by societal norms suggest the ‘danger’ of ‘unregulated’ drug use, legitimising workplace drug testing and giving credence to its implementation. The drug test is thus justified as scientifically reliable and ‘truth bearing’ in its reduction of an individual to the information contained in their urine, hair blood or sweat.

Its capacity to reveal undesirable behaviour is, it is true, only realized at the moment of its enactment - so the drug test will never reach as many people as other surveillance technologies such as CCTV. But despite this, the drug test undoubtedly extends the disciplinary and biopolitical gaze through its capacity to see beneath individuals’ skin and reveal that which had not previously been seen. As such it arguably goes further than many other surveillant technologies. Although as previously discussed society is becoming increasingly interested in biometrics and DNA, these data are difficult to collect as they involve cooperation from the subject.

The discussion so far of the Panopticon, panopticism and contemporary surveillant technologies has focused mainly on externally observable behaviour. So whether we consider the archetypal physical structure of the Panopticon or panopticism such as CCTV surveillance, all that is available to most of these ‘vision machines’ is that which can be physically observed; the external performance of conformity by individuals. These various technologies are unable to check individuals’ internalization of norms. Unlike various other surveillant technologies, then, the drug test *is* able to look beneath the skin to reveal

someone's *internal* conformity to/ performativity of expectations. This reveals an individual's *literal* internalization of norms and expected modes of behaviour: the drug test thus not only invades bodily privacy but arguably extends the disciplinary power of surveillance.

Furthermore the drug test blurs the boundaries between public and private spheres; boundaries that are seemingly maintained in other forms of technological surveillance in which the private sphere remains beyond the realm of surveillance – in other words, it does not extend into an individual's home. Such invasions of the private are conventionally seen as acceptable *only* in exceptional circumstances, such as phone taps utilized by the police with the formal agreement of the courts, and electronic tagging of offenders (Edgar and O'Donnell, 1998: 20). Electronic tagging as explained in Footnote seventeen is often used to impose curfews and other requirements of probation. It has the potential to create the home as a temporary prison within which the individual is confined. However, tagging is not only unable to monitor an individual's behaviour *within* the space of the home but is also unable to reveal individuals' internal commitment to norms and expectations.

In addition, the drug test is not limited to the moment in time in which it 'stops' an individual. Instead it is able to reveal the drugs individuals have used in the recent past - an ability enabled by the varying times different drugs stay in the body (IIDTW, 2004). Thus the test is potentially able to reveal what an individual has been doing in *both* their private *and* organizational time. So, for example, if the residual time for cannabis is thirty days a drug testing

organization can seemingly reveal that an employee has used the drug at some point over the previous thirty days¹⁸. So far then, I have pointed to various differences between the drug test and other forms of surveillance and also, importantly, that the drug test is able to reveal previously unseen behaviour. In this sense the drug test is able to rewind time to reveal what an individual has consumed in the recent past. Thus, the capacity of the drug test as a surveillance technology extends beyond many other contemporary technologies which are only able to survey that which is visible to the naked eye and that which they have already seen¹⁹.

My discussion of various surveillant technologies also illustrates what could be referred to as a contemporary fascination with information, particularly information that differentiates the individual from others. In light of this apparent fascination the work of Paul Virilio may offer some interesting additional insights into organizational drug testing. It is my contention in fact that employee drug testing is an extension of Virilio's 'infowar', as epitomized by the proclaimed UK government 'war on drugs', becoming yet another technology in what Virilio refers to as the militarization of society - in this instance the war against the deviant drug user. For Virilio, the battlefield of war consists of the organization of the *field of perception* - war has become mediated by technology:

“It is a war of images and sounds, rather than objects and things, in which winning is simply a matter of not losing sight of the opposition. The will

¹⁸This issue and that of the residual time in which drugs are identifiable in individuals systems is discussed later in the chapter and further in chapter 5 with respect to work-life balance

¹⁹ Although CCTV footage may be rewound this capacity is limited to what has already been observed.

to see all, to know all, at every moment, everywhere, the will to universalised illumination: *a scientific permutation of the eye of God* which would forever rule out the surprise, the accident, the irruption of the unforeseen.” (Virilio cited in Cubitt, 1999: 134, emphasis added)

New information technology seemingly infiltrates all aspects of contemporary society and in doing so extends or blurs the traditional boundaries of war. From the uninterrupted images of the war in Iraq reaching into homes through television through the search for Osama Bin Laden - the ‘phantom terrorist’ - to the war on drugs and the search for the anonymous enemy of the drug user, war could be seen as pervasive. The drug test is undoubtedly imbued with the intention to mediate perception, as its panoptic intentions reveal. From reinforcing perceptions of drugs and their users as dangerous, to the instantiation of the test itself and the scientific identification of the individual deviant, it is evident that the drug test seeks to dictate what individuals understanding of drugs and their users *should* be. Thus contemporary war is concerned with the control of information and the mediation of images. This infowar “is not traditional war, where the images produced are images of actual battles. Rather, it is a war where the disparity between the images of battles and the actual battles is ‘derealized’ (Armitage, 2000:6). Indeed, the image is subject to interpretation by the media which represents it, choosing the battles that are transmitted and selecting the information/ commentary which informs these images. As such, the image is removed from the ‘reality’ that it seemingly represents. As Virilio illustrates;

“[f]or instance, in 1999, Bill Gates not only published a new book on work at the speed of thought but also detailed how Microsoft's 'Falconview' software would enable the destruction of bridges in Kosovo. Thus it is no longer a Caesar or a Napoleon who decides on the fate of any particular war but a piece of software!” (Virilio, cited in Riemens, 2000: 9)

This is just one example of information technology as a new artillery of war, and I would suggest that the drug test is yet more artillery in the war of information. Thus drug testing is an expression of Virilio's identification of the “invasion of the human body by hypermodern technoscience” through which it individualizes and judges (Armitage, 1999: 4). This not only demonstrates contemporary western society's reliance on technology but equally its desire to reveal the phantom/ enemy within.

Virilio suggests that the development of technoscience changes the nature of information and enables the informatization of the body, from the pixels of the digital image to the reduction of the individual to standardized database characteristics - a technological representation – or in the case of the drug test, to their bodily data/ biometrics. Also intrinsic to Virilio's conception of the militarization of society is the concept of dromology or the science of ever increasing speed and time compression. As Armitage (1999: 6) acknowledges, “[d]romology is an essential component of urban space, the politics of transportation and information transmission, and the aesthetics of technologically generated perception”. Virilio is concerned with how new information

technology is changing our understandings and experiences of time and space, signifying a movement to dromocratic society. Virilio thus points to the instant information exchange facilitated by the Internet and real time broadcasting which dissolves traditional spatial and temporal boundaries. He suggests that “[c]hronological and historical time, time that passes, is replaced by a time that exposes itself instantaneously.” (Virilio, 1991: 14). Virilio’s (1997: 139) argument that technology renders individuals perpetually present in the ‘already here tomorrow’ is illustrative of his emphasis on the acceleration of time, which he suggests also shortens distance.

It is my contention that the drug test is another example of dromological technology, conflating the past present and future and in so doing, changing our experience of time. The drug test seemingly signifies the extension of technoscience as (to reiterate) it is able to reveal behaviour that has not been previously seen, rendering individuals visible in an ‘*ever present/ inescapable past*’ and acting to further distort previously accepted time-space conventions as it traverses the boundary between that which has already passed and the present. It reveals the past by testing for previous drug use, seeking to identify metabolites that are produced through the metabolization of drugs rather than the substance itself, which may be identifiable for weeks or even months after use. Therefore, through the drug test, individuals’ previous behaviour is identified in the present and becomes a means of predicting the future (their future drug use and subsequent workplace performance) thus, through the technology of the drug test time is seemingly compressed and the future conflated into the present. The drug test as a means of predicting the future is illustrative of Virilio’s (1997: 139)

argument that technology renders individuals present in the *'already here tomorrow'* and subsequently is an example of the acceleration of time. So, again, the drug test extends beyond the ability to rewind and view that which has previously been seen. Rather, it delves beneath the skin in search of bodily data that has not previously been observed. The passing of time no longer affords individuals a veil of obscurity. Importantly then Virilio's concept of dromology reveals the surveillant and informatizing capacity of the drug test to extend beyond that of its panoptic counterparts - CCTV, key-stroke monitoring etc - through its ability to informatize the body. However, despite the suggestion that the drug test is another example of Virilio's Infowar, able to identify the deviant/enemy through its informatizing and dromological capacities, much like its biopolitical, disciplinary and regulatory power, this possibility is reliant on the accuracy and capacity of testing - an issue that shall be explored later in this chapter.

By now then the disciplinary, biopolitical and 'informatizing' nature of the drug test has been established. This has also been considered with respect to its apparent ability to go beyond the temporal and physical boundaries within which other contemporary surveillant technologies are confined. The penetration of the drug test and thus organizational surveillance into the private realm of the body clearly has a number of moral, ethical and political implications. One such implication is whether an organization should be able to access information concerning an individual's private behaviour outside of working hours. Further to this the drug test potentially reveals far more bodily information than an individual's drug taking habits. Examples such as the testing of policewomen for

pregnancy by the Washington DC police force using urine taken for the purposes of drug testing (Gilliom, 1994) reveals this potential and the subsequent possibility for abuse that resides within the test. Moreover Draper (1998: 63) suggests that organizations “have screened workers for health risks related to smoking, reproductive hazards, specific genetic traits, and the AIDS virus” in an attempt to identify those more likely to be sick. Thus the drug test is seemingly yet another way of checking whether individuals are ‘fit for work’, an issue that shall be explored in greater depth in the next chapter. The test also seemingly redefines the employee/ employer relationship, what is private and what is proprietary, as well as extending employee obligations to their public employment into their private time (Cozzetto and Pedeliski, 1997).

However, despite its apparent potential to render visible the internal/ private individual, much like other surveillant technologies the test is far from perfect. In other words, in light of somewhat surprising research revealing drug users to command higher wages than their non-using peers (IIDTW, 2004) it is questionable whether the drug using individual is an undesirable employee. Moreover it is equally questionable whether the drug test “does what it says on the packet’ and can identify users and finally, there is no conclusive evidence to support the proclaimed link between drug and alcohol use and workplace accidents (Zwerling, 1993; Draper, 1998; Wood, 1998; IIDTW, 2004). The next section expands on both of these issues.

Imperfect panopticism: the drug test as flawed surveillant technology

There are a number of factors that influence the accuracy of the drug test: the lack of uniform and regulated laboratory standards, the type of bodily fluid tested, the notice period given of an impending test, and the window of opportunity²⁰ afforded by various drugs and the regularity of testing. All of these factors and their potential to influence the outcome of a drug test and limit its panoptic capacity will be considered below.

Perhaps most obviously the drug test, much like the breathalyser, fails to take account of individual bodily variations that may affect impairment and subsequent test results. It is important to note that, although no allowance is made for gender, weight etc. with respect to the breathalyzer and subsequent legal blood-alcohol levels, these individual differences must be of some importance in light of the different recommendations for maximum weekly alcohol intake for each sex, say²¹. Likewise the drug test is unable to take account of the same factors which again are likely to be of some importance. Relatedly, Horne and Baumer's (1991) research findings suggest that the time of day in which alcohol is consumed affects an individual's impairment. They identify a greater effect of alcohol consumed during the afternoon rather than the evening, and report dangerous effects as a result as some individuals whose tests remained below the UK legal limit were thus legally defined as fit to drive. Further to this Banks *et al.* (2004) found that alcohol consumption below the US legal limit combined

²⁰ The time during which a drug is identifiable in an individuals system.

²¹ However, as previously noted, the justifications for these limits and their relative differences for each gender are not founded on scientific evidence (Norfolk, 2007: News 6).

with partial sleep deprivation increased fatigue and impaired performance. This research demonstrates the role of a variety of bodily and environmental factors in influencing alcohol testing, problems that are likely to be exacerbated with respect to the newer science of the drug test. And what is the ideal level of sensitivity of drug testing equipment? Too high and the consequences will be a proliferation of false-positives²², too low and this will result in false-negatives²³. This has obvious implications for the accuracy and capacity of the test and its ability to make accurate judgements of individuals.

Interestingly moreover, there is very little formal regulation of workplace drug testing and laboratory standards in the UK²⁴. Indeed ‘cut-off’ points similar to the blood alcohol limit above through which individuals are legally deemed to be impaired seem by contrast to be arbitrarily decided and to vary among laboratories, determined by technology rather than scientifically based policy (Coomber, 2004:15). So when is one *legally* impaired by drugs when there is no consistent cut-off point? This lack of regulation and uniform cut-off points brings into question the legitimacy of the science upon which drug testing is founded and justified. Indeed Raskin (cited in Coomber, 2004: 14) with respect to laboratories in the US also comments that “[l]aboratories vary widely in their accuracy, diligence and reliability; it is essential that quality-control procedures

²² “The term ‘false positive’ is used to describe a situation in which someone tests positive for a drug, but has not consumed that drug over the relevant time period.” (IIDTW, 2004: 15) There are a number of the potential causes of false positives which shall be discussed later in this section.

²³ Similarly the term ‘false negative’ is used to refer to a situation in which someone tests negative for a particular drug, but has in fact consumed that drug in the relevant time period of concern to the tester.(IIDTW, 2004)

²⁴ Rothstein (1991: 87) notes that a number of the advocates of drug testing including manufacturers, laboratories, consultants and physicians have a financial interest in the proliferation of testing which is a multi-billion dollar business.

are instituted to ensure the accuracy and reliability of testing programmes.” Moreover, “European laboratories (as a whole) are currently insufficiently geared up to undertake best-practice analysis to the required level.” (Verstraete *et al.*, cited in Coomber, 2004: 14). This has significant implications for the panoptic capacity of the test, as there is seemingly not a single uniform norm against which individuals are judged.

Further to this the accuracy of laboratory testing of samples is limited by the role of human error, be that at the point of sample collection - the problem of cross-contamination, say - or at the point of analysis, facilitated by poor laboratory standards. Hence the role of the people involved in collecting and processing the samples will undoubtedly impact further upon the accuracy and consistency of the test. The case of British middle distance runner Diane Modhal is illustrative of this, Modhal who tested positive for high levels of testosterone and in December 1994 received a four year ban from competition, a decision that was overturned in July 1995 after doubt was cast on the accuracy of the tests. Modahl claimed that the Portuguese laboratory mishandled the samples, failing to store them in refrigerated conditions, leading to their degradation (*BBC News*, 2000). Importantly, laboratories used by the International Athletics Federation (IAF) are required to meet set/ universal standards unlike there UK counterparts responsible for processing workplace samples. However, as this case illustrates they *still* make mistakes.

Moreover, the accuracy and thus sensitivity of the test is influenced by the type of bodily fluid utilized in the testing procedure. Urinalysis is the most commonly

utilized form of testing and is also thought to be the most robust, having been used and developed for over twenty years (IIDTW, 2004). As emphasized by Justice Clarence Thomas presiding over a United States court case concerned with the use of drug testing for all school students participating in extra curricular activity (*Board of Education of Independent School District No 92 of Pottawatomie County V. Earls*, accessed 4/01/07), “Urinalysis is the most common drug testing method, has been studied exhaustively and used extensively, has undergone rigorous challenge in the courts, and has proved to be accurate and reliable.” Furthermore, and reaffirming its position as the most reliable test, urinalysis remains the only technique approved for the testing of the US federal workforce (*Drug Testing in the Workplace*, accessed 16/10/2007). But different testing techniques produce differing ‘windows of opportunity’ – the time period during which substances are identifiable via testing. For example, all drugs are thought to have the longest residual time within hair, and the least within saliva. Thus the substance tested has various implications for the panoptic capacity of the test, revealing it to have a diverse - and always limited - field of vision.

Further to this, as established in chapters one and two, each drug is identifiable within the body for differing amount of times *regardless* of technique. For example according to the IIDTW (2004: 16) amphetamines may be identifiable in urine for anything between 1-4 days, whereas marijuana may be identifiable for anything from 7 to 30 days or longer depending on the frequency of use. Within urine cannabis has the longest residual time whereas this period is as little as 24 hours within saliva. Alternatively cocaine is identifiable in urine for between two

to five days and for up to 24 hours within saliva (IIDTW, 2004: 16). Consequently the cannabis user is more easily identified via the urine test than the saliva test and overall is more easily identified than the cocaine user. This also explains why the introduction of mandatory drug testing in UK prisons resulted in some inmates changing their consumption habits from cannabis to heroin which has a residual time of one to two days (Edgar and O'Donnell, 1998: 20). Moreover, if the potential residual time of cannabis is thirty days, the information revealed by the test is unlikely to have any relevance to an individual's *current* workplace performance.

Furthermore, and of especial significance, is the fact that “[A] worker can snort cocaine on the way to work and test negative the same morning as cocaine will have not yet metabolized and therefore not show up in a urine test.” (*All-Party Parliamentary Drug Misuse Group*, 2003: 16). Hence urinalysis is in fact unable to identify an individual at the time of impairment. The reason for this apparent failure, as mentioned in chapters one and two, again results from what the test actually tests for; the processed form of the drug, its metabolites. However the saliva test, which *is* able to identify parent drugs, provides a very short window of opportunity – roughly twenty-four hours - in which it can identify and judge an individual as a drug user (IIDTW, 2004: 32). Thus not only is there little evidence supporting a causal link between drug use and workplace accidents and/or poor performance but equally the drug test is unable to identify the user at the moment they are impaired/ dangerous – flaws which greatly limit its legitimacy and panoptic capacity. Moreover there is no conclusive evidence that drug use results in impaired performance or that it results in increased risk of accidents at

work as the IIDTW (2004, xii) state, “the IIDTW was able to find no conclusive evidence for a link between drug use and workplace accidents, except for alcohol” a position reiterated by various other authors (Zwerling, 1993; Draper, 1998; Wood, 1998; IIDTW, 2004). This further limits the legitimacy of testing, negating one of the key justifications on which the test is developed. In addition there is a conclusive causal link between factors other than drug use –such as sleep deprivation and long working hours - and increased workplace accidents (Draper, 1998; IIDTW, 2004). The development of drug testing seemingly obscures these other factors maintaining a focus on drug use as a primary concern in the event of an accident. Thus the drug test also seemingly removes organizational responsibility for accidents at work, as Draper, (1998, 72) acknowledges:

“Management typically holds workers responsible for problems that corporate officials themselves create, such as stressful jobs and dangerous conditions. It is increasingly common to use drug testing as a way of blaming workers for their own injuries and illness, thus escaping corporate liability.”

The drug test seemingly removes or diminishes corporate responsibility for the health and safety of the workforce placing the onus on employees to demonstrate their innocence rather than raising concerns about working conditions.

Furthermore, even if drugs do affect performance at work licit substances may also inhibit the accuracy of any drug test, resulting in an increased number of

false-negatives and equally false-positives (Neerman, 2006). According to one Internet site, anything from over-the-counter diet aids to nasal spray can seemingly result in a positive test for amphetamines and ecstasy, whereas high doses of the painkiller ibuprofen can result in a positive test for cannabis while antibiotics have been known to result in a positive test for cocaine (*Ultimate Detox*, accessed 12/01/07). It is also unknown what effect mouthwash may have on a saliva sample, and there are claims this can result in false-positive results for drugs (Worner and Prabakaran, 1985).

Relatedly, and as discussed previously, some of our most frequent encounters with drug tests are from those reported in sport where testing is far more extensively practiced and developed. The case of Alain Baxter the British Olympic skier is an apt example of a legal over-the-counter drug resulting in a positive test result. He was stripped of his 2002 Olympic bronze medal after testing positive for trace methamphetamine, having used a Vicks nasal inhaler to clear up a head cold. The British version of this product does not contain any banned stimulant whereas the American version of the product contains levamphetamine – a mild form of what is commonly known as speed and is prohibited in sport (*BBC Sport*, 2002). Ironically, despite removing his medal, the International Olympic Committee agreed that the substance had had no beneficial effects on Baxter's performance.

To be sure, the pre-test interview in which individuals are asked to divulge any prescription or over-the-counter medicine they may be using alongside any dietary intake they suspect may influence their test result is utilized by

organizations to minimize the problem of false-positives and false-negatives (IIDTW, 2004: 15). But the interview arguably justifies further organizational intrusion into individuals' lives providing access to information beyond that of the drug test itself, to consider all aspects of their lifestyle. Furthermore and as previously mentioned, the above discussion highlights conceptual differences in the various justifications for drug testing - in an organizational setting it is based on the premise that drug use is *detrimental* to performance and in the sporting world on the premise that drug use is *beneficial* to performance. Indeed, would an organization be concerned if employees were using drugs to *enhance* their performance? Interestingly, Burrell (1992) considers the role of drugs within the workplace. From Huxley's (1989) discussion of the drug soma, used to suppress undesirable behaviour in his account of a futuristic authoritarian society in *Brave New World* through to the use of dexamphetamine or 'go' pills to extend the performance of fighter pilots for greater durations of time, to the poet Coleridge's use of laudanum (opium) as a means of creating vision, it is evident that drugs may play an important role in enhancing performance. In this context the justifications for testing in sport and the workplace are seemingly antithetical.

In addition, the ability of the drug test to identify users is limited by the frequency with which individuals are tested. It is suggested by the US National Institute for Drug Administration that "[f]or urine testing to effectively *prevent* and detect drug use testing for most drugs would really need to be carried out 2 or 3 times a week." (cited in Coomber, 2004: 11, emphasis added). Thus any testing procedure initiated in the workplace (pre-employment, random or for-cause) will have very little if any impact on drug using employees if it is simply not regular

enough. This is further exacerbated by the period of notice given to an individual of an impending test, which varies between organizations. Take pre-employment testing for example, where notification may alter the consumption of drugs to those with a short window-of-opportunity, such as cocaine, which is identifiable in urine for 2-5 days which would reduce the capacity of the drug test to identify use. Indeed, the performance of the test with a few days' notice may make the difference between a positive and negative result.

As has been demonstrated then the drug test is fallible and a number of factors may influence its reliability. But it can also be resisted. In the following section the various routes of resistance will be explored, from the measures reportedly used by some sportsmen/ women to the possibilities available to the more mainstream employee.

Resisting the test: methods and possibilities

As has been previously been established, the drug test creates the possibility of surveillance and subsequently workplace discipline, embodying various principles of biopolitical and disciplinary power as discussed by Foucault (1977, 1979). Inherent to this discussion of the drug test as a technology of power is Foucault's conception of resistance, which he suggests is "inscribed in power as an irreducible opposite" (Foucault,1979: 96). Thus with power and its effects

comes resistance. The two are in Foucault's opinion inextricable, as illustrated by his contention that:

“Where there is power, there is resistance, and yet, or rather consequently, this resistance is never in a position of exteriority in relation to power. Should it be said that one is always “inside” power, there is no “escaping” it, there is absolutely no outside where it is concerned...This would be to misunderstand the strictly relational character of power relationships. Their existence depends on a multiplicity of points of resistance: these play the role of adversary, target, support or handle in power relations.”
(Foucault, 1979: 95)

Importantly, then, and as I have already argued, Foucault does not suggest that disciplinary or biopolitical power results in completely regulated bodies and behaviour. Rather, he advocates a focus upon power relations in which society is characterized by a multiplicity of competing discourses (and thus power relations) rather than a hierarchical, monolithic power structure. As discussed earlier, for Foucault power is not stable, it is not a capacity whereby power can be wielded or possessed. Rather it is relational and subject to continual negotiation. So power is not something some have and others do not: instead we are simultaneously agents of our own discipline (defining ourselves through the power relations to which we are exposed) and resistance (Knights and Vurdubakis, 1994: 173). So Foucault's conception of power moves beyond the traditional dualistic perceptions of power 'versus' resistance and rather suggests that there are various power relations acting at any one time in any given place, which may compete with, reinforce or

contradict one another. Thus for Foucault, resistance occurs *within* power relations. Moreover, as Knights and Vurdubakis (1994, 180) acknowledge; “[r]esistance consequently plays the role of continuously provoking extensions, revisions and refinements of those same practices which it confronts”, resistance and power each defining and redefining their relative boundaries. Thus, the disciplinary and biopolitical power of the drug test does not negate the possibility for resistance, a possibility which shall now be considered.

As testing becomes an ever more prevalent facet of organizational life so theoretically does the issue of ‘beating the test’. After all, the employee’s career may depend on it. The desire of the organization to monitor the bodies of its employees will facilitate these individuals’ knowledge of drugs – for, if knowledge is power, knowledge also produces the power to resist. There are various ways in which individuals may resist the test, from simple abstinence prior to a test for which notice has been given through to the use of various adulterants and the more extreme methods employed by various sportsmen and women.

As we have seen, the drug test is particularly well established within the realm of sport within which it is simultaneously justified and utilized as a means to discover individuals who are cheating through the consumption of performance-enhancing drugs. Nonetheless, drug taking and resistance to testing has seemingly become ever more sophisticated within the sporting context. In his book *Breaking the Chain: Drugs and Cycling – The True Story* (2001) concerning the use of drugs within cycling, Willy Voet, the disgraced Festina team masseur,

discusses the various methods utilized to ensure a negative test result for a drug-using cyclist. He notes for example that an intramuscular injection of cortisone (an anabolic steroid to aid the development of muscle) in the buttock cannot be detected by a urine test, only by a blood test (Voet, 2001: 3). Testosterone (also an anabolic steroid, although found naturally in the body) taken orally is apparently similarly undetectable.

Moreover Voet discusses methods other than changes in drug consumption to beat the test that have, by necessity, become ever more sophisticated and extreme alongside the evolution of testing procedures. For instance, cyclists seeking to fool the test by substituting clean urine for their own began by using a bulb filled with urine hidden under the arm with a tube running to the wrist where it was stopped by a cork, in the days when they were permitted to give a sample fully clothed. This progressed to the use of a condom in the anus injected with clean urine and a tube following the line of the perineum to the testicles, and then to injecting clean urine into the urethra prior to the test (Voet, 2001: 47) as testing procedures evolved. All these systems “ha[ve] the advantage of keeping urine at body temperature, so the doctor won’t be suspicious.” (Voet, 2001: 45). As Dreyfus and Rabinow, 1982: 147) suggest:

“Foucault holds that power needs resistance as one of its fundamental conditions of operation. It is through the articulation of points of resistance that power spreads through the social field. But it is also through resistance that power is disrupted. Resistance is both an element of the functioning of power and a source of its perpetual disorder.”

So methods to cheat/ resist the test become ever more extreme as a response to ever more stringent testing procedures, each action serving to continually modify the other (Dreyfus and Rabinow, 1982: 219; Knights and Vurdubakis, 1994).

Drug testing in the non-sporting workplace is less developed, but this does not negate the possibility of such developments in both the remit of the test and techniques of resistance. Indeed an enormous variety of Internet sites selling a plethora of products claiming to help individuals beat the test are testament to this. Websites advertising products claiming to flush your urine of toxins or to cleanse your hair follicles, or indeed offering a 'real look' prosthetic penis complete with fake urine sample (*How to Beat the Test*, accessed 13/10/2007; *I Passed My Drug Test*: accessed 12/1/07; *Ultimate Detox*, accessed 10/12/07; *Passing All Drug Tests*, accessed 10/12/2007, *Drug Test 911*, accessed 10/ 12/ 2007) are certainly easily accessible via the Google search engine. Although there is no available data on how good these products are - whether they can in fact cleanse your hair, or mask drugs in your urine - their existence does demonstrate that there is a market for products supposedly enabling people to resist the drug test. This is illustrated by the case of Hunterdon Central High School in the US and the problems encountered during their random testing programme of students: "[e]ventually, problems with adulterated urine samples prompted school officials to give up urine testing and start testing oral fluids." (Office of National Drug Control Policy, accessed 1/07/07). Resistance is also developing alongside this sort of organizational intervention as many of the

previously mentioned websites also offer various mouthwashes to apparently ensure a clean oral fluid test result (*Pass the Drug Test*, accessed 12/1/07).

Further to this the aforementioned pre-test interview may in fact be turned against itself – or at least its managerialist agenda - and used as a tool of resistance. Not only can various over-the-counter drugs - from nasal sprays to Lemsip - result in false-positive results (Neerman, 2006), as illustrated by the case of Alain Baxter, but equally this creates the possibility for an individual to explain a positive test result away. Further to this individuals may simply change their consumption habits, utilising drugs when on holiday from work, at times when they know that they will not be tested. This may further be facilitated by a change in their ‘drug of choice’, much like the prisoners who chose to smoke heroin rather than cannabis as a result of the dramatically reduced window-of-opportunity for identifying the former via testing (Edgar and O’Donnell, 1998). It is not that I am suggesting that employees will turn to heroin use. Rather I am simply pointing to the possible changes in consumption habits that may occur. After all, to reiterate “[r]esistance consequently plays the role of continuously provoking extensions, revisions and refinements of those same practices which it confronts” (Knights and Vurdubakis, 1994: 180).

Summary

The archetypal architecture of the Panopticon as discussed by Foucault (1977) reveals the potential disciplinary effects of continuous surveillance on its subject, seemingly producing the self-monitoring individual. The conceptual value of this model is evident by its utilization in organization studies in the consideration of contemporary workplace initiatives designed to monitor and subsequently control employees (eg, Poster, 1990; Sewell and Wilkinson, 1992; Wood, 1996; Ball, 2000; Norris and McCahill, 2006). But the distinction made by Foucault between the disciplinary-blockade of the Panopticon and the disciplinary-mechanism of panopticism further illustrates the importance of his work to the analysis of surveillance technologies. The disciplinary-mechanism of more generalized surveillance that extends beyond the confines of physical architecture has especial application in a world of mobile individuals where surveillance is happening at ever-increasing distance. As illustrated by the proliferation of CCTV throughout public spaces within the UK replacing the gaze of the watchman, surveillance is no longer confined to the architecture of the prison, hospital, school or workplace: it now extends throughout social space.

The development and utilization of drug testing in the workplace is a further illustration of this. The drug test seeks to render employees' behaviour visible and to subsequently judge them against preconceived behavioural norms. Thus the test embodies panoptic intentions: its gaze individualizes, normalizes, reveals and judges with the expectation of corralling individuals into acceptable modes of

behaviour as a result of their visibility. Moreover, the drug test seemingly redefines the sphere of the managerialist gaze, enabling it to see beneath an individual's skin, invading bodily privacy. The test thus reveals an individual's internalization (or otherwise) of organizational norms and expectations, extending managements capacity to see beyond their external performance to identify that which has previously been hidden by the boundary of the skin. Moreover, with its intention to extend the bodily norm of being drug-free throughout the workforce and so to regulate the behaviour of the 'mass', the drug test embodies not only principles of disciplinary power but equally those of biopower (Foucault, 1979).

But despite the disciplinary and regulatory intentions of the drug test there are a number of factors that impose limitations upon its potential in this regard. From human error, laboratory sensitivity and arbitrary cut-off points, to the inability of urinalysis to identify the parent drugs consumed by individuals there are a multiplicity of factors that may influence the accuracy and consequently the biopolitical and disciplinary effects of the test. This is further inhibited by the various 'windows of opportunity' during which drugs are identifiable within an individual's system, the frequency of testing and many other factors. These all hinder the ability of the drug test to identify users, limiting its vision and the subsequent possibility for normalization and judgement. Moreover the potential of the drug test to reveal those individuals who do not conform to expected behavioural norms may also be limited by resistance. From the use of products to conceal drug use to the explanation of a positive test as resulting from the consumption of a licit substance, a variety of means to beat the test have been

explored. Importantly, this illustrates the imperfections of the disciplinary gaze of the drug test and its limited ability to reveal subversive behaviour. Despite this it is apparent that the drug test nevertheless – at least in theory - facilitates extended management knowledge of employees and thus reveals disciplinary and regulatory intentions. This capacity to increase knowledge of employees also has significant implications for employees' WLB.

