The Competing Discourses of Workplace Health

Steven Allender, B.App.Sci. (Hons.)

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School of Human Movement and Sport Science

University of Ballarat

PO Box 663

University Drive, Mount Helen

Ballarat, Victoria 3350

Australia

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Summary

Workplace health initiatives have been continually evolving since the industrial revolution, and, in the past 30 years, workplace health promotion has become prevalent. In this time, little critical thought has been given to the effects that health programs in the workplace have on the subjective experience of employees. This study provides a postcritical analysis of the discourses of workplace health, using data gathered with information technology company Labyrinth Computing. Data includes interviews with employees and health managers as well as documents including health policy and health-related intra/internet websites. The methodology employed relies on Fairclough's Critical Discourse Analysis, and examines discourse as text and discursive practices within broader socio-historical conditions. Analysis includes elements of description, interpretation and explanation and extends previous discourse analysis using the theoretical perspectives of Michel Foucault.

Four discourses are identified and examined: Occupational Health and Safety, Occupational Health and Fitness, Risk, and The Glory of Technology. Occupational Health and Safety identifies a clear distinction between health and safety, and shows that safety is prioritized ahead of health due to the legislative pressure within the discourse. Occupational Health as Fitness constructs health as a function of physical activity, and extends this to link health to the lifestyle of employees. Occupational Health and Safety and Occupational Health and Fitness each use elements of Risk discourse to rationalize intervention in the health of the worker. Risk discourse constructs all employees as a potential site of risk to be governed. Governance occurs

particularly through assessment using information communication technologies. The construction of information communication technology is found to be exclusively positive and is examined as The Glory of Technology discourse. The potential for each of these discourses to determine the conduct of others is examined through the notion of governmentality. The study is extended through a postcritical lens to investigate the effects of workplace health promotion on subjective experience, knowledge and power. The development of a methodology for postcritical discourses analysis is linked to potential sites for future research. The research identifies the strength of policy-based health promotion in the workplace and makes recommendations for alternate ways of conceiving workplace health initiatives. The study also provides new ways of researching workplaces, of tracking the effectiveness of communication and for providing employees a voice within the workplace.

Statement of Authorship

Except where explicit reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted whole or in part from a thesis by which I have qualified for or been awarded another degree or diploma. No other person's work has been relied upon or used without due acknowledgement in the main text and references of the thesis.

Signed: _____

Dated: _____

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Any mistakes in this thesis are my own.

1 Introduction

Your Fears of Work

There was once a man
who rushed terrified into a house,
his face yellow, his lips blue, and his hands
trembling like an old man's.
"What's wrong?"
"Outside! They're rounding up donkeys
to do some labor!"
"Why are you so upset?"
"They are so fierce in their purpose
that they may take me too!"
Don't be like this man.
Quit talking about your fears of work
and of being uncomfortable.

It's time to speak of roses and pomegranates,
and of the ocean where pearls are made
of language and vision, and invisible ladders,
which are different for each person, that lead
to the infinite place where trees
murmur among themselves,
"What a fine stretch
this is in the air today!"
And nightingales ask
the just-beginning nubs of fruit appear
when the blossoms fall off,
"Give us some of what
you're drinking!"
Join that endless joy-talking,
and forget the other, worrying that
you might be taken for a jackass!

(Rumi 1991: V, 2525-2563)

Most of the people I talk with about work resonate with the man rushing into the house. For many people, work is something they would rather avoid and certainly would never expect to enjoy. The picture becomes more complex when we begin to

examine the effect of work on health. For the employer, the problems associated with workplace health are clear. Workplace illness results in at least 20 million lost workdays annually, more than 50 times the days lost to industrial unrest. This costs the Australian economy between 19 and 20 billion dollars annually (Australian Industry Commission, 1994). The health of workers has very real effects on the economies of nations: the World Health Organization estimates that the reduced working capacity of workers relates to a loss of between 10 and 20% of GDP. 'According to the World Bank estimate, two thirds of occupationally determined loss of disability-adjusted life years (DALYs) could be prevented by occupational health and safety programs' (World Health Organization, 1994: 3).

From the point of view of the worker, health is bound up in personal concern, negotiations with unions and the desire to remain healthy and capable of work. Turning attention to the way health is addressed in the workplace results in a muddying of the waters. For those wishing to promote health, the workplace represents an ideal setting. Most of the adult population spend a third of their time at work, and represent a captive audience for the promotion of health. The potential for health promotion programs to reduce costs has been recognized both here and overseas. The prevalence of workplace health promotion programs is increasing, and nine in ten American workplaces have some form of health promotion for employees (Caldwell, 1998).

While workplace health promotion proliferates, less attention is paid to the way health promotion is implemented, or the messages it portrays. A useful notion for the analysis of communication and reception of health messages is discourse. Discourse allows for an examination of the effects and context of health communication. This

thesis aims to identify and explain the effects of the discourses that operate in workplace health.

The thesis begins by painting the landscape of workplace health. Current research is described as positivistic, and 'doing' health in the research means looking at health from expert technical positions. Some exceptions to this exist in the settings approach to workplace health (Chu, Driscoll & Dwyer, 1997), and other settings projects including health promoting schools (Colquhoun, Goltz & Sheehan, 1997), and healthy cities. An argument is made that health research needs to move beyond these traditional understandings 'to go beyond simple evaluations to deeper explanations of the communication process and the development of theoretical perspectives' (Lupton, 1992: 146).

My research is interested in the discourses of workplace health promotion at an information technology company called Labyrinth Computing. I use the term discourse to mean a body of knowledge that works at three levels. Discourse can be understood at three levels; on the first level as a general domain of statements, text and talk; on the second level as a group of statements relating to a particular discipline, such as feminism; and, on a third level as a regulated practice that can account for particular statements (Mills, 1997). My research involves an in depth postcritical discourse analysis of health and health promotion within the company. Data used includes interviews with employees and health managers at the company, company health policies, and documents from a specific Labyrinth workplace health program. This thesis develops a methodology that allows the identification of discourses and applies poststructural perspectives to gain an insight into the effects of discourse. The methodology is based on Fairclough's Critical Discourse Analysis

(CDA) (1992), and is extended by poststructural theory, particularly that of Michel Foucault.

Fairclough's CDA allows for the identification of discourses and provides a framework to place these discourses within textual, practical and socio-historical contexts. Foucault provides a set of tools for analysis, and these anchor the analysis in knowledge, power and subjectivity. The methodology builds a theoretical framework for postcritical discourse analysis that is sensitive to the power systems that operate within. In particular, the utopian promise of critical theory is replaced by a postcritical sensitivity for the governing of the subject. The flavor of this work could neatly be described as an answer to Fox's questioning about discourse:

> Whose voice is being heard in the discourse…? What authority is being spoken here, what body of expertise is being cited, what are the conditions of promulgation of these messages through and by which we are asked to accept the authenticity of the discourse?
>
> (Fox, 1993: 135)

This thesis describes the four main discourses identified through a postcritical discourse analysis; these are Occupational Health and Safety, Occupational Health and Fitness, Risk, and the Glory of Technology. Each discourse represented a significant theme that emerged from literature and data. They were chosen as discourses for analysis in relation to literature, their prevalence in data and through my personal experience of each theme during my work in workplace health. This process is explained in more depth in chapter 3. Chapter 1 provides an outline of the thesis, detailing the contents of each of the following chapters. Chapter 2 reviews the literature around research in occupational health and safety, occupational fitness, health and risk, and health information technology. Chapter 3 develops a post-critical discourse analysis methodology referring in particular to the work of Michel Foucault and Norman Fairclough.

Chapter 4 identifies Occupational Health and Safety as the dominant discourse in workplace health. Within this discourse, a clear dichotomy is found between health and safety practice and safety is valorized ahead of health. The importance of safety is supported by legislation and the threat of compensation in the event of workplace injury. Health is shown to be marginalized in this relationship due to its less formal, structured nature.

Chapter 5 concentrates on the discourse of Occupational Health and Fitness, which is based on the lifestyles of employees, in particular their exercise, diet, and sleeping habits. The associated health surveillance of the employee is rationalized in this discourse and is shown to result in a breaking down of traditional barriers between working and private life. Both of these discourses borrow from risk discourse to rationalize their approach to workplace health.

In Chapter 6, Risk discourse is shown to construct all employees as a problem to be solved by workplace health, using assessment to find risk in any employee. This discourse is shown to construct the responsible employee and has consequences for the conduct of individuals.

Labyrinth is an international information communication technology company, and as such, information technology was a continual concern. The messages and use of information technology in health programs was always produced as positive and advantageous. Chapter 7 details the Glory of Technology discourse, which maintains an evolutionary impetus for technology while constructing the health of the worker in the space between the individual and the personal computer (PC). I argue that this serves to produce health in the space between the employee and their computer, resulting in health as part human, part machine.

Chapter 8 is dedicated to examining the implications of each discourse for governing the conduct of workers. The expert technical nature of workplace health discourse becomes apparent and the implications of privileged knowledge positions are investigated. The language used by professional knowledge positions has real implications for power relationships:

> George Bernard Shaw once remarked that all professions are conspiracies against the common folk. He meant that those who belong to elite trades – physicians, lawyers, teachers, and scientists – protect their special status by creating vocabularies that are incomprehensible to the general public. This process prevents outsiders from understanding what the profession is doing and why – and protects the insiders from close examination and criticism. Professions, in other words, build forbidding walls of technical gobbledygook over which the prying and alien eye cannot see.
>
> (Postman, 1997: 128)

The use of professional, expert and technical knowledge in discourse has real implications for workers and their understandings of health. These systems of knowledge help to construct people in language, and provide people with ways to see the world and understand who they are. 'Thus medical knowledge constructs people as patients, the law constructs people as 'criminals' or 'law-abiding subjects', Christianity constructs people as sinners' (Fox, 1999: 211). Health at work is clearly important, and many different initiatives and interventions are planned and implemented to try and positively influence health. As the World Health Organization describes the stakes in workplace health are high:

> Health at work and healthy work environments are among the most valuable assets of individuals, communities and countries. Occupational health is an important strategy not only to ensure the health of workers, but also to contribute positively to productivity, quality of products, work motivation, job satisfaction and thereby to the overall quality of life of individuals and society.
>
> (World Health Organization, 1994:4)

Corporations are increasingly providing workplace health programs, health consultants, and private health providers for their employees. This move towards health at work has not been examined critically despite the central role health plays in constructing subjective experience. My postcritical discourse analysis identifies the discourse of workplace health and examines their effects on the power relationships and the conduct of individuals.

The following chapter reviews the landscape of research into workplace health. I identify the predominately positivist approach to researching workplace health and locate this within professional knowledge positions. Research is examined within the framework of the discourses identified, beginning with occupational health and safety, moving to fitness and lifestyle, risk, and information technology.

2 Mapping the Landscape: Research in Workplace Health

2.1 Introduction

A continual theme throughout this thesis is the organic, messy nature of the research process. This is true with the following review of research approaches to health in the workplace. The initial review, written in my first year of study, was a beginning to a journey rather than a potential chapter to the completed thesis. Parts of the initial review have been kept and others left behind along the way. The review has been re-written after data analysis, reflected in the similarities between the discourses identified and examined in the analysis and the themes picked over in the following review. In this chapter, I review a number of approaches to health in the workplace and describe various critiques of each. These approaches include occupational health and safety, occupational fitness and lifestyle, occupational health risk and occupational health and information communication technology.

I begin with occupational health and safety, and find the research within the field to be mostly from an 'expert technical' viewpoint. Expert technical approaches are seen to be distinct fields of knowledge that jealously guard their position in the workplace. The critique of occupational health and safety identifies the false claims to the apolitical nature of the field. This claim to objective realism is criticized particularly for ignoring influences of social conditions on health and safety at work. OH&S is shown to be fraught with political controversies, some examples include debates about Miner's Nystagmus, Asbestosis, Repetitive Strain Injury (RSI), and stress.

Each disease is characterized by a victim blaming explanation that locates the cause of disease within the actions of the worker. Developments in OH&S would now see a systems explanations used.

Workplace health programs concerned with fitness and lifestyle reflect an expansion in the definition of health represented by OH&S. I locate fitness within lifestyle programs and trace the argument that physical fitness is essential for health. The development of this approach is linked to the increasing sophistication and power of epidemiological studies into diseases such as cancer and cardiovascular disease. Workplace fitness programs are rationalized by the perceived health and productivity benefits of physical activity. A more critical analysis finds inequities in the type of programs offered. Feminist critiques of the gendered nature of health and fitness show the implications of lifestyle and fitness discourses in constructing individual subjectivity. This critique identifies moral and ethical judgments as well as victim-blaming and individualizing elements of research.

Risk as a concept for analysis, is prevalent in all parts of workplace health research and practice. Risks relate to accidents and poor lifestyle choices. Health Risk Assessment (HRA) is shown to be an essential part of risk based workplace health. Risk assessment is criticized for its reductionist, numerical nature and its ignorance of the social influences on workers health. Risk assessment assumes that once a risk is identified, workers are free to choose less risky behaviour. Some authors identify the positivist nature of risk assessment, in particular the failure of scientists to predict major disasters such as Mad Cow disease and Chernobyl. A constructionist view suggests that risk provides individualizing and totalizing forms of knowledge. This contends that we are brought together as a population subject to global risks while

being individualized according to individual risks. The population 'at risk' has implications for the control of conduct in workplace health.

The technology section describes the changing nature of work brought about by rapid advances in information communication technology. Research is contradictory, suggesting information technology has an enormous positive impact, an enormous negative impact, and no impact at all. The speed and scope of information collection and transfer is contrasted with the negative implications of surveillance. Technology is used in particular for the surveillance and monitoring of employees.

The chapter concludes by identifying the need for social constructionist research in workplace health. The discourses of workplace health have potential for making meaning but first need to be identified and investigated.

2.2 Occupational Health and Safety: Technical Experts and Workplace Health

Johnstone and Quinlan (1993) describe occupational health and safety as one of several expert technical approaches to workplace health. These expert technical approaches include safety engineering, occupational medicine, psychology, ergonomics, and occupational hygiene. The workplace is a potentially hazardous environment, made dangerous by the presence of workers. Highly specific technical knowledge is bought to bear on the physical environment of the workplace to examine and understand accidents and illness. Each body of knowledge protects their intellectual territory and each is reticent to consider social or political influences on worker health (Ziegler, 1997). Expert technical approaches are particularly aware of legislation and compensation and draw a 'sharp distinction between health problems that [are] job-related and those independent of work' (Conrad and Chapman Walsh 1992: 91; Victorian Occupational Health and Safety Act 1985). The distinction is

made sharper by the strict indicators and guidelines for identifying illness, exposure or injury (Morgan, 1997; Rubens, Oleckno & Papaeliou, 1995; Offergelt, Roels, Buchet, Boeckx, & Lauwerys, 1992). Social influences on health are actively discouraged, the widely held view being that, 'treatment and consultations by occupational health service staff should be confined to work related injury and disease' (Schilling, 1991: 446).

Nichols (1999) identifies a political element of expert technical approaches, suggesting that each professional approach places the individual worker at the center of investigation. According to Nichols, following Sagoff (1985) the search for human factors in accidents and ill health makes the worker solely responsible. The influences on health such as management decisions and government policy, are ignored by 'the emphasis on the human factor…generally used to mean just 'the worker' (Nichols, 1999: 88).

Johnstone and Quinlan (1993: 7) show this victim-blaming ideology proves 'popular with management because [it] exonerate [them] from any obligation other than relatively inexpensive efforts (in comparison with altering physical structures and basic organisational aspects of the workplace) to re-educate, or recruit their workforce more effectively'. Gint (1998), shows that the causes of illness are related as much to management and production than any inherent flaw in the working population. Chu (1998) cautions against victim-blaming along ethnic lines showing that underlying unemployment patterns explain disease and injury better than any individual factor. Immigrant workers experience cultural and language-based misunderstandings, leading to unsafe conditions. Accidents and injury can also be linked to changing conditions in the labour market. Net increases in the workforce,

the hiring of unskilled workers, and increasing work intensity can lead to accidents and illness (Nichols, 1997).

Miner's Nystagmus provides a salient example of the positioning of workers in occupational health and safety. As Crofts (1988) describes, the problem of Miner's Nystagmus affected the coal miners of the late 19th and early 20th centuries. Represented in the flickering of the eyes and overwhelming lethargy of workers, Miner's Nystagmus was a hotly contested illness between different expert groups. Each profession with an interest in the area attempted to apply their own perspective to find the worker at fault for their illness.

For the medical profession, the disease was physiological, evidenced in the physical symptom of flickering eyes. These questionable symptoms led physicians to believe that workers were fabricating pain and suffering in order to gain compensation. Psychologists believed the disease affected the worker's mind, reflected by sufferers having 'the nerves'. Another field of knowledge suggested that Miner's Nystagmus was psychosomatic, combining the psychologist's focus on the nerves and physician's suspicion that the condition was a fake. In each case, the causes of the illness are located solely within the worker, be it physically or mentally. For employers, this condition meant workers were claiming undeserved benefits, while unions saw the condition as a chronic, long-term disability. The debate ignored potential causes like 'working conditions, poverty, unemployment and alienation from work [diverting] attention from the injuries that unsafe work causes' (Crofts, 1988: 3).

Nichols (1999) describes the more recent example of RSI in Australia during the 1980's. The condition became representative of the social and cultural weakness of

Australian workers in the 'land of the long weekend'. Those suffering RSI were considered to be 'bludgers', not suffering a serious condition caused by repetitive or mundane tasks. Like Miner's Nystagmus, workers were suspected of malingering often devolved along ethnic lines. RSI was described variously as 'Greek Back', or 'Lebanese Back' due to the high prevalence of the condition among immigrant workers. The high proportion of immigrant workers suffering the disease was later shown to be due to the distribution of low-paid repetitive work. Chu (1998), for instance, traces the high proportion of immigrant workers in dangerous occupations like manufacturing and construction.

Canaan (1999) extends the discussion of RSI research to examine the construction of the condition within different professional contexts. Social analysis found the cause lay in the shift to a service-based economy, reduced task autonomy and mundane repetitive tasks. Psychologists contended that RSI was caused by conditions seated deeply in the 'worker's psyche' (Canaan, 1999: 154). Alternatively, biomedical conceptions located the cause wholly within the body, for physicians, RSI did not exist until clinically visible symptoms were observed. In each case, the professional's view is prejudiced over the worker's experience of the injury.

Psychology and biomedicine privilege expert knowledge and have both been criticized for intolerance of other explanations of disease. These disputes have been revisited through new workplace health problems like stress and Crohn's disease (an inflammatory condition of the digestive tract) (Murphy, 1996). Each condition began as examples of employee malingering until professionals within the expert technical paradigm identified direct causes (Bellaby, 1999). Psychology has advanced by testing and explaining individual differences, relating individual differences to susceptibility to injury and ill health. This is most clearly marked in the notion of

"accident proneness", leading to 'the idea that most accidents are caused by few people, that involvement in accidents will be a characteristic whatever the environment, that accident proneness is an innate and unalterable characteristic' (Nichols, 1997: 64). The acceptance of this rationalist psychological view is reflected in the popularity of psychological screening of employees (Altman & Christensen, 1990). Drug screening leading to counseling is another psychological approach to reducing accidents at work (Capece & Akers, 1995). Reducing the impact of psychological problems is linked to reducing the costs of occupational illness (Hartwell, Steele, French, Potter, Rodman & Zarkin, 1996; Kaman, 1995; Opatz, 1994).

Reasons et al. (1981) describe how occupational health and safety identifies "certain kinds of people" who are prone to illness and accidents. Research, which defines the individual through biological, physical and social traits of accident victims, identifies potential causes. Attributing the cause of accidents and illness in elements of the worker's biological, psychological or social makeup means management and working conditions are immediately dismissed (Coulton et al., 1990). The worker being blamed for their own accident or illness 'leads to the initiation of a variety of programs, such as educational safety and training, without changing the structure, nature or process of work' (Reasons et al., 1981: 138).

In this environment, the injured worker must show that the employer has failed to provide a safe workplace, and that they are not culpable for their own injury. The default suspicion is that the workers are responsible for their own misfortune. The emphasis on blaming the worker ensures that the organization is removed from blame.

Weindling (1985) shows that occupational health research has served the interests of employers at the expense of workers by: minimizing the scale of work-related illness; limiting compensation costs; prioritizing the maintenance of production over the protection of health; ignoring and devaluing worker's experience of occupational ill health and focusing on individual behaviour in explaining work-related illness (Weindling, 1985). For some, the safety of workers should not be considered the main priority of employers, but just another aspect of running the business:

> Those who own and operate business enterprises…have other issues to grapple with. Their basic economic situation, business considerations, management, production all form part of the problem set which must constantly be refined and adjusted in order for the business to remain viable. They have also to exist with the workforce… so that the major tasks of the enterprise can continue unimpeded.
>
> (Coulton et al., 1990: 8)

Official bodies are also accused of promulgating exposure limits, which have clear implications for worker health. Asbestos is a prime example; with scientific evidence of inadequate exposure levels being ignored while workers continued to be exposed (Wilson, 1993). The scientific establishment has also been accused of ignoring occupational and environmental causes for disease, focusing instead on individual factors such as family history, hormonal factors and dietary fat. According to Daykin (1999), this is motivated by a capitalist imperative:

> While employers might be motivated to comply with health and safety regulations in order to avoid litigation, they are more likely to support health activities which strengthen management and control functions than those aimed at preventing, recognising and providing rehabilitation for work related ill-health
>
> (Daykin, 1999: 12)

Sociological critique assumes that injury and illness are socially produced. Gint (1998), Daykin (1999), and Johnstone and Quinlan (1993) all agree that:

> physical aspects of the workplace are not immutable, but are a result of conscious human decision making, and the social values and priorities which underpin this. Sociological explanations incorporate immediate organisational factors (such as payment systems, supervisory regulations, job design, and physical working conditions) but, unlike most psychological explanations, they are also concerned to indicate how these are shaped by broader social factors such as profit/production imperatives, and the gender, ethnic and class divisions found within capitalist societies.
>
> (Johnstone & Quinlan, 1993: 8)

The changing nature of work and capitalist pressure on production are implicit as conditions for increased risk, ill health and injury. Research here includes analysis of inequalities between indigenous populations, ethnic minorities and rural workers (Morris et al., 1999), the health effects of broad socio-cultural factors like social class, gender, income, education and geography (Navarro, 1997; Marmot et al., 1991; Emslie et al., 1998); and employment uncertainty (Ferrie et al., 1998).

2.3 Occupational Health and Fitness: Fit for Work

Changing understandings of health have seen workplace health perspectives grow to include a focus, on among other things healthy settings, wellness and in particular, lifestyle and physical fitness (Chu, Driscoll & Dwyer, 1997; Baker & Israel, 1996). The original concern with establishing the physical capability of individuals to work has grown to see a healthy lifestyle as a necessity for health (Collins, 1991). Health can be improved through improving lifestyle rather than simply protected through health and safety (Bellaby, 1999). These programs:

> may concentrate on employees' lifestyle and behaviour, offering services such as smoking cessation and counseling as well as exercise and fitness programmes. Yet lifestyles and behaviours themselves may be work-related, as work can affect health in both direct and indirect ways… For example, occupational stress and boredom are known to contribute to increased alcohol consumption and liver cirrhosis in a range of manual jobs.
>
> (Daykin, 1999: 12)

The move towards lifestyle and fitness programs is traced to the health and fitness boom of the 1970's and quickly became popular, reflected by Roberts' (1987) submission to the Australian New Zealand Journal for Occupational Health and Safety:

> It used to be that work was seen to be only a place that affected health negatively, in that the conditions operating in the workplace could have a detrimental impact on health, e.g. noise, dust, asbestos, etc. It is now recognised that health influences the ability to work effectively and that poor health or fitness can often contribute to work-related health disorders, e.g. low back pain and RSI. The workplace can also be an effective location for promoting both general and specific job related work capacities. Exercise and fitness programs are a major means of promoting health at the workplace.
>
> (Roberts, 1987: 9)

The lifestyle and fitness discourse is heavily influenced by epidemiological studies that build an evidence base comparing lifestyles and physical activity levels against the incidence of disease. Low physical activity is correlated with high incidence of disease and, subsequently, the benefits of physical activity have been found to be reducing the burdens of disease (Faulkner & Biddle, 2001). This is also due to the prevalence of professionals in workplace health promotion with human movement and physical education training. Typical lifestyle and physical activity research shows that:

> Compared to those who are inactive, people who are moderately or vigorously active have been found to be significantly less likely to suffer premature all-cause mortality; cardiovascular diseases (CVD) such as coronary heart disease (CHD), stroke, and high blood pressure; colon cancer; non-insulin dependent diabetes mellitus (NIDDM); and osteoarthritis.
>
> (Salmon, Breman, Fotheringham, Ball & Finch, 2000: 17)

The positive effects of improved lifestyle and physical activity are continually re-enforced in the empirical work which shows workplace fitness has positive effects on cardiac risk factors, life satisfaction and well-being, and illness and injury' (Shephard

1996: 436). Lifestyle and fitness programs have become accepted as having positive effects and are largely unquestioned. The positive rhetoric surrounding workplace fitness programs includes economic benefits, shown here in the work of Lechner and de Vries (1995):

> the benefits of exercise influence a wide variety of diseases and conditions affecting both physical and mental health. Regular exercise can help prevent and treat coronary heart disease, osteoporosis, diabetes, hypertension, and depression… several studies suggest additional effects for exercise programs, when they are placed within the worksite, such as reduced health care costs, reduced absenteeism, and less employee turnover.
>
> (Lechner & De Vries, 1995: 429)

Research into lifestyle and physical activity in workplace health is exclusively positivist, reflecting a continuance of the expert technical approaches of OH&S (Waddington, 2000). Research involves prescribing exercise rates (Price, MacKay & Swinburn, 2000), predicting uptake and stemming dropout (Pender, Noble-Walker, Sechrist & Frank-Stromberg, 1990), and detailing the 'right' amounts of physical activity for health (Glasgow & McCaul, 1993).

O'Connor and Parker (1995) show that most workplace fitness programs are introduced as executive perks rather than to improve the health of the worker. Health and fitness programs are seen as executive rewards, re-enforcing organizational hierarchies. Often the only lifestyle and fitness programs provided for general employees are information pamphlets posted on bulletin boards (Chu & Forrester, 1992). Research in lifestyle and fitness programs identifies discrepancies in program adherence between white and blue-collar workers. Tentative explanations include education level, access to equipment, recreation time, and discretionary income (Salmon, Breman, Fotheringham, Ball & Finch, 2000). Workers are still blamed for 'lack of adherence' to exercise programs.

Critical feminist approaches show that lifestyle and fitness approaches to health have consequences for the relationships and body image of women (Markula, 2001). Weedon (1987) describes the gendered nature of health as physical activity. Her work suggests fit women are considered masculine while the inactive maintain their femininity. Physical exercise is seen as macho, and unladylike, marginalizing women while re-enforcing male dominance through physical strength. Problems with who should or should not exercise are identified around age, disability, self-perception, and education levels (Mullineaux, Barnes & Barnes, 2001).

Lupton (1995) shows the implications health as fitness has for the construction of individual subjectivity. For Lupton, lifestyle and fitness construct the 'guidelines for self-transformation, ways of dealing with external and internal pressures, a conduit of agency and self-expression' (Lupton, 1995: 143). Lifestyle and fitness is more than a physiological understanding and has very real social implications. Fox (1993) sees an imperative to act in seeing health as fitness:

> The inscription of 'fitness' upon the bodies of those who exercise is therefore not simply concerned with muscle tone, heart rate, or anything in the physical domain. It entails a discipline of the self, and a necessary self-reflexivity about being a particular kind of person who 'does fitness'.
>
> (Fox, 1993: 34)

Fitness comes to signify the moral worth of the individual, providing an outward sign of the willingness to ascribe to societal norms of what is fit and healthy. The unhealthy are similarly judged by their physical appearance being fat and unhealthy, as Waddington (2000) describes:

> we live in an era of a new health consciousness where to be unhealthy has come to signify individual moral laxity. Thus slimness signifies not only good health but also self-discipline and moral responsibility whereas fatness, in contrast, signifies idleness, emotional weakness and moral turpitude. In this sense, our bodies, whether slim or obese, signify not merely our health status for they also become, quite literally, the

> embodiment of moral propriety or laxity. Within this context, those who fall ill are increasingly likely to be seen not as unfortunate victims of processes beyond their control but, rather, as people who, through their moral laxity and lack of self-discipline, have 'brought it upon themselves'.
>
> (Waddington, 2000: 410)

Physical exercise comes to reflect the moral strength of the worker to regulate himself or herself as a healthy, productive member of the workforce. Levels of physical activity and the state of the physical body become markers to others of the individual's moral accomplishment. 'Bodies… are constantly self-surveilling themselves and each other, checking for bulges, flab, or lack of tone' (Lupton, 1995: 144).

Colquhoun (1990; 1989) has traced the increasing imperative to exercise in the linking of health messages to other aspects of physical education curriculum in schools. He shows health-based physical education is influenced by the prevalence of cardiovascular and other lifestyle-based diseases. Colquhoun (1990) identifies a victim-blaming ideology at the center of health-based physical education, arguing that this constructs the distorted view that we have more control over our health than is true. This is reflected in the ideology of healthism, which reduces:

> the complex causes or etiology of disease to simple behaviour or lifestyle factors. An increase in the amount of aerobic exercise, for example, is often posited as a major strategy recruited to combat coronary heart disease… Because of the emphasis given to exercise, other avenues for improving health are often ignored or neglected. As an ideology, healthism serves to depoliticize other attempts at improving health.
>
> (Colquhoun, 1990: 226)

Bercovitz (1998) identifies a victim-blaming ideology in national Active Living policies. Active Living aims to increase the physical activity of populations to improve health. Active Living reflects a re-working of previous 'lifestyle' rhetoric in response to a climate of economic rationalization. The inherent victim-blaming

places the emphasis for health on the individual, extolling the virtues of individual as expert in the management of their own health. The push for physical activity for health 'diverts attention away from other pressing social (for example, gender inequalities, substance abuse, personal safety) and structural (for example pollution, poverty, unemployment) issues… Active Living is mistakenly regarded as a 'panacea' for the 'ills' of modern culture' (Bercovitz, 1998: 322).

The identification of little physical activity as a factor in the etiology of disease opened consideration of other lifestyle factors. Attention moved to diet, sleeping patterns, sexual activity, family relations, stress, career satisfaction, and drug use (Barrier, 1997). For O'Brien (1995), this represented a reconceptualization of health, highlighted in the World Health Organization's description of health as a 'state of complete physical, mental and social wellbeing, not merely the absence of disease or infirmity' (WHO, 1978:1). Craig and Hancock (1996) describe the prevalence of 'lifestyle' diseases and the importance of considering them in practice:

> lifestyle diseases are prevalent … and seem to involve numerous interrelated factors which somehow combine to stimulate the disease process. Coronary heart disease, cancer, hypertension and asthma are a few examples, which are considered major public health problems. While death rates from most major infectious diseases have declined dramatically in the developed nations since the beginning of this century, mortality and morbidity from the lifestyle diseases like coronary heart disease kill up to 70% of all those who die each year in countries such as Australia, the United States and Europe, and in many cases may be work-related. The high prevalence of these diseases has prompted health promotion strategies which are usually aimed at helping persons lose weight, eat better, exercise appropriately, and effectively manage their stress. There is now substantial evidence linking behaviour and lifestyle stresses with lifestyle diseases. It is therefore no surprise to find that risk factor interventions that produce reductions in total risk will eventually produce reductions in mortality rates from diseases such as coronary heart disease and cancer. For instance, a drop of 11% in physical risk factors was associated with a longer term 7.4% fall in deaths from coronary heart disease.
>
> (Craig & Hancock, 1996: 194)

Tracing the causes of cardiovascular disease, cancer, hypertension, or asthma back to the lifestyle of those suffering illness brings forth the issue ‘of culpability. If a disease is preventable by adopting (or desisting from) certain behaviours, then it follows that victims of such disorders are at least partially to blame for their predicament’ (Kelly & Charlton, 1995: 142). Lupton (1995) describes how health promotion discourse constructs “a pathology of lifestyle”. Particular lifestyles become causal factors in disease and ill-health, ‘the constellation of a diverse range of specific and discrete behaviours identified as risky, including tobacco and alcohol use, weight, diet, exercise patterns, stress management, driving behaviour, sexual activity, sleep patterns and medication use’ (Lupton, 1995: 142).

The lifestyle discourse has also been criticized for ignoring the socio-political resources of individuals to choose particular styles of living. Daykin and Naidoo (1995) identify a widening gap between rich and poor, suggesting that those with less economic and political resources cannot necessarily choose prescribed lifestyles. The authors suggest this further marginalizes poor health in specific groups, in particular the unemployed, the disabled, and poor, single mothers. Nettleton and Bunton (1995) support this finding, and suggest although lifestyle programs are aimed at the disadvantaged, it is often the advantaged that benefit. The advocates for lifestyle normalize middle class values in describing ‘the healthy lifestyle’, strengthening bourgeois positions and further alienating the underprivileged. Further, improving the style of life may not improve health: ‘changes in individual health behaviours do not have uniform impact on health status’ (Nettleton & Bunton, 1995: 51).

Conrad and Chapman Walsh (1992) identify the emergence of a new corporate health ethic in the discourses of workplace fitness, healthy lifestyles and more recently wellness:

> In the name of health and wellness, the new ethic breaches the line between work and private life. It extends the companies' interests in employee "health habits" and "lifestyle," without regard for whether they occur at work or at home or, indeed, whether they affect work performance in any direct way. Where the old corporate health ethic was narrow and specific to the workplace, a new ethic that casts a wide net for employees' emotional and physical vulnerabilities is broad and not at all punctilious about limits on its legitimate reach. Both the old and the new ethic are implicit ideologies that outline contours of corporate responsibilities and entitlements with respect to employees' health. The current shift to a new health ethic represents a subtle but substantial change in this latent ideology.
>
> (Conrad & Chapman Walsh, 1992: 99)

Previously companies held an influence over the employee's private life by providing benefits like housing or cheap goods. Fitness, lifestyle and wellness rationalize the surveillance of all aspects of the worker's life. A focus on lifestyle and health habits is a new method of controlling the workforce, further blurring the lines between public and private lives. The interest in lifestyle and the mobility of health risk assessment technology means lifestyle risks become a major form of assessment.

2.4 Risks and Health at Work

Risk is evident in every part of our private and working lives, when buying insurance, making investments and even deciding whether or not to eat yesterday's leftovers. Beck (2000) shows that 'previously depoliticized areas of decision-making now find themselves politicized by the public awareness of risks. They are opened to public doubt and debate – mostly in the face of resistance from the powerful institutions that monopolize such decisions' (Beck, 2000a: 99). As a society, we

come to be divided across instances of risk rather than traditional lines of wealth and poverty.

At work, risks most often relate to the chance of an accident or injury occurring. Risks can be identified in any workplace, and a large proportion of OH&S practice is dedicated to risk management. Bellaby (1999) describes the pervasiveness and importance of risk at work:

> Employment, like crossing a busy road, entails some risk. Accidental deaths at work may be considered relatively hard evidence of the effect of work on health. They may be partly attributable to factors outside work (e.g. alcohol use, family stress), but are almost always avoidable by measures taken at work.
>
> (Bellaby, 1999: 22)

Gabe shows an expert technical positioning of risk as 'an essentially technical matter to be resolved by developing more accurate scientific information. Physical and life scientists and government agencies have sought to develop 'rational' means to make decisions about health risks' (Gabe, 1995: 2).