In the forthcoming chapter - the last of my conceptual discussions - I hope to explore the current rhetoric promoting greater WLB for employees. It is my contention that the development of organizational drug testing policies undermines this rhetoric, seemingly prioritising 'work' over 'life'.

CHAPTER FIVE

Work-Life Balance and Organizational Drug Testing: Rhetoric, Reality and Compatibility

Introduction: work versus life

Thus far this thesis has sought to conceptually interrogate the categorisation of drugs through Cooper's (1997) thesis of the Labour of Division. Chapters one and two thus suggest that the binary oppositions through which we make sense of the world are reflected in the dominant social order or understanding of drugs, as exemplified by their legality/ illegality. However, these paired chapters also sought to question the ways in which the Labour of Division could be seen to reify these divides. Utilising Geertz (1983) and the distinction he draws between 'common' and 'local' knowledges these two chapters explored how and why individuals' understandings of drugs may deviate from the dominant social order based on the Labour of Division, suggesting that lived experience is key to nuancing perception. Nonetheless, these chapters argued that organisational drug testing is both founded on and justified by formal categorisations of drugs as good/ bad, legal/ illegal, and so on.

Having already established the drug test as founded on binary categories established by the Labour of Division, paired chapters three and four examined how this enables its surveillant, disciplinary and biopolitical capacity. In other words, not only does the test prescribe the remit of acceptable modes of

behaviour in organisations, it equally renders employees both visible and subject to judgement against these norms – namely, the expectation that they are drug-free. Thus these chapters argued that the drug test is an exemplar of what Foucault (1977) calls panopticism. Chapters three and four also suggested that the drug test goes beyond most other forms of contemporary surveillance technology. Unlike the technology of CCTV for example it is not confined to the time and space within which it is performed, but rather is able to rewind time and reveal previously unseen behaviour as well as delving into the ‘private’ realm of an employee’s domestic or leisure time. Moreover, the drug test is not restricted by the bodily boundary of the skin, but rather is able to see beneath this barrier and reveal employees’ *internal, physiological* conformity to accepted modes of behaviour.

From this perspective these paired chapters also suggest the drug test, through its capacity to identify the drug using ‘enemy’ of organisations, is part of the artillery in the war against drugs and thus a technology of what Virilio (1997) refers to as infowar, referring to the concern of contemporary western society’s ~~concern~~ with the control of information. Additionally these two paired chapters argue that the capacity of the drug test to rewind time makes it a technology of Virilio’s dromology, conflating time so that employees are tested in the present to detect their past drug use which then seemingly predicts their future conduct. This discussion finally sought to outline various ways in which the drug test could be seen to be a flawed surveillance technology – for example because it only identifies the metabolites of parent drugs as opposed to establishing actual impairment.

Nonetheless, and in keeping with the ethico-political concerns established in chapters three and four in particular relating to surveillance, discipline and so on, the chapter at hand will argue that the development of employee drug testing potentially erodes the traditional barriers between work and the home and between the ‘public’ (external) and ‘private’ (internal) body. After all, the drug test theoretically discloses what employees consume and how they conduct themselves *outside* of the workplace. Equally it assesses individuals’ conformity to organisational rules of behaviour through the testing of various bodily fluids – typically urine. As such the test not only prescribes acceptable modes of individual behaviour both within and outside the workplace, but it equally invades the body, looking beneath the skin. Thus it invades, on a temporal and a spatial basis, conventionally private arenas; the home and the body.

In doing so, and as chapter five explores, the drug test conflicts with current western organisational rhetoric advocating ‘life’ over ‘work’, formally reflected in the development of work-life balance (WLB) policies. Instead drug testing arguably perpetuates or even advances the dominance of ‘work’ over ‘life’ in the name of employers’ concern with or need for a healthy workforce. If, as prevailing discourses like Human Resource Management (HRM) suggest, employees are the means through which organizations achieve competitive advantage, ensuring their health and ability to perform is a primary issue for employers. From this perspective, the development of surveillance practices by organizations – including drug testing - have their origins in the requirement that employees are ‘fit for work’.

Of course this concern is also embedded in the emerging emphasis on WLB. However, in the latter instance, as suggested, a concern for ‘life’ over ‘work’ is emphasized, and the key impetus behind such developments is usually understood to approximate to Corporate Social Responsibility (CSR). The development of organizational drug testing contrastingly signifies an extension of the workplace into the home – the organization is seemingly no longer simply concerned with on-the-job performance but equally with how employees spend their leisure time, and that they spend it in organizationally healthy ways. Although it is true to say that, at another level, drug testing could also be seen as an instance of CSR (given the binary categories prescribed by the Labour of Division and the consequent social order positioning much drug use as unhealthy, illegal and so on), it is my contention that, ostensibly at least, such policies conflict with the rhetoric advocating the importance of WLB. This is because the latter is concerned to reclaim a space for life *away from* the requirements of the workplace.

In this chapter I hope to explore the remit of WLB rhetoric and organizational WLB policies, to consider whether they are – as they first appear – indeed incompatible with the development of organizational drug testing policies. In reviewing the literature concerned with this topic, I shall not only explore the origins of these policies but also consider their role within the contemporary western workplace. Interestingly, although there is extensive literature advancing the benefits of WLB not only for employees but equally (the ‘fit for work’ argument) for employers, these policies, their administration and utilisation are in practice often found somewhat wanting. I therefore conclude that it is in fact

WLB policies rather than organizational drug testing that do not fit with the contemporary work environment as we experience it – and that for such policies to be successful, a profound shift in employment culture and expectations would be needed.

Work-life balance: origins, rationale and rhetoric

In a world where the 24 hour organization is becoming an ever more prevalent institutional form it is unsurprising that there has been an interrelated burgeoning of literature and organizational policies concerned with the issue of WLB. The impetus for the WLB ‘movement’ seemingly has its origins in the increasing uptake by women of paid employment during the post World War II period in the west and a consequential emerging concern for equal opportunities (Haas and Hwang, 1995: 29, De Cieri et al., 2005). As Wise and Bond (2003: 24) acknowledge “[work-life balance policies] allow women more of a career opportunity eg job-share, career break...We have come a long way in equal opportunities.” Thus WLB policies were initially designed to enable women to compete as equals to men in the workplace. Indeed, Connell (2005) contends that WLB is fundamentally linked to ‘gender justice’ which he defines as going beyond the reduction of difference (eg, admitting women to higher education) and being concerned with a search for equivalences, for a balance of the benefits and costs for women entering the workplace - and subsequently a respect for gender difference. Thus, it is a response to dilemmas that have arisen from the

transformation of the gender order, in which men and women were traditionally linked to the specific spheres of the workplace *or* the home and which has been subverted and disrupted at least to some extent.

But despite these gendered roots, many commentators contend that such policies and programmes should be more broadly conceived to encompass *all* types of non-work activities that individuals may pursue. Thus, WLB policies should be concerned with the ability of employees to combine their work and non-work responsibilities and activities, regardless of age, gender or family commitments (Hughes and Bozionelos, 2007). This is illustrated by the retitling of organizations' 'work-family' policies into 'work-life' policies. Such a move putatively demonstrates an attempt to make these policies available to a broader spectrum of people (MacDonald *et al*, 2005). Indeed, Smithson and Stokoe (2005: 149) propose that the increasing popularity of such terms may in part be an attempt to put work-life issues into the 'mainstream' of organizations, commenting that "[i]t is assumed that men, and organizations, will respond better to 'flexible working' and 'work-life' initiatives than to gender equality issues". However MacDonald *et al*. (2005) acknowledge that resentment by some co-workers who perceive them as favouring some employees over others, remains a problem. Nonetheless, this apparent development of WLB rhetoric to encompass men and women alike notwithstanding, in reality these initiatives remain highly gendered (Lewis *et al*, 2007); a point that shall be developed further in this chapter.

For now it suffices to say that, although WLB policies including ‘family-friendly’, ‘flexible-work options’ - part-time work and flexible hours, ‘specialized leave policies’ - parental leave and career breaks, and ‘dependent care benefits’ - subsidized childcare (see MacDonald *et al.*, 2005)- are ostensibly gender neutral. Yet in practice they seem to be concerned to facilitate women’s paid employment, and keep women in the workplace, with few employers expecting men to take advantage of them (Haas and Hwang, 1995: 29). Indeed the utilization of such programmes is – the evidence suggests - greatest amongst women with dependent children, as shown for example in Hochschild’s (1997) research at pseudonymous Amerco.

Still, whether gender-neutral or not, WLB is undoubtedly firmly on the organizational agenda now, a point which is aptly illustrated by the now well established European Working Time Directive ([EWTD] 1993). This was initiated out of concern for the negative impact of extended working hours on employees’ health and safety. The Directive limits the maximum number of hours individuals are able to work per week to forty eight, to enforce a minimum eleven hour rest per twenty four hour cycle, and to enshrine the right to a rest break if an individual’s working day is longer than six hours (EWTD, 1993). In doing so this Directive represents a formal commitment to WLB amongst European Union member states and to maintaining the space for ‘life’ amongst ‘work’. As aforementioned, the Directive presumes a causal link between long working hours and detrimental health consequences for employees. Moreover, in extension of this, the majority of literature advocating WLB policies suggests that the utilization of these policies not only results in a happier workforce, with

individuals experiencing less work-life conflict, but that their introduction is also beneficial for organizational efficiency. Indeed it is suggested that the development and implementation of these policies are organizationally positive for a variety of reasons.

Thus, to reiterate, this literature suggests that a lack of balance between ‘work’ and ‘life’ will have negative effects on individuals’ psychological and physical well being and that the degree of this conflict may in fact be used as a predictor of employees’ well-being (Grant-Vallone and Donaldson, 2001; Hughes and Bozionelos, 2005). Thus the WLB literature extends and develops arguments originally made in the stress literature. As implied above, moreover, the connection between long working hours and ill health, and the subsequent organizational costs has also been widely acknowledged. For example, Almond and Healey (2003: 731) suggest that in 1998 absenteeism cost “UK industry as much as £10 billion every year in salary and worker replacement costs, and lost production”, with workplace stress cited as an important reason for this absenteeism. This position is further supported by Hughes and Bozionelos (2007) who identify the detrimental health effects of intrusive work obligations, resulting in heightened stress, emotional exhaustion and withdrawal behaviour by employees. The literature suggests an extensive array of these negative health implications, from musculo – skeletal disorders, burnout and stress disorders, blood pressure, depression and exhaustion to brain and heart disease which may have resounding financial implications for organizations from lowered productivity to increased risk of workplace accidents (Kalimo *et al.*, 2003; Rau and Triemer, 2004; Iwasaki, 2006; Jeffrey and Lipscomb, 2006; Kinzi *et al.*,

2006; Newcombe, 2006; Raediker et al., 2006; Perry-Jenkins *et al.*, 2007). In this light over-work is seemingly counterproductive for employees and organizations alike. Thus the introduction of WLB policies by organizations perhaps not only demonstrates their commitment to and concern for the health of their employees but may equally have beneficial financial consequences, reducing the problems of workforce absenteeism, poor workplace performance and ‘presenteeism’ – individuals coming to work with untreated illnesses like headaches and depression, which Hemp (2004) suggests may be costing businesses billions of dollars.

Further to this, WLB policies may promote not only the health and thus productivity of employees but equally safety in the workplace. From the organizational perspective, a lack of WLB has been reported to result not only in reduced workplace performance but to increase the risk of mistakes and accidents at work. These problems have been explored by various authors, and it is commonsensical to assume that the advent of a healthier workforce (one with greater WLB) will reduce the possibility of accidents occurring. As Yasbek (2004: 3) asserts, “[w]ork-life balance policies also minimize stress and contribute to a safer and healthier workplace by combating fatigue, thus reducing the chance of accidents occurring in the workplace.” This is further supported by Dawson *et al.*, (2001), whose research reveals a significant increase in the risk of accidents for individuals after the eighth hour of work similar to that of moderate alcohol intoxication, which is interesting in the light of the lack of evidence for the same connection between drug testing and accidents at work suggested in chapters three and four. This is further supported by Ilhan *et al.* (2006), who also

report long working hours to result in increased risk of needlestick injury in nurses. Thus increased employee WLB may not only improve the quality of individuals' working life but also promote organizational efficiency. However, and as alluded to earlier, it could be suggested that drug testing equally reflects an organizational concern for employee well-being seeking to ensure their health and indeed, safety at work. Certainly the IIDTW (2004) suggest that drug testing *is* legitimate and justified for individuals working in a safety-critical environment.

Related to the danger excessive working hours pose to individuals' health as well as safety in the workplace and employee performance, various researchers suggest that working hours do not in fact equate to work commitment and/ or productivity. From this perspective it is suggested that performance should be measured in terms of output rather than 'time at work'. As Dawson (2001: 35) suggests, then, there are many potential benefits to *limiting* hours at work: increased employee productivity, reduced stress and improved commitment, staff retention and reduced lateness and absenteeism, to name but a few. These proposed benefits would obviously have a positive impact on organizational performance and thus are desirable for the organization as well as for employees. The potential benefits of WLB policies to the employee *and* organization are further considered by Yasbeck (2004) who once again suggests similar benefits to those noted by Dawson. Such conclusions are also reached by Hochschild (1997) and De Cieri *et al.* (2005).

Government and organizations alike then are ostensibly supporting and instituting these WLB initiatives to promote organizational efficiency *and* quality of

working life. Thus they are simultaneously good for the employer *and* employee, promoting a healthier and more productive workforce and encouraging and maintaining a balance between the work and the home. The following offers some specific examples of WLB initiatives.

Hochschild's (1997) research at Amerco offers a number of examples of WLB policies instituted to redress the loss of professional female employees and the subsequent cost to the organization. Indeed, "[o]n average, for each skilled employee who quits, it costs a company \$40,000 to hire and train a replacement...it also takes a new worker at least one year to perform as well as the worker he or she replaces." (Hochschild, 1997: 31). Policies that may enhance the retention of employees are therefore undoubtedly important to organizational success. Within Amerco these sought to redress the work-life *imbalance* that was held responsible for the loss of employees. They involved various initiatives from job-sharing and part-time work to flexitime, and aimed to enable employees to spend their time at work untroubled by family worries and responsibilities. Moreover these policies were concerned to provide high quality care for pre-school age children, before and after school programmes and emergency care for children falling unexpectedly ill (Hochschild, 1997: 22). Similarly Smith and Gardner's (2007) research into a business division within a UK government department identifies sixteen WLB initiatives including paid/unpaid special leave to care for dependants, paid/ unpaid leave for other purposes, flexitime, compressed work schedules, job sharing and study assistance to name but a few. Their research also found that employees who utilized WLB initiatives experienced less work/ family conflict than their peers. This research reflects

findings by McDonald *et al.* (2005: 37) who suggest that WLB policies aim to give employees greater control over *how* and *where* they work in an attempt to reduce work-life conflict – including the already mentioned flexible work options, specialized leave policies and dependant care benefits (see also De Cieri *et al.*, 2005).

In light of the above, then, and despite the element of CSR that *could* be seen to underpin drug testing, WLB policies and the development of organizational drug testing initiatives are apparently in conflict. Inherent to the development of drug testing, as we have seen in earlier chapters, is a concern for how employees spend their leisure time, and ultimately a concern to ensure it is spent in an organizationally healthy way, avoiding the ‘excesses’ of drug use. WLB policies by contrast seemingly make an increased space for a life free from work responsibilities, a space in which individuals may pursue their own family or leisure activities absent from any organizational intrusion and influence. The intrusion of work into life is on the other hand *further* enabled by organizational drug testing, which seemingly makes it possible for the organization to observe and judge more and more aspects of an employee’s behaviour. Thus a concern for WLB directly contradicts organizations’ desire to know and control their employees as epitomized by the development of the drug test. In reality however I would contend that WLB policies and employee drug testing are not actually antithetical to one another, as proceeding discussion will establish.

Rhetoric versus reality: WLB Policy in practice

As previously discussed, WLB policies seemingly benefit employees and employers alike. Excessive working hours have been revealed to have various detrimental effects for both. It is thus evident that WLB policies are (or should be) an important initiative for both male and female employees. However, as aforementioned, despite the apparent move by organizations to make WLB policies gender neutral and subsequently available and applicable to the entire workforce, such policies remain highly gendered. As Lewis *et al* (2007) note, the development of WLB discourse from a focus on ‘family-friendly’ policies to ‘flexible work’ thus does not change the reality. Instead such gender-neutral language obscures the gendered nature of work and persistent gender inequalities. Indeed Smithson and Stokoe (2005: 153) suggest that, despite the apparent move away from traditional concerns for gender equity in the workplace and the extension of flexible work options to all individuals to promote diversity and equality, WLB policies are still associated with and used by women in the main. It is especially important to view these ‘assistance programmes’ in the context of the unequal domestic division of labour with women still assuming greater responsibility for household work. Combined with women’s participation in paid employment, this unequal distribution of domestic work is often referred to as ‘the double day’ (Hochschild, 1997; Thrane, 2000; Connell, 2005; Bacik and Drew, 2006). As Duncan *et al.*, (2003: 310) acknowledge, “Gender divisions of labour remain deeply unequal in practice both in paid work and in households”. Similarly, Baxter (2000: 609) suggests that UK women are on average doing 70%

more domestic work than their male counterparts. WLB policies of course are an organizational response to problems employees have in balancing the workplace and the home – problems that as a result of persistent traditional gender roles and responsibilities are experienced by a greater number of women than men. As Connell (2005: 369) succinctly acknowledges, “[b]ecause domestic labour is still predominantly women’s work, ‘family friendly’ workplace policies mainly serve to support women’s domestic commitments.”

A particularly sterling example of the stubbornly gendered uptake of these policies is as follows:

“No society has gone further than Sweden’s in promoting a model of gender equity that calls for men and women equally sharing responsibility for family breadwinning and child care...However, few have undertaken wide-scale changes in corporate policy and practice that would make the work environment more supportive of active fatherhood. Furthermore, men’s use of family leave benefits in these companies is modest. Indeed, our results suggest that, in the majority of Swedish companies, only a minority of men take advantage of programs like paid parental leave and the right to reduce work hours, although the majority do take paid time off immediately after child birth.” (Haas and Hwang, 1993: 35)

Hass and Hwang’s discussion of the Swedish case implies that, despite the promotion of gender equity within this society, development of corporate policy supporting fathers and the subsequent utilization of these policies remain low.

The Swedish case is of particular interest as the various problems of limited uptake remain despite this country's very progressive attitude to gender relations.

One key factor inhibiting the uptake of these policies is a culture in which working long hours and prioritising work over the home are both benchmarks of organizational commitment and productivity. As Porter (2004) argues, this commitment to work may originate from the long established western connection between work and religious duty – the Protestant Work Ethic, as originally described by Max Weber. Lewis *et al.* (2007) acknowledge that the ideal worker is one who can prioritize paid work above all other activities. It is unsurprising therefore that uptake of WLB policies is potentially associated with a lack of success and is subsequently incompatible with the image of the high achiever (Meyer *et al.*, 1989). Indeed, as Brown and Adebayo's (2004) research suggests, the higher the organizational position held by the individual the more likely that their work time has fewer boundaries and infringes on their leisure time. Thus those individuals who utilize such policies are understood – perhaps – as being unlikely to progress to the highest level within organizations. McDonald *et al.* (2005: 41) suggest various interlinked explanations for this gap between provision and utilization of WLB programmes including a lack of managerial support and training, perceptions of career consequences, organizational expectations of time commitment, the gendered nature of policies and co-worker support (see also DeCieri *et al.*, 2005, Dick and Hyde, 2006).

Moreover, utilization of these programs have been identified as resulting in actual career *disadvantages*. As Schwartz (1989) identifies, women re-entering the

workplace after childbirth may find themselves on the ‘mommy track’ in which they work part-time and earn less money pro rata, receive less training and are less upwardly mobile than their full-time counterparts. And of course these problems are not limited to women. Part-time workers per se are less likely to be promoted or be entitled to the same benefits as those working full time (McDonald *et al.* 2005). Smithson and Stokoe’s (2005: 158) research in banks and chartered accountancy further reveals the association of part-time work with a lack of workplace commitment and performance:

“Extract 4: Man, partner in accountancy firm

- 1 I In terms of promotion, do you think it’s easier for a man to get
2 promoted than a woman, or doesn’t it make a difference?’
- 3 D I don’t think it makes a difference what sex you are, but I think
4 it does make a difference going back to what we were saying
earlier,
5 to part timers and commitment, I think that if a woman has a
6 house husband, as it were, but if someone is looking to take a
7 career break of two to three years, I can’t see her presence being
8 required [afterwards]. But that could be a woman or a man, and I
9 don’t see the difference.” (Smithson and Stokoe, 2005: 157)

Not only does this quotation illustrate the perception of part-timers as less desirable employees, it equally reveals the persistently gendered assumptions surrounding WLB policies. Despite suggesting gender doesn’t make a difference the respondent goes on to suggest a stereotypical gender problem – for a woman

to be *fully* committed she needs a ‘house husband’. Thus the success of women is seemingly dependent upon their capacity to relieve themselves of domestic/family duties, to prioritize work over life – which, as other data suggest, is in fact much easier for men whether they have a housewife at home or not. Despite the apparent attempts to make WLB policies gender neutral, it is evident that these preconceptions remain embedded in them. Moreover, there is evidence showing that to counter the apparently detrimental effects of family on career prospects and to cater for the demands of a career, many women in the west are postponing motherhood. So “the birth rate is falling (especially amongst professionally qualified or graduate women); children are more likely to be born to older and/or non-married parents, and so on” (Brewis, 2004: 1821).

In sum then, the lack a WLB may have a negative impact on employees and employers alike from the various health complications associated with excessive work and their cost to organizations to the broader social problem of women choosing to have children later in life (decreased fertility rate and increased risk of complications, for example) to the cost of replacing an experienced employee who has to leave due to work-life conflict (Hughes and Bozionelos, 2007).

Moving on from this, and ironically, although it has previously been suggested that WLB policies are advantageous for both the employee and employer it could be contended that the flexible ideals which they apparently embody are in reality incompatible with the global working environment. As Dawson *et al.* (2001) note, WLB programmes may *reduce* organizational competitiveness in overseas markets as realized by employees working unsociable hours to facilitate 24 hour

trading. Moreover if as Yasbek (2004: 4) suggests WLB programmes are often individually negotiated between employee and employer it seems likely that organizations will incur extensive costs in both money and time to administer such policies. Further to this the gendered nature of these policies may also have negative implications for employee morale. As previously discussed, McDonald *et al.* (2005) note that these policies, commonly seen as inapplicable to young male workers, could be conceived to advantage some employees over others and may be a cause of workplace discontent.

Hochschild's (1997) aforementioned research at Amerco provides an apt illustration of the problems associated with WLB policies, their uptake and administration. To begin with she notes that, despite the availability of these policies only 3% of employees with children under the age of thirteen worked part-time. One explanation for this lack of utilization suggested that individuals were simply unable to afford lower wages pro rata. But Hochschild found that it was the *better paid* employees who had the least interest in part-time work (Hochschild, 1997: 26-28). Moreover, she suggests that the failure of individuals to utilize the WLB initiatives may in fact be explained by the reluctance of middle managers whose responsibility it was to implement them to do so. In fact these managers tended to describe such initiatives as "one more headache to manage" (Hochschild, 1997: 32). This point is reinforced as we have seen by McDonald *et al* (2005) who emphasize the importance of managerial support to the success and uptake of WLB policies. Further to this, Dick and Hyde (2006) suggest that line manager support for WLB may be influenced by a variety of factors including organizational culture and their training/ knowledge of these

policies. Moreover they suggest that these managers have a crucial role to play in the future career success (or otherwise) of those individuals who utilize these initiatives.

Hochschild's research also supports the suggestion that commitment to work in the west is generally associated with time spent at work rather than actual productivity and efficiency. This is emphasized by a conversation between Eileen and her boss:

“He said to me “Eileen, I don't know how to do part time. My experience is that people who put in the hours are the ones who succeed.” I said, “Measure me on my results.” He replied, “No. It doesn't work that way. What matters is how much time you put into the job, the volume of work.” Eileen replied “Say you and I mow your lawn. You got it done in three hours. I got it done in four hours. We do the same job but you get it done in less time. Should *I* be the better worker because it took me *longer*?”
(quoted in Hochschild, 1997: 92)

This conversation also goes some way to revealing why those individuals utilising WLB policies are likely to be passed over for promotion, as Eileen's boss asserts that long hours are all he knows as a basis of success.

In sum, it is evident that WLB policies in practice are subject to a variety of deficiencies and complexities. My discussion has revealed that the reality/experience of WLB policies is often different from the rhetoric upon which they

are founded. Indeed in practice, not only are they rarely utilized by men at all but they may result in various negative career repercussions for those employees who do utilize them. This appears to be because WLB policies jar with the persistent long hours culture in the west.

As has previously been established the WLB seeks to create greater space for private life outside of the workplace whereas the drug test seeks to extend organizational surveillance to reveal individuals' behaviour both within and outside the workplace and in so doing both prescribe and proscribe the remit of acceptable employee conduct. However, following the discussion above it is evident that the *reality* of WLB policies differs from the *rhetoric* and that in practice it is *WLB* rather than *drug testing* which is incompatible with western organizational cultures. Implicit to much of the above discussion has been the persistent prioritization of work-life over home-life – commitment measured as hours spent at work; performance measurement as hours spent at work; suitability for promotion as hours spent at work and so on. This prioritization is seemingly a requirement of success. The importance of time at work is revealed through the lack of purchase of WLB policies within the workplace. From the failure of middle managers to implement and administer them to the negative career consequences perceived to result from their uptake, it is evident that WLB is generally at odds with real organizational cultures. From this perspective it is the rhetoric of WLB rather than the principles of organizational drug testing that are out of kilter with the 21st century western business environment.

Indeed, for such policies to be successful, organizations would need to go through a far more extensive shift in culture, rhetoric and expectations than simply making these programmes formally available. This is especially true of the UK which has the longest working hours in Europe (Workplace Employee Relations Survey, 1998), retains its 'opt-out' from the EWTD out of concern that a reduction in working hours will reduce productivity and competitiveness and equally has one of the highest divorce rates of any European country – surely no coincidence.

Summary:

Despite an attempt to make WLB something all employees are entitled to, it is evident from the above discussion that these policies are generally utilized by more women than men. It is also apparent that in contemporary western organizations performance and commitment are still measured by time at work – a measurement incompatible with the uptake of WLB programmes. This correlation between performance and hours worked (although not accurate) goes some way to explaining the various negative career consequences that seemingly result from the uptake of these policies as well as why uptake is lower than we might expect, amongst men in particular. Thus I would suggest that WLB policies are incompatible with contemporary western organizations and the 24 hour global market. Moreover I would contend that this conflict is most apparent in the case of the UK, where a long hours culture does not promote the possibility

of WLB. From this perspective WLB is seemingly an unrealizable ideal – one that would require a profound shift in workplace culture to enable success.

To draw these five chapters in my conceptual review together before proceeding to my methodology I have considered various themes here, from how the Labour of Division is both a useful and limited tool in mediating and elucidating our perceptions and understanding of drugs; to an exploration and critique of the drug test as a development of Foucault's (1977) discussion of the Panopticon, facilitating organizational surveillance of employees and seemingly enabling disciplinary and regulatory power, to a concern for WLB against the drug test as an intrusion into individuals private lives, tipping the balance in favour of work over life and in doing so contradicting current rhetoric promoting space for life over work. These conceptual chapters will frame the exploration of my research questions. The Labour of Division facilitates an exploration of the either/ or binary categories upon which drug testing is founded and subsequently employees acceptance of them. Through the discussion of the Panopticon, the disciplinary and regulatory effects of the drug test is explored, or rather whether employees accommodate or resist this initiative. Finally, as discussed in this chapter the drug test seemingly conflicts with the contemporary rhetoric advocating greater WLB prescribing what individuals should do in their own time. This intrusion has important ethical implications seeking to extend the regulatory and disciplinary power of the drug test beyond the physical boundaries of the organization.

In the following paired discussion of chapters six and seven I shall discuss how I sought to explore these various themes through empirical data collection the methods I used; the problems that I encountered, and ultimately the advantages and limitations my research strategy, and its impact on my data.

CHAPTER SIX

Methodology: From the 'desirable' to the 'possible' 1

Introduction

To briefly reiterate the discussion in the previous chapters for the sake of clarity, I am investigating organizational drug testing policies, with particular concern for the potentially intrusive nature of this technology and issues pertaining to WLB. These themes have been explored through my empirical research, a process which shall be considered in these two paired chapters. My research questions are outlined below:

1. To examine the extent to which employees accept, accommodate or resist drug testing policies.
2. To consider what the ethico-political implications of these policies may be for individual employees, organizations and society at large.

Again as already established, informing these questions is my critique of the premises upon which the development of drug testing is founded. Inherent to the implementation of such programmes is the assumption that drugs are a problem in the workplace. It is claimed that drug testing will help to prevent workplace accidents and mistakes, improving worker productivity and promoting health and

safety in the organization (eg Burnet, 2002; Coomber, 2004; Sheppard and Clifton, accessed 10/01/07).

So organizational drug testing policies are designed to monitor and control the workforce by defining the remit of acceptable employee behaviour and enabling the identification of deviance from this remit. Thus, the biopolitical intentions of organizational drug testing policies and their establishment of bodily norms – namely that employees are drug-free – is self-evident. These biopolitical intentions are facilitated via the disciplinary capacity of the drug test which seemingly allows for individuals to be normalized into, and/ or judged against, organizational norms and expectations. Further to this, the drug test extends beyond the realm of other contemporary surveillance technologies, which are concerned with individuals' outward bodily behaviour, to reveal what lies beneath the skin – and consequently *internal* commitment to employer expectations.

This extension of surveillance technology to reveal that which was previously hidden has clear moral, ethical and political implications: most notably that the physical bodily boundary is no longer a determinant of privacy. Workplace drug testing also raises other potentially problematic issues, such as the ability of the organization to access bodily data beyond that of an individual's drug taking habits, aptly demonstrated by the testing of female police officers for pregnancy by the Washington DC police force (Gilliom, 1994). Finally, employee drug testing programmes further extend the influence of the organization into the home, and/ or the arena of leisure, and in so doing, seek to ensure that employees spend their free time in organizationally 'healthy' ways. This erosion of

traditional barriers between ‘private’ and ‘public’ spheres therefore suggests that testing has the power to redefine the employer/ employee relationship (Cozzetto and Pedeliski, 1997). Moreover the development of these programmes promotes ‘work’ over ‘life’ and in doing so seemingly conflicts with various rhetoric, policies and programmes that advocate greater WLB.

However, drug testing is far from an exact science, and can be found wanting in a number of respects. Its accuracy is limited by a variety of factors including the regularity of testing and the notice period given for an impending test. External adulterants and ‘legitimately’ ingested substances such as over-the-counter medicines and manufactured masking products may likewise influence the precision of the test - and this is exacerbated by the lack of regulated standards for UK laboratories (Coomber, 2004). Importantly, drug testing regimes also rely on clear and finite understandings of drugs as either ‘good’ or ‘bad’ to facilitate and enable the judgment of an individual’s behaviour. But, conceptions of drugs are socio-historically transient.

A contemporary example is cannabis, whose recent reclassification in the UK to Class C remains subject to contestation. Indeed, despite this reclassification, the proliferation of recreational use of cannabis and its potential medicinal qualities including use as a painkiller by sufferers of multiple sclerosis (Trebst and Stangel, 2005; Chong *et al.*, 2006) and in the treatment of sickle cell disease (Howard *et al.*, 2005), there are persistent concerns that smoking cannabis may facilitate the onset of mental illnesses such as schizophrenia or depression. Thus, conceptions of cannabis, much like those of other drugs, remain undecidable – which

therefore calls into question the standards upon which drug testing regimes are founded.

In light of these various controversies and the apparent deficiencies in drug testing, I wanted to explore individuals' thoughts about the issue as well as their opinions and experiences of workplace testing – whether these concerns and/ or deficiencies were either realized or experienced in practice. I also wanted to explore the behaviour of individuals who are subject to these testing regimes, to see whether they changed or altered their behaviour to commit to organizational ideals; whether they sought to resist the apparent intrusion of testing; or whether they were apathetic about these policies - and why. This necessitated the collection of primary empirical data.

In what follows then, I hope to reveal how my research design changed and developed to encompass the various problems that were encountered in its duration. This involves a discussion of the methodological trajectory, which in an 'ideal world' I would have been able to pursue, through to detailing the various difficulties I experienced and the impact this had on my research design. It is important to note that many things changed from my Upgrade Proposal²⁵, including my preferred organization and number of respondents. However, as Buchanan *et al.* (cited in Saunders *et al.*, 2007: 165) suggest, "In the conflict between the desirable and the possible the possible always wins." This is especially pertinent to my research project, which collected empirical data about

²⁵ When I progressed from Advanced Postgraduate student to PhD student and which outlines my research intentions.

an exceptionally sensitive area previously mostly untouched by CMS and which has to date been subject to limited empirical exploration anyway.

In the following sections I shall discuss the methods that I used to explore these questions and how my ontological and epistemological positions have informed my research, from my initial interests to research design to possible findings. I also outline my 'ideal' research project as well as the difficulties, problems and compromises encountered in the design and performance of my empirical research.

'Knowing' reality

Before proceeding to methodological specifics, so as to contextualize my empirical research, it is important that I first discuss my ontological and empirical assumptions concerning the nature of reality and what it is possible to know about the world - plus how these have subsequently informed the methods of enquiry that I employed. As Burrell and Morgan (1979) establish, all social science research is performed in the context of various ontological and epistemological assumptions whether the researcher is aware of/ explicit about this or not.

Following Easterby-Smith *et al.*, (2002) and Richie and Lewis, (2003) my research is informed by the ontological belief that there is no concrete or a priori reality that exists independently of individuals and their lived experience. This

position directly conflicts with that of the (bulk of the) natural sciences within which it is usually assumed that empirical observation stands in faithful representation of an objective reality and that there is a 'real' world of 'hard' facts that it is possible to research (Burrell and Morgan, 1979). These ideas are reflected within the social science paradigm of positivism which "presume[s] a stable, unchanging reality that can be studied using the empirical methods of objective social science" (Denzin and Lincoln, 2005: 8)²⁶. Thus, positivists tend to employ techniques of investigation which assume that the social world may be captured through the scrutiny of detached, structured quantitative measurement. Traditionally, as Easterby-Smith *et al.* (2002) and Richie and Lewis (2003) acknowledge, those individuals adhering to this position therefore use experiments, survey/ questionnaire methods or structured interviews and latterly statistical analysis to make sense of social phenomena with the aim of generalizing about regularities in human behaviour.

There are a number of research techniques that are typically utilized by researchers adhering to different ontological/ epistemological standpoints and are more or less congruent with each conception of 'reality'. As discussed above, inherent to the 'pure' positivist ideal is the conviction that the social world is as steadfast as the natural world and thus can be captured via measurement and quantification. At the other end of the ontological/ epistemological continuum, postmodernism refutes the possibility of objective research, suggesting that the researcher cannot stand outside his/her own experience. From this perspective

²⁶ I am referring here to the 'extreme' version of the positivist paradigm to reveal the spectrum of different assumptions that may underpin empirical research. Nonetheless, I recognise that the positivism itself is multifaceted and that not all positivist researchers think and research in the same way, a point that is equally true of other paradigms.

not only is research always subjective but there is no possibility to generalize beyond the specific research context. As Gergen (1999:10) asks,

“[How] can the empiricist stand outside his or her experience to know whether there is actually a world that is being correctly mirrored? If all we have is the reflection of our minds, how can we be certain what is “out there” producing the image?”

Assuming that individuals are unable to stand outside their own experience it becomes evident that not only will that experience irrevocably construct and inform our view of the world but equally, we will be unable to assess the ‘validity²⁷’ of the knowledge we produce. Hence, in the absence of an objective observer, it is evident that alternative research techniques of collection and analysis other than those associated with positivism would be utilized by researchers in this ‘tradition’.

I would position myself within postmodernism and accordingly align myself with a conception of the social world which conflicts with the positivist tradition. As such I suggest that we cannot know or experience material reality other than through perception and interpretation derived from our experience and our social context/s (Alvesson and Deetz, 1999). Moreover, it is through perception and interpretation that we attribute meaning to this reality: there is no essential meaning therein to discover. To elaborate, Richie and Lewis (2003: 9) allude to

²⁷ Hammersley (1987: 69) suggests that: “[a]n account is valid or true if it represents accurately those features of the phenomena that it is intended to describe, explain or theorise.” This positivistic understanding of ‘validity’ which would not be accepted by postmodernists is also tied to the notion of reliability – that findings are tapping into something stable or persistent in the social world.

the common themes that are encompassed beneath the broad umbrella of postmodernism:

“[w]hich not only question the notion of objectivity but also maintain that the concepts of meaning and reality are problematic. It is argued that there are no fixed or overarching meanings because meanings are a product of time and place. The researcher cannot produce a definitive account or explanation, and any attempt to do so is [regarded as] a form of tyranny because it suppresses diversity.”

Therefore, following Richie and Lewis, postmodernists deny the possibility of a concrete/ tangible reality ‘out there’ that it is possible to know in any enduring way. However, there is no standardized definition of what postmodernism ‘is’. Rather this broad area can be said to approximate to the following assumptions as Alvesson (1995: 1056/ 7) argues:

“In social science, the following credos of pomo [postmodernism] as philosophy are often emphasized: (a) the individual is a fiction, (b) language is shaky and (c) grand narrative is out of fashion as well as ‘bad’. Pomo rejects the notion of the autonomous, self-determining individual as the centre of the social universe...Individuals are caught within and constituted by discourses...Language cannot mirror the reality ‘out there’, nor people’s state of minds...Language is figural, metaphorical, undecidable, full of contradictions and inconsistencies. Meaning is not universal and fixed, but precarious, fragmented and local.”

Thus, postmodernism can be understood to emphasize the centrality of discourses in constituting the world. Moreover it argues for the temporal and indeterminate nature of language and meaning which it sees as situationally contingent and local rather than universal, reflective and all-encompassing (as also discussed by Richardson and Adams St. Pierre, 2005: 961). Hence, postmodernism highlights the subjectivity of meaning – maintaining that language cannot represent or ‘contain’ the world – rather it is concerned with exploring these subjectivities within specific cultural and temporal moments. Postmodernist research is likewise perceived as contingent upon as well as specific to the situation within which it was performed, and does not seek to establish predictability and order commonly associated with the outcomes of positivist research. Broadly speaking then, the postmodernist ‘position’ challenges positivist ideas about the foundations of knowledge, denying objectivist claims to certainty and subsequent claims to unassailable knowledge or the possibility of an enduring or a priori truth. Instead, it understands ‘truth’ and ‘knowledge’ to be the power effects of specific discourses rather than there being an “essential world or knowing subjects” (Alvesson and Deetz, 1999: 82). To continue, the assumption is that:

“As a person learns to speak these discourses, they more properly speak to him or her in that available discourses position the person in the world in a particular way prior to the individual having any sense of choice. As discourses structure the world they at the same time structure the person’s subjectivity, providing him/her with a particular social identity and way of being in the world.” (Alvesson and Deetz, 1999: 97)

Therefore, if we construct our experiences of the world through the discourses that pertain to it, then individuals' ability to interpret the world around them - their 'ways of being-in-the-world' - are shaped by their own discursively mediated knowledge and experience. Perception is thus always structured by discourse; and, through their perception and interpretation of the world individuals create themselves in relation to it.

Similarly, postmodernism rejects the possibility of an autonomous individual with a single unitary identity. Rather, identity is fragmented, contingent and continuously negotiated in relation to an individual's own knowledge (the discourses they speak and encounter) and subsequent perception of the world. From the postmodernist perspective research data is therefore only ever a subjective representation constituted through the discursive sense-making of both the researched and the researcher. This has important implications for the performance of my research and the data collected to explore individuals' understandings of organizational drug testing. Within this context I am hoping to explore 'dominant' discursive constructions of drugs and individuals' commitment (or otherwise) to them. As Alvesson and Deetz (2000: 97) note; this:

“Foucauldian version [of postmodernism] views discourses as systems of thought which are contingent upon as well as inform material practices, which not only linguistically but also practically – through particular

power techniques (clearly visible in prisons, psychiatric hospitals, schools, factories, and so forth) – produce particular forms of subjectivity.”

Hence, as previously discussed in my literature review, the dominant ‘systems’ of thought on drug use suggest that it is both ‘dangerous’ and ‘undesirable’. These discourses form the foundations upon which the material practice of employee drug testing is justified. The drug test then is a power technique which both creates and reinforces perceptions of drug use and the drug user. It is consequently my intention to explore various ‘systems of thought’ informing organizational drug testing and the extent to which employees accept, accommodate or resist them, as reflected in research question 1. However, and once again drawing on Foucault, these systems of thought are temporary and unstable, an issue that was also explored within my literature review in the paired discussion of chapters three and four with specific reference to the cases of cocaine, cannabis and thalidomide. Thus, my empirical research also explores changes in employees’ understandings of drugs and drug users, whether these have altered since the instantiation of testing in their workplace, and/ or during their life-time and, if so, why.

Moving on from this, there are then a number of research techniques that may be appropriate to my philosophical ‘world view’ - from utilising an ethnographic approach to methods such as focus groups through to semi-structured interviews, to name but a few. Underpinning these possibilities and in contrast to the positivistic ideals of generalizability and predictability, postmodernist research data can be seen as a product of and contingent on the local, temporal

circumstances within which they are collected. Moreover, the role of the researcher in collecting and analysing/ interacting with the data is a key concern. This, as Denzin and Lincoln (2005: 3) suggest, has profound implications for my data, in terms of research intentions, design, collection and ‘findings’ – or my interpretation of the data. I am concerned then with the patterns nuances and contradictions that inform individuals’ opinions and hope to achieve some insight, however small, into individuals’ thoughts and experiences of organizational drug testing policies. However, following Richie and Lewis (2003: 10) and Silverman (2005: 10) I emphasize that these data are situational and at least partly created through the interaction of the respondent and researcher, as well as more generally subject to change over time and between contexts.

Importantly, and in bringing this discussion of ontology and epistemology to a close, Johnson and Duberley (2000:104) suggest that postmodernism presents important challenges for management research; indeed that “sceptical postmodernists rarely do empirical work as they deny the possibility of an empirical social science”. However, although many postmodernist writers on organization maintain a distance from empirical research, this does not have to be the case, as Johnson and Duberley equally acknowledge:

“[A]lthough they [postmodernist researchers] would maintain a scepticism about the ability of empirical investigation to determine the actual nature of organizations, [e]mpirical research from this perspective would focus on gaining an understanding of a situation at a particular point in time,

recognising that this is only one of a number of possible understandings”

(ibid)

As Linstead (cited in Alvesson and Deetz, 2000: 99) similarly argues, “organization then is continuously emergent, constituted and constituting, produced and consumed by subjects”. He therefore contends that investigations should move “towards those processes which shape subjectivity rather than the process by which individual subjects act upon the world”. According to Linstead we should be concerned to explore those processes/ ‘systems of thought’ which inform subjectivity, for example in this instance, the construction of drug use as dangerous/ deviant behaviour. These processes act as a lens, filtering and shaping individuals’ perceptions of the world. Thus, within my research I hope to open up the issue of drug testing and to scrutinize the seemingly reified assumptions that simultaneously justify and reinforce it. However, in questioning the accepted ‘truth’ on drugs, my research is undoubtedly also sensitive, an issue that raises a number of difficulties and concerns in relation to empirical data collection.

Seiber and Stanley define socially sensitive research as “studies in which there are potential consequences or implications, either directly for participants in the research, or for the class of individuals represented by the research.” (cited in Renzetti and Lee, 1993: 4). So, in this broad understanding of what constitutes sensitive research, ‘sensitive’ becomes synonymous with ‘controversial’. Renzetti and Lee (1993: 4) thus propose an understanding of sensitive research as dealing with topics that are threatening in some way to those being studied (or, I would add, who could potentially be affected by the research), having potential

costs/ unwelcome consequences for them. Therefore the sensitivity of my research topic becomes evident as it seeks to explore individuals' drug-taking habits within a society that has often claimed to be waging a "war on drugs" (Rothstein, 1991: 86).

This sensitivity is exacerbated by the fact that the drug test blurs previously accepted boundaries between work and home and public and private information, not only invading the home, but equally an individual's body in its search for information. My research therefore asks individuals to reveal highly private and personal information about themselves, which, should it be obtained by their employers, may well result in their dismissal. As O'Connell, Davidson and Layder acknowledge (1994: 56), "social researchers must be extremely cautious about collecting data from powerless individuals" and delivering them to powerful institutions. Thus, a concern for the sensitive nature of this topic is embedded in my research design and has been considered at all junctures as will become apparent as these two chapters proceed. The commercial sensitivity of this topic also created several difficulties for me. As Easterby-Smith et al., (2002: 4) acknowledge in this regard "[a]ccess to companies can be obstructed by managers if they see a piece of research being harmful to their, or their company's interests..." Again I will expand on this issue as the discussion progresses.

In this section I have established my ontological and empirical 'position' and the assumptions and concerns which therefore inform my research intentions and design. In the forthcoming section I shall explore my initial methodological

‘ideals’ relating to research design, sample and methods and subsequently the problems that I encountered in pursuing empirical research on the delicate topic of employee drug testing.

A comparative focus

As outlined in my Upgrading Proposal, I initially proposed to research more than one organization in which employee drug testing existed, for the purpose of comparison. This would have allowed me to research not only the differences in policies and their implementation between organizations but equally whether these differences influenced respondents’ thoughts experiences and opinions. In light of this I considered a variety of approaches to such a comparison which I thought would result in interesting and rich data. One possibility was to research organizations that were ‘known’ to take contrasting ‘positions’ on drug use. Organizations such as those in the media (popularly believed to have a ‘drug-friendly’ culture) versus organizations operating in a safety-critical environment (and subsequently ‘known’ for their anti-drug stance) such as airlines, construction companies or rail operators were deemed appropriate in this instance. This possibility was underpinned by the expectation that these alternative occupational/ organizational cultures would not only reveal alternative conceptions of drugs but equally of drug testing policies.

The second possibility was a comparison between an American organization in which drug testing was relatively established and a British organization in which drug testing was relatively new. I thought that this comparison would be interesting from a variety of perspectives. Firstly, and as has been established previously, drug testing is far more common and has a much larger history within American organizations than in their British counterparts. Thus it is likely that not only would there be some interesting policy differences – including the type of testing, the quality of laboratories²⁸ and the efficiency of testing procedures – but I would equally have expected very different accounts and opinions of these testing regimes from employees who are more or less familiar with them. The extensive and embedded practice of drug testing throughout US society would ostensibly suggest that it is a more normalized and subsequently accepted organizational practice than in the UK. On the other hand, and in acknowledgement of the recent US court cases identifying drug testing as an intrusion on the Constitution’s Fourth Amendment rights, this may not have been the case.

The third possibility for comparison was underpinned by the IIDTW’s boundaries of justified/ unjustified employee drug testing. In this instance I considered research within an organization whose drug testing policy was by the IIDTW definition ‘justified’ – on the grounds of health and safety and in the context of a safety-critical environment - and an organization whose drug testing policy was ‘unjustified’ – i.e., “in the absence of legitimate safety or performance concerns” (IIDTW, 2004: 64-65). The purpose of such a comparison was again to contrast

²⁸ As stated in chapters three and four, laboratories are subject to far greater regulation within the US than the UK (IIDTW, 2004).

not only the alternative policies but equally employee responses to these initiatives. It was expected that those individuals who are subject to a 'justified' policy would be likely to accept, conform to and support drug testing and vice versa. Moreover I was interested to explore whether the 'legitimacy' (or not) of policies influenced more than individuals' opinions perhaps having ramifications for conforming/ resistant employee behaviours.

The final option that I considered with respect to a comparative study was to look at two organizations that took different approaches to drug testing and drug users, from the procedures utilized to facilitate sample collection to their approach both before and after testing. In this case I was hoping to explore various issues from reasons for testing - i.e. a concern for employee health and well-being rather than organizational performance – to differing responses to a positive test result, from dismissal (a disciplinary response) to rehabilitation (a welfare response).

Beyond this I had various preconceptions concerning sampling, namely who would make up my sample and how I would access these individuals. In developing these ideas my range of comparative options quickly became much narrower as the next section illustrates.

The optimum sample

As discussed by Alvesson and Deetz (2000: 192) and Blaxter *et al.*, (2001: 29), due to the potential problems of gaining organizational access as discussed above as well as the cost of undertaking empirical research, I decided to pursue access to organizations within the UK, and thus not to seek a comparison between British and American organizations. Moreover, the - as yet - fairly limited development of drug testing by UK organizations meant that those located within professions ‘renowned’ for drug ‘tolerance’ were unlikely to have drug testing policies, thus undermining the possibility of such a comparison. Due in part to the limited nature of drug testing in the UK and also the difficulty in researching organizations’ testing policy²⁹ prior to requesting access, I was equally unable to establish whether organizations had alternative approaches to testing policies, from techniques of sample collection to reactions to positive tests. All those policies that I *did* gain access to, including those used by British Airways, Network Rail and my pseudonymous empirical site Delta, claimed to have a policy of instant dismissal in the event of a positive test – thus the aforementioned fourth comparison was seemingly impossible.

The final option, an exploration of employees’ responses to drug testing ‘justified’ on the grounds of health and safety in the context of a safety-critical environment and of ‘unjustified’ drug testing in the absence of legitimate safety

²⁹ As there is no formal regulation of employee drug testing in the UK each organization is likely to follow a different approach, from formal periods of notification given of an impending test to the consequences of a positive test. Moreover these documents are a matter of internal policy as opposed to publicly available records which again prevented me uncovering organization-specific approaches to drug testing.

concerns, could however be considered within a single organization. Here, British Airways or Network Rail were identified as potential research sites, as both employ blanket testing of all employees regardless of job description. It was also hoped that an approach to only one organization would reduce the possible problems of gaining access. Indeed, Easterby-Smith *et al.*, (2002: 71) acknowledge that negotiating access may be a difficult and time consuming procedure and one that would be exacerbated by trying to gain access to more than one organization.

Having settled on a single organizational focus, I intended to utilize what is referred to as non-probability sampling. This, in contrast to probability sampling, does not assume that a sample can be meaningfully chosen at random to represent a wider population and so is not concerned with making generalizations from research data. Instead, it seeks to explore individuals' thoughts and understandings within the research context. As Saunders *et al.*, (2007: 226) outline: "This sample would provide you with an information-rich case study in which you explore your research question" and thus is ideally suited to qualitative research.

There are a range of non-probability sampling techniques, but I hoped that my respondents would volunteer to participate and as such that I could employ a self-selection technique (Saunders *et al.*, 2007: 233). I also intended to interview 'employers'/ 'managers' and 'employees' alike, as I was particularly interested in the views and opinions of those who administered and/ or were subject to these policies. I was also interested in interviewing managers who had been

responsible for the development and implementation of these drug policies and designed a separate interview schedule for them, asking about their intentions during this process and the difficulties (if any) that they encountered. With respect to this I had hoped to pay particular attention to individuals from the Human Resource Department and line managers, who may be more aware of employees' concerns about policy, administration e.t.c.

With respect to my employee sample I wanted to interview individuals of different genders, ages, employment duration and organizational function/ grade. This would, I thought, and as Richie and Lewis (2003) suggest, enable me to investigate a broad spectrum of ideas and opinions and would hopefully add to the depth of my data, allowing for a more balanced account of employee responses to/ opinions and experiences of organizational drug testing policies. Although as Silverman (2005: 10) discusses, I did not intend to produce research which generalized beyond the particular locale where the data were collected, a sample that drew from various groups in the organization would provide me with greater insight into alternative perspectives on the development, implementation and experience of drug testing policies. It would also enable me to see if factors like gender, organizational grade and age were in any way reflected in individuals' opinions of policy. Would women be less comfortable having someone hear or watch them urinate, for example? As Alvesson and Deetz (2000) acknowledge, gender may influence styles of reasoning, social relations and priorities and thus meant women could perhaps provide me with different insights into the same issue than men. Further, as I was unconcerned by the possibility of generalizability, my sample size did not need to be large, and it was

thought that a sample of roughly forty to fifty people, each participating in interviews lasting approximately one hour would provide me with a rich, interesting and manageable data set (as discussed by Blaxter *et al.* 2001: 165; Easterby-Smith *et al.* 2002:117; Richie and Lewis, 2003: 84).

As outlined above, and discussed by Blaxter *et al.* (2001: 163) and Collis and Hussey, (2003) I also hoped that individuals would self-select through volunteering to participate in my research rather than the organization selecting respondents on my behalf. In light of the sensitive nature of the topic, and organizations' desire to be perceived positively, I was concerned that they would select respondents who would offer a favourable account of their policy. Moreover, if individuals were to self-select/ volunteer, this would enable me to ask my more controversial questions concerning drug-taking habits, the influence of policy on this behaviour, possible resistant behaviours and so on, as the organization would be unaware who I was interviewing and thus would be unable to hold them accountable. Additionally, following Richie and Lewis (2003: 63) I was concerned that interviews were undertaken in an environment within which respondents felt comfortable, one that was not subject to interruption and intrusion by other colleagues and subsequently one in which they were happy to talk in and that was achieved during the actual data collection. I also intended to tape record interviews rather than taking notes – although each respondent would be offered the opportunity to refuse this it may still have had implications, as Blaxter *et al.*, (2001: 173) acknowledge, potentially making my respondents anxious about the information they disclosed. Having outlined my preferred research design and sample, the following section is concerned with the research method that I hoped to utilize in my data collection.

Preferred tools and techniques

As previously established, my chosen methodology has been informed by my epistemological and ontological standpoint, namely that there is no concrete reality that exists independently of individuals and their lived experience. Subsequently I am concerned with exploring the complexity and nuances of individuals' thoughts, opinions and experiences of drug testing, inevitably filtered through my own perceptions. As previously established, the paired chapters three and four there is a multiplicity of competing and contradictory understandings of drugs, drug policies and the drug testing and it is these nuances that I sought to probe. As Robson (2002: 271) acknowledges, data collection methods such as questionnaires would therefore have been inappropriate as they are unlikely to reveal insights into individuals' construction of the 'reality' of their situation. Thus, and as aforementioned, qualitative research techniques such as semi-structured interviews, unstructured interviews, focus groups or ethnography are generally the most appropriate given such a world view (Silverman, 2005: 10).

In light of this and as perhaps obvious by now, I chose semi-structured interviews which, despite having relatively pre-determined questions, can be modified in terms of wording and structure in individual interviews where appropriate (Robson, 2002: 270). As Jones (cited in Easterby-Smith *et al.*, 2002: 87-88) notes:

“...there is no such thing as presuppositionless research. In preparing for interviews researchers will have, and should have, some broad questions in mind, and the more interviews they do and the more patterns they see in their data, the more likely they are to use this grounded understanding to want to explore in certain directions rather than others.”

Thus, semi-structured interviews allowed me to explore my ‘presuppositions’ through a foundation of questions from which various patterns, nuances, ideas and disjunctures would be teased out. Equally however, this technique allows for flexibility and the possibility to pursue interesting emergent threads throughout the interview (Easterby-Smith *et al.*, 2002: 87). Further to this, Saunders *et al.* (2007: 315) note that semi-structured interviews are advantageous in a situation where there are a large number of questions to be answered and the questions are complex and open-ended. The use of semi-structured interviews also enabled me to respond to the interviewee’s logic, opinions and behaviour. Due to the sensitive nature of my research, such opinions may need to be carefully teased out, as respondents may not always fully reveal opinions and behaviour that contradict organizational and indeed societal norms. Moreover, this flexibility allows for the researcher to respond to the specific interview context and build up rapport with the interviewee in choosing how or even whether to ask any further questions.

In addition, the structure that underpins the semi-structured interview enables a researcher to obtain some standard and basic information with respect to their topic (Saunders *et al.*, 2007: 315). I was therefore able to ask key questions that

reflected my research interests - the extent to which employees accept, accommodate or resist drug testing policies. At the same time, I would like to reiterate that semi-structured interviewing should allow the interaction to be more relaxed and conversational as I believe that in this way I would gather the most information. This is because this method, I felt, would enable me to approach the most controversial issues once I had established a bond with the interviewee, thereby mentioning a subject at the time I felt was most appropriate.

But as I have also suggested, there are a variety of alternative qualitative research techniques that I could have chosen and which have already been successfully utilized in researching sensitive topics. As suggested, for example, the issue of illegal drug use can undoubtedly be identified as something individuals may feel compelled to conceal, a compulsion further encouraged by the practice of organizational drug testing which facilitates the possibility for formal judgement and even dismissal. From this perspective it would be advantageous to become a part of the group being studied so as to access 'private', sensitive information. As Collis and Hussey (2003: 68) suggest, this technique of ethnography/ participant observation in OS involves.

“the researcher becom[ing] a full working member of the group being studied. The research normally takes place over a long period of time, in a clearly defined location such as a factory floor, and involves direct participation in the activities of that particular workplace.”

Further to this, they note a number of key advantages to such research, from “building trust” to “becoming as involved as you can with the phenomena” (ibid.). However, implicit in the above discussion of ethnographic research is the requirement of greater organizational access – to literally become a member of an organization or to shadow employees. Thus, data collection becomes a greater intrusion on both individual and organizational time and space. As I was expecting organizational access of any kind to be problematic for this controversial research project, to make higher demands seemed unwise. Moreover, participant observation is exceptionally time consuming. Developing relationships where individuals are going to take you into their confidence takes patience.

Importantly, this brings about a further concern with respect to the use of participant observation as a data collection tool for this project, namely, as Easterby-Smith *et al.* (2002: 112) suggest, that of *participation*. Issues such as whether I would be required to become a participant in drug taking behaviour were a pertinent concern for my responsibilities to both myself and participants. For example, as Easterby-Smith *et al.*, (2002: 90) and Fontana and Frey (2005: 708) acknowledge, would individuals trust me and disclose their behaviour if they knew I was a researcher? If not, would I have to disguise my identity to achieve my research intentions? Overt research, where informed consent is sought, can be directly contrasted to covert research where the research subject is unaware of their participation in research or the potential consequences it may have for them. As Christians (2005: 145) acknowledges, in emphasising informed consent,

discussions of social science ethics commonly oppose deception of any kind as indefensible.

Moreover would, as Fontana and Frey (2005: 715) suggest, my role as participant require my involvement in respondents out of work activities? And what implications would this have, not only ethically as mentioned above but equally for myself as I would perhaps be expected to participate in drug use? These various concerns led to the conclusion that participant observation, although a worthwhile and interesting technique, was not the best option for this project, especially given my relative inexperience as an empirical researcher.

Another data collection method that I could have employed was focus groups. As Brewis (2004: 1824) acknowledges, focus groups offer various advantages over certain other research techniques. Firstly, they are less resource intensive than one-to-one interviewing and the previously discussed option of ethnography/participant observation. Moreover, focus groups are useful for collecting information from relatively similar groups of people who share experiences (in this instance respondents who are subject to organizational drug testing). And, finally, the focus group is more than an interview, allowing for interactions between respondents to be captured as well as those between respondent and interviewer. Thus in the process of group discussion, individuals may reveal more ideas and opinions than during one on one interviews in particular (Collis and Hussey, 2003: 166). In principle individuals are encouraged to reflect on their own experiences by listening to other group members – thus wider data is produced through interaction.

Nonetheless, although this technique could have facilitated the collection of in-depth data, it may equally have created a variety of problems. The sensitive nature of my topic especially, raises a number of concerns with respect to focus groups. As Saunders *et al.* (2007: 337) acknowledge, “Inhibitions may be related to a lack of trust, to perceptions about status differences, or because of the dominance of certain individuals.” In this instance individual group members would be required not only to trust me but equally other group members to not reveal their thoughts opinions or their personal habits with regard to drugs and drug testing beyond the focus group. It was therefore concluded that questions exploring individual drug taking habits especially, could not be adequately explored within the context of a focus group and that this method was an inappropriate mode of enquiry.

Semi-structured interviews were consequently the best or most feasible approach to this research topic, minimising concerns about access and trust and moreover creating the possibility for the exploration of controversial questions. Also and importantly there are no secondary data for me to access (beyond those of the IIDTW, whose focus is on employers rather than employees) which makes the collection of empirical data vital to this project. This also means that I was unable to draw on the experience of other researchers in designing empirical research on this undoubtedly sensitive subject, which may have offered some insight into the problems I could expect to encounter. But, in an attempt to minimize these problems it was still important for me to try to predict organizational and respondent issues and concerns that may inhibit my research,

from the formalities of access to the actual data collection. I go on to discuss these issues in the following chapter.

CHAPTER SEVEN

Methodology: From the 'desirable' to the 'possible' 2

Expecting the unexpected

Given the sensitivity of my topic I naturally expected to encounter a number of problems, perhaps the most pertinent of which as Alvesson and Deetz (2000: 193) and Easterby-Smith *et al.* (2002: 71) suggest was that of physical access to an organization. At the very least I expected organizations to be apathetic about the prospect of my research. But a more likely response I felt was that gatekeepers would be fearful of and hostile to my research, concerned that their organization may be revealed in a less than positive light, that their policies failed to prevent or detect drug use, and thus seeing little value for them in granting me access. As O'Connell Davidson and Layder (1994: 171) note:

“The entry into particular kinds of settings is often controlled by ‘gatekeepers’ who are concerned with the way in which the setting or organization and its practices are to be depicted in the published research.”