The main vehicle for identifying risks is Health Risk Assessment (HRA), forming a major component in many workplace health initiatives. Risk assessment emphasises the development of rational quantitative measures, comparisons and cost benefit analysis of risk. HRA is based on the premise that early identification of the conditions for disease will result in disease prevention through altering lifestyle or at least more effective treatment (Collins, 1991). Health Risk Assessments are usually combined with information on potentially health damaging behaviour, aiming to encourage individuals to adopt healthier lifestyles (Hanlon et al., 1998: 131; DeFriese & Fielding, 1990; Anderson & Staufacker, 1996).

The expert technical approach incorporates HRA to understand risk as a real, material entity. This provides the space for intervention and the reduction of health risks:

> Given the presence of the hazard in the work environment, then strategies are to be adopted to minimise the likelihood (the risk) that the hazard will be manifested in an unpleasant outcome. The emphasis may be on individual education, individual or population prevention measures or corporate strategy. As such, the position is not inherently political, and may be coopted to serve any or all of the different interests in which may engage discursively with the perceived hazard.
>
> (Fox, 1999: 204)

Lupton (1995) outlines a process where the patterns of risk are identified, and those who follow those patterns are labelled as 'at risk'. The need to identify the 'at risk' worker rationalises surveillance of risks. Beck (2000b) identifies the purely negative tenet of risk. 'Risks only suggest what should *not* be done, not what *should* be done' (Beck, 2000b: 218). The identification of risk factors provides the opportunity to deal with current behaviours and in doing so circumvent future illness and disease. Within this expert technical approach, it is:

> believed that diagnostic screening allows disease to be identified before symptoms appear, providing time to treat or prevent it, or alerts people to their potential to pass on a disease or condition… Having a test, of any kind, is conceptualized as offering control, or being a way of 'doing something' in the face of the incipient disorder created by the presence or potential of disease. It is assumed that individuals must have 'knowledge' of their hidden disease, or its precursors, to be able to act to protect themselves against it. The relationship between risk and diagnostic testing is therefore synergistic: individuals are exhorted to attend for a test because they are deemed to be 'at risk' of developing a disease or condition, and the statistics produced from testing data serve to support or rephrase assessments of patterns of risk in the population.
>
> (Lupton, 1995: 78)

A major criticism of HRA centres on the way it reduces health risks to numerical data, denying the lived experience of the individual. Rogers and Pilgrim (1995) suggest that epidemiological risk assessment 'may treat the question of…risk as if it

is merely a mathematical or technical puzzle and lose sight of the citizen's view' (Rogers & Pilgrim, 1995: 76). Further criticism suggests that risk assessments focus on solely individual causes of disease, ignoring broader socio-political factors. This is often seen to lead labelling of social behaviour according to individual failure and moral ineptitude. In this way, normal, usual behaviour becomes central to the pathology of disease, resulting in a punitive victim blaming approach. Criticism also suggests that our 'modern technocratic approach leads to the belief that risk is avoidable simply by choosing the safe option' (Lomax, 2000: 748).

Risk becomes a 'consequence of 'lifestyle' choices made by individuals' and 'emphasises the need for self control' (Gabe, 1995: 3). Petersen identifies the risk and self-control elements of fitness discourse, suggesting 'fitness is widely promoted as an opportunity to avert several of the risks to selfhood present in modern society; a way to protect oneself from characteristic ills of modern society such as drug abuse, depression, eating disorders and cardiovascular disease' (Petersen, 1994: 200).

For Burrows, Nettleton and Bunton (1995) risk assessment 'discourse creates the 'lay person' who emerges as the foil of the accident prevention professional and who persists in anachronistic beliefs in fate and luck when explaining accidents' (Burrows, Nettleton & Bunton, 1995: 7). Giddens (1991) reflects this, highlighting the power of risk in its acceptance among the lay population as an important element of health:

> risk profiles do not remain the special preserve of the experts. The general population are aware of them, even if it is only in a rough and ready way, and indeed the medical profession and other agencies are concerned to make their findings widely acceptable to lay people.
>
> (Giddens, 1991: 120)

Durant (1998) sees the fostering of lay understandings of risk undermining professional scientific authority. The inability of scientists to foresee and deal with problems like Mad Cow disease (BSE), nuclear contamination, and genetic deformity bring into question the scientific promise inherent in risk assessment. Science is no longer the sole keeper of risks, 'science is no longer simply regarded as a source of solutions; it is increasingly seen as part of the problem' (Durant, 1998: 72). Science is seen as causing many of the risks through technological advances that it purports to be able to control. This suspicion of science 'draws upon society's experience with nuclear power, toxic chemicals, and other high-technology operations' (Lomax, 2000: 747).

Grinyer (1995) builds on the multiple meanings associated with risk at work, particularly between workers and management. Her work with nurses and the risk of transmission of HIV and Hepatitis B found that management saw risk in numerical terms without having any real understanding of the actual risks involved in nursing work. Despite its claims to a rational, neutral foundation, risk comes to be inherently political and fraught with a multitude of meanings. Daykin (1999) suggests that decisions based on risk are indicative of the values of decision makers:

> decisions about such issues as occupational exposure levels and threshold limit values reflect value judgments about acceptable levels of risk and not just the rational application of scientific information… scientific claims to neutrality obscure the real causes of occupational disease. These are seen to lie in the processes and relations of production. Work hazards are therefore social, collective phenomena reduced by bourgeois scientists to 'natural', individual problems.
>
> (Daykin, 1999: 7)

Lomax (2000) describes the need for scientific risk validation reducing any social value or stake in its existence. 'Quantitative risk assessments intended to determine whether an exposure is at an "acceptable" level, or comparative risk assessments

intended to document that a specific problem is no worse that some other unwanted exposure, become the tools of choice' (Lomax, 2000: 751).

Fox (1999) supports a similar view, arguing that while hazards remain neutral, 'risks are the value-laden judgments of human beings concerning these natural events or possibilities' (Fox, 1999: 206). Starting from the idea that risk is a human construction, some have found that risk binds individuals within professional knowledge (Dean, 1999). Professional assessment of health risk identifies negative 'styles of life' providing a moralizing judgment of the individual. The healthy have clearly avoided risk by ascribing to healthy, good, risk-free behaviours. Alternatively, those who become ill lack the self-discipline to maintain a risk-free lifestyle and thereby have become sick.

Research into the moralizing judgment of risk is found in the work on HIV/AIDS. Rushing (1995) shows that those with 'HIV-AIDS are increasingly being seen…as having been careless and irresponsible' (Rushing, 1995: 215; Bloor, 1995). Those who become ill have undertaken risky behaviour, neglecting their moral responsibility to both themselves and society. As McKeganey and Barnard (1998) describe, individuals divide themselves along lines of risk and the outcomes of risk behaviour. The importance of avoiding risk provides the imperative to step within the numerical assessment of risk professionals. All 'risks may be evaluated and suitably managed, such that all may be predicted and countered, so risks, accidents and insecurities are eliminated altogether' (Fox, 1999: 199). Risk discourse is produced and reproduced through the understanding that assessment and behaviour change will reduce risks and ill health.

A postmodern perspective on risk questions the construction of risks, hazards and dangers. It is only through the analysis of risk that hazards can exist; if a measurement finds zero risk, there is no hazard. The assessment of risk cannot come from a neutral position, nor claim to provide a value-free objective assessment:

> Inevitably, risk assessment must begin with some prior knowledge about the world, what is 'probably' and what 'unlikely', what is 'serious', what is 'trivial'. Such judgments may derive from 'scientific' sources, or may depend on common sense or experiential resources. Whatever the source, the judgments will be evaluative, and will derive from the particular knowledgeability utilized by the risk analyst, whether 'expert' or lay.
>
> (Fox, 1999: 209)

Foucault (1994) identifies risk as both an individualizing and totalizing form of knowledge. We are all at risk of something and at the same time we all have different types and levels of risk. Risk becomes a salvation-oriented construct, a form of power 'linked with a production of the truth - the truth of the individual himself' (Foucault, 1982: 333). The production of what is true relies on and helps construct the subjectivity of workers and management. Management knowledge is valorized over that of employee's, as Daykin (1999) shows, 'multidimensional assessment of risk is judged against the comparatively naïve insistence of managers', producing the worker who is unable to handle anything more than 'simple information and advice about risk reduction' (Daykin, 1999: 9). Dean (1999) examines the consequences of risk for directing the conduct of individuals, risk 'is a way of representing events in a certain form so they might be made governable in particular ways, with particular techniques and for particular goals' (Dean, 1999: 178). So 'risk is a calculative rationality that is tethered to assorted techniques for the regulation, management and shaping of human conduct in the service of specific ends and with definite, but to some extent unforeseen, effects' (Dean, 1999: 178).

Peterson (1996) shows that risk in health represents techniques and strategies for controlling the conduct of individuals. He identifies a 'clear ideological shift away from the notion that the state should protect the health of individuals to the idea that individuals should take responsibility to protect themselves' (Peterson, 1996: 49). Examples of the change include self-help movements and the increasing reliance on preventative health. Self-evaluation enables individuals to gauge their own risk of illness, a 'personal accounting' of the dimensions of an individual's health, distinguishing them by behaviours in which they should and should not indulge. The individual turns a critical gaze upon his or her own body and surveillance and restriction results.

2.5 New Technologies and New Ways of Seeing Health at Work

The dissemination of health messages, risk assessment and lifestyle at work has been greatly advanced by information communication technology (ICT). ICT has been studied for its impact on patterns of work and the changing of traditional tasks, but research on ICTs in workplace health is limited. Various authors have discussed the implications of emerging information communication technologies (ICTs) for the organization and experience of work. Research focuses on a number of areas: the move towards an information society; the economic shift from raw materials and energy resources towards intellectual, knowledge-based goods and services; information as an increasingly marketable commodity and a growing proportion of Gross Domestic Product; an increase in the gathering and management of worker's data; and, an increase in the global pervasiveness of ICTs (Barr, 1994: 93). In the following section, I will focus particularly on the impact of ICTs in the changing nature of work and for the surveillance of employees.

A number of researchers have investigated the effect of information technology on the shape and nature of work. Burton (1992) argues that with '50% or more of the employed population…now in 'information occupations', we no longer have a manufacturing base to society, but an information service base' (Burton, 1992: 16). The information-based workforce results in underemployment of those without computing skills, particularly early school leavers and older members of the workforce (Oliver, 1994). Freeman (1996) finds that direct effects 'relate to the new jobs generated in creating new products and services and the old jobs which are lost. Indirect effects are the consequences felt through the economy as a result of the impetus of a new wave of investment and market opportunities' (Freeman, 1996: 22).

Burton (1992) suggests ICT research is contradictory. Predictions about the influence of IT include that it is 'going to increase or decrease employment opportunities, de-centralize hierarchies of organizations or strengthen centrality, de-skill or re-skill workers at all levels, and so on. For every pessimistic prediction, there was an equally optimistic one' (Burton, 1992: 45). Webster (1996) summarises a prevalent example of this argument in which 'technology's potential to eliminate repetitious tasks…freeing people to develop new skills and abilities' is contrasted with 'fears that computers could cause mass unemployment and increasing intensification of work and enslavement to machines for those remaining in jobs' (Webster, 1996: 144). Others argue that ICT has had no effect on work at all; Mutch's research into welding suggests:

> Welding is an example of a manual craft that, whilst subject to some change, has not been dramatically affected by information technology as some analysts might suggest… these unjustified sweeping generalizations are the result of research methods which are in turn based on flawed premises.
>
> (Mutch, 1998: 140)

Olesen and Myers (1999) describe a positivist scientific base of research in technology at work. The authors show that most technological innovations are evaluated in individualistic laboratory settings. Their action research into the implementation of new communication strategies found that within real work situations barriers existed that were not identified during the scientific and psychological testing of particular technologies. In particular, 'institutional forces such as culture and norms of the organization influenced participants…to reproduce their current ways of working and in effect maintain the status quo' (Olesen & Myers, 1999: 329).

The positive arguments for the effect of ICTs begin with the incredible speed of information sharing. Some, like Lash and Urry (1994), suggest that more equitable, democratic relations may emerge:

> The marriage of the computer and the telecommunications revolution results in movements of information at the speed of light and to enormous audiences, and this might be thought to decentralize both knowledge and power enable 'new sociations' to develop away from the traditional institutions of social life.
>
> (Lash & Urry, 1994: 323)

Hewitt (1998) writes that technology provides the conditions for a reduction of inequality. For Hewitt, technological 'convergence enables us to transform the economic, social and political environments in which we operate. It enables us to limit constraints of time and space and form from everyday life and, in turn, facilitates the creation of new communities which are not bound to geography' (Hewitt, 1998: 84). Nichols (1999) identifies practical benefits of technology for worker health and safety, with robotics and early warning systems providing an alternative to placing human beings in harms way (Nichols, 1999).

Harris (2001) has shown that IT does not meet the preceding rhetoric of improvement. The author identifies the 'IT productivity paradox' in which the introduction of technology either has no effect or results in a reduction in productivity. Her research into IT innovations in the UK banking industry found that 'even IT project successes will have a limited impact upon productivity at the organisational level because structural and managerial constraints ensure that the lessons learned are not communicated to other parts of the organization' (Harris, 2001: 35-6). This study identified problems in the reluctance to measure innovations, poor consideration of the social impact of new technologies and new products and software leading to misunderstanding.

Beck has a more pessimistic view, locating an increasing threat to society in technical advancement, arguing that as 'knowledge and technology race ahead, we are left behind panting in ignorance, increasingly unable to understand or control machines we depend on and so less able to calculate the consequences of their going wrong' (Beck, 1998: 13). The over-reliance on ICT is a basic weakness, shown in the recent power shortages in California reducing the capacity of that state to function. 'ICTs give us the power to overwhelm ourselves with information and to build systems that we cannot fully comprehend or control, creating new potentials for disasters across an economy increasingly dependant on their successful operation' (Peltu, MacKenzie, Shapiro & Dutton, 1996: 178). ICTs also lead to forced redundancy by changing work structures and replacing human jobs:

> Organizations no longer need, and most of them no longer have, command and control hierarchies where information is painstakingly passed up to management, analysed and transmitted back down again. To give a very mundane example, every time you go into a supermarket, the checkout operator…scanning your purchases, is now fulfilling the function of the market researcher and stock controller, although without being paid for both those other jobs as well. Organizational structures and

> job design are constantly changing in a process whose most visible, certainly most politically visible, manifestation in industrial societies is that middle and senior managers are losing their jobs…. What people thought of as lifelong jobs – the jobs in IBM, for example, or the Civil Service or banks – are no longer there. The result is real insecurity, and an even greater *perception* of insecurity, among a class of men who had previously felt some control and predictability in their lives.
>
> (Hewitt, 1998: 85, *original emphasis*)

While job insecurity is prevalent among males feminist critique suggests that ICTs produce and reinforce gender inequalities. Webster takes the masculine nature of ICT as a starting point for feminist analysis, describing how technology has 'largely been appropriated by men at the expense of women' (Webster, 1996: 154). This critique identifies the masculine nature of both software and hardware interfaces and employment and education policies. Spender (1995) identifies the marginalizing of young women in high school computer classes due to the support of boy's loutish behaviour by teachers. Spender argues that the normal information technology professional is still 'one of the boys', resulting in male-oriented access and content (Spender, 1995: 167). Kirkup (2001) shows that the control of emerging technologies by men remains unchallenged.

Postman (1997) argues that there is growing disillusionment and false hope with ICTs. He argues that information technologies have promised more than they can deliver, leading to an impossible expectations of new innovations:

> The computer is, in a sense, a magnificent toy that distracts us from facing what we most needed to confront – spiritual emptiness, knowledge of ourselves, usable conceptions of the past and future. Does one blame the computer for this? Of course not. It is, after all, only a machine. But it is presented to us, with trumpets blaring, as a technological messiah…The message is that through more and more information, more conveniently packaged, more swiftly delivered, we will find solutions to our problems.
>
> (Postman, 1997: 135-6)

Others have identified problems with the immense data storage, handling and transformation possibilities afforded by information technologies. Surveillance using ICTs occurs when we go to the library, drive a car, use the bank, receive junk mail or make a phone call. Computers record each transaction and it remains stored as an easily retrieved and manipulated piece of data. Every time 'we do one of these things we actually or potentially leave a trace of our doings. Computers and their associated communications systems now mediate all these kinds of relationships; to participate in modern society is to be under electronic surveillance' (Lyon, 1994: 4). Clarke (1994) uses the term 'dataveillance' to describe the 'automated monitoring through computer-readable data rather than through physical observation' (Clarke, 1994: 122).

The changing nature of work means the workforce is no longer readily accessible to the surveillance and monitoring of traditional working arrangements. The increased mobility and individualization of work means workers are no longer bound within the workplace, nor easily observed. Technology has adapted with software that monitors email and phone calls, alerting senior management if the content of communications contravenes company policy. Lyon (2001) shows that monitoring of employees is replacing supervision; workers are measured remotely against expected electronic standards rather than in face-to-face mentoring systems.

Integrated ICTs allow technologies to provide even more complex methods for the surveillance of workers; one example is 'active' badges that plot the physical location of workers at all times. This provides precise feedback for management on time spent in the toilet, at the coffee machine or outside having a cigarette. The 'combination of visual and electronic surveillance … has proven to be a key factor in the intensification of the labour process' (Bain & Taylor, 2000: 4). Typically

performance is 'measured against minimum standards, which [have] to be met before a bonus was paid' (Kinnie, Hutchinson & Purcell, 2000: 974). Standards may relate to manual handling, customer service or the recording of product or sales information.

Technological surveillance is rationalized as improving health and safety by reducing the potential for accidents. Lyon (1994) provides a Foucauldian reading of the surveillance provided by information technology:

> Modern societies have developed rational means of ordering society that effectively dispense with traditional methods of brutal public punishment. Rather than relying on external controls and constraints, modern social institutions employ a range of disciplinary practices which ensure that life continues in a regularized, patterned way. From army drill to school uniforms, and from social welfare casework to the closely-scrutinized factory worker's task, the processes of modern social discipline are depicted in sharp relief…Specialized knowledge strengthens the power of each modern agency, and taken together they colonize ever-increasing tracts of so-called private life. The categories and classifications imposed, whether they be the time for performing a work-task or raising a rifle or the calculation of a health or crime risk, induce, according to Foucault, progressively sharper distinction between acceptable and unacceptable behaviour. This in turn defines the 'normal' human individual, thus creating what we think of as social order. In this way people are produced as subjects – or, more accurately, objects.
>
> (Lyon, 1994: 7)

Everard (2000) argues that ICTs produce disparate and torn subjectivities within nation states. He sites Australia as an example, suggesting that many Australians consider themselves actors in a developed information-based economy. The reality is that the majority of the aboriginal population lives in conditions representative of a third world nation, with no access to power, let alone computers, on many aboriginal settlements. The development of global information technologies 'may well intensify the current discontinuities between the 'haves' and the 'have-nots' neutral' (Everard, 2000: 53-4). ICTs are not necessarily good or bad, but technology is not neutral as positivist scientists would have us believe. Technology is bound in political

discourses about access, availability, content and implementation. The interaction between humans and technology is studied in terms of increased productivity or speed of communication, but in any case the use of ICTs is bound in beliefs, values and meaning.

2.6 Conclusion

In this chapter, I have shown that the majority of research into workplace health comes from a positivist scientific base. Attempts to understand workplace health are typically quantitative attempts to uncover the objective 'truth' of worker health. The quantitative emphasis of research means that the understandings and experiences of the worker are often left out of any analysis, and in turn not considered in practice. Research focuses on individual's behaviour and the implications for health and productivity (Chu, Driscoll & Dwyer, 1997; Anspaugh, Hunter & Mosley, 1995), aimed at securing ongoing funding for programs rather than improving worker health (Shephard, 1996).

The implications of the knowledge positions invoked in workplace health have never been examined. Research has not looked at the ways in which health is constructed in the workplace, nor the implications of this for employee's understanding of health. Colquhoun (1993; 1996) suggests this is flawed, that health is understood in a broader cultural domain and the context for the presentation of health. As social constructionist theorists argue 'it is necessary to investigate the contemporary image of health in society by viewing health through a particular lens which acknowledges an implicit understanding of the social history of health and its particular constituting discourses' (Colquhoun, 1993: 68). The workplace provides one lens; critique has focused on the individualising, moralizing and victim-blaming underpinnings of

workplace health. The scientific approach is also found to privilege the technical expert's view over the employee's view of his or her own health.

This chapter has reviewed literature in the more traditional areas of workplace health, specifically occupational health and safety, workplace health promotion and risk management, and also introduced research into information communication technologies. The following methodological chapter builds a social constructionist frame towards a discourse analysis that combines critical discourse analysis and elements of poststructural analysis.

3 Methodology

In this chapter, I build a theoretical and methodological framework for the identification and analysis of the discourses of workplace health. I begin by situating myself as researcher, detailing my initial experiences in workplace health and the disappointments and serendipities that have contributed to this thesis along the way.

The research methodology begins by defining my use of discourse, and has a particular emphasis on the work of Norman Fairclough and Michel Foucault. I see discourse operating at three levels: as general statements; as regulated, individualizable utterances and texts; and, as regulated practices operating within particular rules and structures. The use of social constructionist concepts of discourse provides a move away from traditional objectivist workplace health research. Facts are socially constructed and it is here that I am most interested in the possibilities of discourse. Discourse provides ways of constructing knowledge and ordering subjectivities within 'truth'.

Fairclough's Critical Discourse Analysis (CDA) provides a starting point for my theoretical framework. Analysis operates at three dimensions of discourse; text (data); discourse practices (processes of production and interpretation); and, sociocultural practice (conditions of production). This three dimensional analysis is segmented into descriptive, interpretive, and explanatory phases. Elements of Foucault's work are included in the analysis as 'tools' to allow new insight and alternate ways of seeing data.

Participants in my research are drawn from an international information technology company; Labyrinth[1] Computing. Participants include workplace health professionals, health promotion contractors, and general employees of the company. The data corpus comprises interviews with participants, documents relating to company health programs, company web sites and workplace health booklets. I show how the framework is applied using examples from my data corpus to provide a text, processing and social analysis. The ramifications for this in extending workplace health research are explained and include providing new insights into the experience of employees.

3.1 Introduction

As the researcher, I bring my own history and interests to the research project, and I feel that I should relate my experience of the research project and how this has shaped my methodology. My original interest in workplace health came from working with people whose unhappiness at work had very real detrimental effects on their personal lives, their working relationships, and their health. My original idea was to investigate ways of making the workplace more enjoyable with less detriment to health, and the early research for this project led to some dissatisfaction with the typically positivist traditional research in workplace health. Having declared this dissatisfaction and begun my PhD studies, I was offered a part-time job setting up a corporate health program from the beginning. Not only did I have the chance to apply theories I had been reading but I also (thought I) had an immediate source of primary data and key informants. The experience of setting up the program soon

[1] All names of participants and the name of the companies where participants work have been changed to pseudonyms to protect anonymity. Data taken from verbatim transcripts are presented in italics, as is information that cannot be represented without compromising anonymity. Where possible data are presented as a direct scan from the original source, these are not figures; rather they are examples of data. To remain faithful to the participant's experience, their own language (individual swearing) have remained intact. I apologize if any reader feels upset by this.

began to sour: as I tried to apply health promotion theory I found myself coming up against a number of objections from other stakeholders in the process. Most apparent was the different understandings of which purposes workplace health should serve. For some, workplace health should provide a financial benefit for the sponsoring institution; for others, it should promote follow-on business to other arms of the business; and others are interested in the social and ecological justice of programs. But the most common question asked following my presentation of a program proposal was: "Yes, but where's the money in it?"

I began to gain an interest in the different possibilities the concept of health could have for different people within an organization. As I have sketched in the preceding literature review, workplace health research focuses on positivist, expert technical understandings of health and illness. Most often, workplace health is predicated on improving profit, morale or productivity. It seemed to me that rarely did workplace health wish principally to improve the health of employees in the workplace. Further, research hardly ever took the employee's point of view into consideration! Lamenting these initial problems to my supervisor, he suggested that I might be interested in the notion of discourse. After some initial investigations, I found many different understandings of discourse. While not a 'EUREKA', I felt discourse presented a way to make sense of the different perspectives, rationalities and justifications of workplace health. What had begun as an interest in the different ways of talking about workplace health could now be understood in terms of an overarching research question:

1. **What are the discourses of workplace health?**

Having struck on the idea of discourse and found some comfort in critical and Foucauldian research approaches, I developed two more research questions from the original overarching question:

2. **How do these discourses affect the understanding of the health of the employee?**
3. **What other implications do these discourses have for the experience of workplace health?**

Around this time, blind luck collided with coincidence when I was contacted by the manager of Labyrinth Computing's nation-wide workplace health program. Having heard of my research, the company's health manager Lyn was interested in my opinion on a piece of health evaluation software they were considering for their program. As it turned out, my advice was appreciated and the idea of me doing a full research project within the company was subsequently discussed and accepted.

I would like to revisit elements of this story within a firmer structure to develop my methodology. As Crotty (1998) suggests, social research is often presented in a haphazard fashion with elements of epistemology, theoretical perspective, methodology and methods given in grab bag fashion. These four elements are each crucial to social research and each can be understood as informing the others. Denzin and Lincoln (2000) provide a similar framework, suggesting a research structure which asks the researcher to situate themselves as a subject, to detail the theoretical paradigms and perspectives to be used, the research strategies, the methods of data collection and the art, practices and policies of interpretation and presentation. The melding of these frameworks provides a road map to develop the research proper, while also providing a means to examine the other approaches to research in workplace health. The provision of the assumptions underlying the processes

undertaken should show the way that my research both differs from, and advances that which has gone before. This framework allows for the playing out of the history of the research project while remaining sensitive to the historical traditions invoked within the research.

3.2 A Social Theory of Discourse

In discourse research, discourse itself is often left undefined, yet has very different meanings for different research perspectives (Potter &Wetherall, 1994). Due to the shifting nature of discourse it is essential to define the terms that underpin its use (Mills, 1997). 'The term 'discourse' has, broadly, two distinct histories: one within European thought, where Foucault's formulation of the term is located, and one within structural linguistics and semiotics.' My approach to discourse is heavily influenced by both the critical approach of Fairclough and the postmodern/poststructural approach of Foucault. A 'discourse in Foucault's sense is a body of knowledge, not so much a matter of language as of discipline' (Lee & Poynton, 1995:1). Foucault describes how he expanded the notion of discourse:

> Instead of gradually reducing the rather fluctuating meaning of the word 'discourse', I believe I have in fact added to its meanings: treating it sometimes as the general domain of all statements, sometimes as an individualizable group of statements, and sometimes as a regulated practice that accounts for a number of statements.
>
> (Foucault, 1972: 80, cited in Mills, 1997: 6)

Mills (1997) discusses the influence of Foucault, showing a conception of discourse that works at three levels. As 'the general domain of all statements', discourse is seen as the broad possibility of all communication, text, or talk. In this conception 'all utterances or texts which have some effects in the real world count as discourse' (1997: 7). The second conception of discourse as 'an individualizable group of statements' understands discourse as giving structure to 'groups of utterances which

seem to be regulated in some way and which seem to have a coherence and a force to them in common' (1997:7). This includes discourses which direct modes of thinking, such as feminism, biomedicine or economics. The third conception of discourse is as 'a regulated practice which accounts for a number of statements', and signals an interest in 'the rules and structures which produce particular utterances and texts' (1997: 7). This third understanding looks to the power of discourse to enable or constrain particular ways of seeing and talking. These three layers of discourse lay out the field of play when analysing the discourses of workplace health. The field of interest is the utterances and communications that hold some strength in the 'real world', which can be analysed in terms of the rules and structures of a discourse position. Foucault has taken great pains to distinguish a Foucauldian approach from critical approaches, and rather than pigeon-holing this perspective I would like to build a framework which uses elements of Foucauldian and critical approaches.

Lupton (1995) shows that discourse is neither value- free nor neutral, but laden with political and social meaning constituted continually and historically. Cheek (2000), following Foucault, describes how discourse:

> consists of a set of common assumptions which, although they may be so taken for granted as to be invisible, provide the basis for conscious knowledge. They enable and constrain the production of knowledge in that they allow for certain ways of thinking about reality whilst excluding others. In this way they determine who can speak, when, and with what authority, and conversely, who cannot' (Cheek, 2000: 23).

Fairclough provides a description of the effects of discourse:

> On the one hand, discourse is shaped and constrained by social structure in the widest sense and at all levels: by class and other social relations specific to particular institutions such as law or education, by systems of classification, by various norms and conventions of both a discursive and a non-discursive nature, and so forth… On the other hand, discourse is socially constitutive… Discourse contributes to the constitution of all those dimensions of social structure which directly or indirectly shape or constrain it: its own norms and conventions, as well as the relations

> identities and institutions which lie behind them. Discourse is a practice not just of representing the world, but of signifying the world, constituting and constructing the world in meaning.
>
> (Fairclough, 1992: 64)

While Fairclough places discourse within social structure, Foucault avoids placing discourse within any such superstructure. Mills finds that the institutional nature of discourse provides common ground in the different perspectives of discourse:

> a discourse is not a disembodied collection of statements, but groupings of utterances or sentences, statements which are enacted within a social context, which are determined by that social context and which contribute to the way that social context continues its social existence. Institutions and social context therefore play an important determining role in the development, maintenance and circulation of discourses
>
> (Mills, 1997: 11)

In contrast to the socially constructed reality of this discourse research, traditional workplace research is based in objectivist methods, interested in productivity from within a capitalist ideal. These methods are based on the notion of value-free dispassionate enquiry into all aspects of Nature, with a heavy emphasis on separating 'the observer from the observed and provid[ing] a neutral forum for the development of "objective knowledge"'. This is premised on the idea that objective knowledge allows us to take control over nature, health, medicine, mechanical power and so on (Ashton, 1992). In the workplace, early innovators of the scientific method include Taylor (1907), who approached the workplace as a system of units (employees) operating within a closed system. His time motion analysis of cutting metal at the Midvale Steel Company in 1881 led to exact measurement and categorization of employee's actions in the production process. This detailed analysis allowed the reduction of unecessary movement thereby improving efficiency. Henry Ford applied a similar approach to the assembly line, deskilling routine work by individualizing tasks according to specific skills (Smither, 1998).

Most workplace health research comes from this objectivist viewpoint, seeing health as a stable measurable entity, as part of unquestionable fact, waiting to be discovered through rigorous research. Recent exceptions including (Simpson, Oldenburg, Owen, Harris, Dobbins, Salmon, Vita, Wilson & Saunders, 2000) have used both qualitative and quantitative data in examining the impact of structural issues on workers. These efforts have been hampered by a lack of structure and ad hoc application. Objectivist approaches to workplace health have resulted in primarily positivist research, relying heavily on the collection of quantitative data and statistical analysis. The strength of research is measured according to the validity of research methods, evidenced by approaches such as the randomized controlled trial being considered the 'gold standard' (Heaney & Goetzel, 1996; Shephard, 1996). Studies focus on the costs (Byers et al., 1995; Hartwell et al., 1996; Reardon, 1998; Opatz, 1994) and health effects (Glanz et al., 1996; Goetzel et al., 1996), of hazardous agents (Jones et al., 2001; Donaldson., 1998), and change in health behaviours due to intervention (Craig & Hancock, 1996; Hanlon et al., 1998). Research also provides baseline measures of capability and suitability to particular tasks by assessing health and fitness (Palmer, 1995).

Research in the positivist vein seeks to uncover 'facts' in a neutral value-free manner. 'Such methodology assumes that through observation and precise measurement social reality, which is external to, and independent of the mind of the observer, may be rendered comprehensible to the social scientist' (Angus, 1986: 62). Crotty describes the scientific research schema devoid of human meaning:

> Whereas people ascribe meanings to objects in their world, science really 'ascribes' no meanings at all. Instead, it *discovers* meaning, for it is able to grasp objective meaning, that is, meaning already inherent in the objects it considers… Positivism is objectivist through and through. From the positivist viewpoint, objects in the world have meaning prior to, and independently of, any consciousness of them.
>
> (Crotty, 1998: 27)

Positivist research claims a singular truth, denying any other world-view, allowing only positivist scientific views precedence. Baum suggests this view is flawed, because health 'has defied any straightforward qualitative measurement reflecting both the limitations of questionnaire surveys and the actual complexity of health' (Baum, 1998: 6). Radley (1997) argues that resultant objectivist research approaches health in systematic terms, seeing individuals as a physiological system, only capable of being healthy or unhealthy. This omits human consciousness and the experience of the employee altogether, studying them as a purely physiological entity in a state of either health or illness.

The objectivist 'march of positivism' has meant that alternative research methods for developing understanding are received with suspicion and derision by many scientists. The dominant objectivist form seeks to marginalize research that accepts knowledge as contested, political or value-laden. The ignorance of subjective experience means there has been little work on 'identifying the strengths and weaknesses of programs from the employees perspectives' (Heaney & Goetzel, 1996). As Colquhoun (1995) describes a further implication of the objectivist view is that:

> people [are] very much dominated by a science perspective and disciplines of epidemiology and biostatistics where… people [are] researched on, rather than with, and data reduced to numbers and figures… [meaning] people as complex human beings [are] often ignored.
>
> (Colquhoun, 1995: 101)

Research on discourse in the workplace focuses outside the realm of workplace health, researching employees as part of other processes of interest within the workplace. Examples include Woollett and Marshall's discourse analysis of antenatal clinics (1997) and Stenson and Watt's study of local government (1999). Ferrie et al. (1995) investigated the health effects of employee's expectations of job change, while Nelkin (1985) and Hall (1996) have both focused on employee's conceptions of risk within the mining industry. Nelkin's research shows that knowledge is not value-free or apolitical. 'Concerns about risk may depend less on the nature of the danger than the observer's political and cultural biases. The concepts of accountability, responsibility, and liability that pervades debates about risk are in effect political statements expressing points of tension and value conflicts in a given society' (Nelkin, 1985: 16; Nelkin & Brown, 1984). The choice of language is a reflection of strategic values with implications for the formation of meaning for the individual. Crofts (1988) has shown that truth in workplace health is keenly contested and may be the subject of discourse between employees, employers and other experts in the workplace. The insistence on objectivity denies the experience of the employee and human consciousness in truth and meaning making. This is seen as a narrow and contradictory logic (Thompson, 1995). Daniel (1993) expands on the critique of research from within the dominant objectivist paradigm and re-sets the sights for research in health:

> Too much of research in health and medicine is empiricist – narrow and superficial. Good research generates broader understanding of human action and the social structures it encounters and produces, of the resistance of the social and cultural to both group and individual action. From the complex and chaotic interplay of human intentionality and action, research can abstract interpretations, even explanations that can be generalized beyond the immediate contingencies of one set of conditions.
>
> (Daniel, 1993: 5)

Yardley (1997) argues that rather than striving for the illusory goal of objectivity, it is more productive to examine the way in which our reality is shaped by purposes, conventions, aspirations, and assumptions of human life. This returns us to the possibilities and implications of the meaning making potential of discourse:

> A discourse has the power to create reality by naming and giving meaning to aspects of experience from a particular perspective. This power to create is always a 'distributive' politics; that is, what is deemed to be 'real' and 'true' determines what is included and what is excluded, so what cannot be named may not even be noticed… Naming brings new categories into existence, which make possible new ways of both being in the world and of understanding it.
>
> (Lee & Poynton, 1995:1)

3.3 A Theoretical Frame: Adding a Lens to the Frame

My approach to discourse analysis is based on the assumption that 'knowledge is not disinterested, apolitical, and exclusive of affective and embodied aspects of human experience, but in some sense ideological, political, and permeated with values' (Schwandt, 2000: 198). This is at odds with the majority of workplace health research that rarely incorporates the employee's understanding and experience, notable exceptions being the action research of Kurt Lewin (1935) and the emerging settings approach (Allender & Colquhoun, 1999). My concern with the placement of employees in research and the reasons behind workplace health programs is reflected in Kincheloe and McLaren's (1994) discussion of critical theory, which asks why 'questions of production and profit take precedence over questions of justice and humanity' (Kincheloe & McLaren, 1994: 147). To me, workplace health programs that focus on things other than health need to be investigated as they function to 'inhibit the realization of human possibilities' (Morrow,1994: 10). Hall's analysis of risk discourse in mining suggests:

> Few studies have looked specifically at the way in which a range of corporate ideas and discourses are combined within a given corporation's health and safety program… very few have focused on the contradictory elements of corporate discourse and their implications for labour consent and resistance.
>
> (Hall, 1996: 98)

I see a critical approach giving the possibility of questioning the ways people 'have been acculturated to feel comfortable in relations of domination and subordination rather than equality and independence'. Kincheloe and McLaren see the possibilities for critical theory to analyze 'competing power interests between groups and individuals within a society – identifying who gains and who loses in specific situations' (2000: 281). For me, a critical analysis needs to be tempered with aspects of poststructural theory, to understand how relations of power have been established, why workplace health is as it is, to examine the practices, techniques and strategies which support contemporary approaches to workplace health.