Naturally, no organization would like to be depicted as one in which drug use is rife or indeed even exists. Moreover, organizations would not want employees to have access to information that suggests the drug test is flawed - a possibility also

created by my research interests. Consideration of these problems, as already noted, brought into question the feasibility of a comparative organizational study which would exacerbate the problem of access – ‘doubling the trouble’, so to speak. Again as I have already established, I eventually decided that it would not be practical to research two organizations, but decided instead to look at one UK organization which tested individuals working in both a safety-critical and non-critical environment instead. The primary reason was twofold - first, as discussed by Blaxter *et al.* (2001:25) was feasibility with respect to the time and resources entailed in researching more than one organization, and second, a concern to secure access to *one* let alone *two* organizations. Thus although no longer comparing two organizations with contrasting work environments, I intended to be able to compare the thoughts and opinions of individuals who are subject to the same testing policies despite being in different organizational roles - a more realistic and achievable aim. I felt this decision therefore reduced the loci of the problems I expected to encounter to a single organization.

I was also concerned to gain cognitive access to respondents. Physical access (i.e., being granted permission to collect organizational data) does not guarantee cognitive access, which is concerned with the expression of respondents’ *actual* thoughts and opinions whether or not they conform to organizational rhetoric (Robson, 2002; Saunders *et al.*, 2007: 164). My most controversial questions potentially ask people to reveal behaviour which is illegal and would certainly have undesirable professional repercussions were it discovered. Thus developing relationships with my respondents was particularly important. As Saunders *et al.* (2007: 176) suggest this may be achieved by sharing the purposes of my research

with them, stating how they may help and providing assurances about anonymity and confidentiality information which was communicated to all of my respondents.

There are a number of factors that seemingly inhibited my access to and collection of empirical data, factors that extended beyond literal physical, formal organizational access. These factors were accommodated in my original research design in a variety of different ways. Firstly, and with respect to obtaining physical access to an organization, I began with more than one potential empirical site in mind. My first choice was British Airways who since August 2004 have tested employees who work in both safety-critical and non safety-critical environments. This was particularly interesting as British Airways are known to have active unions and experience frequent industrial action but implemented their current employee drug testing programme (an ostensibly controversial and intrusive policy) seemingly without experiencing any problems. My second option was Network Rail who also test those working in safety-critical and non-critical environments alike. Either of these two organizations would have allowed for my desired comparison between employees with alternative job specifications.

Within both, as Saunders et al., (2007) suggest, I sought to identify and make contact with the most appropriate person for the negotiation of access, contacting them via telephone and follow-up e-mail in which I provided details of my research and minimized their concerns about confidentiality and the amount of time and resources this may require. Finally, I also had the option of research at

Delta (a pseudonym), a telecommunications firm within which I already had an existing contact. This organization was my final option due to the restricted nature of its testing policies. These only applied to a certain number of employees working in a specific safety-critical environment controlled by external organization Alpha (again a pseudonym).

Secondly, and relating to cognitive access, a key concern was my self-presentation, from body language to speech and dress (Fontana and Frey, 2005: 707). Indeed, following my initial intentions of interviewing individuals in a variety of roles and from a variety of organizational grades, I expected to alter my dress accordingly – dressing more smartly for those respondents whose primary job was office-based than for those who primarily worked in the ‘field’ and would be wearing overalls. ‘Appropriate’ dress should I felt help to level the playing field – to encourage respondents to accept me as a peer, facilitating trust and enhancing the interviewer-interviewee relationship. Moreover, there may I thought have been various advantages and disadvantages of my relative youth – acting to encourage some individuals to discuss their drug taking habits as drug use is generally perceived as more acceptable to the younger generation, or conversely acting to discourage respondents to whose peer group I do not belong. Other concerns related to the aforementioned problems of confidentiality and how this can be ensured. Various techniques may be used to help to ensure this, from question design (removing questions that may incriminate individuals such as those relating to their drug taking habits, and focusing on opinions instead) through giving each individual a pseudonym within my data analysis. This issue as Alvesson and Deetz (2000: 196) and Richie and Lewis (2003: 67-68)

acknowledge, is particularly pertinent as individuals are unlikely to speak openly in a situation within which they may be at risk, and my research relies on self-report and thus self-incrimination. The issue of confidentiality in particular is expanded upon in the next section.

In sum, it is evident from the discussion above that empirical research on this especially sensitive subject is fraught with potential problems that could to a greater or lesser extent be minimized through research design. Indeed these difficulties eventually resulted in a number of compromises so as to enable data to be collected at all.

Making some compromises

As already pointed out earlier in this discussion, a decision to research one rather than two organizations was made on the grounds that such a comparison was unfeasible in light of concerns for organizational access, and the various limitations on my time and resources. However, I did intend to research and thus be able to compare the differing thoughts and opinions of individuals working in safety-critical and non safety-critical environments by accessing either British Airways or Network Rail, organizations that operate in both these areas and randomly test all of their employees regardless. Thus, my research remained informed by the IIDTW's (2004) arguments on legitimacy of testing, namely on the grounds of health and safety and in the context of a safety-critical environment.

However, this move – to research a single organization - increased concern for respondent anonymity and the confidentiality of their responses, as it created a clear line of accountability between respondents and their statements. I was particularly concerned that the organization – whose intention at least in part was to reveal drug use through testing procedures – may be moved to test all my respondents should one individual self-report as a user, as this arguably increased the possibility of their identification of drug-using employees (concerns raised by Draper, 1998; Wood, 1998; Alvesson and Deetz, 2000: 196; Richie and Lewis, 2003: 67-68; IIDTW, 2004). Moreover, it made the disguising of individual attributes from gender to organizational grade a more important and equally complex problem that would be further exacerbated should I have drawn insights based on these identifying factors. I was worried that this problem would be increased yet again should the organization insist on selecting respondents for me.

In light of this, I began to have serious reservations about my more controversial questions about drugs and individual behaviour – to explore the disciplinary effects of the drug test or individual responses to drug testing policies within an organizational setting. I decided therefore to explore only questions pertaining to individuals' thoughts, opinions and experiences of drug testing policies. Moreover, and in addition to my organizational sample, and as Collis and Hussey (2003: 147) and Saunders *et al.*, (2007, 232) discuss, I also chose to develop a snowball sample (which will be discussed later) using personal contacts who were subject to drug testing as a starting point from which to develop my sample, and

of whom I would be able to ask my more controversial questions. As Blaxter *et al.*, (2001: 163) acknowledge:

“Non-probability sampling approaches are used when the researcher lacks a sampling frame for the population in question...For example, if you were carrying out a series of in depth interviews with adults about their working experiences, you may be content to restrict yourself to suitable friends or colleagues. Or you may be studying an issue which is relatively sensitive, such as sexual orientation in the armed forces, and have to build up a sample confidentially and through known and trusted contacts.”

Within this sample the relationship between organizational drug testing policy and employees' habits *could* be explored.

Thus, my organizational interview schedule sought to explore three broad areas, divided into three phases. My first phase of questioning began by asking benign questions to derive biographical data - employment history, organizational grade/roles and responsibility and respondent familiarity with drug testing programmes. I expected this line of questioning to put respondents at ease and offer me the opportunity to build some level of rapport with them prior to asking more intrusive questions. Further to this and as already outlined, I also expected these factors to influence respondents' opinions of testing, or indeed drug use per se.

My second phase of questioning sought to explore individuals' understanding of the relevant drug testing policy. Depending on the organization where I ended up

doing my data collection, I was interested to see whether those individuals who had been employed prior to the implementation of testing held different views to those who joined after its initiation. I was also interested to explore the extent to which individuals understood the policy and especially the repercussions of a positive test. This would I felt have important ramifications for its success as a deterrent of drug use.

In my final phase of questioning I focused on individuals' personal responses to drug testing from their experience of testing procedures through to their experience of drug use in the workplace to their opinions of testing as a management tool. I wanted to see whether employees experienced drug use as an everyday problem in the workplace, particularly as this is a common justification for the implementation of testing programmes. Finally I sought to discover whether individuals' experience of being tested had altered their perspective of the testing policy. Thus my schedule fulfilled the requirements of my research questions.

Additionally, in my snowball sample interview design I sought to expand on the various questions noted above, developing the schedule to encompass a concern for individuals' drug taking habits including the use of alcohol. I was particularly interested in the regularity of use, and most importantly whether individuals (had ever) used during working hours. My final phase of questioning here explored respondents' reactions to drug testing policies, and most notably whether they felt these either deterred or identified users. I expected their reactions to be informed

by their habits – for those individuals who used drugs to have a negative reaction to testing policy and procedure and vice versa³⁰.

Although snowballing is undoubtedly a useful sampling technique to employ it also creates a number of difficulties. As Richie and Lewis (2003: 94) acknowledge, these problems involve sample generation which is often time consuming and presents various difficulties as the sample is continually emergent – dependant on each interviewee referring a new potential respondent. Moreover, a snowball sample is also likely to be more geographically dispersed than a single sample from one organization. This made it likely that I would only be able to perform one interview at any given time, in any given place, which would make the performance of interviews more costly. While making contact with and interviewing my snowball sample I simultaneously pursued access to an organization, aware that if I failed to achieve formal access I could always expand the former. Taking into account Saunders *et al.*'s (2007) assertion that integral to gaining access to an organization for research is time, both to negotiate with organizational gatekeepers and contact respondents, I began looking for organizational access in September 2004, the beginning of the second year of my PhD.

First I contacted British Airways, initially via telephone in a bid to identify an appropriate liaison person. Then, via e-mail, I sent all details of my request, including a covering e-mail explaining my situation and research interests, a copy of the proposed interview schedule (to which I offered them – the Human

³⁰ Interview schedule is in Appendix One and as explained later, in the end, this was the only one used.

Resource Manager - the opportunity to express any objections), an informed consent form and reassurance that anonymity of the organization and its respondents would be maintained at all times. However, despite numerous follow-up e-mails and telephone calls it took until May 11th 2005 for this individual to formally refuse access. Subsequent to this I immediately approached Network Rail, who formally rejected my request for access on July 29th 2005 - a somewhat more prompt response than British Airways. But as is obvious from the above discussion, these rejections took roughly eleven months and occupied valuable time. As a result I chose to pursue my aforementioned contact, who was a senior manager in Delta.

In the following sections I shall discuss how my research actually unfolded, from the development of my snowball sample and the negotiation of access to Delta to the time and motivation that the pursuit of such a sensitive topic eventually demanded. Importantly, through personal perseverance, valuable and interesting data was eventually successfully collected. Interestingly this discussion also suggests that organizational bureaucracy - usually considered to hinder research - may in some cases be an advantage to data collection.

However, to briefly recap for clarity, at this juncture I had already developed more than one iteration of my research methodology prior to seeking physical access to an organization. These included a move from a comparative study to focusing on a single organization and a reconsideration of my sampling strategy which resulted in the development of an additional snowball sample. As O'Connell Davidson and Layder, (1994: 171) Alvesson and Deetz, (2000: 192)

Blaxter *et al.*, (2001: 29) and Easterby-Smith *et al.*, (2002: 71) all acknowledge, in gaining access to an ideal case the researcher may encounter a number of difficulties, and organizations may have a variety of reasons for denying the researcher access - as my failure to gain access to British Airways or Network Rail demonstrates. This however resulted in the pursuit of access to my third choice 'fall back' organization, Delta. Their testing policy was far less extensive and applied only to a small number of individuals working in specific safety-critical environments.

Achieving organizational access and doing the snowball sample

As detailed throughout my literature review and pointed to in the preceding discussion the issue of drugs, their use and organizational testing policies is controversial and sensitive subject matter. This was demonstrated by the rejection of my access request by both British Airways and Network Rail, who simply refused me access rather than entering into any process of negotiation, despite my attempt to limit their concerns around asking their employees controversial questions and organizational anonymity. Indeed as O'Connell Davidson and Layder (1994: 171) acknowledge, this refusal was likely to be founded on a concern about the way in which the organization and its practices may be depicted. Moreover, as Easterby-Smith *et al.* (2002: 72) suggest, it was unlikely that either organization could see how involvement with my research may be of any benefit to them (see also Saunders *et al.*, 2007: 164). I therefore

made my initial approach to Delta during the first week of August 2005 via an existing personal contact, which as Saunders *et al.* (2007: 168) note may greatly improve the possibility of gaining access. Indeed, they suggest the knowledge that these individuals have of us enables trust in our intentions and assurances about the use of data, and subsequently facilitates credibility.

During this time I also pursued my snowball sample. In light of the response from British Airways and Network Rail I was unsure whether Delta would grant me access and thus, as already stated, the snowball sample ensured that some data were collected regardless of whether formal organizational access was achieved or not. No definitive numbers had been established prior to the uptake of this sampling method predominantly because of the problems concerning organizational access – it was possible that the snowball sample itself would be my only data collection avenue and therefore may have had to be expanded. Further, as Saunders *et al.* (2007: 233) acknowledge, the sample size for snowball sampling techniques is always ambiguous and dependent on your research questions, which are potentially subject to change. I therefore planned to extend my snowball sample if I was unable to achieve formal access to an organization. Moreover, in light of my research intentions - to gain an in-depth qualitative understanding of employee reactions to drug testing - as Blaxter *et al.*, (2001: 64) acknowledge, it wasn't necessary for me to collect data from a large sample of respondents as I was less concerned with objectivity, accuracy and an ability to predict behaviour or make generalizations to the wider population.

The eventual size of the snowball sample was 10 people, half whom I knew personally and five to whom I was introduced via others. Nine were male. All except one worked in safety-critical environments including the police, the military and construction. The final respondent worked for a large city bank. The sample remained small as I not only achieved formal organizational access in the end but equally due to the nature of that access I was able to ask all my controversial questions at Delta, which negated the need to develop the snowball sample further - a point that will be explored further later in this piece.

Furthermore, although my initial snowball respondents were relatively young, as I was often able to interview their colleagues I was able to access individuals of a variety of different ages. Managing qualitative data can also be problematic should the sample become too large, given the time it takes to collect data, and to transcribe then analyse them (Blaxter *et al.*, 2001: 202). As Richie and Lewis (2003: 84) further state, in the pursuit of qualitative interviews an overall sample size is usually less than 50 anyway. With the onset of my research at Delta it became evident that my organizational sample would involve approximately 30 respondents. Thus, I aimed to interview 40 people in total across Delta and my snowball sample, keeping my data as Blaxter *et al.* (2001: 165) and Easterby-Smith *et al.* (2002:117) acknowledge, within manageable limits. And, data need only appear once to be part of the analytical map. As such I began to see repetition in opinions and responses as my snowball sample grew. This was particularly noticeable amongst those individuals working in a similar profession or work environment and further reinforced that there was little need for me to pursue a larger sample. It is also worth recording that, as all snowball sample

respondents were generated through already existing friendships the majority of these individuals had some prior knowledge of either (and sometimes both) my research or interview schedule.

Likewise, and as previously discussed, Richie and Lewis (2003: 94) acknowledge that the snowball technique is time consuming as sampling - who you interview - and sample generation - making contact with respondents - take place simultaneously. This similarly influenced my decision to put a stop to my snowball interviews at the onset of my organizational research. Indeed, as previously suggested, the geographical dispersion of respondents - from central London to Sevenoaks to Ipswich - made the pursuit of this sample particularly lengthy - the collection of ten interviews taking roughly ten months - a typical problem of this research technique as acknowledged by Blaxter *et al.* (2001: 25) and Saunders *et al.* (2007: 232). Moreover the majority of my respondents were either personal contacts or individuals who I had been referred to by the latter (friends of friends). Obviously the more distant my relationship was to individual respondents (friends of friends of friends) the less likely it became that people would agree to become involved. Thus, as previously suggested, the sample was becoming ever more difficult to expand. This may have had implications for the data I collected as individuals were likely to have some interest in the topic prior to interview. I certainly feel it enabled me to gather a good deal of rich and informative data from this sample.

Moving back to my organizational sample, although *official* access to Delta was achieved by the end of September 2005 *actual* access was to be a continual

problem. As Saunders *et al.* (2007: 164) acknowledge, many authors see access as an ongoing process. Although the reasons they mention do not explain my own experience (which will be discussed later) it is evident that access and the issues pertaining to it are context-specific. Indeed Easterby-Smith *et al.*'s (2002: 71) reference to this process as often involving “war stories” is undoubtedly an appropriate analogy for my experience. However, I would suggest that far from Delta being threatened by my research - as I would have expected in light of both the subject matter and subsequent responses from British Airways and Network Rail - my problems were exacerbated by organizational bureaucracy in which no one individual was apparently willing to take responsibility for facilitating my access to appropriate respondents. As Easterby-Smith, *et al.* (2002: 71) highlight, managers are generally protective of their time and it helps if they can see some personal benefit to cooperating or are interested in the research topic. The managers I encountered were reticent in terms of arranging the formalities of my project, notably access to respondents themselves, but rather sought to pass me to other colleagues or suggested that it was impossible to contact appropriate respondents. Thus my access was as Alvesson and Deetz, (2000: 192-194) suggest, subject to a long period of negotiation and multiple gatekeepers, as I will now go on to explain.

Internal confusion concerning who was responsible for Delta's drug testing policy initially caused a variety of problems after formal access had been granted. I was first referred to the individual who had been responsible for the development and initiation of the policy. This individual was reluctant to become involved with/ 'responsible' for my data collection and passed me on to a colleague - Dennis -

who was seemingly responsible for its current administration. I was thus unable to access the manager responsible for the development of Delta's drug testing policy despite formal organizational support for my research. The problems of commitment to my research continued with Dennis, who, despite access having already been approved, then proceeded to request details including who had granted me access and details pertaining to my research on multiple occasions. This culminated in me eventually meeting him at a central London Delta office at the end of October 2005. As Saunders *et al.* (2007: 166) acknowledge, goodwill on the part of the organization and its employees is vital at every level of access - my experience certainly bears this out.

There was also undoubted confusion over my research intentions. Having supplied Dennis with the details of my interview schedule, including an outline of my proposal and who I was hoping to talk to, I attended the aforementioned meeting assuming that we would then negotiate my access to respondents, including the role Delta intended to play in the selection of my respondents³¹ and when I would be able to actually do my research. However, the meeting turned out to be nothing more than a formality in which Dennis provided me with very little useful information but was keen to emphasize the problems that I would encounter in my research, from the difficulty of him establishing contact with those individuals subject to the drug testing policy (and the work this would take) to their geographical dispersion and the issues this may cause for my data collection. Dennis suggested that Delta possessed no single e-mail contact list for

³¹ As already suggested, and contrary to my initial intentions/ wishes I had assumed that my respondents would be selected for me by the organization themselves. This would allow the organization control over who I spoke to and thus subsequently to some extent control of information gathered, an issue I had thought would be pertinent to Delta in light of the sensitivity of the topic I am researching.

these employees and that it subsequently may be impossible for him to contact them. He equally suggested that, although he was prepared to contact these individuals with the details of my research, it was unlikely they would reply. Further to this, Dennis suggested that a questionnaire may be more appropriate due to the dispersion of individuals and their work commitments, and that such a method of data collection would also be more likely to yield responses.

Despite this, we agreed that Dennis would continue to pursue an appropriate contact list for those individuals subject to Delta's drug testing policy. However, after this meeting I was required to contact Dennis on numerous occasions to check on progress in this regard. This involved multiple telephone calls and e-mails in which I sought to follow up on previous telephone conversations. During this time I contacted Dennis roughly once every two weeks via telephone with one or two follow-up e-mails in the interim in a bid to get a response. Finally, at the beginning of May 2006 (eight months after access had been agreed) Dennis sent an e-mail detailing my research to relevant individuals, asking those interested to contact me directly to express their desire to participate. Ten days later I had not received any responses and contacted Dennis once more. Despite his statement that there was nothing he could do if individuals did not want to be involved, I subsequently received an e-mail from him acknowledging that Delta's e-mail address for this specific group of people had changed and that he had sent the request to accounts that no longer existed. Thus my request for individuals to participate in this research was finally sent on the 11th May 2006.

Undertaking the interviews at Delta

Evident from the above description of my experience of gaining access to Delta is that organizational bureaucracy acted as a barrier to my research. This resulted in a dramatic delay to the collection of my data of roughly ten months, from the time that I initially approached Delta to the undertaking of my first interview at the end of May 2006. It also required extensive perseverance and persuasion on my part to achieve my ends. Indeed the problems of data collection did not end in May 2006 when Dennis finally contacted relevant individuals with my request for participation. These problems were magnified not only by the speed at which respondents chose to respond to my e-mail to express their interest in participation - which varied from immediately to some individuals contacting me over six months later - but equally by the fact that they were scattered throughout Great Britain (from Cardiff to Felixstowe to Glossop). As a result these interviews, much like those with my snowball sample, necessitated a lot of time and resources to arrange and undertake a problem that both Blaxter *et al.* (2001: 25) and Saunders *et al.* (2007: 335) acknowledge may be a problem with data collection. Although I was fortunate to receive funding from my department in this regard to cover petrol and so on, my respondents were so dispersed, and subject to such varying work commitments,³² that it was difficult to do more than one interview in a day. Thus multiple journeys were required to enable my data collection.

³² Some individuals were office based whereas others worked 'in the field'

My Delta sample therefore became a self-selection sample and as a result was made up mainly of men, predominantly between the ages of 30 and 50; I had only one female respondent. This imbalance may have various repercussions for my findings. In an ideal world as already stated my sample would have been mixed in terms of gender, age, service and occupation as I would have expected this to reveal different view-points. Moreover, as Silverman (2005: 264) points out: “informants have been shown to say different things to male and female researchers”. Thus my data is likely to have been effected to some extent by both the gender of my respondents (predominantly male) and my own gender and how that was perceived by my respondents. The self-selection issue may also have affected my sample’s responses in another way – it is possible that a certain type of individual responded, one who had a particular type of experience of drugs/ drug testing in the workplace or at very least had some prior interest in/ opinions on the subject prior to my request for interviews. However, as stated with my snowball sample, this is as likely to produce rich and interesting responses as to ‘skew’ data in problematic ways.

Furthermore, and again as a direct consequence of respondent dispersal, three of my interviews were conducted over the telephone. Collis and Hussey (2003: 176) acknowledge that telephone interviewing can provide a number of benefits “as it reduces the cost associated with face-to-face interviews, but still allows some aspect of personal contact”. This technique certainly greatly increased the speed with which data could be collected, as opposed to a three hour drive to the relevant destination (Wales) followed by an hour long interview and the likelihood that no more than one interview could be completed in one day. This

enabled interviews which may otherwise have been impossible, as Saunders *et al.* (2007: 341-342) acknowledge

“This method may allow you to make contact with participants with whom it would be impractical to conduct an interview on a face-to-face basis because of the distance and prohibitive costs involved and time required.”

However, Saunders *et al.* (ibid) also note a number of problems that may be encountered in telephone interviewing. Importantly they suggest the telephone interview may inhibit the development of personal contact with individuals which facilitates trust - of particular importance when asking sensitive questions like mine - and subsequently may reduce the willingness of individuals to engage in exploratory discussion. Equally, though, the telephone interview may *assist* in individuals' responsiveness, *reducing* embarrassment over answers to sensitive questions - for example, a description of giving urine samples under controlled conditions for the purpose of drug screening in my data collection.

Indeed, a number of practical problems *were* encountered during the utilization of this technique. During my first interview I experienced difficulties with my recording equipment which resulted in some of the data being lost as it was too quiet to hear and subsequently transcribe. This resulted in a change of technology from recording equipment that plugged directly into the phone to the use of the speakerphone option and conventional recording. Although this allowed for all data to be heard it still affected the clarity of the recording, again making

transcription more difficult. Further to this and as Saunders *et al.* (2007: 342) acknowledge:

“[T]he normal visual clues that allow your participant to control the flow of the data that they share with you would be absent [in a telephone interview]. With telephone interviews you would lose the opportunity to witness the non-verbal behaviour of your participant, which may adversely affect your interpretation of how far to pursue a particular line of questioning. Your participant may be less willing to provide you with as much time to talk to them in comparison with a face-to face interview.”

Although my participants at no point implied that there were any time restrictions on the interviews, the three telephone interviews were generally shorter than those performed face-to-face, suggesting that there may have been issues that I could have explored further. Moreover on a personal level, being unfamiliar with this interview technique I felt disassociated from my respondents and found it far more difficult to engage with them than in conventional face-to-face circumstances, as the telephone changed the ‘rules’ of interaction. However and as previously mentioned, it did enable these interviews to be performed and some data to be collected. Thus, as is characteristic of empirical research and the problems embedded in its performance I was not always able to do what I had hoped.

In my Upgrading Proposal and as already noted, I had furthermore expressed the desire to interview managers i.e. those individuals who were responsible for the

development *and* administration of the drug testing policy. However due to the confusion concerning who was responsible for the policy, I was unable to do this at Delta. There seemed to be a lack of clarity concerning the nature of the policy, who it applied to and why and how it was administered, with little uniformity between different areas of the country. Also, and to reiterate, from my initial request for access to the completion of my final interview my data collection at Delta took nearly thirteen months, during which, as illustrated above, a vast array of problems were encountered.

As the discussion above illustrates then, my research was subject to a variety of difficulties. But there were nonetheless a number of benefits that equally resulted. Most notably and ironically these positives were a direct result of the bureaucracy encountered at Delta. As indicated above, individuals who wanted to participate in my research were asked by Dennis on behalf of Delta to contact me directly. Importantly, and in relation to this, I was not required by either Delta or Dennis to reveal which individuals acted as respondents nor was I required to give the company access to my data analysis. This had a number of implications regarding to the anonymity of my respondents and the confidentiality of the data.

Delta (or Dennis) chose to play a minimal role in my data collection, in the end doing no more than facilitating my contact with respondents. One of my primary concerns when designing my interview schedule had, as already stated been a concern for anonymity – that a drug-using individual may incriminate themselves and subsequently be identifiable by the organization. This had also facilitated the development of my snowball sample which ostensibly enabled me to ask

respondents controversial questions concerning their drug-taking habits. However, with the removal of organizational ‘influence’ over my sample and Delta’s apparent lack of interest in my research findings, I was able to ask organizational respondents those questions which had previously been reserved for my snowball sample. This enabled me to consider more clearly the relationship between Delta’s drug policy and employee drug-taking habits.

My research then has faced a number of different challenges which have required a great deal of perseverance to overcome. However, despite this, some of these challenges and difficulties have had positive effects – and most importantly some form of empirical data has been collected on this controversial and sensitive topic.

Summary

To reiterate then, one of the biggest achievements of this doctoral project has been the collection of data in an area where there is no prior empirical research that I have been able to locate, namely employee understandings of and responses to organizational drug testing. As has been detailed above, both organizational access and my subsequent data collection faced various problems and took a total of seventeen months from initial contact with my first choice organization (British Airways) to the completion of data collection. Over ten months of this time was spent negotiating actual access to Delta *after* formal access had been granted. Moreover, as has also been discussed above, a number of compromises

had to be made in the quest for data. However, and again as established earlier, my research never sought to tell the ‘truth’ about employee responses to organizational drug testing policies. In this light, although it did not fulfil my initial intentions³³ it still contributes to a field in which there has been no empirical data collection, exploring a topic that is surrounded in controversy. Thus the fact that data were collected at all is of vital importance. Indeed, to restate with the sentiment that has informed this project throughout, “In the conflict between the desirable and the possible the possible always wins” (Buchanan *et al.*, cited in Saunders *et al.*, 2007: 165). Ironically in this case the possible also turned out to be reasonably desirable.

In the following paired discussions of chapters eight and nine I shall consider the data gathered with respect to employee understandings of and reactions to drug testing and how these relate to the themes in the previously discussed literature.

³³ To research individuals working in both a safety-critical and non safety-critical environment

CHAPTER EIGHT

Analysing the data: on employee understandings of and reactions to drugs and drug testing: 1

Introduction

In the following paired chapters I hope to explore the relationship between the literature discussed in the previous chapters, my research questions and my data. In doing so I shall consider the links and disjunctures that exist between these elements of my thesis, revealing the many nuances that permeated my data in particular. Thus I will return to the key discussions of the Labour of Division, panopticism and WLB, to see whether the various issues and concerns raised by this conceptual material with respect to drug testing are revealed in my data and what this suggests about my research questions. As outlined in my introduction and reiterated in my methodology, my research objectives were to:

1. Examine the extent to which employees accept, accommodate or resist drug testing policies.
2. Consider what the ethico-political implications of these policies may be for individual employees, organizations and society at large.

These objectives have been explored through the utilization of semi-structured interviews with employees of Delta, a major UK telecommunications company,

and a snowball sample comprised of individuals from a range of professions that are subject to drug testing, including the army, the police service, construction and banking. All respondents and the organization have been given pseudonyms to protect their anonymity and to limit concerns around individuals incriminating themselves as practising undesirable/ deviant behaviour (i.e. drug use).

Exploring understandings of drugs and drug testing via the Labour of Division

As previously discussed, the Labour of Division as a concept seeks to reveal how we organize the world around us. Cooper (1997) suggests that our perceptions of the world and the development and maintenance of social order can be illuminated by the Labour of Division and its reified either/ or divisions, which both characterize our understandings of the world (in conceptual terms) and help us to make sense of it (Labour of Division as praxis). Thus, the Labour of Division seemingly captures societal understandings of drugs as expressed, for example, through UK government claims to be fighting a 'war on drugs'. These discursive divides of good and bad, legal and illegal and so on simplify the world, filtering the vast amount of stimuli we apprehend in our everyday lives and making the world more knowable and navigable. So the Labour of Division and its binary categories are ostensibly useful in revealing our social praxis surrounding drugs.

These dualistic sense-making tools which enable us to understand and position ourselves in relation to others and the world around us were likewise explored in my empirical research, which in fact indicates the value of the concept in revealing respondents' understandings of drugs, and subsequently drug testing. This is illustrated by Ken - a customer service engineer for Delta who had been subject to drug testing for the last six years - and his response to drug testing:

Interviewer: Overall do you think the [Delta] drug testing policy is a good idea?

Ken: Yes

Interviewer: Why?

Ken: Because I wouldn't want to work along[side] someone who is impaired by drink or drugs and, especially if you're driving somewhere, I despise people that drink and drive. So anything to do with that, definitely.

Apparent in Ken's response is the assumption that drug taking is undesirable behaviour which impairs performance at work. His comments are consistent with the previously discussed discursive justifications for the illegality of certain drugs in the West, and the stereotypical image of the drug user. They conform to the either/ or divide which associates (alcohol and) drugs with the negative/ posterior category in the binary. This type of understanding continued to characterize the

interviews, as further revealed by comments made in response to the same question by both Kurt (a field engineer and employee of Delta for thirty five years) and Darren (a customer service coach - or senior engineer - who had worked for Delta for a similar length of time):

Kurt: Drugs are getting more recreational and more widespread in our society and not just from my point of view. But if I was out working on a building site and some idiot [who] had been out snorting coke the night before dropped a hammer on my head then I'd look at that and think it could of [sic] been the reason why. So I like everyone in my work area to be safe and I think if it does impair them then it drops down that level of safety.

Darren: For everybody's safety and just well-being and if you come to work and you want to work and you're paid to do a day's work then you don't want everybody around you floundering around under the influence.

Kurt and Darren, like Ken, echo broader discursive assumptions that drug taking is dangerous and subsequently support drug testing at work on the grounds of safety. As acknowledged by the IIDTW (2004: 10) safety may be a key reason given by organizations for introducing drug testing, reasoning that, as Kurt's and Darren's comments suggest, this resonates with employees.