An analysis of discourse needs to investigate the contested nature of reality, and the struggles for legitimacy of different discourse positions within individual cases and at the broad societal level (Wright, 1996). Critical analysis highlights struggle and competition, critical 'discourse studies see organizations not simply as social collectives where shared meaning is produced, but rather as sites of struggle where different groups compete to shape the social reality of organizations in ways that serve their own interests' (Mumby & Clair, 1997). Kincheloe and McLaren (2000) describe the:

> criticalist as a researcher or theorist who attempts to use her or his work as a form of social criticism and who accepts certain basic assumptions: that all thought is fundamentally mediated by power relations that are social and historically constituted; that facts can never be isolated from the domain of values or removed from some form of ideological

> transcription; that the relationship between concept and object and between signifier and signified is never stable or fixed and is often mediated by the social relations of capitalist production and consumption; that language is central to the formation of subjectivity (conscious and unconscious awareness); that certain groups in any society are privileged over others and, although the reasons for this privileging may vary widely, the oppression that characterizes the contemporary societies is most forcefully reproduced when subordinates accept their social status as natural, necessary, or inevitable; that oppression has many faces and that focusing on only one at the expense of others (e.g., class oppression versus racism) often elides the interconnections among them; and, finally, that mainstream research practices are generally, although most often unwittingly, implicated in the reproduction systems of class, race, and gender oppression.
>
> (Kincheloe & McLaren, 2000: 290–1)

Weedon (1987) sees discourse in organizations as 'ways of constituting knowledge, together with social practices, forms of subjectivity and power relations which inhere in such knowledges and the relations between them. Discourses are more than ways of thinking and producing meaning'. From this perspective 'the ways in which discourse constitutes the minds and bodies of individuals is always part of a wider network of power relations, often with institutional biases' (Weedon, 1987: 108).

Fairclough's Critical Discourse Analysis (CDA) provides a structure for analysis from a micro (situational) to a macro (structural) or social level. This framing provides the basis for my analysis by providing the means to identify discourse at a unitary level within the single organization, while allowing analysis of the constitutive properties of discourse at a social level. Fairclough and Wodak distinguish CDA from other discourse analyses in the way it 'openly declares the emancipatory interests that motivate it' (1997: 259), understanding that language:

> does not *reflect* reality but actively *constitutes* it. The world, in other words, is not composed of meaningful entities to which language attaches names in a neutral and mimetic fashion. Language, rather, is involved in the construction of reality, the understandings that are derived from it, the sense that is made of it.
>
> (Brown cited in Andrews, 2000: 113 *original emphasis*)

Fairclough's analysis of discourse focuses on linguistic aspects of critical language awareness and language education (1989; 1992a; 1992b; Fairclough & Wodak, 1997). Fairclough sees linguistic analysis as one application of CDA, and suggests it may be used to analyse other conceptions of discourse (Fairclough, 1992a). Discourse analysis is applied in conversation analysis, semiotic analysis and linguistic analysis.

While Fairclough offers a stable framework for the analysis of discourse, I have some discomfort with the inflexibility of the critical understanding of power relations. I am drawn to Foucault's conception of power as 'not simply exercised from the top down (in a repressive fashion), but rather [as it] pervades social structures such that it is continually produced and reproduced by the most mundane social practices' (Mumby & Clair, 1997: 191). While Fairclough synthesizes much of Foucault's conception of discourse into CDA, the traditions of critical thought and Foucauldian analysis are problematic, Fairclough suggests:

> given that Foucault's approach to discourse and the intellectual context within which it developed are so different from my own, one cannot simply 'apply' Foucault's work in discourse analysis; it is, as Courtine says, a matter of 'putting Foucault's perspective to work' (1981: 40) within TODA [Textually Oriented Discourse Analysis], and trying to operationalize his insights in actual methods of analysis.
>
> (Fairclough, 1992a: 38)

Fairclough (1992a: 38) suggests that CDA 'is in principle concerned with any sort of discourse – conversation, classroom discourse, media discourse, and so forth'. Foucault does not situate spoken and written text as part of his analysis, rather he offers analysis of 'rules of formation' which define the possible 'objects', 'enunciative modalities', 'subjects', 'concepts' and 'strategies' of a particular type of discourse….Foucault's emphasis is upon the domains of knowledge which are constituted by such rules' (Fairclough, 1992a: 38). While the two theorists appear to

be at odds on the analysis of discourse, for me Fairclough provides a procedural structure while Foucault extends the analytical capabilities by providing a different lens for analysis. Foucault uses a useful metaphor of the toolbox:

> All my books … are little tool boxes … if people want to open … them, to use this sentence or that idea as a screwdriver or spanner to short-circuit, discredit or smash systems of power, including eventually those from which my books have emerged … so much the better.
>
> (Foucault cited in Patton, 1979a, cited in Mills, 1997: 17)

Foucault said 'I am still working and don't yet know whether I am going to get anywhere. What I say ought to be taken as 'propositions', 'game openings' where those who may be interested are invited to join in; they are not meant as dogmatic assertions that have to be taken or left en bloc. My books aren't treatises in philosophy or studies of history: at most, they are philosophical fragments put to work in a historical field of problems' (Foucault, 1991: 74). What is provided is 'a polyvocal approach that maximises the potential for providing important insights into the research process and development of new… knowledge' (Manias & Street, 2000: 50).

Kemmis and McTaggart (1993) suggest that many researchers fall behind one particular theoretical bandwagon and are happy to work in ignorance of other approaches. Silverman (1997) urges against a 'cookbook' recipe style approach to qualitative research. The alternative theoretical synthesis brings the strengths of different forms of theoretical study to a multi-perspective research.

While the mixture of theory may appear unwieldy, Fairclough argues that combining his method with Foucault will 'strengthen social analysis, essentially by ensuring attention to concrete instances of practice and the textual forms and processes of interpretation associated with them'. The attention to detail within a particular case:

> can help social analysts avoid the schematism and one-sidedness which limit Foucault's work, be it in relation to the effects of power and possibilities of resistance, the constitution of social subjects, or the social and cultural values associated with particular genres such as counseling. It can also help to relate general statements about social and cultural change to the precise mechanisms and modalities of the effects of change in practice.
>
> (Fairclough, 1992a: 61)

3.4 Towards a Postcritical Approach to Discourse Analysis

For Idema and Wodak (1999) power is contested at all levels of work, even the mundane aspects of office size, access to computers and other equipment and indeed access to workplace health programs. A critical approach examines these power relations with:

> a more specific focus on the substantive focus of *domination*, a complex notion based on a concern with the ways social relations also mediate power relations to create various forms of *alienation* and inhibit the realization of human possibilities.
>
> (Morrow, 1994: 10 *original emphasis*)

Critical theory has moved beyond the unitary analysis of power in terms of the Marxist critique of economic determinism from base to superstructure, but remains centered on conflicts of characteristic 'multiple forms of power, including… racial, gender, sexual axes of domination' (Kincheloe & McLaren, 2000: 282). From within a critical frame power relations are seen as:

> set up and maintained in the routine workings of particular social practices (e.g. performing one's job, or consulting a doctor), rather than by force. This shift from more explicit to more implicit exercise of power means that the common-sense routines of language practices… become more important in sustaining and reproducing power relations.
>
> (Fairclough, 1992b: 3)

With critical theory, 'critical theorists attempt to develop a mode of consciousness and cognition that breaks the identity of reality and rationality' this view sees social facts as not 'inevitable constraints on human freedom…but as pieces of history that

can be changed' (Agger, 1991: 109). Critical theory has advanced to gain a greater appreciation of the power of language, as Kincheloe and McLaren describe:

> Critical researchers have come to understand that language is not a mirror of society. It is an unstable social practice whose meaning shifts, depending upon the context in which it is used. Contrary to previous understandings, critical researchers appreciate the fact that language is not a neutral and objective conduit of description of the "real world". Rather, from a critical perspective, linguistic descriptions are not simply about the world but serve to construct it. With these linguistic notions in mind, criticalists begin to study the way language in the form of discourses serves as a form of regulation and domination. Discursive practices are defined as a set of tacit rules that regulate what can and cannot be said, who can speak with the blessings of authority and who must listen, whose social constructions are valid and whose are erroneous and unimportant.
>
> (Kincheloe and McLaren, 2000: 284)

The critical approach maintains a focus on the possibilities for emancipation through critical enquiry, viewing power as linear, where conditions can be reversed. Kincheloe and McLaren reconceptualized critical theory to include an intense concern 'with the need to understand the various and complex ways that power operates to dominate and shape consciousness' (Kincheloe & McLaren, 2000: 283).

Kemmis and McTaggart (1993) argues that critical theory views an endpoint for history, where a certainty is achieved that denies oppression or domination. I am uneasy with critical theory's assumption that utopia is possible. Fairclough's (1992a) main criticism of Foucault's work is his exaggeration of the 'extent to which the majority of people are manipulated by power' (1992a: 56) and 'that in the totality of his [Foucault's] work and in the major analyses, the dominant impression is one of people being helplessly subjected to immovable systems of power' (1992a: 57). These alternate conceptions of power provide another dimension to CDA.

3.5 Peeking inside Foucault's Tool Shed

In contrast to critical approaches, Foucault moved the focus of power to discourse and discourse practice, as Foucault describes:

> the target of analysis wasn't 'institutions', 'theories' or 'ideology', but *practices* – with the aim of grasping the conditions which make these acceptable at a given moment; the hypothesis being that these types of practice are not just governed by institutions, prescribed by ideologies, guided by pragmatic circumstances – whatever role these elements may actually play – but possess up to a point their own specific regularities, logic, strategy, self-evidence and 'reason'. It is a question of analyzing a 'regime of practices' – practices being understood here as places where what is said and what is done, rules imposed and reasons given, the planned and the taken for granted meet and interconnect. To analyze 'regimes of practices' means to analyze programmes of conduct which have both prescriptive effects regarding what is to be done (effects of 'jurisdiction'), and codifying effects regarding what is to be known (effects of 'verdiction').
>
> (Foucault, 1991: 75).

Foucauldian analysis is concerned with 'how the social construction process is shaped across various domains of everyday life, not with how separate theories of macro and micro domains can be linked together for a fuller account of social organization' (Gubrium & Holstein, 2000: 496). This offers a continuous view of power, alternate to the oppositional approach of critical theory, Foucauldian analysis aims to 'cut off the kings head' and see power relations as a function of truth, knowledge and subjectivity. Some have argued for Foucault's ideas to be understood as postmodern/poststructural critical analysis:

> Indeed it is possible to speak of a species of *postmodernist critical theory* that, although agreeing with aspects of the critique of grand narratives, does not want to throw out altogether any basis for a critique of power and domination. Although retaining a similar political engagement in its opposition to orthodoxies of Marxism and academic disciplines, postmodern critical theory – as in the work of Michel Foucault - "indicts, sometimes explicitly, more often implicitly, the idea that modernity contains within itself the potential for human emancipation" (Leonard, 1990: xiv).
>
> (Morrow, 1994: 29 *original emphasis*)

Gubrium and Holstein show that Foucault offers tools for a 'hybridized analytics of reality construction at the crossroads of institutions, culture, and social interaction – an analytics that "misreads" and co-opts useful insights from established traditions in order to appreciate the possible complementarity of analytic idioms without losing sight of their distinctive utilities, limitations, and contributions' (2000: 496). 'Foucauldian discourse studies involve treating the data as expressions of culturally standardized discourses that are associated with particular social settings, looking for relationships, categories and logic claims, and analysing competing discourses within social settings such as the workplace (Miller, 1997: 34). This historical critique investigates how relationships are established and the strategies of power that support current workplace health practice. This opens up the workplace for analysis as a socially, historically situated institution. Fox (1993) places Foucault's analysis within a postmodern/poststructural position, showing that knowledge is at the center of analysis:

> the postmodern position on health asks some questions which focus upon the creation of knowledgeability about illness and health. How do discourses on health and illness, be they medical, lay or from other groupings, claim authenticity, how do they claim authority, and how is it that we are willing to accept their knowledge of the character of health and illness?
>
> (Fox, 1993: 9)

Beavis (1996) distinguishes between the critical and the poststructural in terms of their goals, suggesting critical theory aims for emancipation while the poststructural denies all claims for a 'grand narrative', opting instead for a deconstruction of existing conditions (Morrow, 1994). Foucault made the conditions of knowledge visible, his 'critical historical analyses concretized, or empirically substantiated, the ways in which modern discursive formations act to both enable and constrain the

everyday lives of human subjects' (Andrews, 2000: 123). Foucault's form of discourse analysis sees power operating:

> in and through discourse as the other face of knowledge, thus the term *power/knowledge*. Discourse not only puts words to work, it gives them their meaning, constructing perceptions, and formulates understanding and ongoing courses of interaction… To deploy a particular discourse of subjectivity is not simply a matter of representing a subject; in practice, it simultaneously constitutes the kinds of subjects that are meaningfully embedded in the discourse itself.
>
> (Gubrium & Holstein, 2000: 494-5 *original emphasis*)

Foucault used the notion of discipline 'to account for the material effects of the discourses and practices of institutions, that is, the ways in which individuals lives are regulated (Lee & Poynton, 1995:1). According to Foucault 'disciplining' occurs 'at the point where power reaches into the very grain of individuals, touches their bodies and inserts itself into their actions and attitudes, their discourses, learning processes and everyday lives' (Foucault cited in Lee & Poynton, 1995:1). Yardley (1997) suggests a blend of Foucauldian and critical analysis of discourse to 'elucidate meanings and functions of discourse, and their links with social relations and the exercise of power' (1997: 32).

I approached my research from a similar position to Cheek (2000), who suggests postmodern 'and poststructural approaches [such as Foucault's] are not research methods in themselves: rather they are ways of thinking about the world that shape the type of research that is done and the types of analyses that are utilized' (Cheek, 2000: 4). This shows the possibilities of applying Foucauldian analysis within CDA.

Criticism of Foucauldian analysis includes critique of the emphasis on 'both the *hows* and *whats* of reality construction…. Asking *how* questions without having an integral way of getting an analytic handle on *what* questions makes concerns with the *whats* arbitrary' (Gubrium & Holstein, 2000: 496-7). In using Foucault to examine

the procedural how's, Fairclough's CDA can provide the analytical structure for opening up the what's of naming discourse. Gubrium and Holstein support such an extension of Foucauldian analysis, which can avoid the theorizing of social form while maintaining a focus on institutional and cultural discourses. This joining of methods sits within the theoretical evolution of qualitative research towards a dual concern with 'the artful processes and substantive conditions of meaning making and social order' (Gubrium & Holstein, 2000: 497). Beavis has described this meeting of the critical and poststructural/postmodern as 'postcritical', a theoretical approach which:

> has its own analytic tools for undertaking inquiry, a skepticism towards totalizing grand narratives, and a central concern with such matters as the constitutive power of discourse, power relations, agency, the construction of subjectivity, and a view of the self as multiply constituted rather than unitary.
>
> (Beavis, 1996: 21)

What I hope to build from this theoretical framework is a postcritical approach that uses the structure of CDA as a frame to allow critical analysis while also making visible sites for Foucauldian analysis. Miller (1997) uses the metaphor of a bridge, suggesting 'analytic formations may be linked and made mutually informative, while also respecting the distinctive contributions and integrity of each perspective' (1997: 24). Miller argues that each perspective can open new interpretive insight, and in this case I see CDA allowing analysis to move from bottom up, 'from ordinary interactions to general social processes', while Foucauldian moves top-down 'from culturally standardized discourses to the reality-constructing activities of everyday life' (Miller, 1997: 26). As Manias and Street describe, the toolbox does not 'consider the work of critical social theory and of Foucault as two discrete 'blocks' of theory' (2000: 50).

3.6 A Postcritical Discourse Analysis: Analytical Tic Tac Toe

Further, Fairclough and Wodak (1997) link text and society, suggesting critical discourse analysis 'is very much about making connections between social and cultural structures and processes on the one hand, and properties of text on the other' (Fairclough & Wodak, 1997: 277). Fairclough (1992b) describes how every instance of discourse 'has three dimensions: it is a spoken or written language *text*; it is an *interaction* between people, involving processes of producing and interpreting the text; and it is part of a piece of *social action*' (1992b: 10). These three dimensions are adapted by Janks to text, discourse practice (the process of production and interpretation), and sociocultural practice (conditions of production and interpretation). Here 'texts are instantiations of socially regulated discourses and…the processes of production and reception are socially constrained' (Janks 1997: 329). Examination of these dimensions of discourse involves three levels of analysis; description (text analysis); interpretation (processing analysis); and explanation (social analysis). Combining the three-dimensional concept of discourse with the three dimensional analysis can be shown diagrammatically.

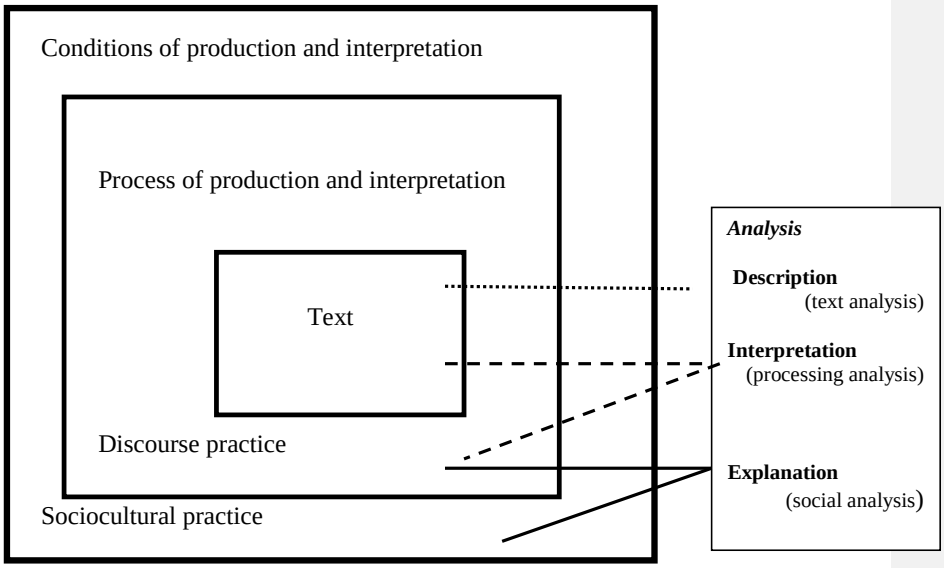


Figure 3.1. A three-dimensional concept of discourse analysis.

***Source*: Fairclough, 1992a; 1992b; Janks, 1997**

Comment [C1]: Caption to a figure sits underneath.

The three dimensions of discourse presented in figure 3.1 above are neither linear nor causal, but best understood as three dimensional, where 'the embedding of the boxes emphasises the interdependence of these dimensions and the intricate moving backwards and forwards between the different types of analysis' (Janks, 1997: 330). While the boxes are nested, for the purposes of analysis they need to be removed, and seen as steps in a game of analytic tic-tac-toe, each taken separately and then re-inserted back within the interconnected understanding of discourse. Fairclough's CDA is useful in providing 'multiple points of analytic entry'. For Janks:

> It does not matter which kind of analysis one begins with, as long as they are all included and are shown to be mutually explanatory. It is in the interconnections that the analyst finds interesting patterns and disjunctions that need to be described, interpreted and explained.
>
> (Janks, 1997: 329)

3.7 Analytic Dimensions: From Tic to Toe

This approach to analysis means jumping from square to square developing the analysis iteratively as each step provides further insight (Gubriem & Holstein, 2000). There are three dimensions to Critical Discourse Analysis: '*description* of the text; *interpretation* of the interaction processes, and their relationship to the text; and *explanation* of how this interaction process relates to the social action' (Fairclough, 1992b: 11 *original emphasis*). Analysis begins by describing and interpreting discourses identified in data and then moves to explain sociocultural conditions.

3.7.1 Description (Text Analysis)

Fairclough categorizes text into an ascending hierarchy containing 'vocabulary', 'grammar', 'cohesion', and 'text structure'. I am interested in the use of individual words (vocabulary), the linking of phrases and ideas (cohesion) and the 'large-scale organizational properties of texts' (text structure). My analysis will not focus on the linguistic properties of grammar in text but take a less formal approach focusing on the text as data to allow analysis, moving away from the linguistic technicality of Fairclough's analysis. The description of text includes whether it is verbal, written, visual, or document text, also describing who is speaking, in what capacity and to what end.

3.7.2 Interpretation (Processing Analysis)

Interpretation of discourse practice examines the conventions relied on for the production and interpretation of the text, the interpretation phase aims:

> to specify what conventions are being drawn upon, and how. The repertoire of available conventions includes various genres (interview, advertising, lecture) and various discourse types (medical, scientific, legal), including both dominant and oppositional/ 'alternative' conventions. There are standard, normative ways of using and combing these resources, but they can also be used and combined in creative, innovative ways, and interpretational analysis tries to pinpoint how these conventions are used.
>
> (Fairclough, 1992b: 11)

Interpretation 'focuses on the processes by which the object is produced and received (writing/speaking/designing and reading/listening/viewing) by human subjects' (Janks, 1997: 329). Adding a Foucauldian lens opens analysis of the discursive techniques such as assessment, surveillance and normalization, identifying how these processes structure work, the workplace and workplace health.

3.7.3 Explanation (Social Analysis)

Van Dijk describes how 'discourses find their ultimate rationality and functionality in social and cultural structures. For this reason, it makes analytical sense to distinguish between *local* and *interactional context* and *global context* or *societal context'* (van Dijk, 1997: 6 *original emphasis*). Fairclough agrees, addressing the issue in the explanation phase of analysis, here 'one aim is to explain such properties of the interaction by referring to its social context – by placing the interaction within the matrix of the social action it is a part of' (Fairclough, 1992b: 11-12). Analysis is:

> concerned with assessing the contribution of the discourse to the social action, the effectivity of the discourse in constituting or helping to reconstitute the different dimensions of the social… it also aims to specify the ideological and political investment in conventions, and the ideological and political import of particular ways of using and combining them.
>
> (Fairclough, 1992b: 11-12)

3.8 Contextual Information: The Case

Previous case study research in workplace health is limited; one study of note is Glover (1997), whose comparative case study of workplace health identified three general levels of workplace health program. Glover found a dichotomy 'between the individual's interpretation of their organisation's values and policies and the party-line from the organisation itself' (Glover, 1997: 214). This dichotomy can be investigated using postcritical discourse analysis within a single organization. My research will engage program administrators, corporate health promoters, company executives, employees and documents.

The organization that participated as the case in my research came to me by chance, although I had been interested in approaching Labyrinth Computing and was fortunate that they approached me. My initial contact with Labyrinth Computing was in evaluating health promotion software for Lyn, the Lifestyle Program administrator. Lyn was an invaluable contact, both as key informant and in helping identify and introduce me to other members of company staff who could participate and add to my research. The organization is an information technology company providing hardware, software and information logistics across the world. The organization has 1300 employees spread across 160 sites in Australia and is renowned for employee benefits and health programs. My research focused on employees based in their Australasian metropolitan and regional offices. Labyrinth has offices in 107 countries around the world and provides information technology for businesses of all sizes. The company also produces hardware and software that is used across the world. My research was with employees at two large sites, one in metropolitan Melbourne and one in regional Victoria. The metropolitan sites are both within central business district buildings owned by the company; they are

modern skyscrapers comprising 18 floors of offices. These offices communicate continually with other arms of the business around Australia and the world. The regional office of the company is also within a new building. This office supports the company's products across Australia and during the time of my research was heavily involved in responding to concerns about Y2K. The people I interviewed were from both of these sites. Employees that participated in this study became involved through key informant snowball sampling. Key informants identified people who could help provide insight into the discourses of workplace health and these participants identified other people in turn.

Company health programs are serviced by a staff comprising a director, an occupational health and safety officer, a lifestyle program administrator, an environmental health specialist, and an occupational health nurse. All participants were approached following an introductory phone call from Lyn, and were recruited through the procedure sanctioned by the ethics committee (see Letter of Ethics Approval, Appendix 1). An exception was in the case of the director who, through a miscommunication, was approached without prior introduction, resulting in the project being jeopardized momentarily. The director was the only member of staff approached who elected not to be involved in my research.

Lyn manages the Lifestyle Program, whose stated aims are to help employees balance their work and family life, and save them time and money by providing information and services in personal and financial affairs. The lifestyle program includes purchasing services, elder care information, financial planning, families at work programs, home loans, car loans, savings and credit facilities, health plan coverage, discount broking and investment services, cinema tickets, tax and legal assistance, travel discounts, employee assistance programs, social activities, and

health promotion. Lyn is responsible for the management of these services, and contracted Herbert Johns to provide health promotion.

Herbert Johns is the director of John's Health, a corporate health promotion business based in Canberra. John's Health provides workplace health promotion for the company's Australasian operations. John's Health programs advocate 'occupational health and fitness' from an assessment intervention model. Assessment is undertaken to indicate health risks followed by prescribed exercise, diet and lifestyle change. John's Health also provides workshops and seminars based on topical health issues.

Amber is the Occupational Health and Safety Officer, qualified in risk management and responsible for ensuring the company meets health and safety legislative requirements. This includes keeping up to date with legislative changes, undertaking health and safety audits, accident investigation and follow up to prevent recurrence. Amber also provides orientation for new staff focusing on the their responsibilities under the company's health and safety policies.

Chloe is an occupational health nurse and works with employees who have become ill, or who have received leave on health grounds. Chloe's role is divided into records management, case management and employee training. Records management involves keeping confidential files on employees and tracking return to work progress for staff on leave. Case management involves liaising with internal and external parties to ensure that the employee returns to work as soon as possible. Chloe runs training sessions for staff on health issues, such as manual handling, while providing other nursing services such as flu injections.

Employees who participated in my study are all subject to the health and safety policies administered by Amber, and have access to Lyn's lifestyle program and

John's Health health promotion programs as part of their employment conditions. They may also work with Chloe in training sessions or when ill. The employees I interviewed were Bob, Dilbert, Jane, John, Libra, Sam, and William. Dilbert and William are both analyst programmers, responsible for enhancing and trouble-shooting software problems. Jane and Sam's role is project management, responsible for putting together teams for a particular job, maintaining budget and ensuring progress. Bob is a systems programmer, administering mainframes for external clients, while John is responsible for change management, ensuring that changes in clients' systems occur with minimal disruption. Libra is a records analyst, responsible for the recording and analysis of statistics relating to client outcomes and team success rates. Eleven Labyrinth employees participated in interviews for this study.

3.9 The Data Corpus

My data corpus was generated from documents, web sites, and interviews. Data collection and analysis commenced at ethics approval and continued until the completion of the study. While the collection of documents may seem mundane, Lemke suggests that even texts 'as prosaic as an organization's "mission statement", may bring to bear on present events and decisions the products of other social processes potentially distant in time and space, and operating over a larger scale of space and time than the present ones' (Lemke, 1999: 24).

Documents seen as relevant to the company's health programs were collected. These included health policies, and employee benefits information, advertising, memos and emails relating to health programs. Website information collected related to health information, speeches by the company president, corporate health policies and online

health services. Web-based links from original company sites were examined where applicable. In the case of documents and websites, data were limited to public information and information that involved employee health or health programs. This excluded broader health data such as Human Resources communications, and confidential or sensitive documents such as internal position papers and medical records. The corpus is also limited by access to the company, from my limited access point possible data sources were not available. Documents were obtained from John's Health including employee booklets and promotional material for prospective clients. As the focus of analysis was the company, I did not collect documents or data from other clients of John's Health. All documents were either publicly available or approved by the relevant parties. Documents are presented as direct scans where the content of the scan does not threaten the anonymity of Labyrinth Computing.

Interviews took place over a six-month period from December 1999 to May 2000. I conducted all interviews modeled on the structured and semi-structured approaches detailed by de Laine (1997). Interviews began with Lyn, who was a key informant in providing access to other staff members who could add to the research. Each participant was interviewed a minimum of three times and interviews were typically open and conversational, conducted in the participant's office, site cafeteria or over the telephone. Discussion developed from preceding interviews, aiming to build a consistent thread throughout data collection. Interviews typically began by discussing the participant's background, how they had come to the company, their role, and so on. Subsequent questions led discussion towards the company's existing health programs, and how programs were devised and rationalized in decision-making. Interviews evolved as issues emerged such as programs not represented in company literature or not officially sanctioned, the gaps in existing health programs,

and barriers to implementing employee-led health programs. Employees were also asked about company requirements for health and the work conditions in place to support or constrain this. Discussion involved the company's aims, and the place of the employee within these aims. Interviews were transcribed and returned to participants for validation and editing. Triangulation of data between interviews, participants and data types (e.g. interviews and texts) was ongoing during fieldwork (Hammersley 1987). Triangulation refers to the mixing of methods of data collection, in this case the intersection of data sources provided points of agreement and contention. Each of these points provide starting points for analysis and the movement between different sources of data helped lend support the validity of insights gained (Fontana & Frey 1998: 73). While triangulation hopes for convergence between data to provide validity, sources may never converge fully (Huberman & Miles, 1998: 198). By using multiple modes of evidence, triangulation provides an ongoing strength to the process of data analysis. Interviewing proved challenging as I began from a low experience base, gaining confidence and skill as an interviewer as the study proceeded. Finding times to interview participants was also difficult as I was clearly a low priority in most cases and was 'stood up' often or informed that my participant was out of the office at the appointed meeting time, and in two cases out of the country! It should be mentioned that interviews occurred during the Y2K[2] crisis, and the organization was deeply involved in ensuring Y2K compliance for clients throughout Southeast Asia and Australia, which took clear priority and added to the crowding of schedules. Interview data are presented in italics. Hamel and Dufour (1993) describe participant interviews as a critical factor in gaining an understanding of the subjective of experience of the members within a

[2] Y2K refers to the global concern over the ability of the computers systems to handle the change in binary date from 1999 to 2000.

particular case. Interview techniques have been shown by these authors to reveal 'experience or social reality defined according to the meanings assigned directly by the social actors as intended to the social experience' (1993: 33). Here I intend for interviews to provide a reflection of the way health is experienced and understood as real by employees at Labyrinth. Interviewing interview allows the researcher to focus directly on the topic of interest and provides insight into the perceptions of actors within the case. Yin suggests that 'one of the most important sources for case study information is the interview' (Yin, 1994: 84). To Fontana and Frey (1998) 'interviewing is one of the most common and most powerful ways to understand our fellow human beings. Interviewing is a paramount part of sociology, because interviewing is interaction and sociology is the study of interaction' (1998: 47). Interviews formed a central part of my data corpus.

Documents were scanned from their original format into Microsoft Word, checked against the originals for scanning accuracy and then entered into the 'ATLAS.ti Visual Qualitative Data Analysis and Theory Building' (Scientific Software Development (1997-2001) software package). Interviews were tape recorded onto microcassette and then transcribed into Microsoft Word. The transcriptions were then returned to participants for changes and approval. Following approval from participants, transcriptions were entered into 'ATLAS.ti'. The ATLAS.ti program allowed data to be arranged in 'primary documents' from which a drag-and-drop mouse procedure allows for the coding of text, initially with new codes and eventually with codes already entered. In this process, I went through the data corpus many times coding, and re-coding data. Coding was clearly influenced by my own history and began with everything being coded as 'biomedical' or 'economic rationalist'. As my confidence grew, I began to allow myself to develop codes more

intuitively, stepping out of the safety of repetition of acknowledged discourse conventions. I ended up with 41 primary documents and 1600 pieces of text coded into over 100 categories. Codes ranged from 'perceptions of health', 'individual health responsibility', 'lifestyle discourse', and 'the gaze', to 'structure', 'working conditions', and 'equity'. The ATLAS.ti package allows for single pieces of data to be coded many times and presented in many different ways. Having heard the war stories of butcher's paper and living room walls of the previous generations of social researchers, I thought computer software was the secret, and that data analysis would be finished within weeks. It would please my forebears to know that I reverted to butcher's paper spread on the living room floor as far as the eye could see. Analysis has been ongoing since day one and will continue long after the completion of my thesis.

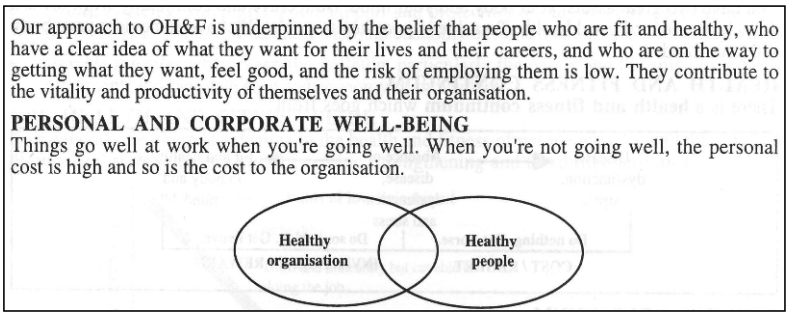
3.10 Postcritical Discourse Analysis: A Working Example

My data analysis applies a postcritical framework to Fairclough's CDA, which provides three-dimensional analysis of a three-dimensional concept of discourse. Analysis begins by drawing the three 'discourse' squares on a large piece of butcher's paper, and working through a printout of analytic coded quotes, placing quotes where they serve to build analysis. Similar to Janks (1997) I begin by finding a piece of text for description that contains the flavor of a particular code and that provides points of departure for further analysis in the interpretation and explanation phases. While this sounds relatively clean, deciding on the initial piece of text was a constant source of anguish, often taking days to identify. Pieces of text move continually across the squares of analysis, and days of work would see the analysis change completely, showing better possibilities for initial pieces of text. Often the flavor of analysis would change 180 degrees from the beginning of analysis to the

finish. I would like to use an example to show how analysis develops through the phases of description, interpretation and explanation. The following analysis is a clean version of full analysis, and represents a pared-down version of a complete analysis provided later in 'The Corporate Athlete'.

3.10.1 Description

This analysis developed out of a code group titled 'health as physical fitness'. Within the data corpus this was a very common code, existing in many of the documents, interviews, websites and interview transcripts. The first piece of text presented comes from an introductory booklet for employees who are beginning the John's Health health promotion program:


Our approach to OH&F is underpinned by the belief that people who are fit and healthy, who have a clear idea of what they want for their lives and their careers, and who are on the way to getting what they want, feel good, and the risk of employing them is low. They contribute to the vitality and productivity of themselves and their organisation.

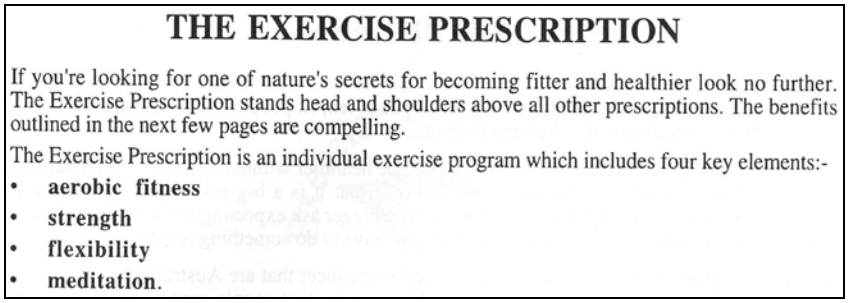
PERSONAL AND CORPORATE WELL-BEING

Things go well at work when you're going well. When you're not going well, the personal cost is high and so is the cost to the organisation.

This text is provided in document form in a booklet given to all employees, making it constantly available for reference. The text is from an employee health assessment booklet and serves to introduce the program to the employee. Occupational Health and Fitness is introduced as *our approach*, positioning the text as an official edict within the alliance of John's Health and the company, overtly positioning the text for the employee as a company text, part of the communication of the workplace, as an organizational position statement passed through company management to the employee.

3.10.2 Interpretation

Interpretation aims to examine the conventions of production and interpretation of text, while also investigating the discourse practices allowed by the particular conventions. The initial piece of text shows a reliance on biomedical and occupational health and safety discourse conventions. The biomedical is covert in the linking individual health and fitness to wider ideals of happiness, vitality and productivity. The OHF programs borrows the idea of scientific prescription from medical practice, a technique central to biomedical discursive practice, and reflected later in the booklet:



THE EXERCISE PRESCRIPTION

If you're looking for one of nature's secrets for becoming fitter and healthier look no further. The Exercise Prescription stands head and shoulders above all other prescriptions. The benefits outlined in the next few pages are compelling.

The Exercise Prescription is an individual exercise program which includes four key elements:-

- **aerobic fitness**
- **strength**
- **flexibility**
- **meditation**.

'Occupational Health and Fitness' (OHF) borrows its name from 'Occupational Health and Safety' (OH&S), placing OHF within the scientific and traditional validity and stability of OH&S practice. OHF discourse brings to existence the fit and healthy as people *who have a clear idea of what they want for their lives and their careers, and who are on the way to getting what they want, feel good, and the risk of employing them is low. They contribute to the vitality and productivity of themselves and their organization.*

What is not said, but stated through omission, is what it means to not be fit and healthy. By omission, the unfit and unhealthy do not have a clear idea of their career

and life direction, do not feel good and are powerless to achieve their goals. The employee who does not ascribe to the OHF doctrine is written by OHF discourse as a high employment risk. The discursive positioning of the employee existing only as fit and healthy is linked directly to the importance of prescribed exercise and training, reflected in the OHF philosophy:

I train therefore I am.

The subject is disciplined through training within OH&F discourse in the metaphoric link to training like an elite athlete to become an elite employee. The athletic metaphor is continually reproduced in health literature, a further example provided in the OH&F advice on back-pain:

> If in the past you've injured your back or neck, or it has become dysfunctional in some way, there is a very good chance that it will soon start to feel better once you start the strengthening and flexibility exercises. Of course, for the 'compleat fix-up' for a crook back, you'll need to do what elite athletes do - become involved in a regular, systematic and intensive training program that includes a wide range of modalities.

The OHF discourse constructs the employee as an athlete, needing to take prescribed exercise to become a better employee, striving for continual improvement, borrowing from the Olympic athletes ideal of stronger, higher, faster. The Corporate Athlete is constructed as an active subject in the process of change, subservient, attentive and responsive to experts (the coach) in taking instruction to improve performance and reduce injury and time away from the ‘game’ (workplace). The discursive positioning of employees as athletes provides an avenue for the workplace health efforts to step outside the boundaries of the workplace and ‘see’ into the private lives of the employee. The OH&F analysis of the corporate athlete makes visible

employees lifestyle, legitimizing surveillance and assessment of employee's dietary habits, family relations, alcohol usage and so on.

3.10.3 Explanation

Placing the discourse of OH&F and The Corporate Athlete within 'the matrix of social action it is part of' (Fairclough, 1992b: 12) means broadening analysis of discourses to the social realm. The discourse sits neatly within the health and fitness ethic, where health and fitness are ethical constructs of the active member of society. To be productive, the individual is constantly encouraged to maintain a fit and healthy lifestyle. The evolving nature of work, and the continual increase in executive salaries in an environment of economic rationalist downsizing is de-politicized by OH&F discourse. The executive is canonized as a hero and expert (elite athlete) for their stamina and fitness to maintain the longer and longer working hours. The unfit employee is written as irresponsible in not maintaining their fitness to work through poor training and discipline. The OH&F and Corporate Athlete discourses support the sociocultural blurring of previously distinct boundaries between work and private life. The assessment and surveillance of diet, chemical intake, stress and sleep levels so important to the athlete becomes a central concern to workplace management. Executives in turn become the object of surveillance through virtue of responsibility to shareholders. The Corporate Athlete produces the notion of athletic competition in the workplace and reproduces the survival of the fittest, kill or be killed competition mentality of global business. This also serves to close the spaces where the capitalist 'me-first' mentality can be challenged or questioned.

3.11 Discourse Analysis as Social Science

The study of discourse is historically located in three main types of social analysis; the quantitative approach to media studies; semiotics in the structural tradition of literary criticism; and, narrative discourse analysis within poststructural theory (Denzin & Lincoln, 1998). 'Discourse analysis is concerned with the ways in which language constructs objects, subjects and experiences, including subjectivity and a sense of self' (Willig, 1999: 2). This provides a clear alternative to the more established categorization of behaviour common in disciplines such as psychology. Fairclough developed what has become known as Critical Discourse Analysis (CDA) (1992a). Critical discourse analysis has been deployed in a number of different fields, including education (Wallace, 1992), emergency housing (Sayers, 1992), nursing (Cheek, 2000), gender (Mills, 1997; Weedon, 1987), and academia (Talbot, 1992). Fairclough's work went further then previous language analysis (Hawkins 1984) by adding a critical awareness to the analysis. Previously, language had been examined purely on content and structure, a critical approach extended this to examine the interplay of power, oppression and subversion inherent in language. This critical approach borrowed elements of Foucault's historical analysis of discourse, which developed 'new and more effective political ways of seeing' (Gordon, 1994: xv). The relationship and work of these two authors is discussed in detail elsewhere in this chapter.

3.12 Conclusion

This chapter has developed the methodology for this discourse analysis of workplace health. Within this chapter I have situated myself within the research and explained how I have come to undertake this project. The methodology has included the epistemological and theoretical ideas that underpin the analysis of data. Data analysis

is based on Fairclough's Critical Discourse Analysis and uses parts of Foucault's work to allow new insights. This is based on a social constructionist epistemology, which sees reality as a social construct where discourse both constitutes and is constituted by social interaction. This approach to workplace health represents a new postcritical way of researching workplace health, and takes an interest in the meaning making implications of the discourses in a workplace health program.

My research was undertaken with Labyrinth Computing, an international information technology company. The data corpus includes interviews from health program managers as well as company health promoters and general employees. Documents are taken from health promotion programs and company websites. In chapters four to eight, analysis identifies four main discourses operating; occupational health and safety; occupational health as fitness; occupational health and risk; and, occupational health and the glory of technology. I also examine the implications these discourse have for governing the conduct of the worker.

4 Occupational Health as Safety

4.1 Introduction

In the following chapter, I examine the discourses of Occupational Health and Safety (OH&S) at Labyrinth. These discourses are examined within the Description, Interpretation and Explanation framework mapped out in my Methodology. The description of Occupational Health as Safety discourse provides an examination of the discourses around health at Labyrinth. This begins by establishing the different professional foci of OH&S discourse. A clear dichotomy is identified between health and safety. Safety and health are two distinct fields of practice, where safety is clearly the dominant element of OH&S strengthened by the legislative and moral imperative to avoid physical harm. The importance of safety to OH&S is reproduced in the practices of OH&S discourses. Assessment, for example, makes safety visible as a health problem while devolving responsibility from the company to the individual worker.

OH&S discourses contain a number of ways to view health. In each, health is viewed in negative terms, and a clear distinction is made between mind and body. Lifestyle is a prominent feature of OH&S discourse. This lifestyle focus prescribes notions of family and the balance of work and private life for the employee. The analysis discovers a wide range of programs that target health, each linking the health of the individual employee to the productivity of the organization. Within this discourse, health becomes multiple and irrelevant, and those who suffer illness are marginalized

from the typical Labyrinth employee. Illness is represented as a weakness and not a "normal" experience within the healthy, productive Labyrinth workforce.

Placing health and safety in socio-historical context highlights the continuing influence of legislation in the workplace. The emergence of new professions concerned with OH&S is shown as a response to new ways of viewing illness while maintaining the oppositional nature of OH&S.

4.2 Description: Occupational Health as Safety

My discussion with each participant began with his or her role at Labyrinth. In talking with the health professionals of the company, I found a clear distinction in roles and boundaries. This surfaced in a discussion with Amber, the OH&S representative, on the organization's approach to health. During our conversation, health and safety are presented as two distinct issues:

> *Ok well we've got this issue and how do we manage it? Ok well we look at it from a health perspective and a safety perspective, so it's mainly perspective rather than approach. Because we would all probably say that we'd get a different perspective on it. Because we're all, in health and safety the key way in which you manage a hazard is actually identify and say 'well what is the hazard? Ok, it's alcohol. That's the hazard and how you assess the risk and manage the risk and evaluate the success in that would probably be the same if you were a safety or a health professional. And assessment is a key area that safety and health professionals would use.*
>
> *P40: Interview 3 with Amber.txt - 40:23 (155:166)*

The approach would include *a health perspective and a safety perspective* producing the two as separate perspectives on workplace health. Amber is the occupational health and safety specialist, but defines her role particularly as safety. The demarcation of health and safety has a long precedent, Wilson (1985) suggests that it is:

> Generally agreed to be desirable to distinguish between occupationally caused injuries and occupationally caused ill health or illness. Injuries are the result of the physical impact of objects such as machinery on the human body; illnesses result from the chemical or biological interaction of substances on humans.
>
> (Wilson, 1985: 2)

My conversation with Amber moved deeper into the nature of health and safety. Health is constructed independently from the role of OH&S specialist. Amber marks out the differences between health and safety:

> *Safety issues are different to health issues so I guess how you manage them, you do need to have someone who's a health professional to manage health related issues. I mean you can probably have somebody with no particular health background manage it [programs] but how they would manage it would be quite different to how a health professional would. Hopefully the health professional would set priorities on the issues that they come up on.*
>
> *P 2: Tension.txt - 2:19 (353:366)*

This text reflects a theoretical and professional divide between health and safety, where safety is valorized and health is marginalized. The health professional is produced as 'other' than the occupational health and safety professional. *You can probably have somebody with no particular health background manage it,* suggests it requires no particular qualification or expertise to manage health. Herbert reproduces the inadequacy of those dealing with 'health' in lamenting the lack of physical educators:

> *Yeah well see there's no good physical educators in industry, they're just clerical officers who have taken over occ health and safety. It's shameful, most of them aren't trained in occ health and safety, or of they have been to occ health and safety courses their piss fartin' courses, or of they've done tertiary courses on it none of them have anything to do with health or fitness. It's all fuckin' safety.*
>
> *P39: Interview 2 with Herbert Johns.txt - 39:17 (90:94)*

Safety is clearly dominant in OH&S discourse as indicated here. Safety and health are produced as distinct entities on the landscape of occupational health. Safety is

rigid, tightly-defined and bound in legislation, while health is characterized as haphazard, amorphous and semi-professional. Safety and health are examined as separate parts of OH&S discourse in the remainder of this chapter. The following section builds a picture of the discourse practices of safety and health, developing the nature of the distinction.

4.3 Interpretation: Slips, Trips and Legislation

OH&S practitioners are primarily concerned with safety, reflected in the experience of corporate health promotion provider Herbert Johns:

> *When you look at occupational health and safety it's all safety. They're really focused on safety. The people who work in occ health and safety positions they just focus on safety.*
>
> *P 8: Health Perceptions.txt - 8:27 (132:133)*

> *It's the same everywhere in Australia. It's a pretty primitive situation when you look at occupational health as being anything more than stopping people falling off ladders or breathing noxious fumes.*
>
> *P36: Interview 1 with Herbert Johns.txt - 36:4 (44:46)*

Herbert describes the dominance of safety in OH&S discourse within Australia. Safety focuses on single, discrete incidents, aimed at *stopping people falling off ladders or breathing noxious fumes*. Safety relates to singular, discrete incidents, while Amber shows health is harder to define:

> *Health things are often chronic or long term issues whereas safety generally is more discrete one off short-term events. So safety is about slips and trips. It's not easy to describe. I'm just trying to think of some good examples of safety. Slips and trips is probably the most obvious of ones.*
>
> *P33: Interview 1 with Amber.txt - 33:43 (240:241)*

Amber introduces a central mantra of occupational health and safety; *slips and trips*, which helps direct OH&S practice towards safety. The slips and trips mantra focuses OH&S practice on the prevention of accidents and the need for safety. Legislation is

central to OH&S discourse, forcing the focus of OH&S practice toward safety. The legislative nature of OH&S problematizes safety as the main role of the OH&S specialist. The importance of legislation is played when defining the roles of OH&S officer Amber, and Healthy Lifestyle administrator Lyn. Amber discusses the differing roles:

> *Mine is on the stuff the company has to do in terms of meeting its legal and moral obligations to providing a safe workplace. Hers is more about what the company can do to make working life better, so it's the what we'd like to do's not the have to do's.*
>
> *P 6: Legal.txt - 6:2 (57:61)*

Safety is constructed as a *legal and moral obligation*. Producing safety as moral creates an official imperative to focus health initiatives on safety. Safety becomes the moral imperative in workplace health discourse. Conversely, health is marginalized against this ethical construct as something *we'd like to do*. Amber discusses how legal obligations inherent in OH&S discourse prioritize workplace health practice:

> *I think at the end of the day 80% of our work will be focused on the legal, and maybe 20% on health promotion.*
>
> *P 7: Health Promotion.txt - 7:11 (205:206)*

OH&S discourse produces the importance of meeting legal requirements in practice. From the perspective of the employee, Libra shows that these legal requirements can restrict health programs:

> *We tried to bring Tai Bo into the seminar room, someone had a video, and the same manager that wanted the alcohol thing said `No, health and safety, if we injure ourselves and everything else.'*
>
> *P19: Interview 1 with Libra.txt - 19:20 (134:137)*

The highly legislative framework surrounding occupational health and safety produces safety as purely reactionary in response to legal requirements. For Amber, legal requirements determine practice:

> *Amber: The way I look at it, and I guess the way most health and safety professionals would look at it is that you have to determine what does the company legally have to do, what are our responsibilities? We do have very clear-cut responsibilities in law about a number of aspects of health, and they are for example, exposure to chemicals at work is heavily legislated so there are some key responsibilities on any company and in that they would feature that the employee has a shared responsibility to use the information about safely managing chemicals to protect their own health.*
>
> *P40: Interview 3 with Amber.txt - 40:3 (24:28)*

The occupational health and safety specialist has *very clear-cut responsibilities in law about a number of aspects of health*. The legal requirements define the role of the OH&S specialist. Legislation directs practice of the specialist by problematising particular issues in particular ways. Here, *exposure to chemicals at work* is constructed as a central concern through the influence of heavy legislation. The reproduction of OH&S discourse to the employee occurs through the legislative requirement to assess his or her own safety risks. The legal pressure is reproduced throughout the company through OH&S checklists:

> *It's a checklist, which goes through some items that they would need to be aware of. Basically it's just like a health and safety review. It's like, look at your housekeeping, look at your lighting, your ergonomics, your materials handling, storage of materials. There are a whole lot of different things on it and it's a couple of page checklist. We basically ask them to look at it and note if there's any issues and actually action those issues.*
>
> *P37: Interview 2 with Amber 06.txt - 37:46 (362:367)*

From the perspective of the employee, the checklist involves a visit from the health and safety specialist and provides the opportunity to raise health and safety issues, Sam explains:

> *Sam: Yes, there is an occupational health and safety department and although we don't really see them a lot we all got an email to say that they were coming and they often do stuff like adjusting your desk and all that sort of stuff and if you've got any health and safety concerns then you raise it at that time.*
>
> *P20: Interview 1 with Sam.txt - 20:21 (48:52)*

The health and safety review reproduces occupational health as safety. Employees are asked to direct their attention to safety constructs like *lighting, ergonomics, materials handling [and] storage of materials*. The health and safety checklist shows employee that health and safety to consist of safety issues. Assessment, via a checklist, places the employee on record as being aware of safety issues. This both devolves and formalizes responsibility for health and safety to the employee. Amber describes how the checklist symbolizes the employee's acceptance of responsibility:

> *We are asking them to formally record that they have made an assessment. I think if you were shown that they'd missed something, that's fine. But if they'd actually found a problem and they hadn't fixed it, I don't think the company would be all that happy and legally they wouldn't be in a very good situation either.*
>
> *P 6: Interview 2 with Amber.txt - 6:11 (180:185)*

This technique devolves legislative pressure to comply with safety standards to the employee. The employee gives formal notice that they have made an assessment, and by implication that they understand the safety issues they have identified. Those who find problems and do not act to fix them are brought under the threat of legal action. As well as self assessment, the safety focus of OH&S discourse is also reproduced for employees through OH&S training programs:

> *We've got a priority on doing training in manual handling and ergonomics and we've basically worked out from our incidents that we actually still need to do that work because we're still having incidents in that area.*
>
> *P11: Content decisions.txt - 11:3 (66:69)*

Training employees in safety issues like manual handling and ergonomics provides them with the skills to further reproduce the safety focus. Knowledge gained during training can be applied to workmates and others upon return to normal duties. The very clear responsibilities for safety in OH&S legislation means safety messages are succinctly constructed and actively deployed. The breadth and depth of the OHS message is not always fully understood, for some employees, like William, OHS appears very limited:

> *That's about the total of the health and safety there (points to resuscitation poster on the cafe wall) and that's it. And that's not even for employees at Labyrinth its for their kids.*
>
> *P21: Interview 1 with William.txt - 21:33 (85:87)*

In contrast to safety, health remains ambiguous, difficult to define and shifting in practice. Within the discourse of occupational health and safety, health is constructed as having multiple meanings, varying levels of expertise and professionalism and of little relevance or importance.

4.4 Interpretation: Marginalizing Occupational Health

Following her safety-centered description of occupational health and safety, I asked Amber how she would describe health:

> *I mean, I kind of describe it like basically it's usually continuous sort of exposure to something that's going to be a health issue or it's a continuous, the fact that someone's got a health problem is something they will have for all time probably.*
>
> *P33: Interview 1 with Amber.txt - 33:44 (244:247)*

Health is affected by *continuous exposure to something*, being chemical or other substances. Health is externalized by OH&S discourse to exposure to harmful agents in the workplace. Health is a negative construct, as something that can be damaged but not enhanced. OH&S discourse constructs health as something to be protected from the risk of *exposure to something* requiring physical barriers to prevent exposure. Health is differentiated from safety in that health is chronic, or *that someone's got a health problem is something they will have for all time probably*. For Amber, poor health results from physical exposure to a harmful agent. Analyst programmer William produces an alternate view of health:

> *There's different ways you can look at health, you can look at health from a physical point of view, and you can look at health from a mental point of view, I dunno that it's a healthy place to work mentally all of the time. Issues like morale are very fluctuating at times, some times morale is really high and other times it's really low, possibly through the nature of the work.*
>
> *P21: Interview 1 with William.txt - 21:13 (98:102)*

William distinguishes health as a separate function of mind and body. The multiple understandings of health are reflected in the eclectic range of health programs. The range of Labyrinth health programs are detailed in the Healthy Lifestyles employee booklet:

> *HEALTHY LIFESTYLES CONSISTS OF THE FOLLOWING PROGRAMS:*
>
> *Purchasing Service, Elder Care Information, Financial Planning, Families at Work Program, Home Loans, Car Loans, Savings and Credit Facilities, Health Plan Coverage. Discount Broking and Investment Services. Cinema Tickets, Tax and Legal Assistance Help Line, Travel Discount Program, Employee Assistance Program (EAP), Social Activities, Health Promotion Program*
>
> *THESE PROGRAMS WILL ENSURE THAT YOU AND YOUR FAMILY*
>
> *are given the opportunity to balance your work and personal life, have the ability to save time, are able to make dollar savings, are provided with information in managing your personal and financial affairs.*
>
> *P23: 11-Labyrinth Healthy Lifestyles.txt - 23:2 (9:16)*

The program designed to encourage *healthy lifestyles* targets a broad collection of elements. Health includes elements as diverse as *purchasing services, elder care, home loans and health promotion* in a healthy lifestyle. Healthy lifestyle provides the space for work to encroach unquestioned into private life, rationalized in the opportunity to *balance your work and personal life*. The influence of work over private life is reiterated in the company *providing information in managing your personal and financial affairs.* Promising financial help rationalizes the opening of private life for examination by work. Facilities like *savings and credit, home loans, purchasing services* and *travel discounts* suggest that financial affairs are central to the healthy lifestyle of the employee. Work is central to the employee's personal life. Bob describes how a *personal crisis* is solved through services available at Labyrinth:

> *Bob: There are things available you can use for a personal crisis. If you were going through a personal crisis they will organise a counsellor, or a psychotherapist or even a psychiatrist or whatever you need.*
>
> *P15: Interview 1 with Bob.txt - 15:42 (60:65)*

Family is also important to the healthy lifestyle, evidenced by the *elder care* and *families at work* programs. *Families at work* provides yet another avenue to blur the margins between working and private life. Health constructs a healthy lifestyle as containing *social activities, employee assistance programs* and *health promotion programs*. Health discourse produces a notion of family that is left undefined but clearly relies on traditional conception of the nuclear family. *Elder care information* and *financial planning* produce an idea of the normal family that is heterosexual, involving three generations in close contact. No space is reserved for families outside this narrow view. In helping to balance work and personal life, Labyrinth prescribes expectations for the conduct of private life to make it easier for employees to work

longer hours. The production of services normally reserved for private life such as *health plan coverage*, *cinema tickets* and *car loans* reduces the time employees spend finding and accessing these services and increases time available for work. Surveillance goes beyond work, an idea developed further in Chapter 8.

Health is targeted in many different ways, has multiple meanings and is hard to pin down or define, leading to the marginalization of health programs behind the singularly defined and legislatively structured safety. The multiple ways of seeing and intervening in health means that health discourse must make room for many different approaches to health. Herbert describes the importance of using multiple approaches in explaining the need to be holistic:

> *Herbert: Its got to be holistic, anything that happens to you is rarely uni-causal, there is a whole lot of causes, there is a whole lot of things you need to fix up, and a lot of those things you need to fix up are probably in your head as well as in your body. But you get high blood pressure so you take a blood pressure tablet, but the blood pressure has come from racing around the world going flat out and not exercising, not looking after yourself, not valuing yourself, being a workaholic because of the way you were bought up as a child. So all we do is take a tablet.*
>
> *P39: Interview 2 with Herbert Johns.txt - 39:24 (153:160)*

The valorization of multiple *holistic* approaches to health provides the space for the many alternate approaches to be used. Herbert produces the preventative approach of health promotion, while reproducing the company's concern with the employee's lifestyle. Healthy Lifestyles administrator Lyn views health as a less complex function of physical fitness. In describing the new health promotion program, she links the health of the employee to the health of the company:

> *I believe that's just really gonna make people fitter and more conscious of their health. Fitter workforce, better, fitter and healthier. Yeah, improvements for the company.*
>
> *P35: Interview 1withLyn.txt - 35:45 (231:233)*

Within this landscape, the influence of working conditions on health are completely omitted. That which constitutes health relates directly to the behaviours of individual employees. Via health discourse the behaviours of the worker are tied directly to the health of the company. The holistic concept of health discourse provides a blank canvas to problematize elements of the worker's financial, work and private behaviour. The multiple understandings of health result in an eclectic collection of workshops, seminars, tests, assessments and programs delivered in the name of healthy lifestyles. For Herbert Johns, the multiple nature of health pushes it to the very margins of relevance:

> *Well to be honest gimmicks are really popular. It's a thrill, what we do. People consider it a thrill. They do have an obligation to tell people probably about noxious fumes, they might have one for manual handling technique if it's a workshop, they might have one for climbing up and down ladders and slipping on slippery floors if it's a workshop, but apart from that you don't have to do anything.*
>
> *P39: Interview 2 with Herbert Johns.txt - 39:14 (74:78)*

Health programs are pushed aside for the closer defined elements of safety discourse. The multiple nature of health results in interventions that are merely *gimmicks* or a *thrill.* The haphazard nature of the health discourse leads practice to be short-term reactive events. The resulting programs have mixed aims and objectives and unpredictable results. Herbert is reticent to evaluate programs and describes how health programs may provide benefits different from the initial intention:

> *If they don't like one of the personal development or health education programs, people might find out a little bit about prostate or how to get on better with their son. You just might trigger a response somewhere that has a little impact.*
>
> *P39: Interview 2 with Herbert Johns.txt - 39:20 (116:118)*

Health discourse holds little optimism for positive program outcomes; with luck being able to *trigger a response somewhere that has a little impact.* Health initiatives

are rationalized on the chance that they may affect health, personal relationships or at least have some positive impact. Health initiatives are constructed as hit and miss, rationalized on the hope they may have some impact somewhere. As a result of the less than optimistic approach, employees meet programs with suspicion. For the employee health programs are received with some mirth, records analyst Libra describes one instance:

> *One manager in the building wanted to run Alcoholics Anonymous, on alcohol abuse and when everybody found out they said, "I'll go to abuse alcohol". It was seen as a bit of a joke.*
>
> *P19: Interview 1 with Libra.txt - 19:14 (129:132)*

The construction in health discourse of programs as *a joke* further negates the importance of health to the employee. Health programs are poorly defined, not taken seriously and a source of mirth. The worker who complains of ill health is produced as strange or deviant, a source of laughter and puzzlement for fellow employees. The ill employee is written by health discourse as someone not to be taken seriously, as Libra explains:

> *Well there is one girl that's constantly been away sick, and it's become a joke among everybody else. I don't actually know what's wrong with her but. Its been happening the last couple of years. She's very slight anyway so perhaps she does catch colds but it's become this big joke.*
>
> *P19: Interview 1 with Libra.txt - 19:17 (162:166)*

While the ill employee is deviant, the 'normal' employee does not suffer illness and looks upon the ill with suspicion. The normal employee does not have sick days and is too strong to fall into the dubious trap of ill health. Poor health is constructed as a sign of weakness. Occupational health nurse Chloe helps those who become sick return to work and describes the general company attitude to her clients:

> *Illness is weakness, she deals with the weak, she deals with the people who can't cope and are therefore losers and I might catch it. There's no evidence that the organisation takes any responsibility for the effects, there is no organisational responsibility.*
>
> *P41: Interview 3 with Chloe.txt - 41:47 (287:296)*

The marginalization of health de-politicizes the role of the organization in the health of employees. At the same time the multiple nature of health allows the company to examine most parts of the employees life. Safety is dominant in OH&S discourse supported by pressure to comply with legislation. The occupational health and safety discourse have is based in the socio-historic conditions of workplace health. The explanation of occupational health as safety examines the divorcing of health and safety in modern workplaces.

4.5 Explanation: Socio-Historical Context of Occupational Health and Safety

The modern health and safety environment is based on a long standing legal and safety framework. Health is continually marginalized, produced as a "soft science" against the valorized engineering and biomedical sciences. McCaig's description of the modern occupational health environment highlights the biomedical and engineering science focus:

Table 4.1. The Modern Environment for Occupational Health

Comprehensive health and safety legislation
Concept of risk assessment firmly established in practice
Increased professional standing and organisation of occupational health disciplines, including medical, nursing, hygiene and ergonomics
Great expansion of the general biomedical science base
Widespread public and media interest in all matters related to health
Greater access to sources of information on occupational health – including via the Internet

Adapted from McCaig, 1998: 11.

The strict scientific focus is a legacy of the historical development of occupational health and safety practice. The dominance of legislated safety in OH&S discourse is embedded in the industrial history of work. The appalling death rates of English mill workers in the late 18th century led to the Morals of Apprentices Act of 1802. This act required specific working hours and factory conditions with an express concern for worker safety. The Factories Inspector Act of 1802 and the Factories Act of 1833 brought safety inspectors to the workplace and gave them the power to charge employers with the offence of providing unsafe work conditions. This legislative muscle was evidenced in Australian employers being made liable for worker injury under the Victorian Factory Act of 1885 (Coulton, McCulloch & Noble, 1990).

The liability for accidents placed on employers created a safety discourse which later influenced the role of the occupational health and safety specialist. Initially concerned primarily with occupational safety, the improvement in the monitoring of health and tracking of disease brought occupational diseases such as asbestosis to the attention of legislators. The influx of occupational physicians and evolving legislation enlarged the role of the occupational safety officer to include a concern with the elements of the workplace that cause ill-health. The specialities of occupational medicine and occupational epidemiology have focused attention on the causes of disease. Practice identifies linear and causal factors in ill-health and reinforces that health is something to be protected rather than enhanced.

Elements of work and health were identified as problems with the introduction of epidemiologists and physicians in the workplace. Approaches to workplace health focused on mechanics of injury, the advanced tracking of disease and the ability to examine physiology through the microscopic techniques of biomedical investigation bore new categories of disease. Asbestosis is the perfect example, where previously

only external physical injury was recognized, the X-Ray allowed the links between the working environment and the internal health of the worker to be identified. The ability to 'see' into the lungs allowed physicians to track the development of work-related diseases like mesothealioma. The chemical analysis of blood allowed the monitoring of lead and other dangerous substances. The recognition of long-term injury from work has brought new professions like physiotherapists to deal with repetitive strain injury (RSI), occupational therapists to deal with returning injured employees to work, ergonomists for manual handling techniques and, psychologists to deal with stress (Coulton et al., 1990).

Threat of legal liability and increasing insurance premiums provides the conditions for safety to dominate occupational health and safety discourse. These legislative 'and policy changes have focused attention on the roles of government, labour and employers in the design of the workplace' (Coulton et al., 1990: 36). This views the individual worker as the problem and aims to provide physical barriers to protect the worker from harmful agents and themselves. As Gliksman (1993) describes, debates about workplace health are inherently political, the individualization of the worker as safety problem constructs oppositional relationships between employers and workers, unions and management, and government and business. Coulten et al., describe the situation:

> the area of occupational health and safety has been dominated by a focus on the individual. In large part this stems from our society's dominant understanding of illness and health. There is an emphasis on personal characteristics of individual workers which has tended to locate "blame" for occupational injury and ill health clearly with the worker or victim, to substantially truncate managerial responsibility, and to suggest courses of action which advance the sectional interests of employers and insurance companies at the expense of workers… Such a focus fails to consider the way in which the structure of work itself contributes to workplace injury and ill health.
>
> (Coulton et al., 1990: 47)

The emergence of new diseases unrelated to exposure to harmful elements at work have led to the problematization of work itself as an influence on health. Modern health problems such as stress, ulcers and cardiovascular disease bring into focus the nature and demands of work. The development of new categories of illness led to new understandings of influences on health, some estimates suggest that 60% of days lost due to illness is stress-related (Parker & Whybrow, 1998: 69). The new forms of illness are both identified and brought within biopsychosocial approaches to health:

> The biopsychosocial model of ill health was introduced during the 1970s at a time when there was increasing dissatisfaction with a purely biomedical model of ill health as an explanation for disease, and its aetiology and management. It has been developed since, particularly in relation to musculoskeletal disorders and mental health problems. It does not seek to dismiss health as a social problem but to integrate the various processes which contribute to the detriment of health experienced by the individual.
>
> (McCaig, 1998: 15)

The proliferation of stress cases is enhanced by the changing nature of work. Increases in role ambiguity, workload demands, computerized pressure on production, reduced support and reduced individual autonomy all promote anguish and increase stress. The approach to stress maintains the systems focus of safety discourse, Cox describes two possible approaches, 'For some, the way to deal with work-related stress is to diagnose, treat and rehabilitate those individuals who are unfortunate enough to be damaged by that experience. For others, it is economically and morally preferable to assess and then repair the failed work system or organisation and thus reduce the risk of future failure and the likelihood of future work-related ill-health' (Cox, 1998: 137). Cox goes on to detail the cooptive nature of occupational health and safety discourse:

> Work related stress, perceived as a major problem for most working people, is a health and safety issue… it is reasonable to attempt to deal with stress using the conceptual framework, general principles and

> procedures that have been successful in dealing with other health and safety issues. The basic equation and language of health and safety management, hazard-harm-risk, should be modified to apply to work-related stress, and the general principles of a risk management approach adapted to make the translation to a practical set of workplace actions… There are several factors which either argue for or generally facilitate such an approach, including the existence of a legal imperative, the availability of authoritative guidance on risk management procedures, and a strong body of relevant scientific evidence. The marriage of the legal and the scientific currently works to promote this approach and to promote the formulation of a 'good enough' set of scientifically defensible procedures which meet legal requirements.
>
> (Cox, 1998: 137-8)

The very nature of work has also undergone significant change. There has been a marked shift from blue-collar physical work to white collar, information communication work, an expansion in part-time work and an increase in the number of females in paid work. McCaig (1998) details the shift in industry:

> Employment in manufacturing has been falling since the mid 1960s, and the rise in office work has been progressive from the start of the century. The predominant change has been from manual to non-manual work. Work patterns are also changing, with more part-time work and an increase in irregular working hours. The majorities of businesses are now small businesses… Many companies which have remained in the manufacturing sector have had to respond to theses conditions, and new companies, for example in financial services, have introduced methods such as call centers from scratch. Not only have the types of job in the economy changed, but often also the structures within which they are undertaken.
>
> (McCaig, 1998: 12)

Problems with safety have obvious and instant affects, attempts to link working conditions to poor health are more difficult. Occupational causes of disease are often not recognised despite the compensatory tenet of legislation. 'If a direct cause resulting from occupational conditions could be medically certified, this meant compensation might be paid, but if the causes were associated with poor housing or nutrition – the result of low pay, and so indirectly caused by work – then there could be no compensation. Complex arguments arose over health prior to starting work,

over normal and abnormal strains and hazards, and over medical diagnoses and theories' (Weindling, 1985: 10).