In each of the above data extracts we can see the assumption that drug use has negative implications within the workplace that extend *beyond* the drug-using individual – i.e. that drugs are dangerous at work. These opinions conflict with conclusions drawn by Draper, (1998), Wood, (1998) and the IIDTW (2004: 43) who are critical of the purported link between drug use and accidents in the workplace, revealing that there are few foundations for such a causal link and rather that increased accident levels may be caused by other factors such as extended work hours and fatigue. Nonetheless, these data do suggest either/ or categorizations underlying respondents' understandings of drugs which can be illuminated by the conceptual mechanism of the Labour of Division (Cooper, 1997). Indeed, many of my respondents suggested that they had *always* been anti-drugs use, further reifying and perpetuating the categories of good/ bad, legal/ illegal, as revealed below by snowball sample respondents Rick, a police officer, Robert, a health and safety officer for a construction company and Sid, a construction worker. These data were all generated in response to the same question:

Interviewer: Has your experience [of drug testing] changed your view of drugs or drug taking?

Rick: Not really, I never liked it in the first place.

Robert: No, as I am particularly anti any illegal drug use.

Sid: No not really, it's not made any difference. I've always been against it.

Thus, these respondents' understandings of drugs and drug use again reflect the dominant societal discourse on drugs and subsequently reaffirm the division of drugs into either/ or, good/ bad categories. Moreover, these data also suggest the naturalization of these divides in so far as they seem to be stable over time, each individual suggesting that they have *always* been anti-drugs use. The stability of these understandings of drugs again indicates that they are predicated upon a belief in 'inherent' characteristics through which drugs are differentiated into binary categories. Hence these categories are seemingly naturally given, and become reified as truth.

Of course these either/ or divisions around drugs also form the foundations of organizational drug testing policies, as illustrated, *inter alia*, by the previously discussed justifications for testing of the US federal workforce - namely that it will improve worker productivity and health and safety in the workplace (US Executive Order No 12564:1986, cited in Brunet, 2002: 1999). The development of drug testing, and its ability to identify 'undesirable' drug use, is predicated upon seemingly clear and uncontested conceptions of what is right *or* wrong, legitimate *or* illegitimate drug use, divides which prescribe what we should know in advance (Munro, 1997). This translates into the idea that drug use by employees is undesirable, as it has negative implications for workplace safety, efficiency and productivity, organizational reputation and employee health, and

moreover that drug testing can both identify and deter this undesirable behaviour (IIDTW, 2004).

Thus, employee drug testing rests upon the assumed inherent goodness *or* badness of drugs which reflects the social order prescribed and maintained by the Labour of Division, not only enabling a differentiation between good/ acceptable drugs and bad/ unacceptable drugs but equally their users who are either good *or* bad for the employer. So the development of the drug test is likewise founded on the practice of dividing up the world: it is a mechanism of social sorting, a material example of the Labour of Division.

Moreover, as illustrated by Burt - an engineer for Delta who has been subject to testing for five years - respondents often echoed/ reflected these justifications for drug testing as legitimate.

Interviewer: Overall do you think the [Delta] policy is a good idea?

Burt: Yes, definitely.

Interviewer: Why?

Burt: Why?...You have to take into account your own safety, the safety of the people you are working with and the safety of the general public...you could endanger anyone of those, couldn't you, by your actions?

Robert further reveals how these simple either/ or divisions permeate respondent understandings: *“The building industry is a very dangerous industry [so] being impaired with drugs or alcohol is a very dangerous thing to do.”* Here he is accepting that drugs not only result in impaired performance but equally that impaired performance is dangerous and in doing so reflects organizational justifications for the development of testing. Similarly, despite not wholeheartedly supporting drug testing or accepting the demonization of drugs and their users - Derek - who had been tested as part of his former role as officer in the Royal Airforce and who is now a barrister, acknowledged the simple divisions upon which testing was justified: *“There’s a sort of sense in which people say drugs are bad, therefore drug testing must deter bad behaviour”*. Like Burt, Robert and Derek accept or acknowledge justifications of drug testing as legitimate. Their accounts may also reflect the nature of their work environments in which safety is a key concern. In this instance, these data reflect the suggestion of the IIDTW (2004: 24) that drug testing may be justified and seen as legitimate in safety-critical industries where health and safety is of paramount importance and thus equally reflect the prevailing social order which suggests that drug use is dangerous.

Respondents’ understandings of the drugs and the drug test seem then to be generally informed by social stereotypes – either/ or categorizations - as characteristic of the Labour of Division as social praxis. However, the data did reveal this ‘common knowledge’ (Geertz, 1983) to be informed or nuanced by experience of drugs or indeed their users. As previously discussed, Geertz acknowledges that Labour of Division type stereotypes do inform what is seen

and understood. For example, Robert's contention that he is "*particularly anti any illegal drug use*" reveals his understanding of acceptable/ unacceptable drug use to be informed by the governmentally mediated division of legal or illegal and the subsequent positioning of drugs as good or bad.

But Geertz (1983) denies the universality of such formal divisions/ understandings, suggesting instead that the 'common knowledge' (which finds its expression in the formal legality/ illegality of drugs) fails to account for the influence of lived experience in producing what he calls 'local knowledge'. This effect of lived experience on individuals' understandings of drugs is also evident in my data. For example, Mark (an engineer at Delta) continued to use drugs on a recreational basis when not at work and did not consider drug use to be a problem in the workplace, something which I will return to later in these paired discussions. Similar sentiments were expressed by a number of other respondents who were of the opinion that recreational drug use was acceptable and not a problem in the workplace.

Fred, (a technician at Delta) was happy to work alongside an individual who used drugs recreationally in their own time - despite no longer using drugs himself - and Derek as implied earlier questioned the relationship between drug use and performance, acknowledging that the military had almost certainly lost good people as a result of drug testing. These responses illustrate how individuals' personal experience of drugs and their users may nuance understandings and create disparities between opinion and social stereotypes, creating 'local knowledge'. This counters the commonsensical managerialist assumption that

drug using individuals are undesirable employees and in fact suggests that drug testing may have negative repercussions for organizations with the loss of valuable employees.

It was also evident that some individuals' personal opinions of drugs had changed *over time*. To quote Fred again:

Interviewer: Have you ever taken drugs?

Fred: In my life?

Interviewer: Yes.

Fred: Yes.

Interviewer: Can I ask what and at what point in your life as well?

Fred: When I was between about 15 and 27

Interviewer: And can I ask you what type of drugs you were using?

Fred: Cannabis, Rocky, Black³⁴ ...

³⁴ By which I understood him to be referring to cannabis

Interviewer: And again taking you back to then how do you feel it affected you and it would have affected you in a work environment?

Fred: Erm now I think it's absolutely stupid but at the time it didn't worry me.

Fred's responses make it clear that he feels his previous use of drugs was 'stupid' but implies that he now knows better. However, as we have seen, he still has no problem with others' recreational drug use. Brad, (a technician at Delta) similarly attributed his 'stupid' behaviour in the past to being under the influence of drugs:

Interviewer: Have you ever taken drugs?

Brad: Cannabis when I was younger, and something else - not in this country... I did take hash and my cousin and I walked across the top of a waterfall and when I realized what I did the next day and how long the drop was, that's it, never again. It was a stupid thing to do at that time and never again.

We could speculate that engagement with full time work and subsequent career development had influenced Fred and Brad's thoughts on drugs as both associate drugs with their youth. Thus the categories of the Labour of Division are too rigid in this additional respect: they fail to allow for individuals' opinions to change over time – or indeed those of society more generally (Munro, 1997), as

arguably illustrated by Derek's comments on growing public awareness of a societal 'drug problem' since the 60's:

Interviewer: So you think of it [the drug test] as a demonstration of innocence rather than an intrusion?

Derek: I think most people have rationalized it. Having grown up in the late 60's drug testing and the impact of drugs has been so well documented that identifying drug users and either treating them or, if they can't be treated, getting rid of them simply was the norm, the organizational cultural norm.

But this is not to suggest that direct experience of drugs will *necessarily* result in a more 'positive' outlook. Indeed, Robert the health and safety officer, who identified as having had a drug 'problem' during his 20's, was as we have already seen now very opposed to any form of illegal drug use. However he did prefer a drug testing policy that offered rehabilitation rather than that utilized by his company of instant dismissal.

On the one hand then, social stereotypes produced by the Labour of Division make the world knowable and navigable, enabling individuals to process/ understand situations, particularly ones that they have not themselves experienced (Geertz, 1983; Cooper, 1997). But the above stories equally illustrate the importance of experience/ 'local knowledge' in changing/ developing individuals' opinions beyond these social stereotypes, creating richer and more nuanced

understandings. The Labour of Division then could be seen, as suggested in my literature review, to offer an overly simplistic view of the world and is subsequently unable to account for the various nuances that inform individuals' opinions. My data indicates that experience of drugs and drug use seemed to result in a more complex understanding of drugs which the Labour of Division as a concept fails to account for (Munro, 1997).

The preceding exploration of the Labour of Division as conceived by Cooper (1997) and the data has revealed some interesting insights into respondents' understandings of drugs and subsequently the drug test. In the following section a detailed consideration of the data continues with respect to the earlier conceptual discussion of the Panopticon, discipline and biopower which was concerned with the apparently surveillant capacity of the drug test and its potential to invade individuals' private lives.

Exploring understandings of the drug test as surveillant

In chapters three and four it was suggested that the drug test was an example of Foucault's (1977) conception of the disciplinary mechanism of panopticism, seeking to check an employee's behaviour against organizational norms and expectations. Manifested in drug testing as we have already seen, are various assumptions, namely that drugs and their use are abhorrent/ undesirable (IIDTW, 2004). The drug test intends to render individuals behaviour visible and

knowable, creating the possibility of judgement against accepted modes of behaviour, the capacity for employees to internalize managerial norms and the possibility of punishment where deviance is identified. As previously noted, this supposed ability of the test to identify deviant behaviour is integral to its disciplinary effects. Further to this it was suggested that drug testing extends managerial surveillance to see beneath the skin and thus reveal that which has previously been hidden, permeating bodily barriers that obstruct other 'vision machines' including the CCTV camera (Parenti, 2002) and key-stroke monitoring (Poster, 1990).

Moreover, the previous discussion suggested that the drug test is a biopolitical technology, comprising of "numerous and diverse techniques for achieving the subjugations of bodies and the control of populations" (Foucault, 1979: 140) as it intends to discipline an entire workforce to be drug-free through the establishment of bodily norms. These biopolitical intentions are achieved through the disciplinary mechanism of the test itself, which individualizes, normalizes and judges: thus regulation of the masses is achieved via the individualising gaze. These biopolitical and disciplinary effects are of course also dependent upon clearly defined understandings of drugs and their users, on the definitive categories of good and bad which enable the previously discussed 'sorting' of employees against predefined norms and expectations.

Also embedded in the disciplinary and regulatory power of employee drug testing, at least as I conceptualized it earlier, is the notion of war against the deviant drug-taker. Thus, restating the previous discussion, it is my contention

that employee drug testing is an extension of Virilio's infowar (Armitage, 2000: 6), as epitomized by the proclaimed governmental 'war on drugs' and the capacity of the drug test to invade the body and reduce an individual to their bodily data. The drug test thus becomes a weapon of discovery. Moreover and again as previously discussed, the drug test is seemingly able to conflate time, revealing the recent past and thus previously unseen 'private' behaviour outside the workplace. So the technology of the test reveals previous behaviour so as to judge present impairment and predict future conduct³⁵ and signifies a move to what Virilio refers to as Dromocratic society, that is to say, compressing time and acting as a lens on perception. Thus, individuals are reduced to their bodily data from which their present and future 'fitness' for work can be 'known'.

Returning to the data in light of this conceptual framework, Tom (an engineer and snowball sample respondent) described the drug testing procedure at his previous employer, the London Underground as "*pretty clinical...they supervised you as you went into the toilet and someone stood around the back of it and you had to give them the sample*". This description reflects Foucault's discussion of disciplinary techniques, most obviously the process of visual, direct supervision during the drug test. Jamie's (a policeman and former soldier) experience of drug testing procedures in the Army further reveal them to be panoptic:

Yes, first of all you'd get briefed [about what would happen], then they'd feed you a lot of water obviously to make you go [urinate], and then it would be a one to one. Obviously they'd register you on a computer, and

³⁵ Both the policies of instant dismissal and rehabilitation assume that employees who test positive for drugs will use them again.

then it would be a one to one person who'd take you to the toilet and they'd actually watch you pee.

In this instance not only is the process of testing subject to specific procedural guidelines, but individuals are subject to explicit surveillance – they are watched while they urinate. Further to this, Jamie recounts, they were equally required to empty their pockets and to declare in a pre-test interview any over the counter or prescription medicine they were taking and food that they had eaten so as to eliminate other substances that may influence the test. As also suggested in the earlier conceptual discussion through the pre-test interview the drug test potentially extends its surveillance beyond the search for illegal drug use and reveals other aspects of individuals' private lives, including their relative health and lifestyle, as Carl's (manager of Delta's private services team) experience of having to declare prescription medication reveals – which shall be discussed in more detail later. In this instance we can also see how the test focuses on the minutiae of behaviour and reduces individuals to the sum of their bodily data.

Also vital to the disciplinary power of the drug test is the aforementioned capacity to reveal behaviour that deviates from the accepted organizational norm. In this instance only Robert and Steven (a project manager in the same construction organization) had first hand knowledge of a positive drug test, despite all 40 respondents being subject to testing policies:

Steven: It's like these two guys, they weren't habitual users, it was a party and they thought they'd have a go, and about a week - 10 days later they got tested.

Interviewer: So do you think that the drug test is effective at identifying individuals who use drugs?

Robert: It would be effective at finding out which individuals were using drugs, and it has proved to be the case within our company.

On the one hand these comments are illustrative of the disciplinary capacity of the drug test, its ability to render individuals visible and subject to judgement. Indeed, the dearth of individuals who personally knew of a positive test could be illustrative of the disciplinary *success* of the drug test. However, on the other hand, this may equally be illustrative of its *failings*; an inability to identify deviance.

Further to this, the data also indicates the biopolitical or regulatory intentions of organizational drug testing policies. As previously established, each individual, from both samples, was subject to a drug testing policy that applied to their workforce population and thus apparently intended to regulate these groups through the instantiation of a drug-free norm. Jamie's description of drug testing in the Army is especially suggestive of the intention of regulation:

Jamie: It was an independent team, they were a civilian team, totally independent from the Army. They used to come in, shut the camp down. The only people that were aware they were coming would be the commanding officers and they were under all sorts of rules to stop them disseminating that information. So they got into the camp, closed the camp down. People used to come on to the camp but no one was allowed to leave the camp as it was closed down. And then everyone who was on the camp, military-wise, would throughout the day be drug tested on a one-to-one basis.

Interviewer: For example Colchester Garrison...?

Jamie: Well there's lots of different camps at the garrison so they'd close part of it down.

In this example, one hundred percent of a population were tested on a given day thus in this instance disciplinary/ individualising power and biopolitical regulatory power are simultaneously evident through the drug test.

At the same time however, the data revealed that many individuals had little if any knowledge of their employers drug testing policy. I have already reiterated that the practice of drug testing is an instantiation, or rather material effect, of good and bad perceptual or discursive divisions, founded on assumptions concerning the various properties of drugs and their subsequent undesirability (Munro, 1997). The various forms of testing, pre-employment, random and for-

cause, thus aim to catch different types of ‘dysfunctional’ employee (IIDTW, 2004). As already established, pre-employment testing aims to identify the individual who is a drug user prior to employment and requires all new recruits to be tested. It aims to identify individuals who already use drugs and thus people that organizations don’t want to employ. Random testing aims to identify the habitual drug-using employee who is a ‘chronic’ or ‘ongoing’ HR ‘problem’ and for-cause testing aims to identify individuals whose drug use may have resulted in an accident at work and so has health and safety implications (Borg, 2000; Sheppard and Clifton, accessed 10/01/07). The majority of my respondents were subject to random and for-cause procedures, regardless of industry sector. Interestingly only the police service utilized pre-employment testing as a means of ‘rooting out’ the drug user prior to employment.

Most respondents were also aware of the testing procedures to which they were subject and seemed to have a basic understanding of the implications of this, notably that testing would be done at infrequent intervals and that they would be given some form of notification of an impending test. This is illustrated by Antony, who has been a Delta employee for twenty one years and trains new recruits:

Interviewer: Right, and so what is your understanding of this [drug testing] policy?

Antony: I understand that at any time I can be called in for random drug tests, alcohol ‘tests’ etc, during any time, or [e]specially when I go [into

the safety-critical environment] they can call me before I even go on there so at any time they can test.

Luke, a senior engineer at Delta, offers a similar understanding in his response to the same question:

Luke: I only... we haven't touched on it again since the course over two years ago but my understanding is that you can be called at any time to give a random test. I haven't been since the initial medical and I don't know of anyone who has within Delta in my area. I don't know an awful lot about it, I have to be honest, other than you can be checked. We've been made aware that, if you work on Alpha's³⁶ site and you've been like most people had a drink the evening before, you have to be aware that if you're working on Alpha's site you could be tested at any moment, and obviously you would be chucked off and disciplinary action could be taken against you.

Nonetheless, what was much less evident was knowledge of the *implications* of drug testing in the respondents' 'work' places. Respondents from Delta for example expressed a variety of opinions concerning the possible repercussions of a positive test result – listing instant dismissal from Alpha, dismissal from Delta and rehabilitation among the options. Matt, amongst others, suggests that a positive drugs test would result in instant dismissal, whereas Brad suggests that:

³⁶ As aforementioned Alpha is the external contracting organization that necessitates and controls drug testing of Delta employees

Delta's policy on drug and alcohol abuse is, erm, you obviously speak to your manager and there is help from our HR and various other organizations to do their best to get you off [the relevant substance].

Here, Brad argues that Delta is pro-rehabilitation rather than dismissal, contradicting the view of respondents like Matt. Thus, the regulatory intention of the drug test is limited by the lack of a clearly understood policy. As previously discussed, the IIDTW (2004) suggest that a drug testing policy needs to be transparent as well as fair to ensure its effectiveness and to prevent the policy being undermined. Respondents' lack of knowledge and understanding of the Delta policy may undermine its disciplinary effects and make it vulnerable to challenge. The experience of Luke, whose manager had refused to release him from his work responsibilities to be tested by Alpha, revealed this form of surveillance can be refused without any repercussions.

I think it may be three years ago, my manager received an email asking for me to go for another test, and he refused to let me go because it meant going to London and I never ever went. So I'm not quite sure, I did get the impression on the course that if you're asked to go that you go. But I'm not quite sure it's taken as seriously as we were led to believe.

This possibility for individuals to refuse the surveillance of the drug test significantly limits its disciplinary and biopolitical effects.

The surveillant technology of the drug test is also seemingly more invasive than those of CCTV, key-stroke monitoring etc, able to extend management vision beyond that which is available to the naked eye or the technology which supports or enhances it. Likewise the drug test can also be seen to constitute an invasion of bodily privacy. Although direct acknowledgement of its ability to reveal internal bodily data was not explicitly mentioned in my interviews, the collection and dissemination of such information *was* implied to be invasive. As alluded to earlier by Jamie and Tom, drug testing procedures usually require encroaching on the privacy and perhaps dignity of those tested. As Jamie further illustrates:

Interviewer: They'd actually watch you pee?

Jamie: Yeah, and they'd be people two or three hours in the toilet. Obviously people when they're a bit nervous can't go, can they? You know what I mean. So they're actually watching to check you're not scooping water out of the toilet, like people do.....that was what happened initially when they started doing it. They [also] found people would pee on behalf of other people to try to get away with it, and then it was brought in that you were actually watched.

Interviewer: So you couldn't have the cubicle door shut?

Jamie: Nope, cubicle door'd be open and there would actually be someone there watching, seriously.

Interviewer: So in your experience did you find this intrusive or was it just part of the job?

Jamie: The first time, yeah, a bit, but you knew you weren't getting out of it so you were there until it [urination] happened basically.

Although no descriptions of such carefully managed drug testing were offered by other respondents it is important to note that drug testing in the UK military is more established than in civilian organizations. Jamie is also one of the few respondents who has any knowledge of active resistance to the test, as illustrated above - a point that will be developed later - thus more stringent testing procedures may go hand in hand with resistance as it develops.

The drug test may equally invade the private sphere of the home, dictating acceptable behaviour there as well as at work, because it is able to reveal what an individual has consumed in the recent past and thus usually during their leisure time. This power potentially extends the managerial gaze, as the quote from Steven, part of which has already been discussed, illustrates:

*It's very difficult, you are telling people what they should do in their own time and some drugs stay in your system. It's like these two guys, they weren't habitual users, it was a party and they thought they'd have a go, **and about a week 10 days later they got tested.** So it's very tricky, but there needs to be something in place. (emphasis added)*

Individuals here were identified as drug users some ten days after their initial ingestion of cannabis at a party. In this data extract we can see how the drug test blurs previously accepted boundaries of work and life, creating the individual as accountable at work for their behaviour at home. This example is also illustrative of the drug test as a democratic technology revealing individuals' previous behaviour. Moreover, at the point that these individuals tested positive for marijuana they would not have been impaired by its effects. Despite this, these employees were dismissed in light of their positive test, presumably because Steven's employer saw this as predictive of their *future* conduct. Interestingly, Kevin - a planning officer at Delta - expresses his discontent about this issue:

Yes, erm that's where I've got a problem with it of course. You know, what I do out of work shouldn't really be the company's problem. I can see where it does become their problem if it stops what I could work on, what I'm able to do; I mean do, what I'm here to do. So that's why I would accept it up to a point. But it's a lot like Big Brother watching what I'm doing and I get a bit bolshy about things like that.

Thus for Kevin, drug use in an employee's private time should only be a managerial concern when it affects what the individual does in their work time, making it clear that from his perspective the legitimacy of the drug test is dependent upon this link being evident and proven. Nonetheless, respondents who expressed concern about this invasion of 'work' into 'life' often simultaneously acknowledged and seemingly accepted the managerialist

justifications for such procedures - most notably that drug use is dangerous and a threat to health and safety in the workplace. This is illustrated by Sid:

Interviewer: Overall, do you think drug testing is fair?

Sid: Yeah, same thing for everyone isn't it?...I think it invades your privacy but on the other hand if you're dangerous at work then you need to be invaded

Moreover, although Sid acknowledges that the test invades individuals' privacy, his response reflects the assumption that drug use is a threat to health and safety in the workplace and suggests that the invasion of the test is legitimate if people are 'dangerous' at work.

Moving on from this it is also evident in the data that some individuals have altered their behaviour in light of the introduction of these policies. However, this encompasses their alcohol rather than drug consumption. As Carl and Liam – also an engineer at Delta - amongst others suggest, people no longer go to the pub at lunch time, a change that they attribute in part to the development of testing. Moreover Greg - a planning officer at Delta - suggests that people should not have two pints during an evening if they are subject to drug testing as it may cause a positive result. Similarly, although Liam sometimes consumes a pint or two during the working week he admits that this 'stresses him out'. These data indicate Delta employees in particular are changing their behaviour inside but also outside of the workplace to accommodate organizational stipulations of

acceptable behaviour. Thus work-life is infringing on home-life to some extent and prescribing what individuals should do in their own time reflecting the previous discussion in chapter five in relation to Hughes and Bozionelos (2007) McDonald *et al.* (2005) and Smithson and Stokoe (2005).

However, although these opinions suggest that drug testing has some, if limited influence on individuals' consumption habits, other individuals such as Tom - an engineer - and Ted - a sportsman - continued to use drugs despite being subject to testing. This is illustrative of Derek's opinion that, although drug testing may dissuade individuals from mixing drugs and work, he doesn't "*think it actually dissuades them from using drugs in the evening, especially drugs that work through your system quickly*" - an issue I shall return to later. Moreover, despite the above data suggesting that respondents have become increasingly aware and concerned about their alcohol consumption, many of them nonetheless reported having been hungover in the workplace on numerous occasions. Again, I will discuss this in more detail later in these two paired chapters.

Another facet of drug testing is its requirement for consent. Unlike other surveillance technologies such as CCTV or keyboard monitoring which usually operate without specific individual agreement, the drug test requires the individual subject to it to accede to being tested. It was suggested in the conceptual review that this may have important implications for the test – increasing its legitimacy in comparison to other technologies which survey individuals without consent. Interestingly, this issue seemed to have little, if any, implications for perceptions of legitimacy amongst my respondents. Although, as

Matt acknowledges, the drug test in the case of Delta required formal consent, with employees having “*to fill in a form that you have to agree to have it done*” this seemed to have no effect on individuals’ understanding of the test as an acceptable form of surveillance. A variety of opinions *were* nonetheless expressed concerning its legitimacy per se, largely reflecting individuals’ wider understanding of drugs and drug use as good or bad and thus in support of the workplace test.

However, some respondents at Delta did express a more complex understanding of legitimacy, suggesting that testing was only appropriate when they were working for Alpha and not in their everyday workplace. Brad for example said that:

I would be happy to have a drug test...depends how they go about it because obviously I don't work on Alpha [all the time], maybe I've gone four months and I don't work on Alpha and then they could be doing a project for about a week or so. So if it's an unannounced drug test and I'm not intended to work on Alpha property then I would be against it.

Although Brad is not concerned with being tested for drug use, he does express a number of reservations concerning *when* he should be subjected to it. He suggests that testing is only acceptable when he is working in the safety-critical environment at Alpha and that there is no justification for testing him during his day to day activities at Delta where safety is not a paramount concern. Thus, his

comments reflect the conclusions drawn by the IIDTW (2004) who as previously noted suggest that one justification for testing is a safety critical environment.

Thus far various themes considered in the literature review have been explored via my data, including the regulatory and disciplinary power of the drug test in practice, its infringement on respondents' personal lives and its capacity to identify deviance. The next chapter will move to consider the various limitations of the test and their implications for its disciplinary and biopolitical effects.

CHAPTER NINE

Analysing the data: on employee understandings of and reactions to drugs and drug testing: 2

Exploring understandings of the drug test as imperfect technology

As previously established, the drug test and organizational drug testing policies embody various panoptic and biopolitical intentions which have been shown to have some effect in the context of my data. However, my data also suggests that these effects are in practice somewhat limited. One of the primary disciplinary intentions of the drug test is, as already established, to discourage undesirable behaviour. This is achieved through its panoptic gaze. However, as likewise acknowledged in the conceptual review the gaze of the drug test is interrupted: individuals are only rendered visible at the moment of its enactment. As Steven likewise observes:

Interviewer: Do you think that testing is effective at deterring employee alcohol and drug use?

Steven: No

Interviewer: Why..?

Steven: Because it's random you get the attitude 'well, they'll never test me' and people feel that it infringes on what they do in their personal life and in their own time. Then I think most people carry on and do what they want, thinking 'well, you're not going to tell me what to do in my own time anyway'. And it [is] random so how likely is it to get caught?

Steven suggests then that the irregularity of testing reduces the disciplinary power of the drug test. Indeed, as the IIDTW (2004) argue, employees would have to be tested between three and five times a week for it to reliably identify and deter drug use. Importantly, Steven's comment also indicates that the drug test can undermine the notion of WLB intruding on individuals' personal time by seeking to prescribe the realm of acceptable behaviour outside as well as inside work.

Moreover, at Delta and in snowball sample organizations other than the construction industry, and as I have suggested earlier, *despite* the possibility of being tested, alcohol remained a problem. As Derek and Sam illustrate, respondents still consumed alcohol in leisure hours and continued to suffer the effects of alcohol at work.

Interviewer: Do you think that being hungover at work has impaired you?

Derek: Oh yes, it's not good, it is definitely...I did not feel good at the time nor do I feel it was particularly praiseworthy turning up...but it's a decision what to do, stay at home and pull the pillow over your head and go back to sleep and call in with a sicky or actually struggle into work

and perform badly. I don't know what the right answer is. My inclination is to come to work and sweat it out.

Interviewer: Have you ever been drunk or hungover at work?

Sam: Not drunk, very hungover!

Interviewer: So do you think that that's impaired your performance at work?

Sam: Greatly, especially when we go out. We work two or three days and then two or three nights and between the shift changeover you finish at seven in the day and then you're not in until seven the next night so we go out and get absolutely hammered, get home about two or three in the morning, go to bed, get up at five in the afternoon and go to work and then work a night shift until seven the next morning. So your body switches over on your time clock but you're so hungover so that if you end up with a sudden death or something and have to sit in a dead person's house for ten hours you just feel violently ill and you're not taking and stuff. It's just pants.

Thus the drug test according to these respondents fails to instantiate an alcohol-free norm. Police service respondents actually suggested that they were subject to suspicion-based alcohol *and* drug testing during their employment. However,

though police respondents (like Sam) suggested that they had been impaired by alcohol while at work *no* respondent had been subject to a breathalyser test. Thus, the lack of experience of for-cause testing is seemingly reflected in individuals' failure to discipline their behaviour. Further, Tom continues to use drugs although only on 'special occasions':

Once I was given the all clear [after the pre-employment test], it might be New Year or birthdays or something like that, maybe three or four times a year I may go and enjoy myself and take some drugs.

The above data illustrates that the biopolitical and regulatory intentions of the drug test are not necessarily fulfilled in practice. The drug test's capacity is also limited by a number of other factors. Indeed several questions were raised by respondents concerning its accuracy with a few discussing cases of false-positive test results as also noted by the IIDTW (2004). Rick acknowledged that he knew Lemsip (the over-the-counter cold and flu medicine) could cause a positive test result after the experience of a colleague, and Jim, a professional sportsman, also acknowledged the capacity of various medicines to affect the test:

Yeah, coughs and colds and things like that and Lemsips and stuff like that. Everyday drugs that your mum would buy for you or your dad would say take one of these' if you're not feeling too well. But I, like I said, we've got that little card, I might have it, I always keep it in my wallet or somewhere like that. It's like a little drugs leaflet I got given so it's the same size as a credit card.

So Jim actually owns a card given to him by his sporting body detailing potential 'everyday' adulterants. As previously discussed, Neerman (2006) acknowledges that these various adulterants have important implications for the accuracy and capacity of the drug test. Kevin's lucky escape from the more established technology of the breathalyser also illustrates the limitations of testing technology and the potential for false-negatives as well as false-positives:

Interviewer: Do you think it's possible to beat the test?

Kevin: Probably...I have actually got away with a breath test many years after I'd had nine pints, many years ago. But I got away with it, I was negative, so if I'm negative after nine pints, yeah, I'm sure people could get away with it.

Interviewer: And was that a case of getting pulled over?

Kevin: I had a crash; I smashed a motorbike against something else...after nine pints how can you expect me to remember to be honest? It was a long while ago as well.

Interviewer: So you actually were impaired and passed...?

Kevin: Someone had to hold me up to kick-start my bloody bike, that's how impaired I was!

Kevin's comments certainly imply that the breathalyser test is an imperfect technology. As the IIDTW (2004) acknowledge, these problems of accuracy also affect the drug test and are likely to be exacerbated by the fact that this technology is both newer and less established.