Workplace health practitioners overlook the effects of work upon health in favor of political concerns. 'The social status of occupational medicine has meant that doctors are usually unwilling or unable to confront the capitalist-production methods which are damaging to health' (Milles, 1985: 57). Currently, hazards to health at work are defined under four categories: 'Physical – noise, heat vibration and radiation; Chemical – dusts, poisonous fumes and gases, toxic metals and chemicals, carcinogens; Biological – bacteria, fungi and insects, and; Stress – caused by physical, chemical and work situation, including psychological factors such as job pressure' (Reasons, Ross & Paterson, 1981: 38). Health problems are a function of cause, if the causes cannot be found then an occupational health problem cannot exist. This omits the possibility for poor health in a number of ways. Interpersonal relations, feelings of control and job mobility all cause significant health effects and can result in absence from work, yet none of these fall within this narrow description. The worker's experience of health problems is a secondary concern in the prohibitory OH&S framework:

> Mediating between the interests of the worker and employer are state and local authority factory, medical and environmental health inspectors, party political and government agencies, judicial and statutory procedures, and a range of professional experts like general practitioners, industrial medical officers and nurses, industrial hygienists and toxicologists, psychologists and safety officers. A worker's sense of aches and pains might not accord with what can be recognised as a compensatable disease by the complex legal and medical machinery.
>
> (Weindling, 1985: 2)

OH&S discourse focuses solely on the hazardous or negative impacts in an attempt to reduce the burden of ill health. Within OH&S discourse, notions of health focus on problems such as stress and cardiovascular disease in an attempt to reduce their

negative impact on the individual, the employer and society. What is not present in the various discourses of workplace health is health as positive. It is possible that the inclusion of positive aspects of health is the next discursive turn for workplace health practice. The WHO Global Strategy on Occupational Health for All (1994), suggests that the 'conditions of work and the work environment may have either a positive or hazardous impact on health and wellbeing' (WHO, 1994: 6). The impending shift in workplace health discourse is perhaps best represented by the concept of workplace wellness. Workplace wellness is constructed as an extension of workplace health promotion and while it began over three decades ago has experienced a boom in the 90's. The World Health Organization is a leading advocate for change and links positive approaches to health with economic outcomes for business:

> A high standard of occupational health and safety correlates positively with high GNP per capita. The countries investing most in occupational health and safety show the highest productivity and strongest economy, while the countries with the lowest investment have the lowest productivity and the weakest economies. Thus, active input in occupational health and safety is associated with positive development of the economy, while low investment in occupational health and safety is disadvantage in the economic competition.
>
> (World Health Organization 1994:31)

The ambiguous meaning of 'health' and the diverse range of professional opinion results in a 'lack of uniformity either of provision or of the type of service which is offered' (Waldron, 1992: 297). Further confusing the issues is the wide range of stake-holders and professionals involved in workplace health. Stakeholders include management, shareholders, community groups, governments and health care providers. Coulton et al. (1990) shows how differently health can be viewed from alternate standpoints:

> A medical view of health, with the individual patient as the focus, could be quite different from a government view which may consider a national average as "healthy", and deviations on the negative side as "unhealthy". A lawyer may consider a different set of criteria: the amount of loss of movement or strength that a client may have suffered as the result of an injury, in order to translate the loss of full health into an amount of compensation measured in dollars and cents.
>
> (Coulton et al., 1990: 11)

A further alternative is the definition provided by the World Health Organization (1948) constitution, which describes health as a 'state of complete physical, social and mental wellbeing, and not merely the absence of disease or infirmity.' More recently WHO has deemed that 'the ultimate objective of occupational health is a healthy, safe and satisfactory work environment and a healthy, active and productive worker, free from both occupational and non-occupational diseases and capable and motivated to carry out his or her daily job by experiencing job satisfaction and developing both as a worker and as an individual' (World Health Organization, 1994:3).

4.6 Conclusion

This chapter has sketched the field of workplace health discourse with a particular focus on Occupational Health and Safety. Occupational Health and Safety provides a stable point of access for the analysis of discourse in workplace health. This chapter identified a schism constructing health and safety as two separate entities in both professional understanding and practical approach. The safety element is heavily driven by legislation, taking the majority of the OH&S officer's professional attention. Health is seen as outside the role of Occupational Health and Safety. Health is a bonus, part of the things the company would like to do, but has no moral or legal imperative to do. Health is characterised by multiple meanings, broad approaches and poorly defined goals and assessment. In this environment safety is

valorized in workplace health discourse while health and those who suffer illness are marginalized.

The following chapters examine more closely the discourses of health within Labyrinth. Each of the discourses identified represented major themes within the data corpus. “The Corporate Athlete” relates to the construction of Health as Fitness, “The At Risk Worker” examines the risk discourses of workplace health and “The Glory of Technology” shows the way information technology is constructing the cyber worker in workplace health discourse. *Occupational Health as Governance* examines the way the conduct of the employee is influenced by the many discourses of workplace health.

5 Occupational Health as Fitness: The Corporate Athlete

5.1 Introduction

This chapter extends the analysis of Occupational Health as Safety examined previously to investigate the discourse of Occupational Health as Fitness. This analysis begins with the haphazard nature of health identified in the previous chapter, taking the particular focus on physical fitness for health as the starting point for analysis. A link with Occupational Health and Safety practice is identified in the naming of the Occupational Health and Fitness approach. This health as fitness discourse produces physical fitness as the single determinant of health. In doing so the fit, healthy, productive employee is normalized as the typical Labyrinth worker.

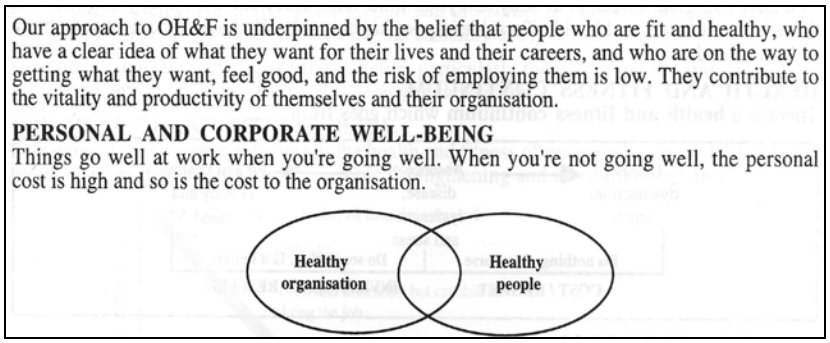
The employee is individualized and, similar to OH&S discourse, responsibility for health is devolved towards them, omitting the effects of working conditions on health. The OH&F discourse constructs the active individual within a metaphor of the body as machine. The need for regular maintenance and servicing is examined as a way of instilling discipline and self control in workers through OH&F discourse. Through this strategy the servicing and maintenance of the body in physical exercise becomes a moral responsibility.

The healthy employee is linked to the elite athlete, developing the employee as disciplined in their training and prepared to make sacrifices to achieve their goals. I conclude by describing how the athletic metaphor helps align personal and organizational objectives, providing a rationalization for professional examination of

all elements of the employee's life. The explanation sketches the socio-historical conditions that have led to health as fitness being one possibility for viewing workplace health. Particularly relevant is the changing nature of work. The shift from a labour workforce to an information services workforce has led to an increased interest in lifestyle-based disease and illness. Coupled with the ever-increasing demands on productivity, I show that Occupational Health as Fitness discourse does more than simply extol the benefits of exercise for health.

5.2 Description: Occupational Health as Fitness

A private corporate health provider, John's Health, runs the Labyrinth workplace health promotion program. John's Health bases their programs around the concept of Occupational Health and Fitness. The John's Health program includes Occupational Health and Fitness assessment, Occupational Health and Fitness Programs, (involving health management, stress management, back and neck pain management, smoking cessation, career satisfaction, gender health, healthy finance, and workstation assessment), Occupational Health and Fitness Audits, Musculo-Skeletal Rehabilitation, and Fitness Classes. Central to the John's Health program is Occupational Health and Fitness, described in the John's Health program philosophy:

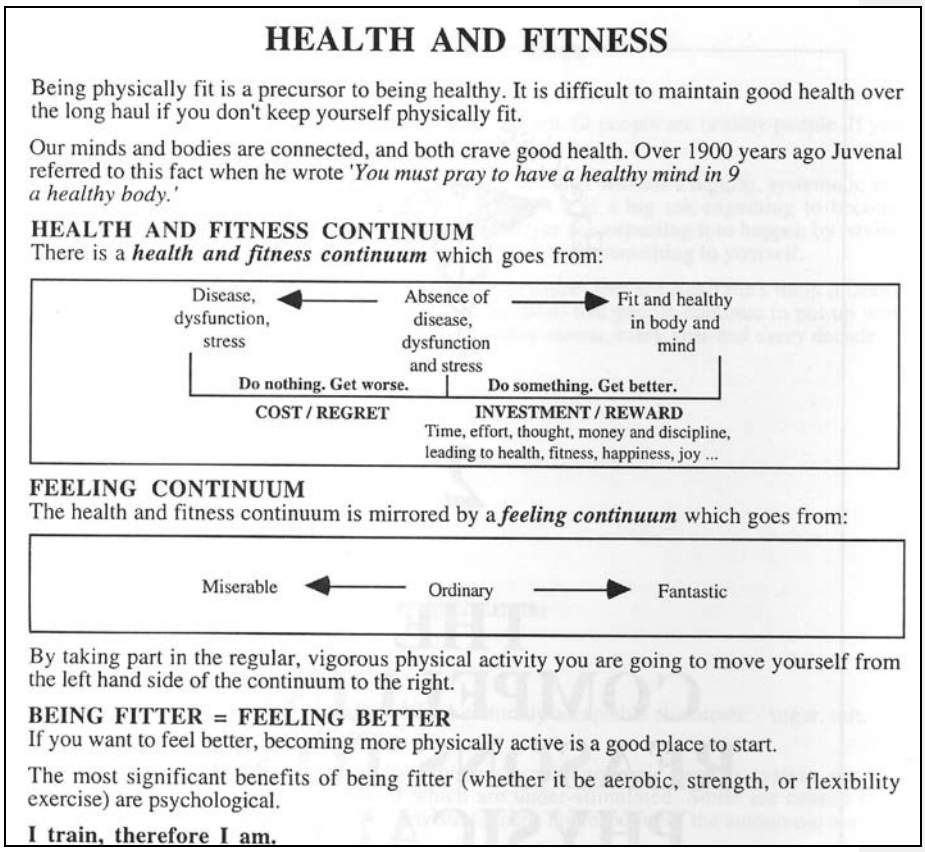


P25: 02-Program Philosophy.txt - 25:6 (79:87)

Occupational Health and Fitness is produced as part of the introduction to John's Health Programs. The text introduces Occupational Health and Fitness (OH&F), and health promotion at Labyrinth becomes defined within OH&F. The text provides the 'beliefs', which underpin this approach, indicating these views are both deeply held and extremely important to both the service provider and Labyrinth. The OH&F worker is fit and healthy, a low risk to employ, contributes to the vitality of themselves and the organization, and has a clear idea of life and career goals. OH&F demonstrates a subjective reality of the ideal employee. The text of OH&F produced by John's Health is reproduced to employees throughout the Labyrinth workplace. OH&F is an official edict, transmitted through official channels, communicated through the company's hierarchy in the same way as any other official directive.

5.3 Interpretation: Health as Fitness

The philosophy of Occupational Health and Fitness borrows its name directly from Occupational Health and Safety, providing immediate legitimacy through its connection to the traditional workplace health approach. While using the association with OH&S to gain a foothold, OH&F views occupational health as a function of fitness. The importance of physical fitness in defining health is spelt out in the Exercise Prescription booklet:



HEALTH AND FITNESS

Being physically fit is a precursor to being healthy. It is difficult to maintain good health over the long haul if you don't keep yourself physically fit.

Our minds and bodies are connected, and both crave good health. Over 1900 years ago Juvenal referred to this fact when he wrote '*You must pray to have a healthy mind in 9 a healthy body.*'

HEALTH AND FITNESS CONTINUUM

There is a ***health and fitness continuum*** which goes from:

Disease, dysfunction, stress ← Absence of disease, dysfunction and stress → Fit and healthy in body and mind

Do nothing. Get worse. | Do something. Get better.

COST / REGRET | INVESTMENT / REWARD

Time, effort, thought, money and discipline, leading to health, fitness, happiness, joy ...

FEELING CONTINUUM

The health and fitness continuum is mirrored by a ***feeling continuum*** which goes from:

Miserable ← Ordinary → Fantastic

By taking part in the regular, vigorous physical activity you are going to move yourself from the left hand side of the continuum to the right.

BEING FITTER = FEELING BETTER

If you want to feel better, becoming more physically active is a good place to start.

The most significant benefits of being fitter (whether it be aerobic, strength, or flexibility exercise) are psychological.

I train, therefore I am.

P32: 05-Exercise Prescription.txt - 32:61 (207:241)

The Exercise Prescription spells out to employees that *being physically fit is a precursor to being healthy*. Physical fitness is constructed as synonymous with health, this produces the active subject responsible for their health through exercise. Employees at Labyrinth see fitness as more important than safety, primarily due to the sedentary nature of the work they do within the company, Sam explains:

> *Sam: Probably yes in that the likelihood of having an accident is slim but in terms of fitness not, it's like any office job I suppose your sitting down most of the day I suppose its not the healthiest situation. We go for runs at lunchtime or play sport after work, I know sport after work is a hassle*
>
> *P20: Interview 1 with Sam.txt - 20:22 (67:70)*

The health and fitness continuum within the health and fitness box describes the physically inactive as those who '*Do nothing. Get worse'*, while the active subjects are those who '*Do something. Get better'*. Physical fitness provides a *healthy mind in a healthy body*, providing an utopian end-point of health, far advanced from the mid point on the continuum describes as a state of *absence of disease, dysfunction and stress*. Physical fitness for health links physical states of health to subjective experience through the *Feeling Continuum*, describing the unfit as miserable and the physically active as feeling fantastic. This clearly assigns subject roles on the basis of physical fitness levels. The active subject is constructed as happy, fit and healthy, while the inactive subject is miserable and riddled with disease, dysfunction and stress. This relationship is spelt out: *Feeling fitter = Feeling better*, and the subject is constituted through their physical activity: *I train, therefore I am*. For the organization *I train therefore I am* constructs the active worker, suggesting the euphemism should be: *I train therefore I am a better worker*. This is reinforced continually through the actions of management. Jane explains:

> *There's some of the groups that go walking at lunchtime so management are always keen to see that done, and especially when we had the management structure that we had before, the management structure that we had before the actual managers did go running at lunch- time. So the fact that you see them out and doing that is a pretty strong message.*
>
> *P17: Interview 1 with Jane.txt - 17:8 (59:63)*

Occupational Health and Fitness concentrates health completely in the individual. The individual's level of fitness is the sole contributor to states of health, denying environmental, social, or genetic factors. Health as fitness is a continuous theme, providing a continual individualization of the employee, as shown in this section of the Exercise Prescription booklet:

THE BIG ASK

HEALTH AND FITNESS

Health and fitness go hand in hand. Nine times out of ten, fit people are healthy people. If you want to become healthier, start by becoming fitter.

In fact for most people it is very difficult to become healthier without a regular, systematic and vigorous fitness program. The corollary of this is that it is a big ask expecting to become healthier without becoming fitter. And it is an even bigger ask expecting it to happen by having someone do something to you. Sooner or later you have to do something to yourself.

Contrary to popular opinion, it is not heart disease or cancer that are Australia's main illhealth problems. It is the following conditions and dysfunctions that people continue to put up with every minute, every hour, every day, every week, every month, every year and every decade: -

- poor sleep
- lack of energy and vitality
- colds and flu
- headaches and migraines
- sore shoulders and necks
- crook backs
- crook gut
- elevated blood pressure and adult onset diabetes
- being overweight
- elevated levels of anxiety
- the effects of over consumption of the culturally acceptable chemicals: - sugar, salt, caffeine, alcohol and nicotine.

Some of these **conditions** are caused by a dysfunctional autonomic nervous system, parts of which are over-stimulated and parts of which are under-stimulated. Some are caused by a weakened immune system. Physical activity strengthens the response of the autonomic nervous system and the immune system.

Some are caused by poor diet. The musculo-skeletal **dysfunctions** are caused by weak and inflexible muscles.

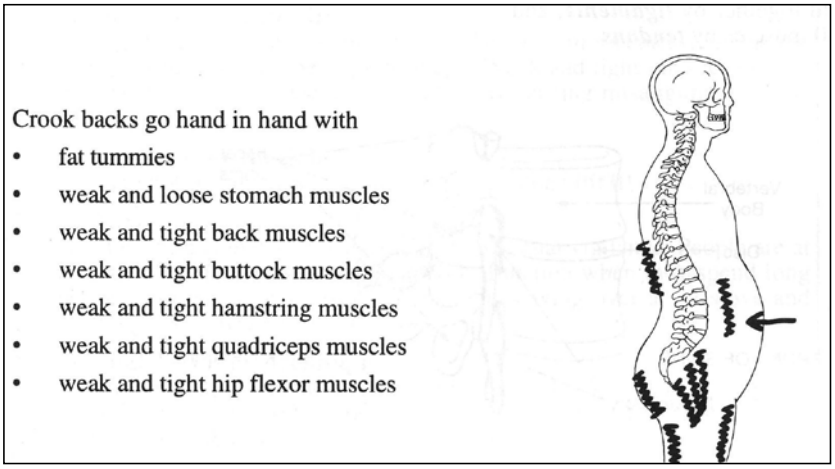
For more information about the response of the autonomic nervous system to physical activity read the ***Exercise Watcher*** book or attend an Exercise Watcher program.

There is compelling evidence to support the belief that people who are regularly and vigorously physically active have less of these dysfunctions and conditions. If you wish to join them, welcome to the Exercise Prescription.

It is a big ask expecting yourself to get healthier for the long haul by having someone do something to you. Sooner or later you're going to have to do something to yourself.

THE BIG ASK provides a discourse of health and fitness that highlights the individual, providing the space to place the responsibility for health solely on the individual. Each of *Australia's main ill health problems,* from *poor sleep* to *crook guts* and *being overweight* are individual health complaints. The individual is produced as responsible for taking action to reduce the incidence of *conditions and dysfunctions*, suggesting that *sooner or later you have to do something to yourself.*

The individualizing element of health promotion discourse blames the individual for instances of poor health. The back and neck pain management series of booklets provides a good example. While time pressure, unrealistic task expectations, and a number of other causal factors can contribute to back and neck pain, Labyrinth's program singles out the individual's behaviour as the only contributing factor. Two examples are provided in the description of conditions associated with *crook backs*:



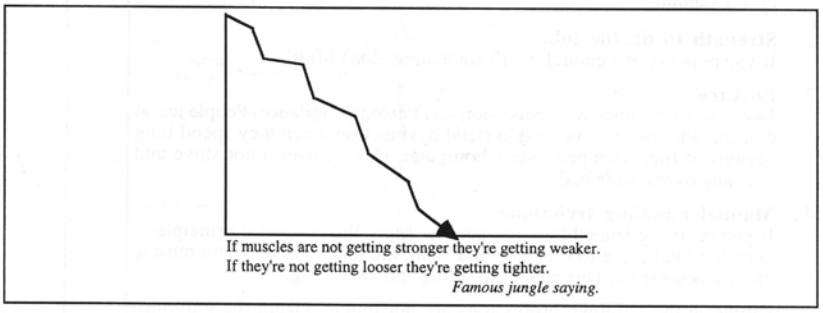
P25: 02-Back and neck man.txt - 25:34 (328:336)

The program has been developed on the premise that a high proportion of musculo-skeletal dysfunction occurs as a result of ***inadequate personal workplace competency*** with respect to an unsafe ergonomic work-station, poor posture, unsafe manual handling technique, lack of strength and flexibility.

P25: 02-Back and neck man.txt - 25:5 (16:20)

In each case, components of the individual's body and behaviour are seen as contributors to back pain. The focus on the muscles of the individual, on *inadequate personal workplace competency*, *poor posture* and *lack of strength and flexibility* are all individual characteristics. This discourse builds the individuals as responsible for their own fitness as it contributes to health. It is seen as the responsibility of the individual to take positive pro-active action to avoid poor health. The following back and neck pain advice places the responsibility for action upon the individual, calling on them to undertake systematic physical activity to enhance health:

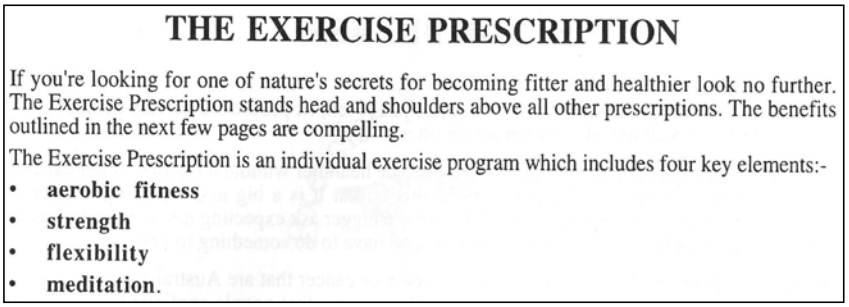
DO NOTHING
If you do nothing to enhance and then maintain levels of strength and flexibility, muscles gradually get weaker and tighter, to the point where they may cause musculo-skeletal dysfunctional. You go downhill.



P25: 02-Back and neck man.txt - 25:26 (239:241)

The call to action is aimed specifically at the individual. A normalizing judgment is made: *If you do nothing… you go downhill*. The individual must take action to keep 'normal' levels of strength and flexibility. In producing health as directly linked to

physical fitness, the Exercise Prescription describes a fitness anathema to poor health. The magic cure prescribed is exercise:



THE EXERCISE PRESCRIPTION

If you're looking for one of nature's secrets for becoming fitter and healthier look no further. The Exercise Prescription stands head and shoulders above all other prescriptions. The benefits outlined in the next few pages are compelling.

The Exercise Prescription is an individual exercise program which includes four key elements:-

- **aerobic fitness**
- **strength**
- **flexibility**
- **meditation.**

P32: 05-Exercise Prescription.txt - 32:58 (94:104)

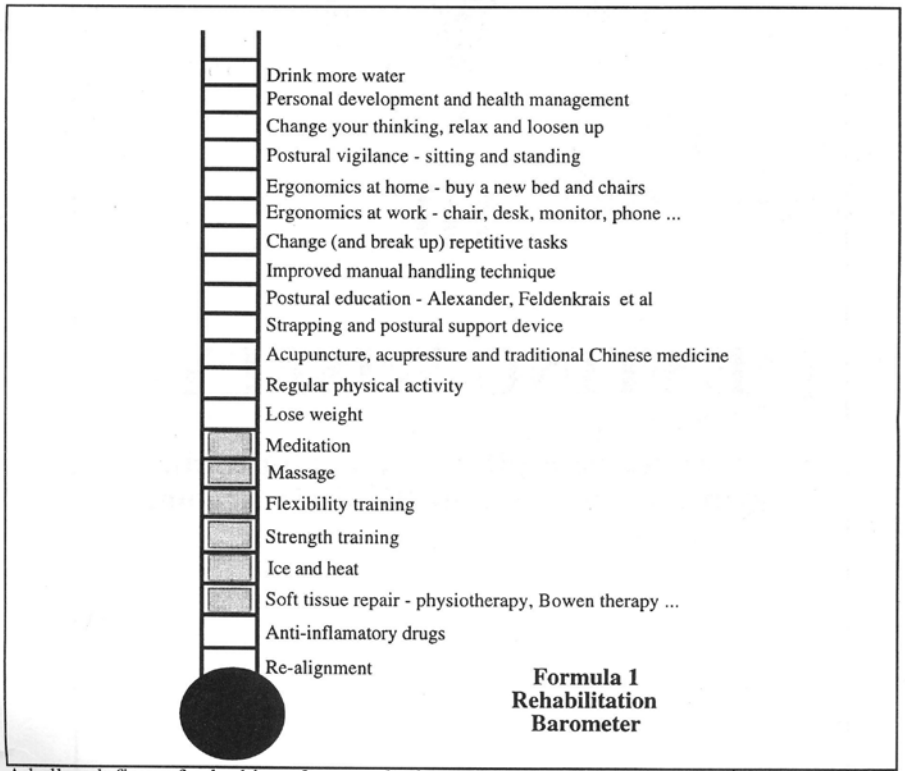
Health as determined by physical fitness reflects changes in understandings of health in the workplace and in society. The move from an industrial to knowledge-based labour force has seen workers health problems move from industrial accidents to diseases derivative from sedentary lifestyles. The individualizing focus remains consistent across the shift, maintaining the visibility of the individual worker as the site for intervention. The use of prescription borrows a medical understanding of health, seeing exercise as the magical ‘medicine’ to cure the ills of individual neglect and sloth. A second consistent element is the construction of the body as a machine, evidenced in physical barriers and motion studies of OH&S, and in OH&F examples like the John’s Health rehabilitation advice:

FORMULA 1 REHABILITATION

Just as the technology developed in Formula 1 motor sport filters down to ordinary motor cars, so the rehabilitation of musculo-skeletal injuries benefits from the spin off from sports medicine, particularly in dramatically reducing the time for injuries to heal.

REHABILITATION MODALITIES

You can speed up the rehabilitation process by using a wide range of rehabilitation modalities, on a regular, systematic and intensive basis.



Formula 1 Rehabilitation Barometer

A ball park figure for looking after your body would be to spend as much on servicing yourself as you do on servicing and repairing your car. And remember, the older the model the more you're likely to have to spend. However, money spent on servicing your body is an investment, not a cost!

An ounce of prevention is worth a ton of cure.

The *Formula 1 Rehabilitation* builds a clear picture of the body as machine. The body as machine metaphor constructs a mechanistic understanding of health, where *regular, systematic and intensive* maintenance can avoid 'breakdowns'. The analogy of the body as machine shows individuals that health requires a certain amount of self-control to organize and complete the required maintenance. For those without the discipline to conduct health maintenance, poor health and rehabilitation will result. The metaphor of body as machine is extended in linking the costs of maintaining machine and body; *A ball park figure for looking after your body would be to spend as much on servicing yourself as you do on servicing and repairing your car*. Colquhoun (1990) sees the body as machine metaphor producing a disciplining pressure:

> Individuals need self-control, self-discipline and will-power constantly to upgrade and maintain the body. To achieve health they need to go out and work for it – luck or serendipidity will not bring it their way. Individuals cannot store health and fitness, and each needs regular attention.
>
> (Colquhoun, 1990: 233)

The maintenance of health through applying physical activity to the machine that is the body becomes a moral responsibility for each individual. The *Rehabilitation Barometer* stretches the body as machine metaphor to describe the maintenance of health as a concern for the elite. Formula 1 is the elite in racing, the best in the field. Occupational Health and Fitness describes the elite employee, with well-maintained body and disciplined mind. The OH&F discourse calls on employees to behave like elite athletes, constructing the Corporate Athlete.

5.4 Interpretation: The Elite Employee through Health

Occupational Health and Fitness constructs the ideal employee who, through fitness, becomes a low risk to employee has clear personal and career goals and a positive

impact on their organization. The ideal employee is re-enforced by the body as machine metaphor, where the unhealthy worker is brought back to health through Formula 1 rehabilitation. The health as fitness discourse links the health of the employee with the behaviours of the elite athlete. The metaphor describes the normal employee and provides a normalizing pressure for those who do not have 'normal' behaviour. For those in poor health, subscribing to the exercise prescription and taking on the behaviours of an elite athlete will restore good health. The point is reinforced in the OH&F back pain handbook:

> If in the past you've injured your back or neck, or it has become dysfunctional in some way, there is a very good chance that it will soon start to feel better once you start the strengthening and flexibility exercises. Of course, for the 'compleat fix-up' for a crook back, you'll need to do what elite athletes do - become involved in a regular, systematic and intensive training program that includes a wide range of modalities.

P25: 02-Back and neck man.txt - 25:10 (164:166)

OHF discourse describes health in the workplace as attainable for those willing to undertake the training and discipline of an elite athlete. Health is achievable through *regular, systematic and intensive training*. The individual is responsible for committing to the 'intensive training' required to become the healthy employee. The employee who assumes the training regimes and disciplines of the elite athlete becomes the competent employee. The unhealthy are unproductive and irresponsible, evidenced by their poor health, attributable to personal weakness and lack of discipline. The non-athlete is a burden on other staff who have become Corporate Athletes. Those who take on the behaviour of the Corporate Athlete are seen as normal, balanced people, encouraging employees to take on the behaviours of the

athlete as normal. Maintaining elite fitness habits is rationalized as a part of a balanced life. The elite are normalized, as described in an interview with systems analyst Dilbert Glum, who describes those at the top as balanced and well rounded:

> *Those who get to the top don't get there unless they have a balance of perspective. They tend to be people who are pretty healthy themselves, the workaholics work underneath them now. To get to the top of an organization now you have to have a rounded personality and rounded view of work and life.*
>
> *P 1: Interview 1 with Dilbert Glum.txt - 1:7 (99:104)*

The Corporate Athlete avoids bad behaviour and displays the discipline and dedication of the elite athlete. This requires the employee to ascribe to and demonstrate professional behaviours, as Petersen describes:

> professionalism constitutes the set of ideas, beliefs and practices in respect of 'being a professional'. It is generally believed by those who call themselves professionals that one must have acquired and be able to demonstrate various skills, and to show that one subscribes to the rules of conduct and to the values appropriate to their particular occupational group. Professionalism is an inherently conservative discourse since it demands of members unquestioning obedience to a set of impersonal rules and procedures laid down by the authorities within the profession. Those who do not conform to the ideals of their group face disciplinary action and possibly expulsion.
>
> (Petersen, 1994:150)

The professional athlete mixed with the corporate employee constructs *The Corporate Athlete*. The athlete metaphor provides space for the deployment of physical fitness knowledge by health professionals. Good athletes are willing to change behaviours at the behest of the coach (health professional) to improve performance. This can have another effect, resulting in employees making extraordinary efforts, and like the elite athlete not allowing personal matters to affect their performance. William describes one such situation:

> *Particularly another guy I work with whose wife was sick in hospital for a number of weeks and yet he worked every day, and he was working 35, 40 hours a week and still going home and looking after his kids. So I mean that's a tough couple of weeks. He's probably a workaholic.*
>
> *P21: Interview 1 with William.txt - 21:34 (155:158)*

Workplace health steps beyond the workplace and into the private lives and homes of employees. Like the elite athletes, the corporate athlete must be conscious of diet, sleeping patterns, alcohol use, stress, familial relations, and so on. Surveillance is used to achieve compliance through the measurement of different aspects of the employee's health. Through professional consultation and self-assessment, employees are ranked and scored according to pre-determined standards developed by Johns. Employee health books contain a myriad of health measures, the Mind and Body Profile is one example:

MIND AND BODY
- profile -

The head is connected to the body. When we get stressed, the stress is relayed to the body via the autonomic nervous system. Whilst you may not even realise that you are stressed until you complete this questionnaire, your body does, and it has the means to tell you. It does not matter whether the causes of your distress are from conscious or unconscious sources, the body will pick it up. The stress will also show up in some of your habits and mannerisms.

If you are currently experiencing any of the symptoms listed below, **circle the number** appropriate to the degree to which they are experienced. The greater the symptom, the higher the score. Total the score at the bottom of the page.

	None		Hardly any			A fair bit			A lot		
1. Headaches	0	1	2	3	4	5	6	7	8	9	10
2. Migraines	0	1	2	3	4	5	6	7	8	9	10
3. Lack of energy and vitality	0	1	2	3	4	5	6	7	8	9	10
4. Poor sleep	0	1	2	3	4	5	6	7	8	9	10
5. Snoring and/or sleep apnoea	0	1	2	3	4	5	6	7	8	9	10
6. Sore shoulders and/or stiff neck	0	1	2	3	4	5	6	7	8	9	10
7. Crook back	0	1	2	3	4	5	6	7	8	9	10
8. Frequent colds and flu	0	1	2	3	4	5	6	7	8	9	10
9. Irritable bowel and/or unsettled stomach	0	1	2	3	4	5	6	7	8	9	10
10. Constipation and/or diarrhoea	0	1	2	3	4	5	6	7	8	9	10
11. Being over-weight and/or putting on weight	0	1	2	3	4	5	6	7	8	9	10
12. Dramatic weight loss or loss of appetite	0	1	2	3	4	5	6	7	8	9	10
13. Shortness of breath due to asthma, or poor fitness	0	1	2	3	4	5	6	7	8	9	10
14. Chest pain, palpitations	0	1	2	3	4	5	6	7	8	9	10
15. Rashes, zits, skin outbreaks, psoriasis, itchy ...	0	1	2	3	4	5	6	7	8	9	10
16. Mouth ulcers, cold sores ...	0	1	2	3	4	5	6	7	8	9	10
17. Elevated blood pressure ...../.....	0	1	2	3	4	5	6	7	8	9	10
18. Reduced sex drive	0	1	2	3	4	5	6	7	8	9	10
19. Shakes, nervous ticks and mannerisms	0	1	2	3	4	5	6	7	8	9	10
20. Grinding teeth	0	1	2	3	4	5	6	7	8	9	10
21. Drinking too much alcohol	0	1	2	3	4	5	6	7	8	9	10
22. Smoking too many cigarettes	0	1	2	3	4	5	6	7	8	9	10
23. Drinking too much caffeine	0	1	2	3	4	5	6	7	8	9	10
24. Popping too many pills, pain/sleep/depressant	0	1	2	3	4	5	6	7	8	9	10
25. Anxious about life in general	0	1	2	3	4	5	6	7	8	9	10
26. Insecure and/or apprehensive about the future	0	1	2	3	4	5	6	7	8	9	10
27. Depressed and/or sad	0	1	2	3	4	5	6	7	8	9	10
28. Angry at life	0	1	2	3	4	5	6	7	8	9	10
29. Under appreciated (at work & home)	0	1	2	3	4	5	6	7	8	9	10
30. Negative and/or pessimistic	0	1	2	3	4	5	6	7	8	9	10

The score of a normal, fit and healthy human being is less than ....

TOTAL ☐

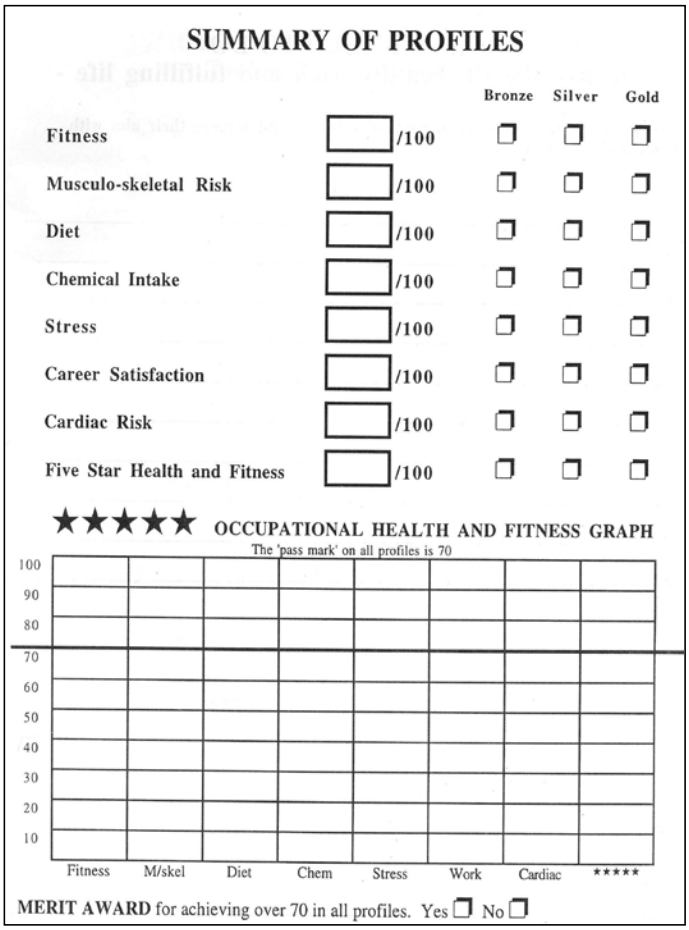
Are you awake and listening to what your mind and body are telling you about your lifestyle?

If you want to be fit and healthy, do what fit and healthy people do. Once you start exercising regularly and with vigour, there is every chance you can expect a dramatic improvement in your scores. The reason is that exercise (along with meditation) has a wonderful effect on restoring the autonomic nervous system to good health.

Thus, employees are introduced to the standards of the Corporate Athlete, measured against these and then directed to change those that do not meet the prescribed standard. This introduces aspects of the employee's private lives to scrutiny, allowing their ranking and subsequent corporate intervention. Competition is strong, and as a result employees like William continually rate their performance and stamina against that of their colleagues:

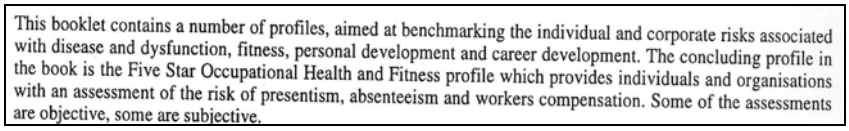
> *Working here I find it really hard to sit at a desk for long periods of time. Certainly being healthy physically makes it easier to be healthier mentally. It makes concentration, I spent two hours this morning sitting at a PC, at 5 o'clock in the morning and there's not many people who can do that two hours straight.*
>
> *P21: Interview 1 with William.txt - 21:31 (41:45)*

The athletic metaphor remains strong with employees measured against standards of Olympic medals: 'excellent' scores receiving a gold medal, 'good' scores a silver medal, and 'reasonable' scores receiving a bronze medal, as shown here in an extract from the Occupational Health and Fitness Assessment:



P42: Occupational Health and Fitness Assessment.txt – 42:42 (632:734)

The gaze of professional assessment can be directed towards weight, aerobic fitness, strength, flexibility, cholesterol, blood pressure, and smoking, stress and work satisfaction. The employee is measured against a normal, or benchmark as part of the OH&F assessment:


This booklet contains a number of profiles, aimed at benchmarking the individual and corporate risks associated with disease and dysfunction, fitness, personal development and career development. The concluding profile in the book is the Five Star Occupational Health and Fitness profile which provides individuals and organisations with an assessment of the risk of presentism, absenteeism and workers compensation. Some of the assessments are objective, some are subjective.

P42: 15-Occupational Health and Fitness Assessment – 42: 21 (265-271)

The Corporate Athlete is produced and reproduced through the discursive practice of management via the hierarchy of the organisation, it is also represented within and across the employees. Janks (1997) argues that 'as members of a society we are constituted in and by available discourses and that they speak through us' (1997: 388). This is highlighted in Jane's opinion of the employee's responsibility for health:

> …if you're not very healthy then you don't perform well on anything you do whether it's work or life. I mean if you're constantly tired because you're very unhealthy you've got the wrong diet and your not doing enough exercise. I don't know if it's actually the company's responsibility, whether I'm healthy or not, that's my responsibility.
>
> *P17: Interview 1 with Jane.txt - 17:17 (122:127)*

5.5 Explanation: The Socio-Historical Context of Health as Fitness

Examining the discourses of workplace health opens a discussion of broader socio-cultural practice. The revolution in information technology has seen economies moving from production of goods to production of services and information, a knowledge society. Traditional working patterns involving physical tasks performed over set working hours have succumbed to a global economy where a market that operates continuously around the world dictates working patterns. The corporate employee works an increasing number of hours with increasing levels of responsibility. Greater competition in the information technology job market has meant that high salaries and rewards for middle level staff are no longer enough. Employment conditions become more important in attracting qualified staff. Flexible

work time, health benefits and health programs are provided as inducements to gain the best employees.

Changing social conditions and an increasingly sedentary lifestyle have resulted in changing patterns of illness. Bernard and Krupat (1993) describe the changing pattern of illness in the 20th century from infectious disease to chronic 'lifestyle' diseases such as cancer and cardiovascular disease. Through the majority of the twentieth century, health care efforts centered on the identification and elimination of pathogens and improvements in medical technology to reduce illness and disease. The change in disease patterns, coupled with increasing costs and reducing effectiveness of medical research and treatment has led to a greater focus on improving lifestyle to improve health.

Faulkner and Biddle trace an increased interest in physical activity for health in the past two decades (2001: 433). Physical activity discourse is premised on the widely accepted view that being physical activity results in improved health. Mullineaux et al., (2001) provides an example of the rhetoric, suggesting that physical activity leads to:

> improved health and feelings of wellbeing, better quality of life, lower costs for individuals, government and industry, and a lower incidence of disease. Increased participation in physical activity by adults reduces the risk of coronary heart disease, stroke, hypertension, non-insulin dependent diabetes mellitus, osteoporotic fractures, depression and some cancers.
>
> (Mullineaux, Barnes & Barnes, 2001: 279)

For others, physical activity is deconstructed as a 'normalizing strategy and generally an activity to be provided by other health professionals. Despite a growing evidence base, the application of exercise as a therapeutic adjunct remains problematic' (Faulkner and Biddle 2000: 442). The focus on individual lifestyle, and particularly

physical activity, de-politicises other determinants of health. The focus on physical activity:

> functions to divert attention from structural barriers to fitness by framing physical activity in terms of personal responsibility and choice – 'a pull yourself up by the bootstraps' alternative to state intervention… It is implied for instance, that all people *should* incorporate some form of physical activity, such as walking to work, into everyday living.
>
> (Bercovitz, 1998: 322)

Groppel and Andelman's book, *The Corporate Athlete*, sits neatly within this victim-blaming ideology. Among their advice for workers aiming to become Corporate Athletes is this advice on weight management: 'If you are overweight, you must own it. Don't just say "I know I'm overweight." Own it – be responsible for it' (Groppel & Andelman, 2000: 16). The Corporate Athlete discourse actively diverts attention away 'from other pressing social (for example, gender inequalities; substance abuse, personal safety) and structural (for example, pollution, poverty, unemployment issues. [Physical activity] is mistakenly regarded as a panacea for the 'ills' of modern culture' (Bercovitz, 1998: 323).

This Corporate Athlete discourse has marked a shift from a reliance on biomedical solutions toward individual agency and responsibility. Physical fitness discourse is one form of self-care advice, heralding:

> the beginning of demedicalization, in the sense that the medical profession's near monopoly over the production of abstract knowledge about health and illness has been severely disrupted by the profusion of non-medical and anti-medical self care advice in the mass media'
>
> (Zigarus, 1998: 25)

Health promotion in Australian workplaces is often haphazard, dogged by varying levels of professionalism, multiple aims, and suspect evaluation (Seedhouse, 1996). Workplace health initiatives in Australia range from single focus programs based on information pamphlets through to complex cultural change programs involving

social, economic, and environmental change efforts (Simpson et al., 2000). At Labyrinth, health promotion sits within the Lifestyle Program alongside a purchasing service, health, car and travel insurance, and free financial advice.

Workplace health promotion is a potent site for constructing and legitimizing understandings of health for employees. Workplace health promotion programs are presented as an employee benefit, driven by a paternalistic interest in the well-being of the employee. Seedhouse (1996) refutes the simplicity of this understanding, suggesting that health is inherently and essentially political, heavily laden with values and shot through with issues of control and access. Workplace health promotion has contingent and shifting meanings constructed in a social milieu between contesting groups. Programs are constructed through negotiation, with different groups presenting 'vested interests in the privileging of one set of knowledge and beliefs over another' (Wright, 1987: 332). The construction of workplace health initiatives is neither simple nor value free; Johns Corporate Health was chosen ahead of other competing providers. As a result, John's Health programs are provided for all employees within Labyrinth. The active choice of provider and the compulsory nature of employee attendance means the program represents the values and ethos of the company.

5.6 Conclusion

This chapter has mapped out the discourse of the Occupational Health as Fitness, which serves to construct the employee as Corporate Athlete. The discourses relies on athletic and mechanistic metaphors in procedures of assessment to produce the expectations of the normal Labyrinth employee. For Labyrinth, the normal employee is fit, healthy and productive, maintains a regular physical fitness program, and is

competent and capable of assessing and correcting their own unhealthy (deviant) behaviour.

A strong counter-point for the Occupational Health and Fitness discourse is the risk of poor health should the employee not comply with the prescribed behaviour. Risk of poor health provides a space to direct employee behaviour. As a construct, risk is the problem that the active subject wishes to reduce through physical fitness. As a discourse, risk has implications for the experience and meaning-making potential of workplace health. The following chapter extends the analysis of Health as Fitness and examines constructions of risk at Labyrinth.

6 The Worker At Risk

6.1 Introduction

This chapter examines the risk discourse of workplace health at Labyrinth. It builds on the idea of the active subject and the normal Labyrinth worker introduced in the preceding chapters. Risk management is found to be a key concern of management, and, like health, conceptions of risk are multiple, contingent and shifting in nature. The development of society to the current concern with risk is also detailed.

At Labyrinth risk is found to be both blatant and implied within workplace health. Risk is produced as a continuum upon which all employees sit. This strategy provides the conditions for all employees to be subject to health risk, simultaneously making health behaviour visible to employee and employer. A prime strategy for providing visibility is risk assessment, reducing elements of risk to numerical measures. Assessment is also found to provide a normalizing pressure on employees, with risks being rated against the 'normal' score for the population.

Through risk discourse, all elements of the employee's lives become visible; behaviour is assessed for risk at home and at work. The behaviour of the employee is linked to the risks of the organization through analysing the risks of absenteeism and presentism. The management of risk becomes an ethical responsibility towards the self as well as their employer. The competent worker is hence produced as one who has the discipline to assess and manage his or her own risk.

Life is full of constant risks, the risks of being involved in a car smash, of becoming a victim of crime, of becoming unemployed. Risks to health are brought to public attention through emotive language around the potential risks of genetically modified food, electromagnetic radiation from power lines, and contaminated drinking water. Beck suggests there has been a culture shift to the point where 'society is no longer primarily divided by access to wealth, but by our relative susceptibility to risk' (Beck, 1992: 116). The strategic elements of risk discourse are seen in the 'selective use of labels [which] can trivialize an event or render it important; marginalize some groups, empower others, define an issue as a problem or reduce it to a routine' (Nelkin, 1985: 21). Indeed, the 'experience of being diagnosed as 'at risk' is highly personal, often confronting the individual with the possibility of serious illness or death and changing notions of the embodied self' (Peterson & Lupton, 1996: 50). The discourses of risk in workplace health provide an interesting point of access for a postcritical discourse analysis.

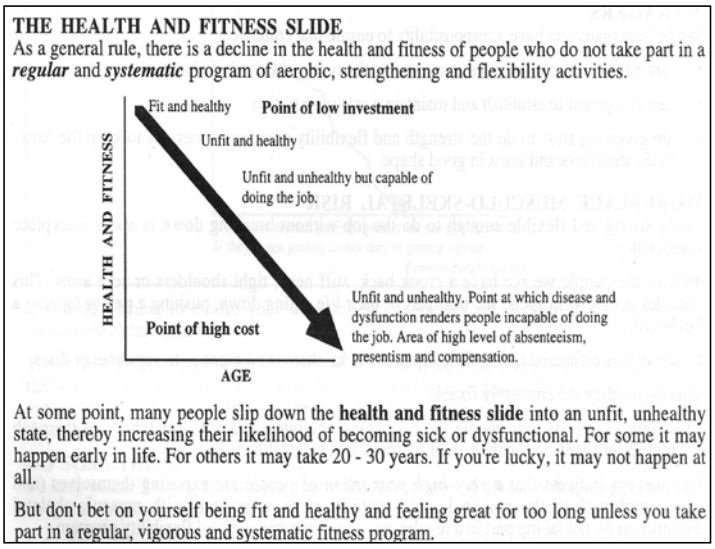
The 1994 Australian Industry Commission report into Occupational Health and Safety described the assessment and control of risk as a core duty of employers. Risk has moved further than this, beyond the role of central management to include scientists, physicians, journalists, administrators, and policy analysts. A consequence of this multidisciplinary approach is the continual shifting and competition over the meaning of risk (Holmes & Gifford, 1996). Risk disputes engage and polarize a wide range of groups including:

> …scientists, company doctors, lawyers, government administrators, journalists, health and consumer bodies and policy experts. Their interests in risk stem from such divergent factors as economic imperatives, professional ethics, bureaucratic routines, personal concern about health, concern about the environment, career pressures and ambitions and political predilections.
>
> (Lupton, 1995: 77)

The following analysis examines the construction of risk discourse within workplace health at Labyrinth.

6.2 Description: Binding the Worker in Risk Discourse through Workplace Health

Risk discourse is evident throughout Labyrinth's health programs. The Health and Fitness slide is provided to employees at the start of the John's Health program, and is reproduced here:



P25: 02-Back and neck man.txt - 25:13 (182:188)

While risk is not mentioned explicitly, I have used this text intentionally as risk is often implied rather than expressly stated. The *health and fitness slide* is presented as part of official communication, given to employees as part of workplace information. The booklet is received as a communication from management to staff, and is posited by the organization as part of the employee rewards package.

The *health and fitness slide* constructs a continuum from the bottom point of *an unfit, unhealthy state* to a top point of health and fitness. The bottom of the slide is characterized by the *likelihood of becoming sick or dysfunctional* while those at the top have less risk of illness. The *health and fitness slide* constructs employees subject to risk of ill health, 'the probability that a particular adverse event occurs' (Hayes, 1992: 403).

The continuum provided by the slide produces a space where all employees can be subject to workplace health initiatives. The continuum places all employees on the landscape of workplace health, specifically in relation to his or her health risk. Risk becomes dynamic, capable of decreasing or increasing, unstable, shifting and contingent. The assessment of risk:

> Allows intervention to be legitimated not simply on the basis of the existence of actual concrete dangers, but rather on the basis of the expert assessment that an undesirable event may occur and that intervention can prevent this. This would seem to have vastly extended the possibilities for intervention since, to be suspected, one need not manifest symptoms of dangerousness or abnormality, but rather need to simply display the characteristics that experts … have identified as a risk factor.
>
> (Peterson & Lupton, 1996:19)

6.3 Interpretation: Assessment – Producing the "At Risk" Subject

Assessment is central to risk discourse practice, problematizing aspects of health by simultaneously bringing them to the attention of employer and employee. Assessment makes visible the individual behaviour of the employee, followed by prescribed intervention to 'reduce the burden of premature death by stimulating individuals to stop or modify 'risky' behaviours' (Hayes, 1992: 402). Behaviour is problematized through assessment of risk for particular illness. At Labyrinth, assessment is undertaken for cardiac/cardiovascular risk, disease risk, environmental

risk, accident risk, musculo-skeletal risk, employment risk, and absenteeism risk. Dilbert describes the process:

> *SA: Does the organization have any other programs or things that promote health?*
> *DILBERT: a while back they had somebody come around and do some kind of fitness test where they gave a questionnaire and told you whether or not your are likely to be in danger of this that or the other. If you eat fruit and drink so much water and rah de rah de rah. I think they did that once and that was maybe two or three years ago. It was interesting, it just told me what I already knew which is that I was doing all the wrong things.*
>
> *P16: Interview 1 with Dilbert Glum.txt - 16:37 (149:155)*

Risk assessments are done in conjunction with professional consultants and form a major part of the employee health booklets, the assessment element is introduced in the program philosophy:

The parameters and the length of time for the assessments is decided by our clients. We recommend a one hour assessment.

Our assessments may include an estimate of risk with respect to

- physical fitness - the principal risk being through lack of vitality, susceptibility to diseases of the immune and autonomic nervous systems and increased levels of stress
- musculo-skeletal risk
- cardiac risk - including measures of cholesterol and blood pressure
- diet
- chemical intake
- stress symptoms
- stress risk
- career satisfaction
- five star occupational health and fitness.

We offer a full pathology service and medical exam for those clients who would like it.

Copies of the profiles are included in the assessment book .

Our assessments include feedback to participants and information about their health and lifestyle in a way which dovetails personal life and working life in to each other.

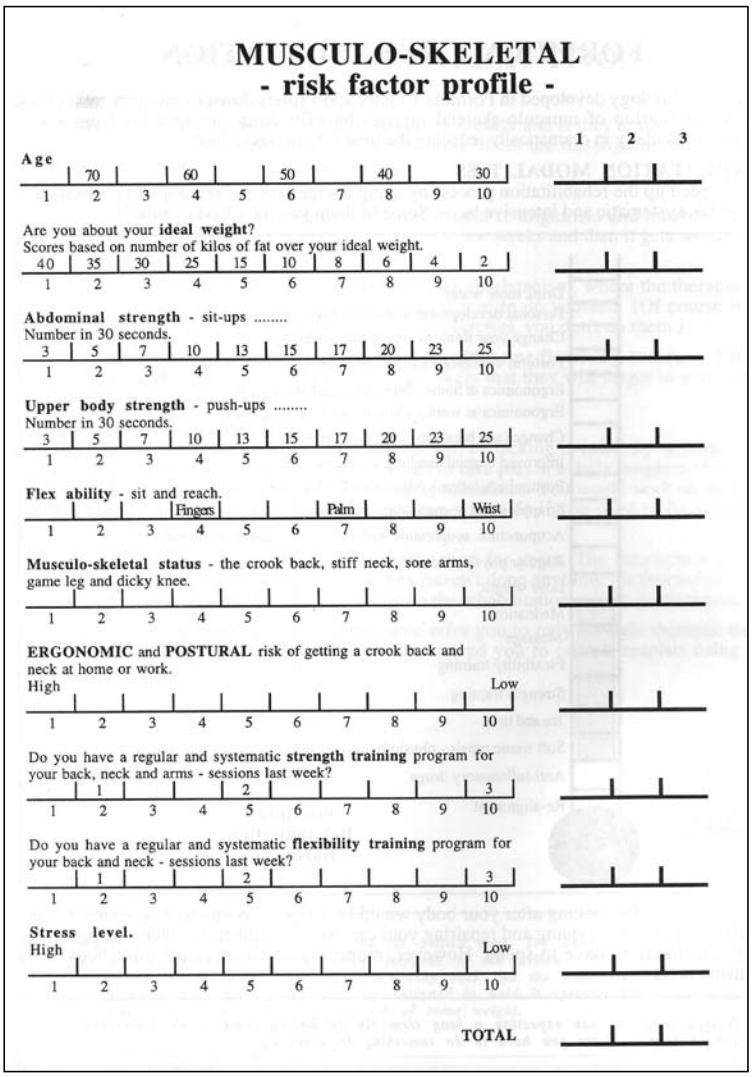
P28: 17-Programs-Program Philosophy.txt - 28:1 (92:105)

The employee submits to assessment to gain access to their risk profile, which is controlled externally, requiring the ruminations of an expert to gauge risk from risk assessment. Measurement provides the means to investigate the individual in

comparison to others, as Schrag suggests 'each of us becomes visible as an individual, but only along dimensions that apply to all. Thanks to the examination, each of us can be *put in his or her* place on a finely graded hierarchy – one that is organized around the concept of the norm' (Schrag, 1999: 377 *original emphasis*). A new corporate health ethic is produced in risk discourse, rationalizing the imposition of the workplace into private life through *providing information about their health and lifestyle which dovetails personal life and working life into each other*. Lupton explains:

> Ostensibly, the introduction of such programmes signal philanthropic moves on the part of employers to improve the quality of their employees' health, as well as serving the function of containing health care costs… However, the encroachment of appraisal and testing programmes into the workplace signals a new type of control over the worker's body. The measurement of health risks, fitness assessments and screening programmes at the workplace establishes the grounds to screen out 'undesirable' employees on the basis of such factors as their body weight, lack of adherence to self-disciplined lifestyle and recreational use of drugs. The emphasis on physical fitness and no drug taking in effect serves to exhort workers to engage in certain types of activities and relinquish others in their spare time. The all-embracing concept of 'lifestyle', as measured in workplace programmes, therefore encompasses the private as well as the public domain.
>
> (Lupton, 1995: 83)

Employees are provided with risk assessment scales on different illnesses in health booklets. I would like to provide a closer examination of risk discourse by narrowing the focus to back and neck pain. The back and neck pain risk profile is produced as part of the Back and Neck Pain Management Booklet, and describes back and neck pain as musculo-skeletal dysfunction. The musculo-skeletal risk factor profile measures the risk of neck and back pain:



P25: 02-Back and neck man.txt - 25:75 (955:972)

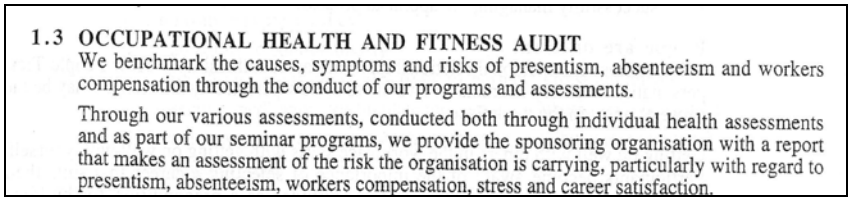
Risk assessment scales like the *Musculo-Skeletal risk factor profile* are completed in a consultation with the workplace health specialist, using the assessment and surveillance conventions of medical practice. Assessment practice allows the workplace to reach into parts of the individual's private life, measuring age, weight, stress, ability to do specific exercises, and flexibility. The use of scales provides a

normalizing pressure, asking the employees to rate themselves against a normal measure, where 'normal' is fit, healthy and productive. The normalizing practice of risk discourse encourages employees to move toward the normal, marginalizing the sick, dysfunctional and disabled. Assessment 'combines the techniques of an observing hierarchy and those of a normalizing judgment. It is a normalizing gaze, a surveillance that makes it possible to qualify, to classify and punish. It establishes over individuals a visibility through which one differentiates them and judges them' (Foucault, 1977: 184).

Risk assessment problematizes the employee's behaviour by identifying the specific components of behaviour that influence risk. This provides the basis to prioritize intervention. The assessment of singular risk factors to measure an overall risk profile borrows from medical, occupational safety and insurance disciplines, where health is signified in numerical data. Amber, the occupational health and safety officer, describes the place of assessment in managing workplace health hazards:

> *In health and safety the key way in which you manage a hazard is actually identify it and say 'well what is the hazard, ok, its alcohol'. That's the hazard and how you assess the risk and manage the risk and evaluate the success in that would be the same if you were a safety or a health professional. You adopt that same method of assessment and management. And assessment is a key area that safety and health professionals would use. So that's the approach to risk assessment.*
>
> *P40: Interview 3 with Amber.txt - 40:33 (159:166)*

The assessment of risk problematizes aspects of health that were not previously open to examination. The conjunction of risk assessment and professional knowledge suggests new discipline-based understandings of workplace health. John's Health introduces *presentism, absenteeism, and workers compensation* to the risk discourse through 'benchmarking' the health risks of employees in an *Occupational Health And Fitness Audit*:



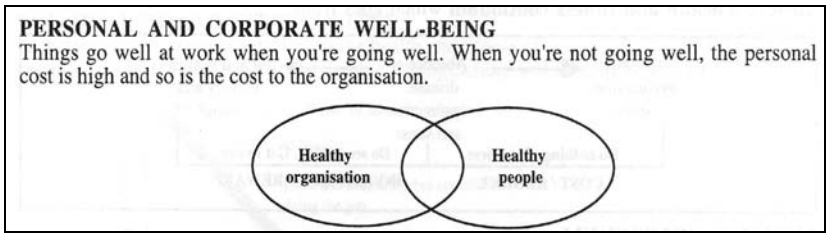
1.3 OCCUPATIONAL HEALTH AND FITNESS AUDIT

We benchmark the causes, symptoms and risks of presentism, absenteeism and workers compensation through the conduct of our programs and assessments.

Through our various assessments, conducted both through individual health assessments and as part of our seminar programs, we provide the sponsoring organisation with a report that makes an assessment of the risk the organisation is carrying, particularly with regard to presentism, absenteeism, workers compensation, stress and career satisfaction.

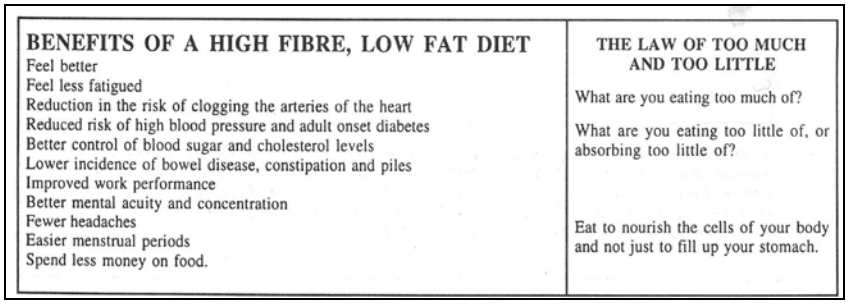
P28: 17-Programs-Program Philosophy.txt - 28:4 (261:271)

While the health risk of an employee is measured through their individual behaviours, the health risk to the organization is measured through the risk of their individual employees. The organization is assessed as at risk due to employee behaviour, placing the employee's behaviour as a risk to themselves *and* their employer. This is brought home in the section on wellbeing:



P25: 02-Back and neck man.txt – 25:90 (75:86)

The practice of producing risk at the workplace allows the employer to dictate the behaviour of the employee even while they are outside the workplace through advice to reduce risk. Risk discourse is used here to direct the employee's diet:



BENEFITS OF A HIGH FIBRE, LOW FAT DIET

Feel better
Feel less fatigued
Reduction in the risk of clogging the arteries of the heart
Reduced risk of high blood pressure and adult onset diabetes
Better control of blood sugar and cholesterol levels
Lower incidence of bowel disease, constipation and piles
Improved work performance
Better mental acuity and concentration
Fewer headaches
Easier menstrual periods
Spend less money on food.

THE LAW OF TOO MUCH AND TOO LITTLE

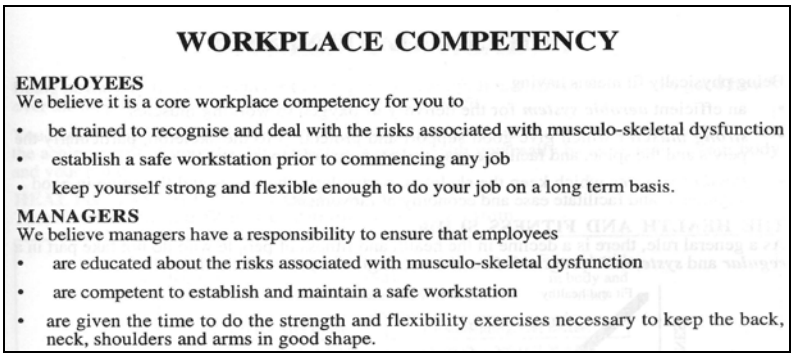
What are you eating too much of?

What are you eating too little of, or absorbing too little of?

Eat to nourish the cells of your body and not just to fill up your stomach.

P32: 05-Exercise Prescription.txt - 32:57 (1357:1372)

By undertaking a *high fibre, low fat* diet, the employee can reduce the risks associated with clogged arteries, high blood pressure, and adult onset diabetes. The benefits to the workplace associated with this change in diet are *improved work performance, better mental acuity and concentration,* and *fewer headaches*. The focus on behaviour produces an active individual who is attentive to the advice given, and who is capable, competent and vigilant in acting on this and other health advice. Managing *personal and corporate wellbeing* through reducing risk becomes part of 'being' a worker at the company. The ability to do this is tied to the normal, competent worker in the section of the Exercise Prescription booklet on workplace competency:



WORKPLACE COMPETENCY

EMPLOYEES
We believe it is a core workplace competency for you to

- be trained to recognise and deal with the risks associated with musculo-skeletal dysfunction
- establish a safe workstation prior to commencing any job
- keep yourself strong and flexible enough to do your job on a long term basis.

MANAGERS
We believe managers have a responsibility to ensure that employees

- are educated about the risks associated with musculo-skeletal dysfunction
- are competent to establish and maintain a safe workstation
- are given the time to do the strength and flexibility exercises necessary to keep the back, neck, shoulders and arms in good shape.

P25: 02-Back and neck man.txt - 25:92 (202:229)

Foucault suggests that, by 'assessing acts with precision, discipline judges individuals in "truth"' (1977: 181). Risk discourse has inherent within it that once a risk is identified and measured, it can be managed. The ability to recognize and deal with risk is *a core workplace competency*, the normal employee is trained and active in recognizing and managing personal risks. Petersen and Bunton (1997) suggest that risk assessment reduces the:

> need for individuals to be under the direct gaze of experts, because the construction of risk profiles largely takes the place of treatment… the need for intervention is deduced from the general definition of dangers one wishes to prevent rather than from their observation in experience.
>
> (Petersen & Bunton, 1997: 22)

6.4 Interpretation: Producing the Worker as Ethical Subject

Through the examination of 'risky' lifestyle behaviour, the emphasis is placed on self-control; risk becomes '*internally* imposed, a function of the individual's ability to manage the self. Individuals are subsequently exhorted by … authorities to evaluate their risk of succumbing to disease and to change their behaviour accordingly' Lupton, 1995: 77).

Bob describes the organization's expectations of employee's health behaviour, reflecting the actively responsible employee:

> *I guess it would be like anywhere, you're expected to maintain yourself to remain employable, to be an active member of your team or if you work alone it's to be productive.*
>
> *P15: Interview 1 with Bob.txt - 15:15 (68:70)*

> *The only accountability is being productive and getting the job done.*
>
> *P15: Interview 1 with Bob.txt - 15:20 (83:84)*

The responsibility for productivity, the health of the organization and the health of the employee are devolved down the hierarchy to the individual employee. Holmes and Gifford revealed how employers 'devolved their OH&S duties to their

employees. The corollary was that risk in OH&S must be due to the failure of employees' (Holmes & Gifford, 1996: 447). The link between the employee and productivity is re-enforced in the assessment:

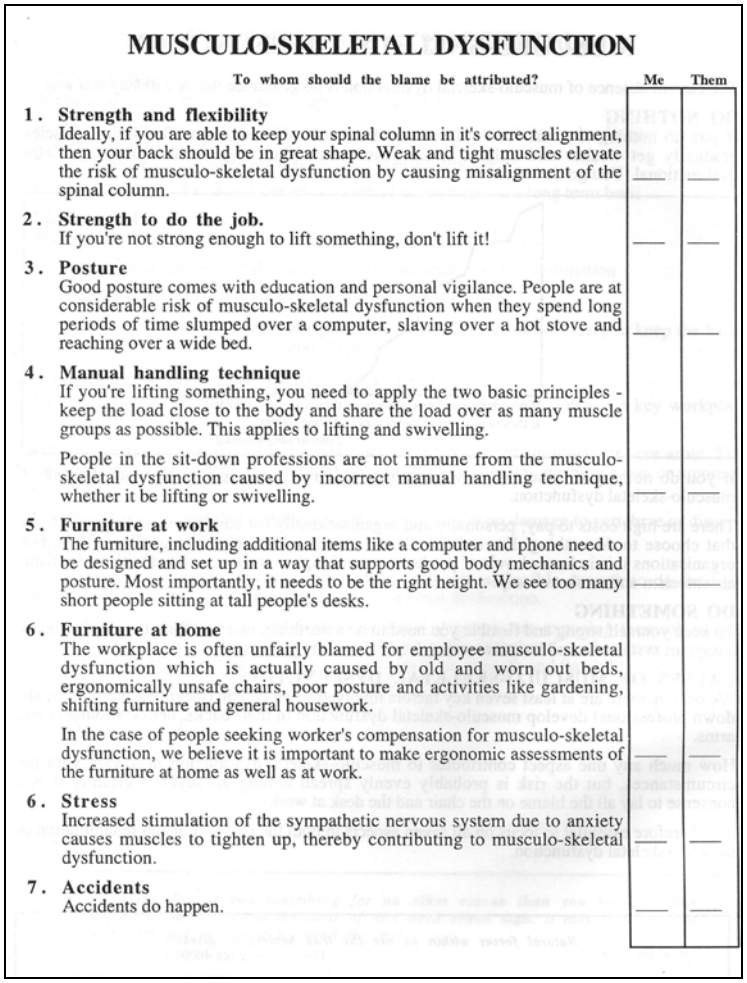
> Our surveys indicate that ***a very high proportion*** of people are exposing themselves (and their employer) to the personal and corporate risks associated with musculo-skeletal dysfunction by not taking part in a regular and systematic strength and flexibility program.

P25: 02-Back and neck man.txt - 25:24 (226:229)

Responsibility is shifted further towards the employee in other cases by the portrayal of risk as a normal and therefore unquestionable part of work. The employee is given a chance to apportion blame:

> **CAUSES OF MUSCULO-SKELETAL DYSFUNCTION**
> We believe there are at least seven key factors involved when people (including those in the sit-down professions) develop musculo-skeletal dysfunction in their backs, necks, shoulders and arms.
>
> How much any one aspect contributes to musculo-skeletal dysfunction may vary with the circumstances, but the risk is probably evenly spread among all seven. Certainly it is a nonsense to lay all the blame on the chair and the desk at work!
>
> It is therefore essential to focus on all seven aspects in both the prevention and rehabilitation of musculo-skeletal dysfunction.

P32: 05-Exercise Prescription.txt - 32:3 (30:38)



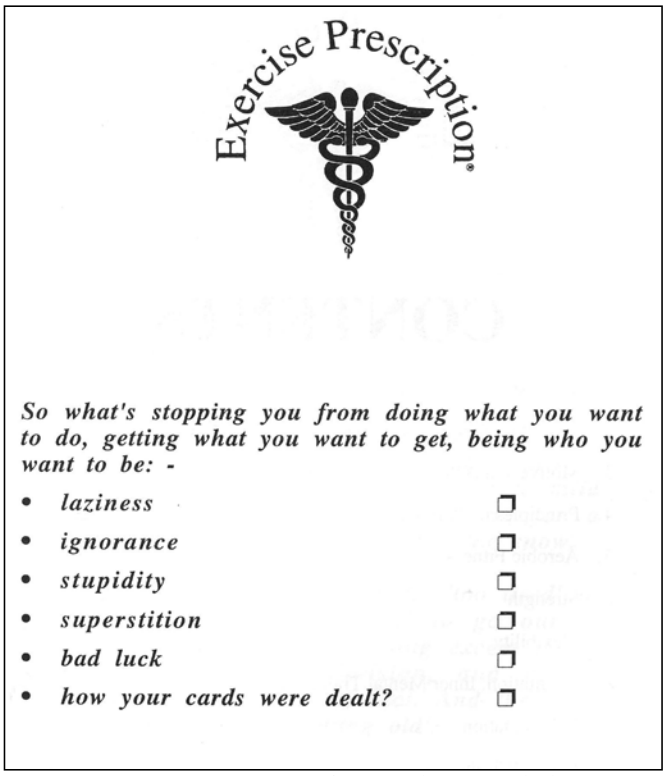
MUSCULO-SKELETAL DYSFUNCTION

To whom should the blame be attributed?	Me	Them
1. Strength and flexibility Ideally, if you are able to keep your spinal column in it's correct alignment, then your back should be in great shape. Weak and tight muscles elevate the risk of musculo-skeletal dysfunction by causing misalignment of the spinal column.	___	___
2. Strength to do the job. If you're not strong enough to lift something, don't lift it!	___	___
3. Posture Good posture comes with education and personal vigilance. People are at considerable risk of musculo-skeletal dysfunction when they spend long periods of time slumped over a computer, slaving over a hot stove and reaching over a wide bed.	___	___
4. Manual handling technique If you're lifting something, you need to apply the two basic principles - keep the load close to the body and share the load over as many muscle groups as possible. This applies to lifting and swivelling. People in the sit-down professions are not immune from the musculo-skeletal dysfunction caused by incorrect manual handling technique, whether it be lifting or swivelling.	___	___
5. Furniture at work The furniture, including additional items like a computer and phone need to be designed and set up in a way that supports good body mechanics and posture. Most importantly, it needs to be the right height. We see too many short people sitting at tall people's desks.	___	___
6. Furniture at home The workplace is often unfairly blamed for employee musculo-skeletal dysfunction which is actually caused by old and worn out beds, ergonomically unsafe chairs, poor posture and activities like gardening, shifting furniture and general housework. In the case of people seeking worker's compensation for musculo-skeletal dysfunction, we believe it is important to make ergonomic assessments of the furniture at home as well as at work.	___	___
6. Stress Increased stimulation of the sympathetic nervous system due to anxiety causes muscles to tighten up, thereby contributing to musculo-skeletal dysfunction.	___	___
7. Accidents Accidents do happen.	___	___

P25: 02-Back and neck man.txt - 25:82 (257:264)

Employees are asked to attribute blame between *'me' or 'them'*, constructing musculo-skeletal dysfunction as oppositional, suggesting either the employee is to blame or *they* are. The non-specific naming of the other in the blame equation provides little choice but for employees to blame themselves. Of the seven risk factors for musculo-skeletal dysfunction, five construct blame at the level of the employee, leaving the employee to assume blame for back and neck pain. *Strength and flexibility* is written as an individual construct, naming the ideal spine and

questioning whether the employee has weak or tight muscles. *Strength to do the job* also brings assessment to bear on the individual, suggesting personal vigilance can reduce risk. The risk of *furniture at home* removes the gaze from workplace conditions. Blame and responsibility for health and happiness is devolved completely to the individual in the introduction to the Exercise Prescription booklet:

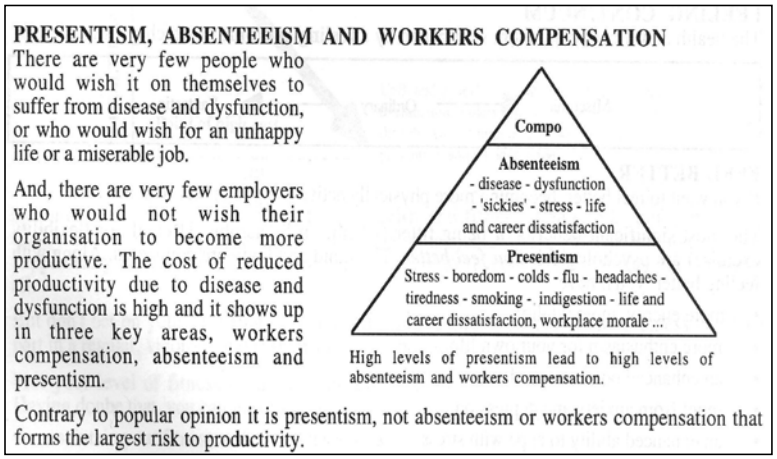


P32: 05-Exercise Prescription.txt - 32:3 (30:38)

The employee is constituted as actively wishing to avoid disease and dysfunction, tied directly to employers who would like greater productivity. The employee is placed in a health – risk – productivity nexus, where the behaviour of the individual has a direct effect on the organization. Risk provides a call to action, the 'imperative to *do* something, to remove the source of a health risk, however tenuous, impels

action. The discourse of risk becomes a political strategy, a way of negotiating the dialectic between public fears and private dangers' (Lupton, 1995:80).