Relatedly, all respondents acknowledged that the policy in their organization meant they would have to declare any prescription medication or over-the-counter drugs they may have consumed in the recent past before being tested. This pre-test interview is intended to help negate the influence of substances such as Lemsip in causing false-positives, allowing for them to be identified in advance. However, as suggested earlier, the interview also potentially extends the intrusion of the drug test, allowing the organization access to an increasing level of personal information, as Carl's experience illustrates:

[P]ersonally I do take medication on a regular basis, I had to take that medication along...tell them what I suffer from, why I use it and whether there are any effects from that and because it's something I have had for many years I have no problems passing that information on to them.

Although, Carl was not concerned by having to divulge extra, personal information, other respondents *were* concerned about the intrusion of the drug test into their private lives. Moreover, it is the inaccuracy of the science of testing that necessitates the disclosure of such information. Indeed, the pre-test interview

is seemingly testament to the inability of the drug test to identify and separate illegal drugs from other harmless substances.

Further to this, respondents such as Kevin noted that individual differences, such as varying tolerance, may equally have an impact on the accuracy of the test:

Levels of what people claim, like the drinking and driving, the level set at impairing if you like might be set artificially low. People get tolerant to stuff don't they?, all sorts of drugs and drink and what's your impairment level might not be mine. So if you are doing a test with a standard level, this is the line above it you're impaired and below it you're not. It's a bit, I don't think it's that accurate.

Again as suggested in the conceptual review, potential differences in tolerance are formally reflected in guidelines concerning the different recommended weekly alcohol intake for each gender³⁷. Furthermore, in light of Horne and Baumer's (1991) findings that the effects of alcohol are influenced by the time of day it is consumed, it seems unlikely that other factors such as age, weight and metabolism will not also have some effect. Moreover, it seems likely, even commonsensical, that these factors will also have important implications for the drug test - most notably the cut-off point at which a positive test results.

Moving on from this, perceptions and understandings of the functions or outcomes of the drug test were also complex. A number of respondents

³⁷ As previously discussed in Chapter two the scientific evidence upon which safe limits of alcohol consumption are founded has been called into question. (Norfolk, 2007: News 6)

suggested that the breathalyser was a test of impairment, as epitomized by Gavin's statement that: "*if you have sufficient alcohol in you to fail a breathalyser test then you are impaired in work*". However, respondents from Delta also acknowledged that in their work for Alpha they were subject to a stricter breathalyser test. Thus they could be under the legal limit for driving but produce a positive test at work, as Darren acknowledges:

In other words if I had had a drink the night before and was absolutely safe to drive to come to work and then I was given a job to [do for Alpha] I would probably need to decline, as I would probably fail their test, although I would be [legally] safe to drive.

Thus, Alpha's breathalyser test does not conform to legal standards and seems to be based on zero tolerance of alcohol consumption by employers rather than legal definitions of impairment. Further to this, when asked whether they felt the drug test was an impairment test, individuals' responses were mixed. For example, Sam the police officer suggested (rightly) that the test is *not* an assessment of impairment:

Well the chances are, the situations where it would pick someone up at work would be if they have been over to Holland for a month and got absolutely out of their head for the month and then come back and got tested a few weeks later at work as you'd have the residual bit left in the blood stream. But it's not going to impair you in any way at work.

Importantly, due to his role in drug testing prisoners, Sam has some expert knowledge concerning the capacity of the drug test which is likely to be reflected in his opinion. Equally, although some respondents felt as we have seen that the test could accurately identify drug *use*, there were a number of questions raised about its ability to test for *impairment*. Lee noted that:

I don't think it will be [a test of impairment]. Just because you smoked some marijuana the night before it doesn't mean you're impaired at work the next day, but it stays in your system a long time...

Fred however thinks that the test definitely can identify impairment – although a number of other respondents suggest that this is more likely to be identified by colleagues, and is actually likely to be obvious:

Sid: I think that it's more likely that someone would identify someone they're working with as being not all there type of thing.

Kevin: No, I would have thought if they are impaired it should be obvious without a test...I would have thought that if someone's work was being impaired you'd identify that the work was impaired, but the drug test itself doesn't determine whether the work is impaired.

Thus Kevin is seemingly rejecting the connection between the drug test and impairment – and thus one of the key managerial assumptions that the drug test

identifies impaired individuals. Indeed the instantiation of the test itself suggests that this impairment would not be visible to the naked eye. Thus, respondent's opinions did not universally identify the drug test to be an impairment test. This has important implications for the legitimacy of the test as it seemingly negates the foundations upon which drug testing is justified.

Moving on from this the capacity of the test to identify drug use may, as again we have already seen, may be limited by the various windows of opportunity afforded by each drug. For example cocaine metabolites may be identified in an individual's urine for 2-5 days whereas cannabis has much longer residual time in the body. This has important implications for the notification period given for an impending test. Employees at Delta had varying experiences of notification periods, from one week to a few days. Ben, a field manager, knew of individuals who had been given a week's notice, plenty of time for a drug such as cocaine to leave one's system:

Ben: No, Delta would pay you [to travel to the drug testing site] but I suppose a lot of it is our guys get their work planned, so it's when they're given notice.

Interviewer: I don't suppose you know how much notice they were given?

Ben: I think it was something like a week, I'm sure it was something like a week.

Interviewer: They were given a week's notice?

Ben: Yes...

This contrasts to Antony, who also works for Delta who was given two days' notice of an impending test. This shorter period of notification should enhance the capacity of the test to identify drug users as it is within the aforementioned window of opportunity even for drugs which leave the system quickly:

Interviewer: And in regards to your last test, did you have any notice prior to it?

Antony: I think it was two days' notice I think they gave me.

Interviewer: Two days' notice?

Antony: Yes.

Another example was the police officers in my snowball sample discussing the services recruitment and selection procedure in which they were given roughly two weeks' notice of a pre-employment drug test. These time scales, which vary from two days to two weeks, affect the capacity of the test to identify drug use. Further to this, and to develop an earlier point, the regularity of testing has obvious implications for the capacity of the test to identify drug users. As aforementioned, the IIDTW (2004) suggest that testing needs to be carried out a

minimum of three times a week. Importantly, a number of my respondents from Delta, such as Ben, had only ever been tested as part of their initial medical check up, and the most regular testing was experienced by Derek as part of his routine medicals for the Airforce. Of the rest of my respondents no one had been tested more than three times during their employment or more than once in a year. Indeed a number of respondents from Delta acknowledged that the test was at best performed sporadically. They also felt that this influenced the ability of the test to identify impaired individuals as Ken, Greg and Carl all illustrate:

Interviewer: Do you think that the drug test is effective at identifying individuals who are impaired at work by the use of drugs and alcohol?

Ken: If they test them, yes, but it's having those tests.

Greg: Well if it was implemented it would find them out definitely, but like I say I've never seen anyone drugs tested or alcohol tested since I've been here.

Carl: No I don't think it does here. It doesn't happen often enough.

These responses mirror the previously discussed comments by Steven who suggested that the attitude of 'they'll never test me' is indicative of individuals' responses to random drug testing. Thus, the data implies that drug testing is not

necessarily done regularly or frequently enough – and this limits its disciplinary and regulatory power.

The above data, then, reveals that a number of factors could influence the capacity of the test to identify drug users, including its accuracy, windows of opportunity afforded by the ingested drug combined with various notice periods for tests and the regularity of testing. This capacity may be further limited by individuals resisting the test. The following section explores respondents' experience in this regard.

Exploring resistance, or beating the test

As previously discussed, an inescapable aspect of the drug test as a technological extension of Foucault's concept of panopticism is the notion of resistance. This he suggests is "inscribed in power as an irreducible opposite" (Foucault (1977: 96). Thus power and resistance are embedded within each other. Within my conceptual review resistance to the drug test was explored utilising various examples, from the extreme measures taken to beat the test by Tour de France cyclists (Voet, 2001) to the adulterated urine samples deployed at Hunterdon Central High School (*Administering the Test*, accessed 12/1/07).

Although it was suggested in the earlier review, the pre-test interview may provide individuals with the opportunity to 'explain away' their drug use, my data

did not identify an individual who had done this. I did however identify a number of other forms of resistance to testing. For example, the concealing of drugs through the use of masking agents and the use of clean urine was discussed by Ted:

Interviewer: Have you personally or do you know anyone who has successfully beaten a drug test?

Ted: Yes, a few people.

Interviewer: How did they do it?

Ted: Flushing their system³⁸, someone with a fake urine sample as well.

Interviewer: Do you know anyone that has tried and failed to beat the test?

Ted: Yeah at school, they tried the same method and some got away with [it] and some didn't. So that's why when we were at school we thought we could get away with it because it was just dodgy drug testing. You could say it was wrong anyway because you knew certain people got away with it and certain people don't so they would never have 100% success record at testing and if they don't it's always pretty ambiguous. You can always argue it out. You know what I mean.

³⁸ Products designed to flush the system seek to mask drug metabolites by diluting them in the body.

Here Ted implies that the imperfections of the test not only create the possibility for it to be challenged but equally affect its disciplinary power, suggesting that because individuals knew they may ‘get away with it’ the test had less influence. The use of fake urine was also discussed by Mark:

Interviewer: Do you know anyone who has tried and failed to beat the test?

Mark: No, but I could tell you, but it could be a bit of a shaggy dog story but I did hear of somebody. And again it was a friend of a friend’s story and it wasn’t recent. And they reckon I think he said a bus driver who liked to smoke cannabis and they were going for a screening and they took someone else’s urine, sneaked it in, urine that they knew was clean and used that.

Mark’s ‘shaggy dog story’ echoes the previous examples of the use of clean urine by Tour de France cyclists to beat tests (Voet, 2001). It is also worth noting that clean urine is promoted by some websites for the same purpose (see for example, *Affordable Urine Samples*, accessed 13/10/2007).

Equally, as already established, testing procedures varied between organizations – which has undoubted implications for resistance. Jamie’s comments concerning the development of stringent drug testing procedures in the Army seemingly stemmed from increasing attempts to beat the test. Thus, we can see the

progression in drug testing procedures in an attempt to counter resistance. So the development of drug testing technology and resistance perhaps do evolve alongside one another, as was also clear in the case of cycling in which resistance developed from the use of clean bulbs of urine disguised under the arm by clothing to the injecting of clean urine up the urethra (Voet, 2001).

Further to this 'active' resistance, respondents discussed various perhaps more 'passive' forms which involved them moderating rather than seeking to conceal their behaviour. As the interview with Mark reveals, firstly he believes that being subject to drug testing may influence behaviour and discourage drug taking, before going on to note changes in his own drug taking habits:

Interviewer: Have you ever taken drugs?

Mark: I have, yes.

Interviewer: Do you still use drugs now?

Mark: Very occasionally on a social basis

Interviewer: And can I ask kind of what? It is totally confidential.

Mark: Cocaine more than anything, well, really now only cocaine. I have in the past, erm, I've taken ecstasy, I've never really been one for cannabis

but that's about it really. And nowadays it's very occasionally and usually at weekends and always when I'm not working, I would say.

Interviewer: Would you consider yourself a regular or an occasional drug user?

Mark: Very occasional.

Although Mark makes no direct link between this and the drug test he does go on to suggest that he takes drugs *only* when he is not working. This combined with his belief that drug testing may discourage drug use would imply that the policy has had some influence on his behaviour. But by utilising drugs less regularly and at weekends he is arguably also resisting the test, allowing the drugs time to clear his system and reducing its ability to detect his use. Derek likewise acknowledges the possibility of individuals going on 'drug holidays':

Interviewer: So you think that testing is effective at deterring use?

Derek: I think it can be effective at dissuading people from mixing drugs and work. I don't think it actually dissuades them from using drugs in the evening, especially drugs that work through your system quickly. Someone going on holiday would have a two week window where they would be free to do as they like.

Derek acknowledges that a holiday from work equally creates a period of time within which drugs can be 'safely' used, although, as previously acknowledged, this is dependent on the window of opportunity for testing afforded by each drug.

Overall it is evident that, despite its disciplinary and regulatory intentions, there are a number of ways in which the drug test can be resisted. Indeed respondents used or claimed knowledge of a variety of techniques to beat the test, from the more passive actions of limiting the times that they took drugs to holidays and weekends to more active resistance including the use of products to flush urine of toxins and the use of clean urine. The interviews also suggested that as the drug test and its procedures developed so did resistance to it.

Summary

The above discussion reveals that a complex range of issues surround my two samples' perception and experience of drug testing at work. Respondents' understandings were often founded on good or bad divisions, supporting the previous suggestion that the drug test is an instantiation of the categorization of drugs as either good or bad, and so a material effect of the Labour of Division. However, others demonstrated how their personal experiences of drugs had nuanced these seemingly reified categories, which suggested the importance of Geertz's (1983) 'local knowledge' in informing thoughts and opinions. Further to this, although ostensibly a technological extension of Foucault's (1977) concept

of panopticism, individuals discussed only minor changes, if any, to their behaviour in light of being subject to drug testing. They acknowledged various factors including the irregularity of testing and the accuracy of testing as a reason for this. Thus, although the drug test has potentially disciplinary and regulatory effects, in practice these may be limited according to my data. Moreover, respondents told a number of stories of resistance, from the utilization of clean urine to drug holidays that once again revealed the limitations and potential fallibility of the test.

From this we can suggest that concerns for the surveillant capacity of the drug test, particularly its ability to invade and survey the private sphere, are perhaps less well founded than the conceptual review may imply. Although the potential to identify, discipline and survey the workforce is embedded within the test, these data indicate that this potential is not always realized due to the limitations on the capacity of the test and the possibility of beating it. In the forthcoming conclusion I hope to draw together some of the themes explored within this thesis and identify conclusions concerning not only my research objectives and findings but equally their respective limitations.

Conclusion

This conclusion will bring together the key conceptual and empirical themes that have been explored throughout this thesis to draw conclusions to my two research questions. Finally it will very briefly comment on the direction of further research that may be developed from this thesis.

I will begin by outlining the main conceptual arguments and indicating what I would have perhaps expected respondents to offer with regard to each of these arguments. To reiterate, chapters one and two suggested that the dominant social order of drugs could be elucidated via the concept of the Labour of Division and was reflected for example in their formal legality or illegality. I argued that it was on the basis of such divides and the clear distinctions they make between acceptable and unacceptable drugs that the employee drug test was both justified and enabled. Moving on from this, and in light of Geertz (1983) and his discussion of ‘common’ and ‘local’ knowledges, it was suggested that individuals’ understandings of drugs and subsequently drug testing was likely to be nuanced by personal experience. As such individuals who did not have any direct experience of drugs or drug testing were likely to subscribe to the dominant discursive construction of drugs and drug testing; namely to see drug use as both undesirable and dangerous and thus to feel that drug testing would both deter drug use and identify drug users within organizations. Alternatively those individuals who did have personal experience of drugs and drug testing would

express opinions that would be informed by their own positive or negative experiences of either.

Chapters three and four then explored the drug test in light of Foucault's (1977) understanding of panopticism and the disciplinary effects of surveillance. These chapters argued that the drug test is both biopolitical and an exemplar of panopticism, its technology rendering behaviour visible and subject to judgement against prevailing norms of behaviour. Moreover, unlike other contemporary surveillance technology such as CCTV, these chapters suggested the capacity of the drug test to reveal individuals' behaviour is not confined to the physical organisation. Following Virilio (1999; 2001) the drug test was identified here as able to traverse time and space, revealing employees' behaviour both within and outside the workplace in the past, present and future. Thus individuals are subject to organisationally prescribed modes of acceptable behaviour both in and outside of work time. In this light it was argued that individuals were likely to change their behaviour to accommodate organisational drug testing, and to avoid the use of prohibited substances. Surveillance thus generates material effects, or power effects, such that employees 'internalize' the mechanism of the test and behave according to its parameters.

These chapters equally explored resistance, which Foucault (1979: 96) suggests is "inscribed on power as an irreducible opposite". Indeed, for Foucault power is a network of competing relations: where there is power there is resistance, the one producing the other. In this light I expected respondents to detail various instances of resistance to the test, perhaps manifesting a number of possibilities

from the use of masking agents available via the internet to alterations in drug consumption habits - changing their drug of choice or the mode of ingestion - to the use of clean urine, for example. These chapters also gave consideration to the intrusive nature of the drug test, which goes beyond traditional surveillance technology to invade bodily privacy and permeate beneath the skin. Indeed, this facet of the drug test extends the power of the organisation yet further, enabling it to check bodily commitment to organisationally prescribed modes of behaviour rather than just their external 'dressage'.

I therefore expected respondents to express concerns about the intrusive nature of the drug test and question the extent to which an organisation should be able to prescribe behaviour outside of the workplace. Similar issues are often explored in discussions of the development of the so called 'nanny state' and the extent to which citizens are subject to regulatory intervention in their everyday life, for example the potential introduction of identity cards in the UK (Thomas, 1995). Thus I expected respondents to express objections like those raised by websites such as *No2ID* (accessed 3/11/2008) which campaigns against the development of identity cards. *No2ID* points to the unquestioned development of government surveillance in the UK, the growth of what it refers to as a 'database state' and the invasion of privacy it represents relating to personal information. Similarly Joinson *et al.* (2006) suggest that the introduction of identity cards raises a number of privacy concerns although they argue that these may differ between individuals dependent on various factors including their personal experience, perception of benefits and cultural attitudes for example. And as *BBC News* (accessed 3/11/2008) highlights, the concerns with any organisation holding large

amounts of personal and sensitive information about individuals is the safety of that information, a pertinent concern following the recent loss of information by HM Customs and many other government departments or associated agencies.

Finally chapter five sought to explore how the development of surveillance in the form of the drug test effectively extends the organizational gaze into the home/sphere of leisure such that employees are expected to be ‘fit for work’ on a 24/7 basis. This kind of initiative re-defines the traditional boundary between the public and private spheres and prioritises ‘work’ over ‘life’. As such the drug test contradicts the current discourse advocating space for ‘life’ over ‘work’. However, as this chapter further argues, work-life balance in practice is little more than rhetoric, as epitomised by the UK’s opt-out from the European Working Time Directive³⁹.

Answering Research Question One:

Having briefly reiterated some of the key ideas explored through the literature review the following section brings these themes and the data together to draw conclusions around the first of my two research questions, as is set out below:

1. To examine the extent to which employees accept, accommodate or resist drug testing policies.

³⁹ It is important to point out that this is currently under review.

As I expected, a number of respondents expressed opinions that reflected the dominant discursive construction of drugs as dangerous and drug testing as identifying and deterring drug users. In short they accepted employee drug testing as both a necessary and legitimate practice. These opinions are discussed in chapter eight and further epitomised by comments made by Robert, a health and safety officer for a construction company, Sid, a construction worker, and Ken, a customer service engineer for Delta, who all suggested that drug use was dangerous and subsequently that drug testing was required to combat this problem.

Robert: Why do I think it's fair? [I]f someone should come onto a site under the influence of drink or drugs putting themselves in danger and those people who they work with...it's fair because it stops it happening.

Sid echoes this in his suggestion that 'deviant' employees 'need to be invaded':

Yeah, same thing for everyone, isn't it? I think it invades your privacy, but on the other hand if you're dangerous at work then you need to be invaded.

Ken offered much the same sort of opinion:

[Testing is] very clinical and to be honest it needs to happen because you can't work on something that's very dangerous without...you know, if you're not up to the job, you shouldn't put your name forward.

Ken's experience of testing as 'clinical' (presumably indicating that it is legitimate and professionally conducted in his experience) followed by his assertion that you can't work in a dangerous environment without 'being up to the job' likewise indicates his acceptance of the drug test and organisational justifications for it – namely that it improves workplace performance.

Interestingly, and contrary to the discussion in the literature review, these respondents also seem unconcerned by the putative intrusion of the drug test into their personal space, from suggesting that it 'needs to happen' to being comfortable with the experience of being tested. Carl - a manager of Delta's private services team - was also surprisingly unruffled by the test, suggesting it was simply done to satisfy Alpha and was "*in no way intrusive to the way we work or our personal lives*". Such responses also indicate that a number of respondents accepted and supported organisational justifications for testing.

However, others sought to qualify the specific circumstances within which they felt testing was acceptable. For example, although Brad (a technician at Delta) supported drug testing he felt that it was only acceptable when he was working on Alpha's property, in a safety critical environment. Here then we begin to see some disquiet, albeit limited about the test's purview. Overall, however, data such as these indicate that a number of respondents accepted the drug test as both a

legitimate and necessary organisational practice, within the confines of a safety critical work environment.

A sizeable proportion of respondents thus echoed the discursive distinctions of the Labour of Division and expressed no qualms about the way in which drug testing extends other sorts of surveillance practice. Moving on from this, a number of other respondents, although not expressing opinions accepting organisational justifications for drug testing as legitimate, did make relevant changes to their behaviour to accommodate it. These behavioural modifications took a number of different forms. Some respondents such as Sam - a police officer - disciplined their behaviour by keeping notes of all prescription and over-the-counter medication they consumed out of concern for these licit drugs possibly causing a false-positive drug test.

If I take medication I write it down, if I take something that I'm not used to taking I'll write it down just in case ...[they] require [me] to say what medication we've taken in the past few months.

Sam's response to the drug test not only illustrates its potentially disciplinary effects, concern for being tested influencing him to keep note of all medication he consumes, but equally reveals the capacity of the test to reveal more than what it is testing for. Indeed, somewhat ironically the behaviour Sam displays is a direct result of the inaccuracy of the test and its inability to differentiate between legal and illegal drugs as discussed in chapter four of the conceptual review. Sam's behaviour is reflected by Jim (a professional sportsman) who as previously

discussed in chapter nine has a small card which he carries with him stipulating what medication he is not allowed to take as it would result in a positive test. I will return to these issues in my analysis of research question two later in this conclusion.

Other respondents discussed making different sorts of alterations to their behaviour as a result of being subject to drug testing – ie, controlling consumption - although these stories generally centred on changes in individuals' drinking habits. Brad's comments illustrate how other respondents altered their behaviour to accommodate the test in this regard.

Interviewer: Has being subject to a testing policy changed your use of alcohol?

Brad: Only if I know I'm going on Alpha property. I don't drink any alcohol twenty-four hours beforehand.

As previously discussed in chapter nine, a number of other respondents such as Liam (an engineer at Delta) were also keen to emphasise that they no longer go to the pub at lunchtime as they would have done in their younger years as a result of being subject to testing. Similarly both Ben (a field manager at Delta) and Kurt (a field engineer at Delta) emphasise the changes it has brought about in their drinking habits:

*Ben: The only thing I feel and I'm probably pained as it restricts me on my [drinking] as I don't take drugs but I do drink...I have a couple of glasses of red wine a night and maybe at the weekend I might [like to] have a little bit more... so it can restrict my drinking. So if I don't know I'm **not** going to be working on Alpha sites I can't have a drink so it's going to be at least two days and I can't have a drink and for that, I don't get paid any extra for that. So that's how it affects me... [it] doesn't hurt me not to have a drink but it's restricting me and I think really I maybe should... if you're doing something extra [you] should really get paid extra for it. [emphasis added]*

Kurt: I tend to drink a little less because I'm on call-out as well which means I can get called out any time over the 24 hours, so I've had to modify my drinking habits a bit and drink less.

None of my respondents stopped drinking as a result of being subject to testing but they did make alterations to their behaviour as a direct result of being subject to the test, limiting their alcohol intake at key times. In doing so they illustrate the potentially disciplinary effects of the test, in how they met organisational requirements to be 'fit' for work

Paradoxically these examples and those that follow not only illustrate the disciplinary power of the test but also its limitations. Individuals were able to make relatively minor adjustments to their behaviour to avoid detection via the

test. Like the respondents above both Tom, an engineer from my snowball sample, and Mark, an engineer at Delta (as previously quoted in chapter nine), discussed changes they had made to accommodate the test. However these men altered their drug taking habits rather than their alcohol consumption:

Tom: I knew I was going for the test so obviously weeks in advance and weeks afterwards I wasn't gonna take substances cos I wasn't gonna jeopardise my work situation. Once I was given the all clear, it might be New Year or birthdays or something like that, maybe three or four times a year I may go and enjoy myself and take some drugs.

Tom gave accounts of other Delta employees who had used the same tactic to beat the test. These data also illustrate the discussion in chapter four concerning the various windows-of-opportunity afforded by a drug and the role the notification period of an impending test may have in the accuracy and capacity of the test to identify drug use.

Interviewer: Do you still use drugs now?

Mark: Very occasionally on a social basis.

Interviewer: And can I ask what type of drugs?

Mark: Cocaine more than anything; well really now only cocaine. I have in the past, erm... I've taken ecstasy, I've never really been one for

*cannabis but that's about it really and nowadays it's very occasionally and usually at weekends and **always when I'm not working** I would say.*
[emphasis added]

Tom then limits his drug use to 'special occasions' and in doing so greatly reduces the chance of being identified as a drug user. Mark on the other hand consumes drugs only when he is away from the workplace for a few days. Thus by making adjustments to their behaviour these respondents are arguably able to both accommodate and resist the drug test.

Equally, a number of respondents expressed knowledge of more 'active' acts of resistance. No one reported using these techniques themselves but rather discussed knowledge of others who had, with varying levels of success, tried to beat the test.

As already discussed in chapter eight Jamie (a policeman and former soldier) noted cases of people urinating on behalf of one another. He also highlighted this to be one of the reasons for the increasingly stringent and intrusive testing measures employed by the army. Jamie's experience reflected the example of the Tour de France discussed in the literature review (chapter four) which has developed ever stricter testing procedures as a result of more sophisticated attempts to beat the test. Moreover it equally highlights the ways in which power and resistance co-evolve. However, other respondents reported knowing others who had tried and failed to beat the test, as Ken's account reveals:

Interviewer: Do you know anyone that has tried and failed to beat the test?

Ken: Not at work but I do know someone who has tried and failed to beat a drug test. Erm, the person I said I know that has a drug problem...he is a heroin user and he was taking other things in between, he's had a drug test...obviously as a heroin user goes in and out of prison all the time so they get randomly tested.

Interviewer: And he failed to beat the test...do you know how he tried to...?

Ken: I think he had actually been smoking [cannabis] but he's a really big heroin user, heroin goes out of your system after a certain time as I said but the other drugs, the other drugs stay in your system longer and he got caught for the longer one...

Ken's story not only illustrates a failed attempt to beat the test but again illustrates its limitations, most specifically how drugs which pass through the system quickly may not be identified. Following on from this Sam also discusses various attempts by prisoners to beat the test.

Interviewer: Do you know anyone whose tried and failed to beat the test?

Sam: Prisoners regularly try and do it by pretending, get the swab out of their mouth too early so it hasn't got enough saliva on it, umm...

Sam's account reveals attempts by prisoners to beat the test through failing to give an adequate sample.

As is evident from the above discussion respondents revealed a variety of responses to the drug test. Importantly and in contrast to the expectations I had developed via the conceptual review, despite its apparent intrusion into individuals' private lives, respondents offered limited accounts of resistance. Rather the most emotive responses to testing emerged when supporting its legitimacy in the fight against the 'dangerous' drug taker. Equally however it may be the case that this behaviour reflects the limited nature of testing the majority of respondents experienced, which as already established in chapter nine took place once a year at most. So in response to the three elements of research question one most respondents simply accepted the test. These respondents reported no personal drug use and a belief that drugs were dangerous; and subsequently had no concerns over testing. Some respondents however accommodated the test, most by adjusting their alcohol consumption, although two respondents did report making adjustments to their drug taking habits as a result of being subject to testing. Finally 'active' resistance was only ever recounted about other people, which may reflect the general belief that drugs are 'bad'. Overall, conventional discursive constructions of drugs seemed to be very much at the fore here and pervaded individual interviews.

Answering Research Question Two

Moving on from this my second research question is detailed below:

2. To consider what the ethico-political implications of these policies may be for individual employees, organizations and society at large.

To reiterate the conceptual review established a number of potential concerns in this regard:

- The drug test conflates time, testing people in the present and judging them on their past behaviour. It also conflates space, dissolving traditional barriers between the workplace and the home to reveal individuals' behaviour out of work time.
- Through the blurring of these divides the drug test privileges 'work' over 'life'.
- The drug test enables the organisation to see beneath individuals' skin to reveal their internal commitment to workplace norms, and in doing so invades bodily privacy.
- Through the testing of bodily fluids the drug test is able to reveal more than an individual's illicit drug consumption.
- The drug test is an imperfect technology which, for example, may produce false positives and false negatives, and is not a test of impairment.

Thus, as highlighted above, there is first of all a question about whether an organisation should be able to access information regarding individual behaviour outside work. Furthermore concern was also expressed about the capacity of the test to reveal more than drug habits. In the data, my respondent Sam (as discussed earlier) disciplined his behaviour by keeping note of all over the counter and prescription medication he consumed so he could detail these drugs in a pre-test interview and limit the possibility of a false-positive result. Sam's story reflects the experience of Carl, previously discussed in chapter eight, who had had to declare his prescription medication and subsequently his medical condition to his employer as a result of being subject to the drug test. These data emphasize both the potential of the drug test to reveal more than it is testing for, but equally how it may influence individuals' behaviour outside of the physical workspace, blurring the boundaries between work and home. Thus on the one hand organisations could be seen to be using the test to access further information on employees to judge their relative 'fitness' for work. In fact in Carl's case his organisation now has access to personal information that may have no direct implications for his workplace performance.

Moreover, this intrusion - into individuals' legal drug use in these instances - results from the aforementioned inaccuracy of the test or rather its failure to differentiate legal from illegal drugs. A number of other respondents acknowledged the apparent failings of the test, giving examples of a positive test being caused by legitimate drug use. As such we can begin to ask questions about the capacity of the test to identify the 'illegal' drug user.

Interviewer: What sort of testing were you subject to? Is it pre-employment, random etc.?

Rick: Although that was a pre-employment test we have random tests at any time. It was a massive thing, everyone lined up and a load of you went into a certain room and went into a bay and sat there while they did the test. You had to keep the thing in your mouth until it was filled with saliva, and then the next day they let you know. Everyone was really worried about it, or at least a few people were. You had to declare any medication you had taken. I know someone who tested positive from having a Lemsip.

Sportsman Ted's anecdote echoes policeman Rick's, also revealing knowledge of cold and flu medicine resulting in a positive drug test. However, unlike Rick's story the positive test here had negative career implications for the athlete, resulting in a year long ban.

Ted: Yeah, known of people getting done for using cold and flu...someone in the Canadian rugby team got done for it, they got a year ban...they took cold and flu stuff before a game and got tested. It was before an international game and it [was] completely accidental but ignorance isn't like an excuse, they always tell you that so you can't...they always tell you, it's just unfortunate.

These two stories mirror the case of British skier Alain Baxter discussed in chapter four of the literature review who was stripped of his silver medal in light of a positive drug test for methamphetamine as a result of utilising Vicks nasal inhaler. Here, as with Ted's story, 'ignorance isn't an excuse'. However the implications of a false-positive result based on over-the-counter medicine are arguably magnified by the lack of formal laboratory standards and regulation of drug testing also discussed in the literature review. Therefore the risk of mistakes occurring, and remaining unidentified, are potentially amplified. And these respondents were not alone in knowing of positive drug test results being caused by legal drug use. However, as Jamie and Paul (a sportsman) reveal, cold and flu medicines are not the only drugs which may result in a false-positive test result.

Interviewer: Have you ever known a positive test be explained by something other than substance use?

Jamie: Yep, medication wise, someone was on a load of...their immune system had gone down, again a lot of this is going back to the army, they were on five or six types of tablet a day. It was the person who you least expected to be doing drugs anyway. And they tested positive.