The responsibility of the employee to maintain health is borne out in the ideas of presentism, absenteeism and workers compensation:



P25: 02-Back and neck man.txt - 25:91 (97:117)

Relating the employee's risk to the organization leaves the employee with a duty to protect the employer from the employee's risk. Responsibility to manage risk constructs the employee as an ethical subject, responsible for maintaining themselves in a minimal risk state to themselves and their employer.

6.5 Explanation: Sociocultural Conditions – Constructing a Population at Risk

Beck identifies a proliferation of risk discourse in the shift from an industrial to postmodern age (Beck, 1992). The move away from an industrial society towards an information society, and the development of information and assessment technology has re-written the way we live. In a global age, risk transcends international

boundaries, in the pre-war era, an outbreak of foot and mouth disease in Britain would be of little consequence to Australia. In the current era of international instantaneous trade, foot and mouth disease rapidly spreads from England through Europe and poses a significant risk to Australia. Grint takes up the point:

> We have now moved from one form of society to another in which the very foundation stone of the way we live has changed. Whereas the challenge of the eighteenth, nineteenth and twentieth centuries was to accumulate wealth, the challenge from now on will be to avoid risk, for we are now entering the 'Risk Society'…this means that disputes which were previously centered over the distribution of 'goods' are now increasingly likely to be centered on the distribution of 'bads'. Where most people used to worry about whether they had food, shelter and work, in the future they will be more concerned with whether they are eating 'Mad Cow' or drinking poisoned water or breathing polluted air.
>
> (Gint, 1998: 312)

A search of the World Health Organization website lists 3000 hits for risk, and over 5000 for population risk. The topics include common health problems like breast cancer, and cardiovascular disease through to risks of obscure complaints such as zoomatic disease. Although risk enters into every aspect of our lives, it is a human construct; there is no risk in reality, risk 'is a way - or rather a set of different ways – of ordering reality, of rendering it into calculable form' (Dean, 1999: 177). Nothing is a 'risk in itself, … but on the other hand, anything *can* be a risk; it all depends on how one analyzes the danger, considers the event' (Ewald, 1991: 199).

The myriad of risks to the health of the population engages and polarizes a wide variety of groups. Scientists, doctors, lawyers, government, journalists, policy makers, and health and consumer bodies may all be involved in health through risk. Popular risk focuses on 'various behavioural factors, nutritional intake, environmental exposures, personality type, and the nature of social interactions', meaning the multitude and complexity of risks generated is 'too high to expect widespread appreciation of all of the possible risks (DeFriese & Fielding, 1990: 402).

The complex statistical assessment of risk places any primary understanding of risk beyond the layperson leaving behaviour as the only common point for action to reduce risk.

Risk provides the conditions to see the whole population as potentially ill; well people no longer exist, instead moving along the health and illness slide in response to risk behaviour. The power to diagnose risk is negative, a person cannot be defined as risk free. No test screens for an absence of risk, no test shows a state of health. 'There is no substance in blood or urine whose level is reliably high or low in well people. There is no tissue that can undergo biopsy to prove a person is well. Wellness cannot be measured, yet we seek it with analytic methods' (Meador, 1995: 440).

Health risk assessment provides a 'lifestyle survey' focusing on elements of daily living with ever increasing complexity and specificity. Levels of exercise, diet, sleeping patterns, body weight and so on all become linked to the productivity of the workforce in a network of risk. Risk assessment provides a strategy for the deployment of the professional gaze across society. 'It has expanded the concerns of medicine beyond the confines of the hospital walls, and constructed the concept of health from populations. Both the sick and well are caught up in a web of observation' (Lupton, 1995: 21-22).

My analysis of risk discourse examines the pervasiveness of risk and the conditions that construct all members of the workforce as subject to risk. The techniques of assessment central to risk discourse are seen to problematize and dictate the worker's behaviour. At the same time, risk assessment provides a point of access to the workforce for professional health knowledge. The risk discourse creates new possibilities for understanding health and work and, in so doing, devolves

organizational risk to the individual worker. A shift in the nature of work provides the conditions for a proliferation in risk discourse.

6.6 Conclusion

This chapter has provided an examination of risk discourse in the practices of workplace health at Labyrinth. The use of risk has been shown to make all employees visible to assessment and intervention rationalized through a concern to maintain health. The production of all employees at risk constructs an ethical subject who is prepared to examine and mange their own risks for their own good and for the good of the company.

A central strategy in the management of risk is in the assessment of employee's health related behaviours. This is done in professional consultations and through on-line assessment. Labyrinth appears to be turning more and more to information technology to solve problems that they have identified. Health and risk management is one area that information technology is perceived to be able to benefit. The following chapter examines the role of information technology within workplace health.

7 The Glory of Technology: Health and the Cyber Worker

7.1 Introduction

This chapter provides an analysis of the discourses of information technology around workplace health, identifying the glory of technology as a central theme of this discourse. The analysis identifies the Glory of Technology discourse, within which technology is presented from a singularly positive viewpoint. The positive elements of the discourse are found to have an emancipatory tenet, and make many promises about restoring equity between local and global communities. The glory of technology discourse is brought under question and particularly the claims for incredible advance relied on for its rationalization. The chapter provides a discussion of the prevalence of information technology in modern society, the move towards global, seamless, centralization of information.

The analysis examines the normalizing pressure of the glory of technology discourse. Information technology provides a means for continual and unending surveillance of the worker. Providing an excellent point of access for the assessment strategies inherent in both the Occupational Health as Fitness and Risk discourses. At Labyrinth, the employee must submit to examination via the company's intranet to gain risk assessment. This precedes behaviour modification to improve assessment scores.

The emphasis of achieving greater productivity with fewer resources through the centralization of information is examined as a part of Glory of Technology discourse.

For some, the information is inaccessible due to inability to effectively use information technology, while others struggle through poor health literacy. The chapter also describes the way that health policies are effectively buried under a mountain of information presented alongside it in cyberspace, reducing the relevance and availability of health policy for the employee at Labyrinth.

I am a Technologist corrupted by people contact.
I used to think Science had the solution
To communications between Humans.
One day I received a computerized letter beginning with:
Dear Dr. Mr.
I had lost my identity but I was still getting mail.
Is this my future?Is it yours?

The world which I serve as one architect
Threatens to be lonely and grave.
It will be a misshapen universe
Where science will be swamped by its own artifacts:
They want well-trained Humans.
History is being made at the speed of light
Inside today's computers
Shaping our collective destiny.
No records are kept.
I am trying to save some of that experience
To ask where it may lead.

(Vallee, 1982: original emphasis)

7.2 An Information Technology Society

When Vallee wrote this poem in introduction to his critique of networking technology in 1982, he, like other futurists, made both grand and grave predictions about the future that technology would deliver us (Forester, 1997; Saxby, 1990). The possibilities for the year 2001 ranged from cyborgs providing humans lives of recreation, to computers using humans to serve their evolutionary needs (Asimov, 1988). Williams maps the potential impact of modern computers in the workplace:

> Computers can be used in many ways by business: to automate work processes, to monitor employees' work and efficiency, to maintain massive amounts of personal data, and even to reduce building and transportation costs by having employees work at home using the telecommunication features of computers. Each of these uses has potential risks and benefits. Thanks to computers, for instance, managers now can monitor employees' business calls, their minute-by-minute work patterns, and the time they spend in contact with customers. Already today, millions of workers, mostly in clerical or repetitive jobs, have some or all of their work evaluated on the basis of computer-generated data, and many more have computer-generated data collected but not currently used in evaluation.
>
> (Williams, 1997: 9-10)

As the speed and power of microprocessors increase, the cost and size reduces, placing technology closer to the center of everyday life. Technology has an enormous influence on world economics through trade, travel and communication. Information technology company IBM has become one of the world's top fifty economies in its own right, larger than the national economies of Singapore, the Philippines and Malaysia (Anderson & Cavanagh, 2000). Developments in technology constantly reshape work; individual tasks, professions, and whole industries can be created or rendered obsolete. Continual development of tools like databases, email, Internets, and shared networking represent new methods of communicating and sharing information. These changes impact on the shape, nature and experience of work, and some, like van der Spiegel (1995), foresee a global office, where geography and time no longer matter. Gint sees complex relations of power inherent in developing technology; he uses Fordism as an early example in which 'work was brought by a conveyer belt to the worker so the speed of task completion could be controlled by management through the technology itself' (Gint, 1998: 284). The new millennium brought a rush of visions for human development through the glory of technology. Meng Khoon sees the approaching synthesis of technologies as changing the world for the better:

> The integration of information and communication technologies (ICT) will help usher in the new millennium of the Digital Age. The convergence of the computing, telecommunications, broadcasting, publishing, education, entertainment industries and more provides windows of opportunity that are beyond imagination in the 20th century. We are talking about a world of pervasive e-businesses, e-commerce, e-services, e-talents – that is, e-everything.
>
> (Meng Khoong, 1999: ix)

George Orwell's *1984* (1950) suggested technology would become an all-pervading menace in all aspects of contemporary life. Health care is a prime example of Orwell's vision approaching, as the monitoring of daily life becomes more and more intense. In predicting health technologies in 2010, Chiew Tan describes the possibilities:

> A series of health agents will constantly monitor your health (by measuring your blood pressure, heartbeat, temperature, urine and stool samples, diet). In addition, you have online access to community doctors, as well as specialists at hospitals worldwide. Most basic diagnosis (e.g., blood tests, X-rays) can be performed within your living area as the Creative Lifestyle community packs a portable medi-clinic.
>
> (Chiew Tan, 1999: 190)

The exponential evolution of technology described by Moran (1994) means a definition of technology as innovative is relative, and could describe anything from the rock and flint tools of Neanderthals to organic nanotechnology. My research is with an organization providing information technology (IT), and IT formed a central theme in the data corpus. For my purposes 'information technology refers to the use of computers to store, analyze, retrieve, and disseminate information. Information systems include computerized technology and the knowledge necessary to achieve advantage from its use' (Davis 1995: 113). Research into health in the modern workplace has largely ignored the importance of information communication technology.

> Nuclear power, chemical products, biotechnology inventions, reproductive technologies, automobile safety devices, vaccines and pharmaceuticals, and many other technologies all have been the source of prolonged disputes over their social, health, or ethical implications. But despite their profound social impact, information technologies have been largely exempt from such disputes.
>
> (Nelkin, 1997: 20)

A postcritical discourse analysis provides a social analysis of information technology. Social analysis of IT is rare, as the use of computers and, in particular, the use of software, is commonly accepted without critique (Katsikides, 1998). Little social research has been done that questions the role of information technology in the workplace or in workplace health. My analysis provides a starting point by investigating the glory of technology discourse, which serves to build the cyber worker operating in an environment where time and place are seamless, and where power is bound in access to information. The cyber worker submits to technology via the rationale of increasing productivity with reduced resources. The cyber worker is normalized through the centralizing and assessment information technology of workplace health programs.

7.3 Description: Producing the Glory of Technology Discourse in Workplace Health

Recently the Chairman of Labyrinth spoke to a U.S. congressional committee on the importance of information technology. His speech is reproduced on the Labyrinth web page and forms part of the introduction to the company's global environment and employee well-being policy:

> Balancing the needs of people, economies and the environment has become of more and more critical importance. Since many of the solutions supporting such sustainable development are based upon knowledge, technology and access to information, Labyrinth, as a multinational leader in information technology and solutions, can play a valuable role. Labyrinth is committed to doing so, realizing that this benefits its own prosperity as well as the well being of our world. E-business represents Labyrinth 's overarching strategy, and it's a strategy

> that, in creating a networked society, can be a significant force behind sustainable development…We are witnessing nothing less than the rise of a new economy —a digital economy — and a new global medium that will be the single most important driver of business, economic and social change in the coming century. It will alter the way we teach our sons and daughters, care for our aged, reach out to the disabled and homebound, and enlighten the isolated and disenfranchised. It can create new opportunities to help close the divide that exists today between the rich and the poor. And it will exert new pressures on existing geopolitical structures and all their underlying economic assumptions.
>
> *P26: 08-environment and wellbeing.txt - 26:6 (56:73)*

The text is produced by the chairman and represents the official view from the head of the company projected both externally and internally. The text is an external representation specifically for congress and generally on the Labyrinth website. The speech is published on the company website, making access instant and reproduction continuous. Publishing on the Internet means there are no space limitations and the speech can be reproduced in full. This also allows the speech to be accessed any time, anywhere in the world. It is produced internally for employees on the company website and in the introduction to the company's environment and wellbeing policy. Employee access is bound to information technology as this and all other company policies are only available on-line.

Knowledge, technology and access to information are constructed as the basis for balancing *needs of people, economics and the environment*. The creation of *a networked society* requires information technology to enable access to information and knowledge. The text introduces a new economy, the *digital economy*. This is a reproduction of wider discourse that hails 'the glory of technology', a discourse with a singularly positive view of technology. The discourse sees the digital economy using technology to *exert pressures on existing geopolitical structures and all their underlying assumptions.* These pressures offer to improve teaching, aged care, and reaching out to the underprivileged. Technology is constructed with the power to

overcome injustice, inequity and human suffering. The technology-driven digital economy can *close the divide that exists today between the rich and the poor*. The glory of technology produces the possibility of a human utopia. Williams provides one of the few dissenting voices:

> The new technology thus seems to be increasing rather than decreasing the gap between rich and poor in the third world. The basic reasons for this are that advanced technology requires high levels of education which the underprivileged of the world lack, and that the desired goods of the information age are "knowledge-intensive" rather than "labor-intensive". Since the underprivileged have only their labor to sell, their position seems likely to become worse as competition increases.
>
> (Williams, 1997: 12)

The glory of technology rationalizes the networking and technologicalizing of society, through the potential health benefits. The company concedes that it too will benefit; *Labyrinth, as a multinational leader in information technology and solutions, can play a valuable role. Labyrinth is committed to doing so, realizing that this benefits its own prosperity as well as the well being of the world*. Previous research has shown the improved productivity resulting from teleworking (Martin, 1995). While the company benefits from teleworking, Sam shows that the employees are not so impressed with the practice:

> *I think working from home sucks actually because you miss out on so much working form home plus if you've got kids at home they can be a huge distraction. If I work from home I never get any work done, you think of other things to do, have a thousand cups of tea, gardening.*
>
> *P18: Interview 1 with John Smith.txt - 18:18 (118:121)*

The benefit to the company is produced as a side-effect of the benefits of technology for the well-being of the world. In most cases, the glory of technology discourse is reproduced unquestioned, and those who are left behind are placated. Postman (1997) elucidates on the reproduction of glory of technology discourse and the effects this has on the disaffected, 'losers' of the IT revolution:

> Should the losers grow skeptical, the winners dazzle them with the wondrous feats of computers, many of which have only marginal relevance to the quality of losers' lives but which are nonetheless impressive. Eventually, the losers succumb, in part because they believe that the specialized knowledge of the masters of a computer technology is a form of wisdom. The masters, of course, come to believe this as well. The result is that certain questions do not arise, such as, to whom will the computer give greater power and freedom, and whose power and freedom will be reduced?
>
> (Postman, 1997: 130)

7.4 Interpretation: Normalizing the Cyber-Worker in the Glory of Technology

The glory of technology discourse maintains the use of information technology in workplace health practice. The employee is offered the chance to improve their lives using technology. This is developed in the environment and wellbeing policy at Labyrinth:

> And as this technology enables tele working, reducing unnecessary travel, the environment again benefits. So, too, can an organization and its employees. The organization becomes more accessible for talent that may be constrained from reaching it, and employees can enhance their work/life balances. In short, e-business can play a vital role in helping the world develop in a more sustainable manner.
>
> *P26: 08-environment and wellbeing.txt - 26:8 (83:101)*

The glory of technology discourse creates the employee as cyber-worker who submits to technology to improve their own health, the health of the organization and the health of the planet. In practice, technology discourse changes the structures, conditions and experience of work, helping the organization reduce overhead costs significantly. The cyber-worker is constructed as highly proficient, using technology to meet their personal and global health responsibility. The benefit of technology for health rationalizes the cyber-worker, while the potential benefits for the organization are omitted or presented as secondary. The glory of technology to enhance *work/life balances* rationalizes telecommuting, or working from home, further reducing costs to the organization while bringing work into the private lives of employees. In

practice, telecommuting, the global village, and the paperless office are not as effective as the discourse represents. Forester makes the point:

> The "paperless" office now looks to be one of the funniest predictions made about the social impact of IT. More and more trees are being felled to satisfy our vast appetite for paper in offices which were supposed by now to be all-electronic… One IBM study estimated that 95 per cent of information in business enterprises is still in paper form… For example, a typical US Navy cruiser puts to sea with no less than 26 tonnes of manuals for its weapons systems – enough to affect the performance of the vessel!
>
> (Forester, 1997: 198-200)

The glory of technology produces the rationality of using technology for greater productivity with fewer resources. Amber describes the use of technology for workplace health:

> *I think the problem is that we're trying to do a lot but it comes back to what we've said is that we really need to be much more focused on how we deliver and be able to service the company with the resources we have. So we've gotta use those technology options, and develop them a lot more.*
>
> *P10: employee perceptions.txt – 10:9 (126:132)*

The discourse normalizes the development of technology to overcome resource shortages. A prime example is the use of electronic mail (email), as Bob describes:

> *Bob: Email is a highly utilized method of communication, I'd probably say its the number one method of communication.*
>
> *P15: Interview 1 with Bob.txt - 15:45 (182:186)*

This may not be the best method of communicating, many employees react adversely to the impersonal nature of email:

> *Dilbert: They produce a newsletter which goes straight in the bin. Same with the emails.*
>
> *P22: Interview 2 with Dilbert Glum.txt - 22:20 (57:61)*

The withdrawal of resources by the company is de-politicized while the cyber-worker is constructed as a problem solver. The discourse encourages the

development of alternate methods of delivering services, and centralizing information removes the physical presence of the professional from the consultation, producing professional knowledge as a faceless component of the desktop computer. Technology discourse is reproduced when the employee uses technology to access information. According to Amber, the centralizing of information is important to efficiency and productivity:

> *That [centralizing information] has to be done as a priority because hopefully if that's done successfully that will reduce the time we have to spend having to deal with one on one enquiries because I can actually, if I'm out of the office, which I am half the time I can just say to the manager the information's here, the forms here. It's working smarter not harder, you can't really service the company effectively.*
>
> *P40: Interview 3 with Amber.txt - 40:20 (121:125)*

The idea of *working smarter not harder* represents a central theme of glory of technology discourse. The cyber-worker can access information themselves without the presence of professionals. Professional knowledge is available continuously despite the absence of the professional. Amber suggests the use of an intranet provides the space for information to be collated and accessed from a central point:

> *That's one way of managing information and getting it right and we are seriously trying to adopt that approach in Australia because we are actually developing our intranet over the next month or two. I would say that that's how we are going to deliver and communicate those things with the resources we have.*
>
> *P40: Interview 3 with Amber.txt - 40:11 (72:75)*

The intranet provides the conditions to manage access and interaction with knowledge. Apart from reducing resources, the intranet reproduces organizational hierarchies, judging employees through access to information. Those employees at the top of the hierarchy have the opportunity to add, remove or alter information on the intranet, while others have access limited to reading the information on their personal computers. Some Labyrinth employees, such as cleaning and canteen staff

represent the bottom of the hierarchy, having no computer access and therefore no access to information. Access is also dependant on computer literacy, which can omit other groups of employees:

> SA: *There's an assumption that there is a high level of computer literacy and accessibility, there are people here who may not be able to access things but would never own up.*
>
> Chloe: *So it excludes a whole group of people, even within the organisation database only policies exclude a lot of people. And the funny thing was that our own internal policy, I only got that in hard copy recently when my colleague resigned, and I got her copy. I mean I could have asked but I didn't know it existed. Because it was on the intranet.*
>
> *P41: Interview 3 with Chloe.txt - 41:40 (241:248)*

The employees look only to the database for information. This serves to valorize the information on-line and removes all other forms of information from the employee. The intranet also offers the potential to manage the ways employees can interact with and experience the knowledge available. The policy and procedures produced on-line comes to represent all the relevant information for employees, leaving anything outside irrelevant as Amber describes:

> *All of our employees have a thing called Knowledge Bank, which is an electronic procedural manual for human resources practices and procedures. We've developed a health and safety manual in that so it's accessible to everyone electronically. Essentially it goes through everything from manual handling to ergonomics.*
>
> *P12: Interview 2 with Lyn.txt - 12:2 (25:30)*

The manual represents the centralization of knowledge to cyberspace. Particular problems can be brought alive or denied existence through their inclusion or exclusion from the Knowledge Bank. By including *everything* on the database that which is not included does not exist. For the employee, their experience of health and health in the workplace is directed by what can be found on the database. Moreover, the construction of the database names health problems and prescribes the

appropriate behaviour for the worker. Thus the action of the cyber-worker is directed through cyber space:

> *if an employee has an ergonomic issue the first thing we do is point them to the document so they can do a self assessment using a document that exists on Knowledge Bank.*
>
> *P10: Interview 2 with Amber.txt - 10:1 (14:19)*

The knowledge bank database provides the tools for *self assessment*. Self-assessment makes the employee bring the gaze of professional knowledge to bear upon themselves. The employees are encouraged to continually monitor themselves against a reference point provided by an unseen professional. The normal, healthy and productive employee is produced in cyberspace, for continual self-comparison through continual self-assessment. The result is the responsible individual, echoed in the experience of the cyber-worker, who is capable of finding and acting on health information:

> *I think that's where that balance of the individual versus the company comes into it as well. Because I guess you can say to the person 'there is that information available on your PC, YOU, the onus is on you to look for that information and do what you think you should do'*
>
> *P40: Interview 3 with Amber.txt - 40:18*

Accessing and reacting to on-line health information is part of 'being' a worker at Labyrinth. The cyber-worker is normalized as proficient in using technology to manage personal health, in turn constructing the technically incompetent as deviant. The process of *self assessment* is reproduced through on-line access to services. The employee happily submits to using IT at work, oblivious of the possible health effects, marginalized in the glory of technology discourse (Bereano, 1997). The relationship between employees and the company occurs in cyber-space, where all communication occurs. Chloe describes a typical interaction with employees in her role as occupational health nurse:

> *I might say 'well you need to fill a notice of accident injury form, you find that on this database under that heading, where you scroll down to forms, you pick the one that says this, open it up, fill it in and send it to me'.*
>
> *P41: Interview 3 with Chloe.txt – 41:36*

Centralizing health to an intranet removes it from the immediate consciousness of the worker. Policy is made less accessible and less relevant. Health policy becomes one of many others, part of the endless possibilities of pull-down lists of policy. The company as a responsible entity is removed; health problems do not lead to a report to an immediate physical representative such as a manager or occupational health and safety specialist. Policies are only accessed reactively in the case of an incident. Employees must log on, access the database, find the relevant policy, find and complete the addendum for reporting the problem and then email the form to a nondescript address. This contributes to a general apathy about health, and moves the focus away from working conditions. Jane typifies the apathy among employees:

> SA*: Are you aware of Labyrinth's health policies and are they relevant to you?*
>
> Jane*: I don't know that they are, I don't know that I've actually ever read them. SA: Do you know where you would find them?*
>
> Jane*: I'd look on Knowledge Bank, I assume it's in there somewhere. It would be in there, I'd just do a word search there but I'm not that interested. It used to be on the managers things on what you've gotta do if someone has an accident. It lays down exactly what you've got to do and there is also a database which people can read. I'm not sure if the manager is accessible to all people.*
>
> *P17: Interview 1 with Jane.txt - 17:42 (289:301)*

In practice, technology discourse creates the conditions for minimum human contact. Communication on-line is valorized as the standard practice of workers at Labyrinth. Employees are isolated physically, in single cubicles, and socially, via information technology. The devolution of responsibility to the employee, juxtaposed against the

centralizing evolution of information technology, serves to reduce the need for management:

> SA: *So it's really depersonalized the whole workspace hasn't it?*
>
> CHLOE*: Absolutely. Even your own phone has a voicemail message on it which you record yourself and you never get a live person taking a message at most sites. There are odd sites which are Labyrinth sites, where if the person is not at their desk the phone just rings and rings out. No one answers it. So the real challenge for me is personal communications with individuals. People feel isolated here when they can't contact their supervisor. I know many is the time when I've tried ringing someone four or five times and then had to resort to an email which said 'I've tried ringing you four or five times and I couldn't talk to you, this is important can I talk to you today, ring me when you get this message'. The phone rings within five minutes.*
>
> *P38: Interview 2 with Chloe.txt - 38:22 (137:146)*

The glory of technology produces the necessity for continual updating; cutting edge technology evokes respect while superseded technology is made redundant. Email elicits an immediate response, while phone calls are ignored. New methods of communication and the centralizing of information remove the need for immediate personal management and the associated human contact:

> *a lot of people here are remotely managed, from another state. I am for example, I don't have anyone I report to in this state, I think there's a need for meetings so people feel included and consulted, and involved in the myriad of changes and restructuring that's occurring all the time. To take people with a restructure, you need to take people and consult them and involve them.*
>
> *P16: Interview 1 with Dilbert Glum.txt - 16:26 (195:203)*

7.5 Explanation: Work, the Information Society, and the Glory of Technology

For the optimist, the glory of technology discourse is easily reproduced and supported. Automation offers higher productivity, 'material abundance, the elimination of repetitive jobs, and more time for creative leisure'. The glory of technology discourse envisions a more egalitarian society, where knowledge reduces the class divisions instilled in the power of wealth. Decision-making becomes less

hierarchical, and decentralized through local computer networks. 'Democracy will be enhanced by instant referenda and electronic voting, made possible by multi-channel interactive cable systems. Telecommunications will improve worldwide understanding in the global vision' (Barbour, 1997: 161-2).

On the other hand, Barbour outlines the pessimists view, suggesting information technology 'augments the power of institutions that are already powerful. It increases the gap between the information-rich and the information-poor. Automation provides a few high-skilled jobs.' Further, 'new methods of electronic surveillance and computerized personal dossiers facilitate the invasion of privacy and the emergence of the computer state' (Barbour, 1997: 162). Computers provide for the deskilling of workers; the 'fragmenting [of] complex jobs into small, meaningless pieces, each done by a different person; for reducing the skill and initiative and hence the psychic rewards of the job; and for making work machine-paced and hence out of the control of workers' (Williams, 1997:11).

The glory of technology normalizes rapid and continual evolutionary development of information technology. Gint describes how innovative (evolving) technology survives while technology that does not adapt becomes extinct. The discourse of continual evolution creates a fatalistic reality where 'only those nations and organizations that adopt such innovations prosper. This is particularly prescient when information technology is considered, for the march of the microchip appears omnipotent and to deny this is to deny both reality and the future' (Gint, 1998:268).

The evolutionary subtext of the glory of technology produces and reproduces the practice of continual upgrading. The technology itself reproduces this by providing automatic update reminder messages for users at specific intervals. In many cases,

the user clicks a button and the product automatically updates from the Internet. This perpetuates the consumerist throwaway society, providing space for continual sales of newer versions of products, where the next to newest version is superseded, seen as useless and thrown away. The rationality is that the most up-to-date technology is quicker and more efficient, thereby providing a competitive advantage. The glory of technology identifies and publicizes new developments, using the glorious possibilities of the advance to sell the product. Salvaggio (1987) identified the early emphasis on building this discourse through advertising. The advertising industry pushed the glory of technology 'in a concerted effort to project a positive image of the approaching information society' (1987: 146). The linking of the glory of technology to economic development builds further foundations for the discourse. The glory of technology discourse is reproduced continually, and for the Labyrinth environment and wellbeing policy the latest development is Deep Computing:

> *It's called "Deep Computing " applying raw computing power, advanced software and sophisticated algorithms to solve increasingly complex problems. And it 's a critical tool in analyzing many of the environmental issues facing us today. We are already seeing many benefits of Deep Computing —from simulations of nuclear explosions eliminating the need for nuclear testing, to improved weather forecasting, advancements in climate modeling and the development of lifesaving drugs. And this is only the beginning of what we'll be able to achieve.*
>
> *P26: 08-environment and wellbeing.txt - 26:11 (132:137)*

Central to the glory of technology is the unquestioned acceptance of new technologies. Computers have enhanced efficiency and productivity enabling the handling and manipulation of large chunks of information. Information technologies have made large sections of the working population redundant and altered our perceptions of skilled work. The ability to purchase services is at once easier through increased access and more difficult through reward schemes and cross-marketing. There are new forms of crime and fraud, 'but we describe them with grudging

admiration. They have allowed new types of vicious weaponry, but we call them "smart bombs"' (Nelkin, 1997: 21).

Ignoring the hypocrisy in describing the advance in destructive capabilities of nuclear weapons as a benefit, the discourse continually reinforces that a greater development is just around the corner. Technology can overcome human problems toward a utopian endpoint. The cyber-society, like the cyber-worker, is constructed by the flow of information from a central point. The centralization of information directs the understanding of people despite borders, language, or geography. For the first time, people all over the world are provided the same information at exactly the same time. The ramifications for business are immense:

> *It can open up access to information, global markets and opportunities for billions of people. It can bring a host of services to people the world over, including medical consultations from remote experts, access to education through distance learning, agricultural advice and weather forecasts, and access to important government and financial services. E-business also helps businesses to meet customers' needs more efficiently. From enabling better analyses of customer requirements, to on-line customer care, to optimizing logistics and the supply chain, it can reduce resource consumption and waste, change the economics of transactions and improve organizational effectiveness.*
>
> *P26: 08-environment and wellbeing.txt - 26:8 (83:101)*

The glory of technology means that the 'work and domestic sphere are intimately and irrevocably linked in a web, [work is] to put a gloss on it, a way of life' (Gint, 1998: 52). The push toward telecommuting moves the workplace inside the home. The home is no longer a sanctuary from work, but an extension of it. The discourse sees the home as a place where the employee is more comfortable and therefore more productive. The rhythm of work becomes relative to production in the absence of social networks of co-workers to maintain traditional working patterns. 'Pilot studies around the concept of a *waking week* in contrast to the *working week* are being considered, where productivity is decoupled from space and time' (van der Spiegel,

1995: 108). The endpoint begins to make the worker look more and more like the cyber-worker of the futurist's direst predictions.

The most remarkable impact of information technology on society is the resultant speed of information exchange. 'Two thousand years ago information traveled as fast as the caravans of peddlers and tradesmen who brought news of conquest and discovery gathered from their journey and the people they meet at the intersections along the way' (Saxby, 1990: 2). Today information is instant, ignorant of previous barriers of time or space.

> Organizations operate today within a worldwide web of nations that are joined together by virtually instantaneous communication. National boundaries fade into insignificance. Knowledge accumulates exponentially, while the rate of change itself moves at breakneck velocity. Organizations must strive to take advantage of opportunities provided by this complex new environment while at the same time they must avoid threats that may come from anywhere in the world.
>
> (Davis 1995: 112)

The information revolution represents a similar upheaval in the patterns of work to that of the industrial revolution, but with significantly different consequences. The displaced labour of the industrial revolution moved away from dangerous, physical work towards intellectual, service-based work. The information revolution begets 'computerization [which] occurs and will continue to occur mainly in areas (like banking, commerce, and administration) where displaced workers do not have the alternatives their predecessors had during the industrial revolution' (Williams, 1997: 13). The free proliferation of technology is already outstripping any hope of regulation or control, with some even warning of the problems of electronic immigration (Martin, 1995).

In lay understanding, any advance in technology is accepted as a positive advance for the population. The typical approach is to measure the improvement in productivity

and job satisfaction associated with the introduction of new technology into any particular workplace. Contrary to the glory of technology discourse, information technology can reduce the variety and physical mobility of tasks by locking workers to their desks and computers. The prolonged, intense interaction with machines isolates workers and destroys social support networks (Hodson & Sullivan, 1995):

> Unions systematically oppose such arrangements, both because the dispersion of workers is inimical to the esprit de corps so important for mobilizing members to fight for better conditions, and because history of homework arrangements is replete with worker exploitation… Additional disadvantages for at-home workers are less visibility for promotion, problems with supervision and security of sensitive materials, and diminished interaction among co-workers.
>
> (Williams, 1997: 11)

The multi-tasking of jobs represents a greater benefit to employers through improving productivity. It also serves to increase unemployment and the labour pool. 'A pool of unemployed labour is of great benefit to employees who can select good workers for the job and offer inferior conditions of work and pay, which employees feel compelled to accept when jobs are hard to get' (Sargent, Nilan & Winter, 1997: 306). The glory of technology discourse omits consequent unemployment, allowing business to provide fewer conditions to a labour pool supported by social security. Technology provides the means to compact multiple roles into one. Coovert uses the example of the Xerox truck driver who is trained to follow computer-generated advice on truck maintenance, copier sales, installation and maintenance techniques. Truck drivers who deliver and set up Xerox copiers are as 'well versed with Xerox document feeders as with the fuel and hydraulic lift system on the truck' (Coovert, 1995: 176-77).