Paul: No, only stuff like nutritional products, well I've taken stuff which [could cause a positive result]...called Z&A, it's like a zinc and magnesium amino-acid and...they are like vitamin tablets yet if you take a

dose of it [it can cause a positive test], it can be illegal. So you know stuff like that I'm aware of.

The above data illustrate that a variety of legal substances (for example, vitamin supplements) may cause a positive drug test. Thus these accounts emphasise some of the ethical implications of the test for individual employees, from it being unclear what it is 'safe' to consume to avoid a false-positive test to requiring individuals to reveal a wealth of personal information about health and general consumption habits so as to facilitate the accuracy of the test. Moreover, and to repeat Steven's story (he is a project manager at a construction company), the capacity of the test to rewind time also brings about a number of ethical concerns:

*It's very difficult, you are telling people what they should do in their own time and some drugs stay in your system. It's like these two guys, they weren't habitual users, it was a party and they thought they'd have a go, **and about a week-10 days later they got tested.** So it's very tricky, but there needs to be something in place. (emphasis added)*

This story of individuals being identified as drug users by the test ten days after their consumption of cannabis, and judged on this basis, highlights concerns about the outcomes of testing. Not only is the test unable to identify the drug user at the moment of impairment, it equally judges individuals when they are not impaired and for behaviour that may have no ramifications for the organisation. Thus the capacity of the drug test to invade and prescribe behaviour within the

private sphere, and the extent to which it may make employees responsible to organisationally prescribed modes of acceptable behaviour both within and outside the workplace, are both conceptually and empirically apparent in the research.

Moving on from this, the drug test also invades the bodily privacy of individuals, not only via the testing of fluids but equally by watching people perform conventionally private behaviour - the act of urination. Respondents did highlight some concerns about the invasive nature of the test and the emotional repercussions they experienced as a result. The four accounts below are all cases of people who were subject to direct surveillance during the act of urination for the purpose of the test. Lee, a sportsman, who was only seventeen at the point he was tested, expressed the most concern in this regard:

I found it quite clinical⁴⁰ and I was quite young and even the prospect of being in the room with like three staff...there was one male and two females, I had to get undressed, get weighed in front of everyone, still not wearing a lot, going into the thing [cubicle] and being given the thing [cup to urinate into] was a bit nerve-racking. I wasn't too keen on the fact, which doesn't help when you're trying to go [urinate].

Lee found the experience nerve-racking, especially as he was required to undress in front of three strangers, including members of the opposite sex, prior to the test. This not only reaffirms the earlier suggestion that testing procedures are

⁴⁰ In contrast to Ken, quoted earlier, Lee seems to use the word 'clinical' to mean intimidating.

likely to become more stringent as it becomes a more established practice and takes account of attempts to subvert it, it equally points to the changes in experiences and opinions of the test that may accompany such a progression. Lee's account was one of the most extreme direct experiences of the drug test in the data. Moreover it highlights the implications that the gender of the tester and testee may have for understandings of testing, and which we would expect to increase individuals' concerns about its intrusion.

Lee's emotional response to the test was echoed by Ben's reference to a colleague who suffered embarrassment when he struggled to produce a sample:

There was one guy I can remember. He was a bit concerned, 'cause when he went to give the urine sample he couldn't do it and he had to drink lots and lots of water and then when he [left] he couldn't stop going [urinating] ...so he had a problem and he found it quite embarrassing.

Ben's story illustrates the potential distress the drug test may cause and highlights the problems, both physical and psychological, of requiring people to urinate on demand. These experiences testify empirically to concerns over the intrusive nature of the drug test, which Tom for example suggested was an invasion of civil liberties. Thus the assumption that individuals who are not drug users would not object to being tested as they have nothing to hide is likewise inadequate as it fails to account for the demeaning experience of being tested.

In contrast to this both Tom (in contradiction to his previously discussed civil liberties stance) and Jamie like others such as Sid and Ken cited earlier were blasé about the test:

Interview: Can you describe your experience [of being tested]?

Tom: Erm, had to pee into two different cups and with someone watching me and you give them [cups] to them [tester]... you give it to someone else to do and you get to watch all of it [the testing procedure] to make sure no-one puts anything in it, or whatever. They do it with two [cups]...I don't know why they do it with two, maybe just to make sure [the results were correct]....I don't know.

Jamie: Yes, first of all you'd get briefed, then they'd feed you a lot of water obviously to make you go [urinate] ,and then it would be a one to one, obviously they'd register you on a computer, and then it would be a one to one person who'd take you to the toilet and they'd actually watch you pee.

Nonetheless, following Joinson *et al* (2006) we could suggest that the fact these two respondents at least showed little concern about the test may in part result from their life experiences. Both had lived in close proximity with others, the former attending boarding school and playing rugby and the latter being a soldier in the army, situations within which conventional boundaries of personal space

are redefined. Moreover, as the above stories illustrate, their lack of concern was not shared by everyone.

Finally, and as was highlighted through the literature review, the drug test is founded on apparently political concerns about the danger of drugs and drug use in the workplace and a proclaimed social responsibility to be waging a 'war on drugs'. Thus the test is seemingly a weapon in the war against drugs, identifying and enabling judgement of the drug user. However, chapter four of the literature review also questioned the correlation between drug use and an increased number of accidents and poor workplace performance. It was suggested that other factors, such as sleep deprivation, may have more significant implications. Thus the test may simply be an expensive and intrusive tool that fails to deter or identify drug use. My data also revealed a more complex array of concerns around the implementation of drug testing.

Firstly, and somewhat ironically a number of my Delta respondents claimed never to have been tested. They had responded to my request for interviews simply because they were subject to a testing policy rather than because of any direct experience of the test. This was all the more incongruous when it became apparent that these respondents were tested as part of their initial medical before they began to work with Alpha. However, they had simply been unaware of this at the time. Thus the disciplinary principles of the drug test in this organization, along with its surveillant capacity, were limited by its implementation. This highlights the importance for an organisation of making employees aware of when they are tested as well as clearly outlining the testing policy more broadly.

For these respondents the drug test had limited meaning, but was instead seen as an organisational formality which was given little if any consideration. This was a point further emphasised by respondents' lack of knowledge of the testing policy. A number of them, such as Brad, read the policy for the first time prior to my interview. Individuals' lack of experience of the test coupled with their lack of knowledge suggests its disciplinary effects are reduced in this instance and drug testing may in real organisational contexts be not much more than rhetoric.

In addition, a number of respondents explicitly suggested that the test was performed too infrequently to deter drug use:

Interviewer: Do you think that testing is effective at deterring employee alcohol and drug use?

Ian: To an extent. I don't think that it will ever eradicate it because some people don't take it seriously: it has made a small impact.⁴¹

Steven: No...Because it's random you get the attitude 'well, they'll never test me' and people feel that it infringes on what they do in their personal life and in their own time. Then I think most people carry on and do what they want, thinking 'well, you're not going to tell me what to do in my own time anyway'. And it's random, so how likely is it to get caught?

⁴¹ A construction site worker.

Ian's response was reflected in the opinions of other respondents who worked for Delta but were subject to testing as a result of working on Alpha sites. These responses seemingly stemmed from an assumption that a positive drugs test would simply result in their inability to work for Alpha rather than their dismissal from their primary job at Delta. Interestingly, as there were no reported cases of an individual in this organization suffering a false-positive test and respondents had little understanding of the testing policy anyway, there was no information available to undermine their assumptions and suggest more serious and extensive repercussions in light of a positive result. Following this, Steven's response (which also mirrored that of other respondents) also illustrates how the irregularity of testing affects its disciplinary capacity, perpetuating the attitude 'they'll never test me'. Implicit to both accounts is the importance of respondents knowing of both individuals being subject to testing and of the consequences of a positive result, for it is through visibility and judgement that the disciplinary power of the test may be realised. Following the data, the irregularity of testing coupled with the lack of a clear policy undoubtedly restricted its capacity in this regard. Thus as it is currently performed, the drug test could be seen to have little if any effect on the behaviour of Delta employees.

A number of respondents also reported working alongside individuals who were visibly impaired at work but not identified by the drug test and who had suffered no job-related consequences as a result of this impairment:

Liam: Well we had one character called Colin the Cod, cos he drank like a fish, and he was arse. He was rubbish in the afternoons, well he wasn't a

lot better in the mornings and he was on when I changed jobs. Eleven years ago he was our mentor for a couple of weeks but it was unbearable.

Liam suggested that Colin (who was also subject to a testing policy) was so intoxicated at work on one occasion he fell over breaking a number of shelves. This illustrates the failure of the drug test to identify individuals at the point of impairment and thus facilitate the safe working environment it proclaims to do. Likewise:

Interviewer: Have you ever worked alongside individuals who you believe have been impaired by drink or drugs?

Ken: Yes

Interviewer: Erm...and how did you feel about this?

Ken: Very, erm... unsafe with the way they were working and I actually told them to sit down while I did the job myself.

Interviewer: And how did other employees around them respond to this?

Ken: There were only two of us there.

Interviewer: And was this in recent history?

Ken: No, a couple of years ago.

Interviewer: And was this on the Alpha scheme?

Ken: Yes, it was, yes.

Moreover, to reiterate Kevin's story from the data analysis (chapter eight) of passing the breathalyser despite being visibly intoxicated, the test is not an exact science. Thus we may be in danger of prioritising the scientific vision of the drug test above that of the naked eye. This reflects the commentary by Ceyhan (2008), who problematizes the emphasis on the body as the primary source of identification of the individual and questions whether biometrics do in fact identify individuals authentically (in the case of the drug test, as a drug free/desirable employee).

Paradoxically, not only might the drug test seemingly fail to deter drug use and identify drug users, a number of respondents equally suggested that their organisation had lost good people as a result of testing. Darren acknowledged that a number of employees at Delta did not put themselves forward to work for Alpha as a result of the testing policy. Moreover Derek suggested that the army has lost recruits as a result of their testing. From this it could be inferred that not only does the drug test fail to achieve its aims, it equally may have a negative effect on employee recruitment and retention. Further to this Jamie also acknowledged that the drug test may be used against an organisation, citing his experience of soldiers utilising the test to get out of their contract with the army:

You find a lot of people, not necessarily in my current job but in the army, you find a lot of squaddies who join and you have to do a minimum time of three and a half years. So you find a lot of squaddies join, find it's not for them so they use drugs as a way of getting out. If you get caught either in CDT [drug test] or with drugs in your barrack block then you get what's called an administrative discharge...an administration discharge, and a lot of people use that, you know [at] eighteen, nineteen, to get out of the army. All that's put on your record, say I was eighteen and got caught with drugs or whatever age, I'd get an admin discharge and then say if I applied for a job and my new employer asked for a reference off the army, all the army could do is say that you got discharged under an admin discharge, they can't mention anything [specific].

Thus in this instance the drug test may be used to escape the organisation. Overall however, from the accounts above it is evident that the practice of employee drug testing potentially has far more extensive and complex ethical and political ramifications than simply being a tool to identify drug users. Indeed, not only do the above accounts reveal the drug test to be found wanting in its ability to identify drug users and deter drug use, but also highlight problems in relying on the accuracy of its vision in the judgement of employees. It is equally shown to be a tool employees may use against the organisation to escape contractual requirements.

Summary

To conclude, contrary to what I expected and what chapters one to five indicated in conceptual terms, my respondents were relatively disinterested in drug testing, many expressing views that reflected the social norm and cases of resistance which predominantly centred on respondents adapting their behaviour in fairly minor ways. Although a few tales of active resistance were reported these anecdotes were hearsay rather than descriptions of respondents' behaviour. This apparent indifference to the test could be explained in a number of different ways. My respondents were firstly predominantly made up of individuals who worked for Delta and were tested as a result of doing work for external contractor Alpha. As such, a number of respondents believed that a positive test result would have little if any implications for their primary role in Delta. Moreover, despite being subject to Alpha's drug testing policy a significant number of respondents had never been tested, or had only been tested as part of an initial medical in which it seemed part of standard protocol. The experience of respondents from Delta therefore differed from that of Jamie or Lee for example who had experienced far more intrusive testing procedures. In these latter cases respondents did express some (albeit limited) concern for the intrusion of the test. Had Delta employees been subject to similar testing procedures I may have found more concern. Equally, Jamie suggests that the changes in military testing procedure resulted from soldiers resisting the test: therefore, as organisational testing becomes more

established and prolific and resistance likewise, it is likely that we may see a similar development in testing procedure and an increase in concern in this regard.

Moving on from this, the data did reveal some ethical and political implications of testing, for the individual, organisation and society, reflecting concerns established by the literature review. Respondents noted the inability of the test to distinguish between legal and illegal drug use and a number also reported knowing of a positive test result being caused by legal drug use. Steven's discussion of employees who tested positive for drugs some ten days after consumption and subsequently lost their jobs raises related concerns. Moreover, paradoxically, a number of respondents reported working alongside individuals who were impaired by drink or drugs, and whom, despite being subject to the test, did not experience any repercussions for this impairment. Indeed, impairment is perhaps more likely to be identified by managers and co-workers rather than by the drug test. Finally, Jamie suggests that the drug test may be used against the organisation as a way of soldiers terminating their contract with the army, and in doing so brings into question what an appropriate response to a positive drug test is; dismissal or rehabilitation?

Finally, though and to reiterate, what has been most surprising about the data is individuals' lack of interest in or concern about being tested. As such it may be that I have over-stated concerns about the intrusive nature of organisational drug testing which potentially prescribes behaviour both within and outside the workplace. Nonetheless, although we may momentarily conclude that the drug

test as experienced by Delta employees in particular is little more than symbolic managerial rhetoric, presenting a façade of an organisation committed to identifying and judging the dangerous drug user and conforming to societal norms, this may be explained by the specific conditions of the Delta experience. Moreover, even the ‘small stories’ raise concerns for employees, organisations and society alike, as these stories are likely to become more widespread along with the proliferation of testing.

Having completed this research project I feel that I have only touched the surface of the complex and multifaceted topic of employee drug testing. Therefore there are a number of directions I would be interested in pursuing. Indeed, referring back to the various research approaches I considered to explore my research questions I would like to undertake some form of comparative project. Most specifically I would be interested to compare the opinions and responses of individuals working in a safety-critical environment to those working in a business-critical environment to being drug tested. I feel that this would enable me to investigate one of the many points that were implied in the data, namely that a number of respondents sought to limit and clarify the specific circumstances within which they saw the drug test as legitimate – areas that were dependent on a distinction between safety-critical and non-safety critical roles. Finally, and as was implied by the data discussed above in reference to Lee, I would be interested in exploring whether respondents’ reactions to testing were dependent on the testing procedure they were subject to.

Having outlined the key findings of this thesis I will now, once again, highlight the contributions it makes. As already stated, the issue of drug testing is of undoubted importance to the contemporary business environment, already being an established practice in the US, where some fifty percent of the workforce are subject to testing and in light of evidence suggesting that this practice is set to increase in the UK (IIDTW, 2004). Therefore as Brewis *et al.* (2006) suggest it is important to consider this topic prior to its sedimentation in the UK to offer some insight into how employees accept or resist it and the wider ethico-political implications.

Moreover, there has been little empirical work on organizational drug policies in OS literature. What has been done tends not to focus on employee reactions to or understandings of policies but rather to concentrate on employers (see for example, Draper, 1998; Wood, 1998; IIDTW, 2004). This silence is especially notable in CMS research which has had almost nothing to say about drug policies or testing – empirically or otherwise. This silence is particularly surprising in light of the obvious relevance of the drug test to some of the key concerns of CMS. As discussed throughout this thesis various surveillant, disciplinary and biopolitical intentions are embedded in and realised through the practice of drug testing. These intentions, in further blurring the formal boundary between work and home and seeking to survey individuals' private behaviour, also have implications for work-life balance. Thus this thesis considers the drug test in light of these concerns, contributing to OS and CMS more specifically by offering insights into the role of the drug test as both a disciplinary and biopolitical technology and its repercussions for employee WLB.

Finally this thesis also makes a methodological contribution by achieving access to an organization and a snowball sample for the purpose of empirical research despite the sensitivity of the topic and the extensive time commitment and perseverance this took to achieve. Some nineteen months passed from the initial request for access to British Airways to the performance of my first interview with an employee from Delta. However I was in the event able to collect data which speaks to my research interests and the contribution this thesis makes.

APPENDIX ONE

Interview Schedule

Hi, I'm Charlotte. Before we begin I thought that I'd tell you a little bit about myself. I am a PhD research student (candidate) with the University of Leicester Management Centre, my doctoral research seeks to investigate the reasons, implications and experiences of organisational drug testing policies.

I would like to emphasise that you will remain anonymous in my research, and that anything you say will be treated as confidential. No-one other than myself will have access to the raw data that this interview will provide me with, and throughout my data analysis all respondents will remain anonymous. (may have to modify this statement depending on negotiations of access with the organisation). Furthermore should you at any point need to clarify any line of questioning feel free to interrupt. Is it okay for me to record this conversation as it will hopefully enable the conversation to flow more freely. Indeed, feel free to turn the tape-recorder off at any point and I also want to emphasise that you do not need to answer all of the questions should you not want to.

Thank you,

Biographical data

1. If you could begin by giving me a brief history of your employment to date?
2. How long have you worked in your current job?
3. What is your job description/ duties?
4. At any point during your employment have you been subject to a drug testing policy?

When? Where?

Section 2: Understandings of the drug testing policy

1. Were you an employee of (Organization) when they initially introduced the policy?
2. What is your understanding of the policy?

3. What is your experience of how the policy has developed and been put into practise?
 - How did you first hear about the test?

Experience of Drug Testing

5. Have you ever been tested?
6. If so, what type of testing? E.g. pre-employment/ random/ for-cause
7. Can you describe your experience?
e.g. efficient/ clinical/ intrusive?

Section 3: Personal responses to the policy

1. When you were subject to the drug test how did you respond? Before/ During/ After the event
 - If they have not been subject to testing then I would ask whether they are aware of the response of other colleagues
2. Have you got any comments on how it was carried out?
3. How did you first hear of the test?
4. Do you think it has changed your attitude towards drugs?
 - Has your behaviour changed in any way?
5. Have you ever worked alongside individuals who you believed have been impaired by drink or drugs?
 - How do you feel this affected their performance
 - How did other employees respond to this behaviour?
 - What were the consequences for these individuals?
6. Do you think overall that the policy is a good idea?
 - Why?
7. Is there any way that you feel the policy of drug testing at (Organization) could be improved?

Habits

8. Do you drink alcohol?
 - Have you ever been drunk/ Hungover at work?
 - Do you ever consume alcohol during office hours?
 - For what reason?
9. Have you ever taken drugs?
10. Would you consider yourself a regular, or occasional drug user?
 - If so of what drugs? Define regular/ occasional
11. Has your experience of drug testing policies at work changed your view/ understanding or use of these substances?
 - If yes, how/ why? If no, why?

Reaction/ Opinion

12. Do you think that testing is effective at deterring employee alcohol and drug use?
13. Do you think that the drug test is effective at identifying individuals who use drugs?
14. Do you think the drug test is effective at identifying individuals IMPAIRED at work by the use of alcohol and drugs?

Important to emphasise impairment.....are individuals impaired at the point that there drug use is identified?
15. Overall, do you think drug testing is fair?
16. Overall, in your experience, do you consider alcohol or drug use to be a problem at work?

Why/ Not?

Resistance/ false-negatives and positives

17. Have you personally, or do you know anyone who has successfully beaten a drug test?

How? Or do you think its possible to beat the test? How?

18. Do you know anyone who has tried and failed to 'beat the test'?

19. Have you, or anyone you know passed a test you were expecting to fail?

i.e. when you had recently consumed and illicit substance?

20. Have you, or anyone you know failed a test you were expecting to pass?

i.e. when you had not recently consumed any illicit substances?

21. Have you ever known a positive drugs test to be explained by something other than substance use?

Is there anything you'd like to add?

BIBLIOGRAPHY

ABDEL-RAZEQ, H.N. and MOUSA, S.A., (2004). Thalidomide: a new old drug in the treatment of multiple myeloma. *Drugs of the Future*, **21**(10), pp. 1059-1063.

ADVISORY COUNCIL ON THE MISUSE OF DRUGS, (2002). *The Classification of Cannabis under the Misuse of Drugs Act 1971*. London: HMSO.

AGUAYO, L.G., GUZMAN, L., PEREZ, C., AGUAYO, L.J., SILVA, M., BECERRA, J. and FUENTEALBA, J., (2006). Historical and current perspectives of neuroactive compounds derived from Latin America. *Mini-Reviews in Medicinal Chemistry*, **6**(9), pp. 997-1008.

ALL-PARTY PARLIAMENTARY DRUG MISUSE GROUP, (2003). *Drug Testing on Trial*. London: House of Lords (Crown Publications).

ALMOND, S. and HEALEY, A., (2003). Mental health and absence from work: New evidence from the UK Quarterly Labour Force Survey. *Work Employment and Society*, **17**(4), pp. 731-742.

ALVESSON, M., (1995). The meaning and meaninglessness of postmodernism: Some ironic remarks. *Organization Studies*, **16**(6), pp. 1047-1075.

ALVESSON, M., (1998). The politics of management knowledge. *Administrative Science Quarterly*, **43**(4), pp. 938-942.

ALVESSON, M. and DEETZ, S., (1999). Critical Theory and postmodernism: Approaches to organization studies. In: S. CLEGG and C. HARDY, eds, *Studying Organization: Theory and Method*. London: SAGE, pp 185-211

ALVESSON, M. and DEETZ, S., (2000). *Doing Critical Management Research*. Thousand Oaks, California and London: Sage.

AMOORE, L., (2006). Biometric borders: Governing mobilities in the war on terror. *Political Geography*, **25**(3), pp. 336-351.

ARMITAGE, J., (1999). Paul Virilio – An Introduction. *Theory, Culture and Society*, **16**(5/6). pp 1-23

ARMITAGE, J. (2000) Beyond Postmodernism? Paul Virilio's Hypermodern Cultural Theory, *CTheory, Technology and Culture*, **23**(3). Online. Available at <http://www.ctheory.net/articles.aspx?id=133>

BACIK, I. and DREW, E., (2006). Struggling with juggling: Gender and work/life balance in the legal professions. *Women's Studies International Forum*, **29**(2), pp. 136-146.

BALL, K., (2000). Power, control and computer-based performance monitoring: Repertoires, resistance and subjectivities. *Organization Studies*, **21**(3), pp. 539-565.

BALL, K., (2002). Elements of surveillance: A new framework and future direction. *Information, Communication and Society*, **5**(4), pp. 573-590.

BANKS, S., CATCHESIDE, P., LACK, L., GRUNSTEIN, R. and MCEVOY, R., (2004). Low levels of alcohol impair driving simulator performance and reduce perception of crash risk in partially sleep deprived subjects. *Sleep*, **27**(6), pp. 1063-1067.

BANKS, S., CATCHESIDE, P., LACK, L., GRUNSTEIN, R. and MCEVOY, R., (2005). The Maintenance of Wakefulness Test and driving simulator performance. *Sleep*, **28**(11), pp. 1381-1385.

BAUDRILLARD, J., (1995). *The Gulf War Did Not Take Place*. Sydney: Power Publications.

BAUDRILLARD, J., (2006). War porn. *Journal of Visual Culture*, **5**(1), pp. 86-88.

BAXTER, J., (2000). The joys and justice of housework. *Sociology*, **34**(4), pp. 609.

BBC NEWS, (2000). Modahl vows to fight on. 14th December. Online. Available at: <http://news.bbc.co.uk/sport1/hi/athletics/1070719.stm> [accessed 20/12/2007].

BBC NEWS, (2007). Cannabis laws set to be reviewed. 18th July. Online. Available at: http://news.bbc.co.uk/1/hi/uk_politics/6904547.stm [accessed 16/10/2007].

BBC SPORT, (2002). British skier fails drug test. 5th March. Online. Available at: http://news.bbc.co.uk/winterolympics2002/hi/english/alpine_skiing/newsid_1856000/1856107.stm [accessed 23/11/2007].

BBC NEWS, (2008). Q&A: identity card plans. 6th March. Online. Available at: http://news.bbc.co.uk/1/hi/uk_politics/3127696.stm [accessed 31/11/2008].

BECKER, H., (1963). *Outsiders: Studies in the Sociology of Deviance*. New York: Free Press.

BENJAMIN, E., WONG, D. K. K. and CHOA, D., (2004). Moffett's' solution: A review of the evidence and scientific basis for the topical preparation of the nose. *Clinical Otolaryngology & Allied Sciences*, **29**(6), pp. 582-587.

BENNETT, N., BLUM, T.C. and ROMAN, P.M., (1994). Presence of drug screening and Employee Assistance Programs – exclusive and inclusive Human-Resource Management practices. *Journal of Organizational Behaviour*, **15**(6), pp. 549-560.

BERGER, P.L. and LUCKMANN, T., (1967). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Allen Lane, The Penguin Press: London.

BISCOPING, J. and BACHMANN-MENNENGA, M.B., (2000). Local anesthetics from ester to isomer. *Anesthesiologie Intensivmedizin Notfallmedizin Schmerztherapie*, **35**(5), pp. 285-292.

BLAXTER, L., HUGHES, C. and TIGHT, M., (2001). *How to Research*. 2nd edition. Buckingham: Open University Press.

BLAZE-TEMPLE, D., (1992). Drug testing in the Australian workplace: Overview of the issues. *Drug and Alcohol Review*, **11**(1), pp. 59-73.

Board of Education of Independent School District Number 92 of Pottawatomie City v. Earls (01-332) 536 U.S. 822 (2002) 242 F.3d 1264, reversed. *Cornell University Law School: Supreme Court Collection*. Online. Available at: <http://supct.law.cornell.edu/supct/html/01-332.ZS.html> (accessed 4.01.07)

BORG, M., (2000). Drug testing in organizations: Applying Horwitz's theory of the effectiveness of social control. *Deviant Behavior*, **21**(2), pp. 123-154.

BOTTING, J., (2002). The history of thalidomide. *Drug News and Perspectives*, **15**(9), pp. 604-611.

BOWER, E.A. and PHELAN, J.R., (2003). Use of amphetamines in the military environment. *The Lancet*, **362**, pp. s18-s19.

BREWIS, J., (2004). Sex and not the city? The aspirations of the thirty-something working woman. *Urban Studies*, **41**(9), pp. 1821-1838.

BREWIS, J. and LINSTED, S., (2000). *Sex, Work and Sex Work: Eroticizing Organization*. London and New York: Routledge.

BREWIS, J., SANDERSON, C. and WRAY-BLISS, E., (2006). The normalization of 'excessive' workforce drug testing? *TAMARA: Journal of Critical Postmodern Organization Science*, **5**(1), pp. 39-53.

BROWN, H. and McMINN, M., (2004). Marie Claire UK report: the drugs don't work - or do they? *Marie Claire*, **May**, pp. 133-138.

BROWN, R.B. and ADEBAYO, S.A., (2004). Perceptions of work-time and leisure-time among managers and field staff in a UK primary health care trust. *Journal of Nursing Management*, **12**(5), pp. 368-374.

BROWNING, S., WHITTET, H. and WILLIAMS, A., (1997). A novel method of application of cocaine to the nasal mucosa for use in endoscopic sinus surgery. *Minimally Invasive Therapy*, **6**(5-6), pp. 472-474.

BRUNET, J.R., (2002). Employee drug testing as social control. *Review of Public Personnel Administration*, **22**(3), pp. 193.

BURCHARD, R.E., BOLTON, R., HEATH, D.B., HILL, M.H., HOPP, M., LEONARD, W.R., POLLOCK, N.J., STRICKLAND, S.S., WEIL, J. and WILSON, C.S., (1992). Coca chewing and diet. *Current Anthropology*, **33**(1), pp. 1-24.

BURKE, J., (2006). Britain stops talk of 'war on terror'. *The Observer*, 10th December. Online, Available at <http://www.guardian.co.uk/politics/2006/dec/10/uk.terrorism> (accessed 12/2/2007)

BURRELL, G., (1992). The organization of pleasure. In: M. ALVESSON and H. WILMOTT, eds, *Critical Management Studies*. London: Sage, pp. 221-236.

BURRELL, G., (1998). Modernism, postmodernism and organizational analysis: The contribution of Michel Foucault. In: A. MCKINLAY and K. STARKEY, eds, *Foucault, Management and Organization Theory*. London: Sage, pp. 14-29.

BURRELL, G. and MORGAN, G., (1979). *Sociological Paradigms and Organizational Analysis: Elements of the Sociology of Corporate Life*. London: Heinemann Educational.

CAIRNS, T., HILL, V., SCHAFFER, M. and THISTLE, W., (2004). Levels of cocaine and its metabolites in washed hair of demonstrated cocaine users and workplace subjects. *Forensic Science International*, **145**(2-3), pp. 175-181.

CALABRESE, L. and FLEISCHER, A.B., (2000). Thalidomide: Current and potential clinical applications. *The American Journal of Medicine*, **108**(6), pp. 487-495.

CAMERON, H., (2004) CCTV and (In)dividuation. *Surveillance and Society*, **2**(2/3), pp. 136-144. Available at: <http://www.surveillance-and-society.org/cctv.htm>

CAVANAUGH, J. and PRASAD, P., (1994). Drug-testing as symbolic managerial action - in response to a case against workplace drug-testing. *Organization Science*, **5**(2), pp. 267-271.

CBC NEWS, (2003). How the THG scandal unfolded. 19th January. Online. Available at: http://www.cbc.ca/sports/indepth/drugs/stories/thg_timeline.html [accessed 02/03/2007].

CEYHAN, A., (2008). Technologization of security: management of uncertainty and risk in the age of biometrics. *Surveillance & Society*, **5**(2), pp. 102-123.

CHONG, M.S., WOLFF, K., WISE, K., TANTON, C., WINSTOCK, A. and SILBER, E., (2006). Cannabis use in patients with multiple sclerosis. *Multiple Sclerosis*, **12**(5), pp. 646-651.

CHRISTIANS, C., (2005). Ethics and politics in qualitative research. In: N.K. DENZIN and Y.S. LINCOLN, eds, *The Sage Handbook of Qualitative Research*. 3rd edition. Thousand Oaks, California and London: Sage, pp 139-165

CNN, (2003). Friendly fire pilots: air force push go-pills. 2nd January. Online. Available at: http://www.acftv.com/news/article.asp?news_id=63 [accessed 27/02/2007].

COLLIS, J. and HUSSEY, J., (2003). *Business Research: A Practical Guide for Undergraduate and Postgraduate Students*. 2nd edition. Basingstoke: Palgrave Macmillan.

COMBE, B., (2001). Thalidomide: New indications? *Joint Bone Spine*, **68**(6), pp. 582-587.

COMER, D., (1994). A case against workplace drug-testing. *Organization Science*, **5**(2), pp. 259-267.

CONNELL, R., (2005). A really good husband - work/life balance, gender equity and social change. *Australian Journal of Social Issues*, **40**(3), pp. 369-383.

COOMBER, R., (2004). *Literature Review for the Independent Inquiry into Drug Testing at Work*. York: Joseph Rowntree Foundation.

COOMBS, R. and COOMBS, C.J., (1991). The impact of drug-testing on the morale and well-being of mandatory participants. *International Journal Of Addictions*, **26**(9), pp. 981-992.

COOPER, R., (1997). The visibility of social systems. In: K. HETHERINGTON and R. MUNRO, eds, *Ideas of Difference: Social Spaces and the Labour of Division*. Oxford: Blackwell, pp. 32-42.

COOPER, R., (1998). Interview with Robert Cooper. In: CHIA, R. C. H., ed, *Organized Worlds: Explorations in Technology and Organization with Robert Cooper*. London: Routledge. 131-181

COWAN, T.R., (1987). Drugs and the workplace: to drug test or not to test? *Public Personnel Management*, **16**(4) pp. 313-322.

COZZETTO, D. and PEDELISKI, T., (1997). Privacy and the workplace: Technology and public employment. *Public Personnel Management*, **26**(4), pp. 515-527.

CRANE, E. and LIST, A., (2005). Immunomodulatory drugs. *Cancer Investigation*, **23**(7), pp. 625-634.

CUBITT, S., (1999). Virilio and New Media. *Theory, Culture and Society*, **16** (5/6) pp.127-144.

DAWSON, D., MCCULLOCK, K. and BAKER, A., (2001). *Extended Working Hours in Australia: Counting the Costs*. University of South Australia: Centre for Sleep Research.

DE CIERI, H., HOLMES, B., ABBOTT, J. and PETTIT, T., (2005). Achievements and challenges for work/life balance strategies in Australian

organizations. *International Journal of Human Resource Management*, **16**(1), pp. 90-103.

DEGENHARDT, L. and HALL, W., (2006). Is cannabis use a contributory cause of psychosis? *Canadian Journal of Psychiatry*, **51**(9), pp. 556-565.

DENZIN, N. and LINCOLN, Y., eds, (2005). *The Sage Handbook of Qualitative Research*. 3rd edition. Thousand Oaks, California and London: Sage.

DREYFUS, H. L., AND RABINOW, P. (1982). *Michel Foucault: Beyond Structuralism and Hermeneutics*. New York: Harvester Wheatsheaf

DTI (1998), *British Workplace Employee Relations Survey*, Department of Trade and Industry, London

DI FORTI, M. and MURRAY, R.M., (2005). Cannabis consumption and risk of developing schizophrenia: myth or reality? *Epidemiologia e Psichiatria Sociale*, **14**(184), pp. 184-187.

DICK, P. and HYDE, R., (2006). Line manager involvement in work-life balance and career development: Can't manage, won't manage? *British Journal Of Guidance*, **34**(3), pp. 345-364.

DIGGLE, G.E., (2001). Thalidomide: 40 years on. *International Journal of Clinical Practice*, **55**(9), pp. 627-631.

DRAPER, E., (1998). Drug testing in the workplace: The allure of management technologies. *International Journal of Sociology and Social Policy*, **18**(5/6), pp. 64-108.

DRUG TEST 911, *Fast, Guaranteed Drug Test Solutions*. Online. Available at : <http://www.drugtest911.com/> [accessed 10/12/2007].

DRUG TESTING IN THE WORKPLACE, *Mandatory Federal Workplace Drug Testing Guidelines*. Online. Available at: <http://jobsearchtech.about.com/library/weekly/aa090301-6.htm#mandatory> [accessed 16/10/2007].

DUNCAN, S., EDWARDS, R., REYNOLDS, T. and ALLDRED, P., (2003). Motherhood, paid work and partnering: Values and theories. *Work Employment and Society*, **17**(2), pp. 309-330.

EASTERBY-SMITH, M., LOWE, R. and THORPE, A. (2002). *Management Research: An Introduction*. 2nd edition. London: Sage.

EDGAR, K. and O'DONNELL, I., (1998). *Mandatory Drug Testing in Prisons*. Research Study 189. London: Home Office.

ELDEN, S., (2003). Plague, Panopticon, police. *Surveillance and Society*, **1**(3), pp. 240-253. Online. Available at: [http://www.surveillance-and-society.org/articles1\(3\)/ppp.pdf](http://www.surveillance-and-society.org/articles1(3)/ppp.pdf)

ERIKSSON, T., BJORKMAN, S. and ROTH, B., (2000). Intravenous formulations of the enantiomers of thalidomide: pharmacokinetic and initial pharmacodynamic characterization in man. *Journal of Pharmacy and Pharmacology*, **52**(7), pp. 807-817.

EUROPEAN PARLIAMENT, (1993). *The European Working Time Directive*.

88. European Commission. Brussels

FLINT, J., (2006). Surveillance and exclusion practices in the governance of access to shopping centers on the periphery estates in the UK. *Surveillance and Society*, 4(1/2), pp. 52-68. Online. Available at:

[http://www.surveillance-and-society.org/Articles4\(1\)/estates.pdf](http://www.surveillance-and-society.org/Articles4(1)/estates.pdf)

FONTANA, A. and FREY, J., (2005). The interview: From neutral stance to political involvement. In: N. DENZIN and Y. LINCOLN, eds, *The Sage Handbook of Qualitative Research*. 3rd edition. Thousand Oaks, California and London: Sage, pp. 695-729.

FOUCAULT, M., (1977). *Discipline and Punish: the Birth of the Prison*. New York: Pantheon Books.

FOUCAULT, M., (1979) *The History of Sexuality, Vol 1: The Will to Knowledge*. London: Allen Lane

FOURNIER, V. and GREY, C., (2000). At the critical moment: Conditions and prospects for critical management studies. *Human Relations*, **53**(1), pp. 7-32.

FRASER, A.D., (2004). Doping control from a global and national perspective. *Therapeutic Drug Monitoring*, **26**(2), pp. 171-174.

FREUD, S., (1974). *Cocaine Papers*. New York: Stonehill.

FRIMAN, R., (1999). Germany and the transformation of cocaine, 1880-1920. In: P. GOOTENBURG, ed, *Cocaine, Global Histories*. London: Routledge, pp. 83-105

GEERTZ, C., (1983). *Local Knowledge: Further Essays in Interpretive Anthropology*. New York: Basic Books.

GERBER, J., JENSEN, E., SCHRECK, M. and BABCOCK, G., (1990). Drug-testing and social control - implications for state theory. *Contemporary Crises*, **14**(3), pp. 243-258.

GERGEN, K.J., (1999). *An invitation to Social Construction*. London: Sage.

GILLIOM, J., (1994). *Surveillance, Privacy and the Law: Employee Drug Testing and the Politics of Social Control*. Michigan: University of Michigan Press.

GRANT-VALLONE, E. and DONALDSON, S.I., (2001). Consequences of work-family conflict on employee well-being over time. *Work and Stress*, **15**(3), pp. 214-226.

GRAS, M.L., (2004). The legal regulation of CCTV in Europe. *Surveillance and Society*, **2**(2/3), pp. 216-229. Online. Available at:

[http://www.surveillance-and-society.org/articles2\(2\)/regulation.pdf](http://www.surveillance-and-society.org/articles2(2)/regulation.pdf)

GUERRIER, Y. and ADIB, A., (2003). Work at leisure and leisure at work: A study of the emotional labour of tour reps. *Human Relations*, **56**(11), pp. 1399-1417.

HAAS, L. and HWANG, P., (1995). Company culture and men's usage of family leave benefits in Sweden. *Family Relations*, **44**(1), pp. 28-36.

HARPER, S.J. and JONES, N.S., (2006). Cocaine: What role does it have in current ENT practice? A review of the current literature. *The Journal of Laryngology and Otology*, **120**(10), pp. 808-811.

HARRIS, M.M. and HEFT, L., (1992). Alcohol and drug-use in the workplace - issues, controversies, and directions for future research. *Journal Of Management*, **18**(2), pp. 239-266.

HARTWELL, T.D., STEELE, P., FRENCH, M.T., POTTER, F.J., RODMAN, N.F. and ZARKIN, G., (1996). Aiding troubled employees: The prevalence, cost, and characteristics of Employee Assistance Programs in the United States. *American Journal of Public Health*, **86**(6), pp. 804-804.

HATSUKAMI, D.K. and FISCHMAN, M.W., (1996). Crack cocaine and cocaine hydrochloride - are the differences myth or reality? *JAMA - Journal of the American Medical Association*, **276**(19), pp. 1580-1588.

HECKER, S. and KAPLAN, M.S., (1989). Workplace drug testing as social control. *International Journal of Health Services*, **19**(4), pp. 693-707.

HEMP, P., (2004). Presenteeism: At work - but out of it. *Harvard Business Review*, **82**(10), pp. 49-58.

HIER, S., (2004). Risky spaces and dangerous faces: Urban surveillance, social disorder and CCTV. *Social and Legal Studies*, **13**(4), pp. 541-554.

HOCHSCHILD, A.R., (1997). *The Time Bind: When Work Becomes Home and Home Becomes Work*. New York: Metropolitan Books.

HOMELAND SECURITY, *US-Visit: How It Works*. Online. Available at: http://www.dhs.gov/xtrvlsec/programs/editorial_0525.shtm [accessed 16/10/2007].

HORNE, J. and BAUMBER, C., (1991). Time-of-day effects of alcohol intake on simulated driving performance in women. *Ergonomics*, **34**(11), pp. 1377-1383.

HOUSE OF COMMONS SCIENCE AND TECHNOLOGY COMMITTEE, (2006). *Drug Classification: Making A Hash Of It? 5*. London: The Stationary Office.

HOW TO BEAT A DRUG TEST, *Affordable Urine Samples*. Online. Available at: <http://www.ureasample.com/pass-drug-test/how-to-beat-a-drug-test.shtml> [accessed 13/10/2007].

HOWARD, J., ANIE, K., HOLDCROFT, A., KORN, S. and DAVIES, S., (2005). Cannabis use in sickle cell disease: a questionnaire study. *British Journal of Hematology*, **131**(1), pp. 123-128.

HUGHES, J.B., and BOZIONELOS, N., (2007). Work-life balance as source of job dissatisfaction and withdrawal attitudes - an exploratory study on the views of male workers. *Personnel Review*, **36**(1-2), pp. 145-154.

HUXLEY, A., (1989). *Brave New World*. New York: Harper & Row.

THE INDEPENDENT, (2007). Top judge: 'Put everyone on DNA database'. 5th September. Online. Available at: <http://news.independent.co.uk/uk/crime/article2931879.ece> [accessed 05/10/2007].

I PASSED MY DRUG TEST, Online. Available at:

<http://www.ipassedmydrugtest.com> [accessed 12/1/2007].

ILHAN, M., DURUKAN, E., ARAS, E., TURKCUOGLU, S. and AYGUN, R., (2006). Long working hours increase the risk of sharp and needlestick injury in nurses: The need for new policy implication. *Journal of Advanced Nursing*, **56**(5), pp. 563-568.

INDEPENDENT INQUIRY INTO DRUG TESTING AT WORK, (2004). *Drug Testing in the Workplace: The Report of the Independent Inquiry into Drug Testing at Work*. York: Joseph Rowntree Foundation.

INTERNATIONAL LABOUR OFFICE ORGANIZATION, (2003). *Alcohol and Drug Problems at Work: The Shift to Prevention* Geneva: International Labour Office.

INTERNATIONAL OLYMPIC COMMITTEE, *MEXICO 1968 Games of the XIX Olympiad*. Online. Available at:

http://www.olympic.org/uk/games/past/index_uk.asp?OLGT=1&OLGY=1968.

(accessed 12/07/2007)

INTRONA, L. and WOOD, D., (2004). Picturing algorithmic surveillance: The politics of facial recognition systems. *Surveillance and Society*, **2**(2/3), pp. 177-198. Online. Available at: [http://www.surveillance-and-society.org/articles2\(2\)/algorithmic.pdf](http://www.surveillance-and-society.org/articles2(2)/algorithmic.pdf)

IWASAKI, K., and TAKAHASHI, M.N.,A., (2006). Health problems due to long working hours in Japan: Working hours, workers' compensation (Karoshi), and preventive measures. *Industrial Health*, **44**(4), pp. 537-540.

JEFFREY, V. and LIPSCOMB, J., (2006). Long working hours, occupational health and the changing nature of work organization. *American Journal of Industrial Medicine*, **49**(11), pp. 921-929.

JOCKERS-SCHERUBL, M.C., (2006). Schizophrenia and cannabis consumption: Epidemiology and clinical symptoms. *Praxis der Kinderpsychologie und Kinderpsychiatrie*, **55**(7), pp. 533-543.

JOHNSON, P. and DUBERLEY, J., (2000). *Understanding Management Research: An Introduction to Epistemology*. London: Sage.

JOINSON, A. N., PAINE, C., BUCHANAN, T. and REIPS, U., (2006). Watching me, watching you: privacy attitudes and reactions to identity card implementation scenarios in the United Kingdom. *Journal of Information Science*, 32, pp. 334-343.

JORALEMON, D., (1995). Coca in history and political economy. *American Anthropologist*, 97(4), pp. 799-800.

JUNGER-TAS, J., (2005) The scientific integrity of applied research. *European Journal on Criminal Policy and Research*, 11(2), pp. 143-158

KALIMO, R., PAHKIN, K., MUTANEN, P. and TOPPINEN-TANNER, S., (2003). Staying well or burning out at work: Work characteristics and personal resources as long-term predictors. *Work and Stress*, 17(2), pp. 109-122.

KINZL, J., TRAWEGER, C., BIEBL, W. and LEDERER, W., (2006). Burnout and stress disorders in intensive care doctors. *Deutsche Medizinische Wochenschrift*, 131(44), pp. 2461-2464.

KNIGHTS, D. and VURDUBAKIS, T., (1994). Foucault, power, resistance and all that. In: J.M. JERMIER, D. KNIGHTS and W.R. NORD, eds, *Resistance and Power in Organizations*. London: Routledge, pp. 167-199.

KOHN, M., (1999). Cocaine girls, sex, drugs and modernity in London during and after the First World War. In: P. GOOTENBURG, ed, *Cocaine, Global Histories*. London: Routledge, pp. 105-123

KORT, M., (1999). Doctors, diplomats and businessmen: Conflicting interests in the Netherlands and Dutch East Indies, 1860-1950. In: P. GOOTENBURG, ed, *Cocaine, Global Histories*. London: Routledge, pp 123-146

LEE, W.C., KAPUR, T.R. and RAMSDEN, W., N., (1997). Local and regional anesthesia for functional endoscopic sinus surgery. *Annals of Otolaryngology and Laryngology*, **106**(9), pp. 767-769.

LEWIS, S., GAMBLES, R. and RAPOPORT, R., (2007). The constraints of a 'work-life balance' approach: An international perspective. *International Journal Of Human Resource Management*, **18**(3), pp. 360-373.

LYON, D., (2001). Surveillance after September 11. *Sociological Research*

Online, 6(3), pp. U29-U37. Online. Available at:

<http://www.socresonline.org.uk/6/3/lyon.html>

LYON, D., (2004). Globalizing surveillance: Comparative and sociological perspectives. *International Sociology*, 19(2), pp. 135-149.

MACDONALD, P., BROWN, K. and BRADLEY, L., (2005). Explanations for the provision-utilization gap in work-life policy. *Women in Management Review*, 20(1), pp. 37-55.

MELAMEDE, R., (2005) Cannabis and tobacco smoke are not equally carcinogenic. *Harm Reduction Journal*, 2(17). Online. Available at: <http://www.harmreductionjournal.com/content/pdf/1477-7517-2-17.pdf>

MEYER, J., PAUNONEN, S.V., GELLATLY, I., GOFFIN, R. and JACKSON, D., (1989). Organizational commitment and job performance – it's the nature of the commitment that counts. *Journal Of Applied Psychology*, 74(1), pp. 152-156.

MIXMAG, (2005a). The United Kingdom of caners - (and how your weekend could land you in jail). February, pp. 30-33.

MIXMAG, (2005b). The drug laws and you. February, pp. 34-36.

MIXMAG, (2005c). Coke: UK's best kept secret? February, pp. 38-39.

MIXMAG, (2005d). Are we a nation of tokers? February, p. 41.

MOEHLER, T.M., HILLENGASS, J. and GLASMACHER, A., (2006). Thalidomide in multiple myeloma. *Current Pharmaceutical Biotechnology*, **7**(6), pp. 431-440.

MORRIS, N., (2006), Drug 'classes' have little link to the dangers. *The Independent*. 1st August. Online. Available at: <http://www.independent.co.uk/life-style/health-and-wellbeing/health-news/drug-classes-have-little-link-to-the-dangers-410087.html> [accessed 28/2/2007].

MUNRO, R., (1997). Ideas of difference: stability, social spaces and the labour of division. In: K. HETHERINGTON and R. MUNRO, eds, *Ideas of Difference: Social Spaces and the Labour of Division*. Oxford: Blackwell, pp. 3-27.

NATIONAL STATISTICS, (2004), *People and Migration*. Online. Available at: <http://www.statistics.gov.uk/cci/nugget.asp?id=1311> [accessed 05/09/2007].

NEERMAN, M., (2006). Drugs of abuse: Analyses and ingested agents that can induce interference or cross-reactivity. *Labmedicine*, **37**(6), pp. 358-361.

NEWCOMBE, R., (2007). Working hours and ill-health - A more serious relationship than it appears? *International Journal of Cardiology*, **114**(2), pp. 284-285.

NORFOLK, A., (2007). How 'safe drinking' experts let a bottle or two go to their heads. *The Times*, 20th October, p. 6.

NORRIS, C. (2003). From personal to digital: CCTV, the Panopticon, and the technological mediation of suspicion and social control, in D. LYON., ed.

Surveillance as Social Sorting: Privacy, Risk, and Digital Discrimination.

London: Routledge pp 249-281

NORRIS, C., McCAHILL, M. and WOOD, D., (2004). Editorial. The growth of CCTV: A global perspective on the international diffusion of video surveillance in publicly accessible space. *Surveillance and Society*, **2**(2/3), pp. 110-135.

Online. Available at: [http://www.surveillance-and-society.org/articles2\(2\)/editorial.pdf](http://www.surveillance-and-society.org/articles2(2)/editorial.pdf)

NORRIS, C. and McCAHILL, M., (2006). CCTV: Beyond penal modernism? *British Journal of Criminology*, **46**(1), pp. 97-118.

NO2ID. Online. Available at: <http://www.no2id.net/> [accessed 3/11/2008].

NUTT, D., KING, L., SAULSBURY, W. and BLAKEMORE, C., (2007). Development of a rational scale to assess the harm of drugs of potential misuse. *The Lancet*, **369**(9566), pp. 1047-1053.

O'CONNELL DAVIDSON, J. and LAYDER, D., 1994. *Methods, Sex and Madness*. London: Routledge.

OFFICE OF NATIONAL DRUG CONTROL POLICY, *Administering the Test:*

What Can Students Expect?. Online. Available at:

http://www.whitehousedrugpolicy.gov/publications/drug_testing/administering.html [accessed 01/07/2007].

OFFICE OF NATIONAL DRUG CONTROL POLICY, *Drugs in the Workplace:*

A Summary of Research and Survey Findings. Available at:

<http://www.whitehousedrugpolicy.gov/prevent/workplace/research.html>

[accessed 08/02/ 2007].

O'MALLEY, P. and MUGFORD, S., (1991). Moral technology: The political agenda of random drug testing. *Social Justice: A Journal of Crime, Conflict and World Order*, **18**(4) pp. 122-146.

PARENTI, C., (2002). DC's virtual Panopticon: A Camera System In The Nation's Capital Is Making Civil Libertarians Nervous. *The Nation*, Online 5th June. Available at:

http://findarticles.com/p/articles/mi_hb1367/is_200206/ai_n5563925

PARKER, M., (1997). Dividing organizations and multiplying identities. In: K. HETHERINGTON and R. MUNRO, eds, *Ideas of Difference: Social Spaces and the Labour of Division*. Oxford: Blackwell, pp. 114-139.

PASS THE DRUG TEST, *Saliva Drug Test Information*. Online. Available at: <http://www.passthedrugtest.com/salivainfo.htm> [accessed 12/01/2007].

PASSING ALL DRUG TESTS, *Passing A Test*. Online. Available at: <http://www.passingalldrugtest.com/> [accessed 10/12/2007].

PERRY-JENKINS, M., GOLDBERG, A.E., PIERCE, C. and SAYER, A., (2007). Shift work, role overload, and the transition to parenthood. *Journal of Marriage and The Family*, **69**(1), pp. 123-138.

POLICE FOUNDATION (2000) *Drugs and the Law: Report of the Independent Inquiry into the Misuse of Drugs Act 1971*. London: Police Foundation.

PORTER, G., (2004). Work, work ethic, work excess. *Journal of Organizational Change Management*, **17**(5), pp. 424-439.

POSTER, M., (1990). Foucault and databases. *Discourse: Journal for Theoretical Studies in Media and Culture*, **12**(2), pp. 110-127.

PRESS ASSOCIATION (2005) 'School launches drug-testing programme' *The Guardian*, 5th January. Online. Available at:

<http://education.guardian.co.uk/schools/story/0,,1383679,00.html>

RAEDIKER, B., JANSSEN, D., SCHOMANN, C. and NACHREINER, F., (2006). Extended working hours and health. *Chronobiology International*, **23**(6), pp. 1305-1316.

RAU, R. and TRIEMER, A., (2004). Overtime in relation to blood pressure and mood during work, leisure, and night time. *Social Indicators Research*, **67**(1-2), pp. 51-73.

REES-MOGG, W., (2006). Someone to watch over you. *Times Online*, 16th January. Online. Available at: <http://www.timesonline.co.uk/article/0,,1052-1987493,00.html>.

REIMENS, P., (2000) Interview with Paul Virilio: the Kosovo war took place in orbital space, *Theory, Technology and Culture* **23**(3) Online. Available at: <http://cryptome.org/virilio-rma.htm>

RENZETTI, C.M. and LEE, W.C., (1993). *Researching Sensitive Topics*. London: Sage.

REY, J.M. and TENNANT, C.C., (2002). Cannabis and mental health: more evidence establishes clear link between use of cannabis and psychiatric illness. *British Medical Journal*, **325**(23), pp. 1183-1184.

RICHARDSON, L. and ADAMS ST PIERRE, E., (2005). Writing: a method of inquiry. In: N. DENZIN and Y. LINCOLN, eds, *The Sage Handbook of Qualitative Research*. 3rd edition. London: Sage, pp 959-979

RICHIE, J. and LEWIS, J., (2003). *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. London: Sage.

ROBSON, C., (2002). *Real World Research*. 2nd edition. Oxford: Blackwell.

ROBSON, P., (2001). Therapeutic aspects of cannabis and cannabinoids. *British Journal of Psychiatry*, **178**(2), pp. 107-115.

ROTHMAN, M., (1988). Random drug testing in the workplace – implications for Human Resource Management. *Business Horizons*, **31**(2), pp. 23-27.

ROTHSTEIN, M.A., (1991). Workplace drug testing: a case study in the misapplication of technology. *Harvard Journal of Law and Technology*, **5**, (65) pp. 65-93.

ROWBOTTOM, M., (1995), Modahl ruling casts doubt on drug tests. *The Independent*, 27th July. Online. Available at:
http://findarticles.com/p/articles/mi_qn4158/is_19950727/ai_n13997015
[accessed 20/12/2007].

RUNCIMAN, R., (2000). *Drugs and the Law: Report of the Independent Inquiry into the Misuse of Drugs Act 1971*. London: Police Foundation.

SAUNDERS, M., LEWIS, P. and THORNHILL, A., (2007). *Research Methods for Business Students*. 4th edition. Harlow, Essex and New York: Prentice Hall.

SCHWARTZ, F., (1989). Management women and the new facts of life. *Harvard business review*, **67**(1), pp. 65-76.

SCIENCE DAILY, (2005), *Cannabis Smoke is Less Likely to Cause Cancer than Tobacco Smoke*, 19th October. Online. Available at:
<http://www.sciencedaily.com/releases/2005/10/051019003339.htm> [accessed 08/02/2007].

SEWELL, G. and WILKINSON, B., (1992). Someone to watch over me - surveillance, discipline and the just-in-time labour process. *Sociology*, **26**(2), pp. 271-289.

SHEPARD, E. and CLIFTON, T., (2000). Are longer hours reducing productivity in manufacturing? *International Journal of Manpower*, **21**(7-8), pp. 540-552.

SHIPLEY, A., (2007). Marion Jones admits to steroid use. *Washington Post*, 10th April. Online. Available:
<http://www.washingtonpost.com/wpdyn/content/article/2007/10/04/AR200710040016> [accessed 05/11/2007].

SILVERMAN, D., (2004). *Qualitative Research: Theory, Method and Practice*.
2nd edition. London: Sage.

SMITH, J. and GARDNER, D., (2007). Factors affecting employee use of work-life balance initiatives. *New Zealand Journal Of Psychology*, **36**(1), pp. 3-12.

SMITHSON, J. and STOKOE, E.H., (2005). Discourses of work-life balance: Negotiating 'genderblind' terms in organizations. *Gender Work and Organization*, **12**(2), pp. 147-168.

SPIKED POLITICS, (2001), *The Lessons of the Drugs War*. 9th October. Online.
Available: www.spiked-online.co.uk/Printable/00000002D264.htm [accessed 08/02/2007].

SPILLANE, J., (1999). Making a modern drug: The manufacture, sale, and control of cocaine in the United States, 1980-1920. In: P. GOOTENBURG, ed, *Cocaine, Global Histories*. London: Routledge, pp. 21-46

SPOELSTRA, S., (2005). Robert Cooper: Beyond organization. *Sociological Review*, **53**(1), pp. 106-119.

STRAKOWSKI, S.M., DELBELLO, M.P., FLECK, D.E., ADLER, C.M., ANTHENELLI, R.M., KECK, P.E., ARNOLD, L.M. and AMICONE, J., (2007). Effects of co-occurring cannabis use disorders on the course of bipolar disorder after a first hospitalization for mania. *Archives of General Psychiatry*, **64**(1), pp. 57-64.

SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES
ADMINISTRATION (SAMHSA), *Rules Proposed for Workplace Drug Testing*.
Online. Available at:
http://www.samhsa.gov/SAMHSA_News/VolumeXII_3/article7.htm [accessed
08/02/2007].

THOMAS, P.A., (1995). Identity cards. *Modern Law Review*, **58**(5), pp. 702-713.

THRANE, C., (2000). Men, women, and leisure time: Scandinavian evidence of gender inequality. *Leisure Sciences*, **22**(2), pp. 109-122.

TINDALL, D., DAVIES, S. and MAUBOULES, C., (2003). Activism and conservation behavior in an environmental movement: The contradictory effects of gender. *Society and Natural Resources*, **16**(10), pp. 909-932.

TOWNLEY, B., (1993). Foucault, power/ knowledge, and its relevance for Human Resource Management. *Academy of Management Review*, **18**(3), pp. 518-545.

TREBST, C. and STANGEL, M., (2005). Cannabinoids in multiple sclerosis - therapeutically reasonable?. *Fortschritte der Neurologie Psychiatrie*, **73**(8), pp. 463-469.

ULTIMATE DETOX, *Never Worry About A Drug Test Again*. Online. Available at: <http://www.ultimatedetox.co.uk/drug-testing-advice-information/drug-testing-false-positives.htm> [accessed 07/07/2007].

VAN OS, J., (2005). Is the party over? Evidence that cannabis is a causal risk factor for schizophrenia. *European Neuropsychopharmacology*, **15**(3), pp. 345-345.

VANDEVENNE, M., VANDENBUSSCHE, H. and VERSTRAETE, A., (2000). Detection time of drugs of abuse in urine. *Acta Clinica Belgica*, **55**(6), pp. 323-333.

VERROKEN, M. and MOTTRAM, D.R., (1996). Doping control in sport. In: D.R. MOTTRAM, ed, *Drugs in Sport*. 2nd edition. London: E & FN Sponsor. pp 307-357

VERSTRAETE, A., (2004). Detection times of drugs of abuse in blood, urine, and oral fluid. *Therapeutic drug monitoring*, **26**(2), pp. 200-205.

VIRILIO, P., (1991) *The Lost Dimension*. New York: Semiotext

VIRILIO, P., (1997) *Open Sky*. London: Verso

VOET, W., (2001). *Breaking the Chain: Drugs and Cycling – The True Story*. London: Yellow Jersey.

WADDINGTON, I., (2000). *Sport, Health and Drugs: A Critical Sociological Perspective*. London and New York: E & FN Sponsor.

WAKEFIELD, J., (2002), Watching your every move. *BBC News*, 7th February. Online. Available at: <http://news.bbc.co.uk/1/hi/sci/tech/1789157.stm> [accessed 04/01/2007].

WARBURTON, H., and HOUGH, M., (2005). Looking the other way - the impact of reclassifying cannabis on police warnings, arrests and informal action in England and Wales. *British Journal of Criminology*, **45**(2), pp. 113-128.

WARREN, S. and WRAY-BLISS, E., (2003). E-business: Drugs, organization and the organization of drugs. Paper presented to the *21st Standing Conference on Organizational Symbolism*, University of Cambridge, UK, 9th-12th July.

WATSON, T.J., (1997). The labour of division: The manager as 'self' and 'other'. In: K. HETHERINGTON and R. MUNRO, eds, *Ideas of Difference: Social Spaces and the Labour of Division*. Oxford: Blackwell, pp. 139-155.

WISE, S. and BOND, S., (2003). Family leave policies and devolution to the line. *Personnel Review*, **32**(1-2), pp. 58-72.

WITTGENSTEIN, L., (1968). *Philosophical Investigations*. Oxford: Basil Blackwell.

WOOD, A.M., (1998). Omniscient organizations and bodily observations: electronic surveillance in the workplace. *International Journal of Sociology and Social Policy*, **18**(6), pp. 132-169.

WORLD ANTI-DOPING AGENCY, (2005) *WADA Out-of-Competition Testing Programme*. Available at: http://www.wada-ama.org/rtecontent/document/DOPINGCONTROL_2005_OOCT_Q&A_EN.pdf

[accessed 08/02/2007].

WORLD ANTI-DOPING AGENCY, *A Brief History of Anti-Doping*. Online. Available at: <http://www.wada-ama.org/en/dynamic.ch2?pageCategory.id=312>

[accessed 08/02/2007].

WORNER, T. and PRABAKARAN, J., (1985). The accuracy of breath alcohol analysis using the breathalyzer. *Alcohol and Alcoholism*, **20**(3), pp. 349-350.

YAR, M., (2003). Panoptic power and the pathologisation of vision: Critical reflections on the Foucauldian thesis. *Surveillance and Society*, **1**(3), pp. 254-271.

Online. Available at: [http://www-surveillance-and-society.org/articles1\(3\)/pathologisation.pdf](http://www-surveillance-and-society.org/articles1(3)/pathologisation.pdf).

YASBEK, P., (2004). *The Business Case for Firm-Level Work-Life Balance Policies: A Review of the Literature*. Wellington: Labour Market Policy Group.

YASUI, K., YAMAZAKI, T. and AGEMATSU, K., (2005). Thalidomide as an immunotherapeutic agent: The effects on neutrophil-mediated inflammation. *Current Pharmaceutical Design*, **11**(3), pp. 395-401.

YOUNG, J., (1971). *The Drug Takers*. London: Granada Publishing.

ZERLING, C., (1993). *Current Practice and Experience on Drug and Alcohol Testing in the Workplace*. Geneva: International Labour Office.