A simple consequence of the all-pervasive technology is computer-based pressure on production. Computers allow close surveillance of work, giving employers instant

feedback on the production of individual workers. For example, most word-processor programs can detail how many minutes and how many drafts a piece of work represents. Emails can be scanned and flagged for reading by a third party or system administrator on the basis that they contain pre-determined key words. Clarke (1994) uses the term "dataveillance" to describe 'automated monitoring [of humans] through computer-readable data rather than through physical observation' (1994: 122). This surveillance is all pervasive:

> A driver's license is no longer just a document allowing you to drive a car. Computer-connected departments of motor vehicles, under the direction of state legislatures, have begun to use drivers' licenses as instruments of social control and information sharing. In Wisconsin, a court can suspend a driver's license for nonpayment of any fine, and that includes library fines.
>
> (Hausman, 1997: 94)

Society submits to professional knowledge by offering personal data to information technology. Professional knowledge is further centralized by these conditions – 'government agencies depend very little on the judgment of employees local to the individual concerned and very heavily on the information that they store in their files and use centrally to the organisation but remotely to the individual' (Clarke, 1994: 122).

A prime concern is the security of the data managed centrally. The potential for theft or loss of data is a modern crisis. Criminal techniques like viruses that infect and corrupt programs or worms that replicate themselves spreading from computer to computer pose major threats. Perhaps the most concerning is the Trojan horse, which enters a database system as part of a normal transaction, and then serves to wipe all of the information the database contains. A less recognised threat to the information society is the unstable nature of the utilities supporting information technology. Recent power shortages in California bought the region's financial services to their

knees and brought down security systems on major financial databases. In cases like this, some authors argue that the damage may never be recognized, let alone undone (Martin 1995). Postman continues the critique:

> …what started out as a liberating stream has turned into a deluge of chaos. Here is what we are faced with: In America, there are 260,000 billboards; 11,520 newspapers; 11,556 periodicals; 27,000 video outlets for renting tapes; 362 million tv sets; and over 400 million radios. There are 40,000 new book titles published every year (300,000 world-wide) and every day in America 41 million photographs taken, and just for the record, over 60 billion pieces of advertising junk mail come into our mail boxes every year. Everything from telegraphy and photography in the 19th century to the silicon chip in the twentieth has amplified the din of information, until matters have reached such proportions today that for the average person, information no longer has any relation to the solution of problems.
>
> The tie between information and action has been severed. Information is now a commodity that can be bought and sold, or used as a form of entertainment, or worn like a garment to enhance one's status. It comes indiscriminately, directed at no-one in particular, disconnected from usefulness; we are glutted with information, drowning in information, have no control over it, don't know what to do with it.
>
> (Postman, 1997: 134)

7.6 Conclusion

This chapter has described the glory of technology discourse in workplace health and detailed its consequences for the experience and meaning of employees. Information technology provides an effective surveillance tool for the assessment and normalization of the working population. The discourse supports the collection and use of information to continually compare and contrast workers, rationalizing intervention to bring those below the expected normal back to the fold. Behaviour modification is typically prescribed through information technology feedback like self-assessment to achieve this. This has a further consequence of de-humanizing the workplace, reducing the chances for the development and maintenance of social relationships.

This chapter identifies the use of information technology as one element to influence the conduct of employees and predicates an analysis of governmentality afforded by 'The Glory of Technology' discourse as well as the other discourses examined earlier in the thesis. The next chapter brings together the discourses identified to this point and examines their implications for governance. In particular the implications of these discourses for knowledge, power and subjectivity.

8 Occupational Health as Governance: Governing the Worker in Workplace Health Discourse

Sometimes I think this whole world
is one big prison yard
some of us are prisoners
some of us are guards.

(Dylan, 1991)

8.1 Introduction

This chapter builds on the previous data chapters to apply the identified discourses of workplace health to a study of governmentality. The chapter begins by situating Foucault in the analysis of power and providing a Foucauldian framework for the analysis of power at Labyrinth. This analysis steers away from overt forms of power but rather is interested in the tactics and strategies used to guide and manipulate conduct through the discourses of workplace health. The analysis uses Foucault's *Knowledge – Subjectivity – Power* triangle to advance the analysis.

Individualizing practices of each workplace health discourse are found in techniques of assessment. These techniques isolate the physical body in space within discourses of safety; the behaviour of employee's regardless of space within health and risk discourse; and, the employee and computer as one single productive unit within the glory of technology discourse. The individualizing assessment helps construct an ethical imperative for the worker, requiring them to be active in managing the project of their own health.

Disciplining procedures reveal techniques of examination, documentation and moves towards normality within each of the workplace health discourses. The worker is examined through health at every level, as an individual, as a member of a localized team, and even as part of Labyrinth's Australian and International workforces. Documenting the results of examination is rationalized by the Glory of Technology imperative to store and manage data. Assessment makes aspects of health visible that would otherwise be irrelevant to the worker. Moves towards normalization are particularly evident in the production in discourse of abnormal and deviant subject positions. Value judgments are made through the discursive construction of employee's exercise habits, stress levels, manual handling techniques, reaction to risks, use of technology "solutions", and so on. Measurement against a normal, or standard for workplace health provides a normalizing discipline

The ordering of forces identifies the ways in which workplace health discourses bring power to bear. This describes the problematization of the worker's behaviour through a concern with health. Elements of each discourse seek to align the employee's goals with that of the company and shareholders. The chapter concludes by mapping the environment for power constructed in the discourses of workplace health.

Foucault's history of truths is seated within a triangle of knowledge, subjectivity and power. These three dimensions consist of techniques of discourse, self and government constructing government as a function of relations of power. Bob Dylan's song "George Jackson" (1991) introduces the idea that in our daily lives we constrain and direct, or can be constrained and directed by others. The lyric sets up the idea that power is a normal part of daily relations, separate from laws governed by the state. Foucault posited a similar idea, suggesting that the 'instruments of

government, instead of being laws, now come to be a range of multiform tactics. Within the perspective of government, law is not what is important' (Foucault, 1978: 222). Rather than strictly examine constructions of overt power between the state and the individual, governmentality investigates how 'governments, corporations, and organisations generate various kinds of compliance in persons themselves' (Cawley & Chaloupka, 1997: 4). Lupton suggests that 'techniques and strategies of governmentality emerge not simply from the state', but locates 'regulatory activities at all levels of social institutions, from the family, the mass media and the school to national bureaucratic agencies such as parliament, the legislature and the police force' (1995: 9-10). Foucault suggested investigation should be directed away from the juridical forms of sovereign power toward the 'domination and the material operators of power, towards forms of subjection and the inflections and utilisations of their localised systems, and towards strategic apparatuses' (Foucault, 1980: 102).

Traditional social research investigates power from Liberal, Structural and Marxist perspectives, understanding power as either 'unidirectional/top-down instrument of the dominant elite (Liberalism), or an economic class (Marxism), or an imposed structure (Structuralism) over a largely passive social body' (Mehta & Darier, 1998: 3). Foucault's conception suggests 'power relations of inequality and oppression are created and maintained in more subtle and diffuse ways through ostensibly humane and freely adopted social practices' (McNay, 1994: 2). The concept of governance views power as far more pervasive and subtle, operating within 'mundane and humble practices, techniques, and forms of practical knowledge which are often overlooked in analyses that concentrate on either political systems or political thought' (Dean & Hindess, 1998:8).

Petersen suggests that ‘class and the nuclear family no longer determine one’s personal outlook, lifestyles, ideologies and identities’, but instead ‘individuality in late modern society is largely played out within the constraints of “secondary agencies and institutions”, principally the labour market and in the arena of consumption’ (Petersen, 1997: 191).

The working population is openly governed by forms of labour market knowledge such as total quality management and shareholder value. These forms of knowledge prescribe specific forms of worker and manager behaviour. Each has specific tools and calculative technologies such as budgets, audits, and other methods for evaluating ‘human, natural and financial resources, in terms such as risk, profit, profitability and danger’ (Dean & Hindess, 1998: 8). Workplace health discourses provide a less overt form of governing, providing ways of knowing, training and regulating the population. Health is ‘a consumed and ascribed value, its marks are visible, so it can be displayed and, up to a point dissembled’ (Fox, 1993: 26-7). Workplace health provides an avenue to constituting and directing the individual through discourses of health.

8.2 Governmentality: Conducting Conduct Through the Discourses of Workplace Health

Foucault described government as “the conduct of conduct”, ‘the manner in which individuals, groups and organizations manage their behaviour. The conduct to be governed may be one’s own or that of others: of the members of households or of larger collectivities such as the population of a local community or state’ (Dean & Hindess, 1998: 3; Gordon, 1991). Foucault provides an in depth summary of the possibilities offered by defining governmentality as the study of the conduct of conduct:

> Perhaps the equivocal nature of the term *conduct* is one of the best aids for coming to terms with the specificity of power relations. For to "conduct" is at the same time to "lead" others (according to mechanisms of coercion which are, to varying degrees, strict) and a way of behaving within a more or less open field of possibilities. The exercise of power consists in guiding the possibility of conduct and putting in order the possible outcome. Basically power is less a confrontation between two adversaries or the linking of one to the other than a question of government. This word must be allowed the very broad meaning which it had in the sixteenth century. "Government" did not refer only to political structures or to the management of states; rather it designated the way in which the conduct of individuals or of groups might be directed: the government of children, of souls, of communities, of families, of the sick. It did not only cover the legitimately constituted forms of political or economic subjection, but also modes of action, more or less considered and calculated, which were destined to act upon the possibilities of action of other people. To govern, in this sense, is to structure the possible field of action of others. The relationship proper to power would not therefore be sought on the side of violence or struggle, nor on that of voluntary linking (all of which can, at best, only be instruments of power), but rather in the area of the singular mode of action, neither warlike nor juridical, which is government.
>
> (Foucault, 1982: 220-1)

Examining the conduct of conduct illuminates relations 'between self and self, private interpersonal relations involving some form of control or guidance, [and] relations with social institutions and communities' (Gordon 1991: 2). The conduct of conduct is achieved in a network of discourse. The 'kind of subject or person we are in different places and times depends on the rules, discourses and ideas in a culture which determine what can be said, thought and done, and on the social and historical context in which we live' (Danaher et al., 2000: 123-124). For Foucault, power is not only negative, but also a productive and creative force:

> When one defines the exercise of power as a mode of action upon the actions of others, when one characterizes these actions by the government of men by other men – in the broadest sense of the term – one includes an important element: freedom. Power is exercised only over free subjects, and only insofar as they are free. By this we mean individual or collective subjects who are faced with a field of possibilities in which several ways of behaving, several reactions and diverse comportments may be realized. Where the determining factors saturate

> the whole there is no relationship of power; slavery is not a powerful relationship when man is in chains.
>
> (Foucault, 1982: 220-1)

To enable an analysis of governmentality, power needs to be examined as a cogent part of Foucault's knowledge-subjectivity-power triangle. Heikkenen et al., (1999) summarises the domain of power into three techniques of government, related to the three corners of the knowledge-subjectivity-power triangle. The power focus on governance examines the ordering of forces, the knowledge corner investigates the disciplining practices of knowledge, and the subjectivity element examines individualizing practices of power. For Dean and Hindess:

> The study of government thus entails the study of modes of reasoning. This is to emphasise the 'rational' dimension of government in which various forms of knowledge are made to function in a multiplicity of ways. Thus, certain knowledgeable discourses (from psychiatry to social policy, economics to public health) represent and, in that sense, constitute objects of knowledge (AIDS, unemployment, youth, the national economy), confer particular identities and agencies on political and social actors (the dangerous individual, the delinquent, the active jobseeker, the community), and make identifiable problems to be solved (youth unemployment, the spread of disease, low national efficiency or international competitiveness)…Government exists in the medium of thought, of mentalities or rationalities of government. It is shot through with the multiple and heterogeneous ways of making the world thinkable and calculable.
>
> (Dean & Hindess, 1998: 9)

Analysis is driven by developing each corner of Foucault's triangles, leaving a framework for the analysis of government:

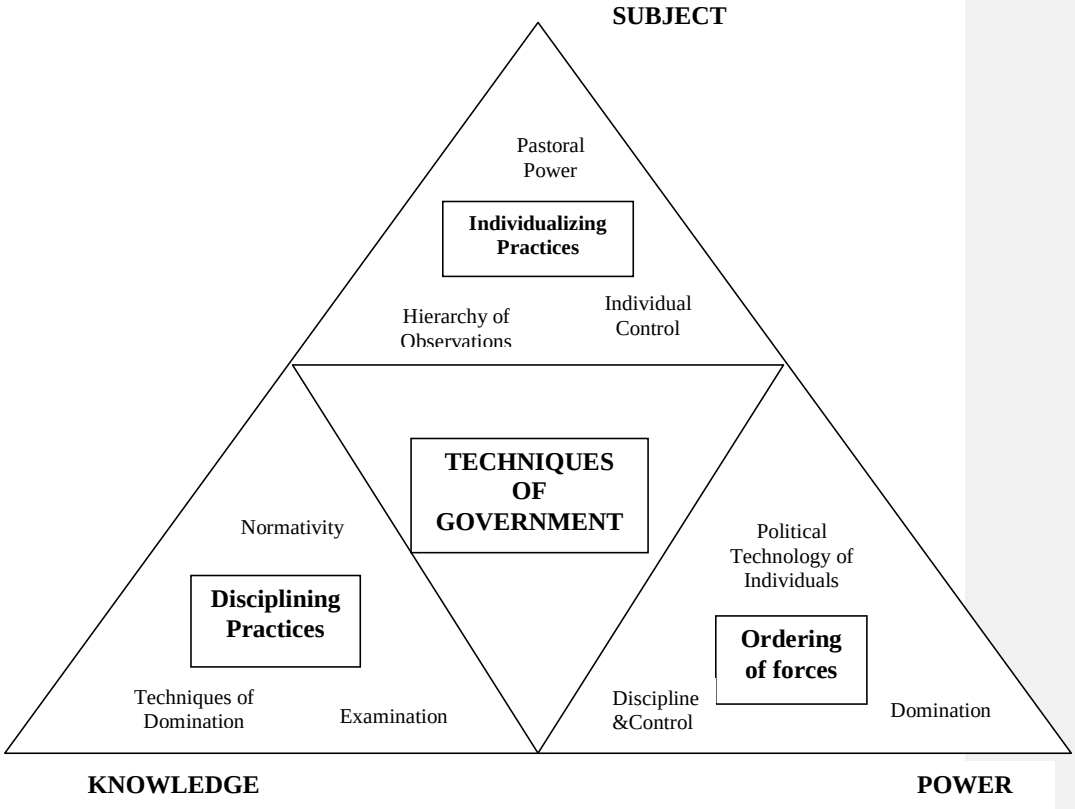


Figure 8.1. Foucault's triangles

Adapted from Heikennen et. al., 1999: 149.

8.3 Description: Individualizing Practices, Making the Workforce Visible

The individualizing practices of workplace health discourse opens for analysis the relationship between self and power. Analysis begins with a hierarchy of observations; with what can be seen, 'with *what* we seek to act upon, the *governed or ethical substance*' (Dean, 1999: 17; *original emphasis*). Discourse 'not only restricts,

limits and arranges what can and cannot be said about the phenomena within its domain; it also empowers (and disempowers) certain agents to create representations, and thereby to authoritatively pronounce on the shape and form of the world' (Prior, 1997: 71). Foucault (1982) describes this as the structuring of the fields of possible action for others. For Labyrinth a number of aspects of the worker population are made visible, brought onto the field of play and problematized in the discourses of workplace health.

The discursive practices of occupational health as safety, the corporate athlete, risk, and the glory of technology, begin with the problem of the workers health. The discourses of workplace health provide the possibilities for assessment, subjugation to self and professional assessment, a reworking of the public and private self, and the linking of employees health to the health of the organisation. Worker's behaviour is a risk to the individual and the company, regardless of time or space, blurring the line between working and private life. The assessment of the employee by technical experts and resulting changes in behaviors are described by Sam:

> *SA: How did you find the screening and things?*
> *Sam: It was good, it was really good, that was a long time ago and I remember asking somebody if we were going to have another one because I remember getting weight and blood pressure and all that sort of stuff checked. I thought that was a really good idea, and I think it would be a good idea also to have eye screening, because we look at a computer all the time, I've got glasses now and I've never had to wear them before. Just because at the end of the day if your looking at a project plan all day long, the optometrist said to me if you stare at the screen its really not very good for your eyes. He gave me some glasses to wear them while I look at the computer.*
>
> *P20: Interview 1 with Sam.txt - 20:24 (146:154)*

Occupational Health and Safety discourse establishes the individual as subject to the physical hazards of the workplace. The employee's behaviour is brought into question insofar as it relates to complying with prescribed standards to maintain safety. The working population is constructed as a danger through their physical

presence and physical behaviour. The worker as individual is negated through generic codes of conduct for the handling of specific chemicals and specialist machinery. The OH&S discourse gains its strength from its embedding in professional knowledge. Blewett and Shaw suggest that 'OH&S practitioners tend to hold their considerable, hard won knowledge closely. While they may be conscious and diligent in the performance of their duties, for them the adage "knowledge is power" is a truism' (Blewett & Shaw, 1996: 50).

For OH&S discourse, the governed substance is the physical body and its relationship to the working space. Health is a function of physical safety, endangered by elements of the working environment including mechanical hazards and chemical exposures. The focus on hazards and exposures allows the body to be governed by placing physical barriers between dangerous elements of the environment and the worker. Health is external to the worker, bound in the relationship of the body to the physical workplace. The professional knowledge positions of OH&S practice subjugate the worker to safety knowledge providing for central assessment. The responsibility of the individual to maintain a physical distance from hazards is visible through professional and self-assessment. In a quote used in a previous chapter, Amber describes the main areas of concern for health and safety practice:

> *slips and trips is probably the most obvious of ones, machine guarding, that's another one we have conveyors in the warehouse in Sydney so that's really a safety issue.*
>
> *P33: Interview 1 with Amber.txt - 33:49 (273:276)*

The main health problem represented in occupational health as safety discourse is the interaction of the working population with the working environment. *Slips and trips* and *machine guarding* locate the physical body in danger from the physical environment of the workplace. Other health issues, like back pain, are also written by

OH&S discourse as products of the relationship of bodies to space. Amber provides an example describing the movement of bodies (ergonomics), as the company's biggest health issue:

> *probably the biggest health issue is back care or back pain and that's low back pain and a whole different type and range of back problems which are from manual handling, poor manual handling which is lifting pushing and pulling. Backs are probably the biggest issue and then we'd have a smaller proportion that would be poor ergonomics, so that could be neck pain, you know all health issues.*
>
> *P33: Interview 1 with Amber.txt - 33:53 (292:299)*

The interaction of the working population and physical environment is made visible in occupational health and safety discourse. This is reproduced throughout the company in the form of employee training. Occupational health nurse, Chloe, highlights the responsibility placed on the individual for self-knowledge and action through risk discourse. Training urges the workforce to be self-assessing and alter undesirable conduct as a normal Labyrinth worker:

> CHLOE: *We look at manual handling training, often that comes about because an individual has hurt themselves, so what I get is a referral from our health and safety specialist Amber, who says 'look there's a group here who need training, and go do it'. It involves also a risk management type of exercise which helps people involved to identify the risks and get them thinking a bit more, we can't do it for them they've got to do some thinking for themselves as well. There's also just orientating people to the organization, when they come in, to health and safety and what is involved in Labyrinth.*
>
> *P38: Interview 2 with Chloe.txt - 38:52 (31:44)*

Fitness and lifestyle discourse problematizes employee behaviour at all times, regardless of their physical presence in the workplace. Lifestyle discourse seeks out the behaviour of the working population in terms that blur the traditional barrier between the home and the workplace. Lifestyle opens for analysis aspects of the individual's behaviour previously unavailable to the workplace like diet, sleeping

patterns, and bowel movements. An example is found in the employee health assessments from the exercise prescription booklet:

BACK END INDEX
Traditional ways of looking at diet have tended to focus more on what's going on at the front end of the system. However, if things are ticking over nicely at the back end of the system, if food is moving through the body efficiently, then there is a good chance that you've got a good, high fibre, low fat, **high water** content diet. 'It' should be loose, floating and happen 2 or 3 times a day.

P32: 05-Exercise Prescription.txt - 32:59 (1342:1350)

Fitness and lifestyle discourse makes visible “style of life” as the substance to be governed. Fitness and lifestyle discourse relies heavily on the rationalities of risk discourse as the driving factor for action. The behaviour of the working population is made subject to professional assessment, rationalized against the myriad of threats to health inherent in lifestyle. This discourse governs actors toward a health that cannot be fully known, requiring continual submission to assessment against the potential ill effects of lifestyle.

Risk discourse also problematizes the behaviour of the working population. Behaviours identified as ‘risky’ within lifestyle discourse are further scrutinized as elements that contribute to poor health. Through risk, employee’s behaviour is also problematized as a risk to the health of the organization. The governance of behaviours problematized in risk to productivity is illustrated in the Johns Health feedback to the organization:

Five Star occupational Health and Fitness
This is our general estimate of the risk of employing people. Some items are weighted more than others.

The profile takes into account

- the level to which people are focussed on self, health and fitness
- musculo-skeletal risk
- constitutional fundamentals - cholesterol and blood pressure
- smoking behaviour - as a risk to health and a time waster
- stress and career satisfaction.

P24: 01-ACME CORP summary of occ health and fitness.txt - 24:42 (275:287)

For risk discourse, the governable substance is the worker's behaviour regardless of space. Behaviour is seen to be the source of poor health, seeing the behaviour of the working population as a continuous source of risk. Risk discourse places behaviour on a graded hierarchy between unhealthy behaviour and behaviour that is not detrimental to health, making visible the entire population at all times. This discourse steps beyond lifestyle discourse to include age, gender, and genetics. The measurement and use of these measures to make decisions is de-politicized in the ethical quest for health. The worker is at risk whether they are present or absent from the workplace. Risk discourse conducts the population to submit continually to professional and self-assessment to avoid ill health. Simultaneously, there is no possibility of escape from the risks associated with style of life or behaviour.

The Glory of Technology discourse directs the employee to regulate health using personal computers and on-line information services. Health information is collected and stored electronically. The subject is constituted within databases, taking:

> place partly beyond the conscious action of those whose data has been garnered…Thus when personal data are specified in a classificatory grid – such as those used by [workplace health providers], taxation departments or marketing companies – subjects are being 'interpellated' or 'hailed' in a particular way.
>
> (Lyon, 1997: 31)

The employee's health is conducted in the ether of information technology via a convergence between human and machine. The first step in the event of a health problem is for employees to consult an electronic database. This provides professional knowledge that employees should ascribe to accordingly, shown in this comment by Amber:

> *if an employee has an ergonomic issue the first thing we do is point them to fact of the document so they can do a self assessment using a document that exists on HR assist. We also give them a copy of the document, like our standard response is we give them the document and then we refer them to HR Assist.*
>
> *P10: employee perceptions.txt - 10:1 (14:19)*

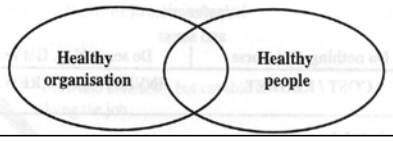
8.4 Interpretation: Creating the Self-Assessing/Self-Educating Workforce

That which is made visible can then be 'constituted as problems, subject to incessant public discussion and discourses of regulation' (Lupton, 1995: 11). The process of governmentality heralds a move away from government by the state to self-government. Each member of the working community is equipped with techniques encouraging them to take on conduct valuable and 'normal' within the working community. Workers are conscious, ethical beings who don't need to be controlled, but rather 'see the realization of their personal objectives as synonymous or congruent with those of the organization and who therefore regulate themselves … [through] self-surveillance' (Usher, 1999: 3). This quote from the John's Health program, used in a previous chapter, provides an example of the congruence between organizational and worker health goals:

Our approach to OH&F is underpinned by the belief that people who are fit and healthy, who have a clear idea of what they want for their lives and their careers, and who are on the way to getting what they want, feel good, and the risk of employing them is low. They contribute to the vitality and productivity of themselves and their organisation.

PERSONAL AND CORPORATE WELL-BEING

Things go well at work when you're going well. When you're not going well, the personal cost is high and so is the cost to the organisation.



P25: 02-Back and neck man.txt - 25:6 (79:87)

This form of pastoral power governs the worker's health through 'infiltrating regulation into the very interior of the experience of subjects. This process involves subjects 'educating' themselves into accepting, valuing and working to achieve alliance of personal and organizational objectives – where subjective experiences are simultaneously shaped and uniquely one's own' (Usher, 1999:3). The reflection upon the moral, productive/economic and bodily self achieved through workplace health discourse aims to govern the individual towards becoming a normal member of the working population. For those who suffer poor health a moral judgment is applied, suggesting the unhealthy are guilty of neglect:

You have two great assets, your body and your mind. Both crave and continually work toward the achievement of good health. To achieve poor health you really have to neglect your body and your mind.

P25: 02-Back and neck man.txt - 25:8 (123:125)

One site where the working population is introduced to expected norms is in employee training sessions. In describing the management of health and safety throughout the company, Amber provides an example of production of the responsible individual via health:

AMBER: *In this company I have to deal with our individual sites and how we manage health and safety*.

SA: *On a site by site basis?*

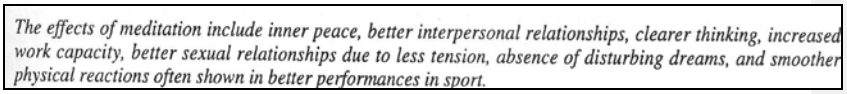
AMBER: *Exactly, get people to understand the basic principle first because they have no appreciation of how you manage risks.*

SA: *So education would be the major issue do you think?*

AMBER: *That's right, well in this company. Education to really understand what their responsibilities are and then education on what's available for them to actually meet their responsibilities.*

P37: Interview 2 with Amber 06.txt - 37:59 (58:66)

Those who are individualized and separated from the normal are required to practise the pastoral form of self-renunciation (of bad habits, poor decisions etc.) revealing their failings to the discipline of workplace health. The confession of poor behaviours is similar to pastoral confession, where the confession of sins to a pastor helped bring absolution. Modern pastoral power is exercised through confessions of health sins to workplace health professionals. Dean (1999) shows that individuals are normalized in relation to scientific knowledge of the health of populations rather than theological or religious knowledge. The coercive, disciplinary practices of traditional pastoral power acted as a 'model for practices occurring throughout the social body, in institutions such as schools, workhouses and army barracks' (Danaher et al., 2000: 108). Pastoral power provides a series of techniques allowing individuals 'to work on themselves by regulating their bodies, their thoughts and their conduct. These processes, Foucault argues, are offered to us as avenues through which we can achieve a degree of perfection, happiness, purity and wisdom' (Danaher et al., 2000: 128). A good example is the prescription of meditation for health in the employee's health booklets:


The effects of meditation include inner peace, better interpersonal relationships, clearer thinking, increased work capacity, better sexual relationships due to less tension, absence of disturbing dreams, and smoother physical reactions often shown in better performances in sport.

P32: 05-Exercise Prescription.txt - 32:40 (1032:1037)

8.5 Interpretation: Constructing the Ethical Self – The Workforce and Individual Control

Petersen sees the 'demonstration to oneself and to others of one's ability to care for oneself [as] evident in such risk-minimization practices as meditation, moderation, abstention, attention to diet, and exercise' (1997: 199). The individual is made the good worker through the knowledge and power of the discourses of workplace health. Similarly the bad worker is 'problematic as a consequence of his/her resistance to discourses (on what a good [worker], patient or a good citizen should be like)' (Fox 1993: 32). Through self-knowledge, the individual becomes subject to the field of visibility constructed in workplace health discourse. The worker thus takes:

> responsibility for the constraints of power; he makes them play spontaneously upon himself; he inscribes in himself the power relation in which he simultaneously plays both roles: he becomes the principle of his own subjection.
>
> (Foucault, 1977: 202-3)

Self-knowledge involves determining the truth about the self, with a view to achieving perfection. Danaher et al. (2000) follow Foucault in locating this in the Greco-Roman practice of self-knowledge, where 'it was the duty of the individual to try to perfect the self – not only for self-improvement, but for the betterment of society' (Danaher et al., 2000: 199). Caring for the self is an ethical, rather than selfish, project. And the goal was to achieve 'a complete and full life for the individual and, in the process, for the community' (Danaher, 2000: 130). This also provides the techniques for workers to govern each other. Each employee is provided with the standards expected and judges themselves and other against these. The moralizing judgment results in a marginalization of those who become sick, and the elite being considered the healthy norm.

Governance examines 'cases in which governor and governed are two aspects of the one actor, whether that actor be a human individual or a collective or a corporation

(Dean, 1999: 11). In this way, 'power is generally exercised not coercively, but subtly and routinely. The most effective use of power occurs when those with power are able to get those who have less power to interpret the world from the former's point of view. Power is thus exercised through consent rather than coercion' (Mumby & Clair, 1997: 184). Healthy behaviours are presented as good for all, ascribed to for the common good. Physical activity is one behaviour that is produced as an unquestioned good:

BEING FITTER = FEELING BETTER
If you want to feel better, becoming more physically active is a good place to start.

The most significant benefits of being fitter (whether it be aerobic, strength, or flexibility exercise) are psychological.

I train, therefore I am.

P32: 05-Exercise Prescription.txt - 32:17 (235:241)

The importance of physical activity and health-promoting behaviour is produced as constructive of the self at the most basic level: *I train, therefore I am.* Health behaviour reflects personal values and integrity, presented in the employee Back and Neck Pain Management book:

3. Integrity
If you want to be fit and healthy; if you do the things that make you fit and healthy; and if you become fit and healthy, you feel good. You feel good from being in integrity with yourself. You automatically have feelings of satisfaction, pleasure and joy.

P25: 02-Back and neck man.txt - 25:60 (693:697)

Cawley and Chaloupka (1997) describe workers motivated not through a dominant will but through a perception of common benefit. This creates a self-regulated, or ethical individual, for whom discipline and efficiency are 'normal', essential parts of

a worker's self-image. 'Obviously, the most efficient disciplining machine is the one the disciplined apply to themselves' (Mehta & Darier, 1998: 10). Discipline in subscribing to health-promoting behaviour is advocated in the exercise prescription book for employees. The worker is asked to program themselves to achieve healthy conduct:

LOOK AFTER YOUR *self*
Your ability to find time for regular, physical activity is the most potent symbol of your ability to give back to your *self*.

Amongst other things, your *self* is craving physical activity, of both the vigorous and more relaxed types.

	Vigorous physical activity	**Relaxed physical activity**
Effect	Burns up stress chemicals Cools down an over-stimulated sympathetic nervous system	Warms up an under-stimulated para-sympathetic nervous system
Includes	• brisk walking, particularly up hills • Shuffling, jogging, running • cycling • some sports activities • swimming • canoeing and rowing ...	• ambling, walking • tai chi • yoga

P32: 05-Exercise Prescription.txt - 32:19 (575:582)

The employees are exhorted to look after themselves, to undertake the project of the self for the common good. Employees are asked to completely subscribe to programs themselves and remain vigilant in their push towards the healthy norm:

Gurdjieff said it's because we 'fall asleep' and lose sight of the goal. However, staying 'awake' all the time is another big ask, which is why you need to program yourself so you are able to maintain your exercise program even when you lose focus. One of the ways in which we will assist you to tackle this problem is to introduce you to meditation and inner mental training as a means of programming your subconscious to doing some of the hard work for you. Take the lead from Adolf Hitler who said '*I move forward to my goal like a sleep walker*'.

Programming your self and having an exercise ritual is a key to keeping on track. Unfit people think that fit people find it easy to stay motivated. Robert de Castella said *'The hardest thing I ever had to do was get my shorts and running shoes on and get outside the front door.'* But he did it and continued to do it often enough to become a world champion. It was part of his daily ritual. He still does it.

P32: 05-Exercise Prescription.txt - 32:23 (622:626)

Health as fitness and risk discourse construct healthy, risk-free behaviour as normal. The good worker can program their behaviour, attaining perfection as a matter of inner strength. It is normal to be highly disciplined, never sick or injured,

maintaining excellence as a part of normal living. The worker's relationship with self is one of autonomy, personal responsibility and self-management towards excellence.

> Through the discourse of excellence, technologies of work (power) and technologies of self (subjectivity) become aligned…One consequence of this is the blurring or dedifferentiation of work and non-work aspirations and identities. The discourse of excellence links the organizationally desirable (more productivity, flexible working, increased efficiency and profitability) with the personally desirable – not just being a better worker but being a better person.
>
> (Usher, 1999: 4)

Competent self-management is a constant in private and working life. Health at work reflects the integrity of the individual both at work and during private life. In learning what it means to be 'healthy', workers also agree to manage their own health:

BACK MANAGEMENT CERTIFICATE

I, ...

have taken part in a back management seminar and assessment program and have been given the knowledge to competently maintain my body in a condition that minimizes the risk of musculo-skeletal dysfunction in the workplace.

Musculo-skeletal risk factor score .....

RISK Low ❒ Medium ❒ High ❒

Low risk, score above 70. Medium risk, score between 50 and 69. High rish score below 50.

.....
Employee

.....
For Five Star Occupational Health and Fitness

.....
Manager

Date ...../...../.....

P25: 02-Back and neck man.txt - 25:87 (1023:1032)

The assessment of risk scores allows a comparison between the documented score and the healthy norm. Comparison of health scores to a normal provides a disciplining impetus towards bringing the individuals measure closer to the normal. Judgments made in health are accompanied by value assessment:

We rate the group profile as very good. We believe that a score of 70 is acceptable. Those who scored above 80 present a low risk to the organisation of presentism, absenteeism and workers compensation. Those scoring less than 70 are able to reach 70 by looking after their diet and exercising.

P24: 01-ACME CORP summary of occ health and fitness.txt - 24:42 (282:287)

8.6 Interpretation: Disciplining the Workforce

Disciplining practice looks at how the worker is to be assessed through health discourses, focusing on the role of knowledge in government. This:

> means both being subjugated under a certain specialized domain of knowledge and under a certain regime and order. Disciplining refers not so much to an increase in obedience and allegiance as to ordering and organizing the mutual relation between basic relationships so that they become more sophisticated, rational and economical as they are increasingly examined. Discipline may not be identified either with an institution or with an apparatus; it is a type of power, a modality for its exercise compromising a whole set of instruments, techniques and procedures.
>
> (Heikennen et al., 1999: 147)

This 'physics of power' involves examination, documentation and moves toward normality. Examination is that which is used in 'modern institutions like hospitals and the schools', making it possible to 'transform an individual biography into the description of an individual by his/her numeric relation to the normal, characterized by features, measures and deviations' (Heikennen et al., 1999: 148). The occupational health and fitness summary is one example at Labyrinth, making visible individuals and the workforce as a whole:

ACME CORP
SUMMARY OF OCCUPATIONAL HEALTH AND FITNESS ASSESSMENT RESULTS
April 1999

At the conclusion of the ACME Corp health assessment program, is pleased to present a statistical report for management which includes a graph of every parameter measured.

This provides management with a very good audit tool for evaluating the health and fitness, not only of individuals but also of the organisation.

We believe it provides a most comprehensive analysis for reflection and action by management at all levels.

P24: 01-ACME CORP summary of occ health and fitness.txt - 24:7 (97:104)

The workforce is assessed locally: by site, across states, nationally and globally. Assessment is undertaken by the parent company through international health audits, providing a normalizing pressure on a global scale. Amber describes the scale of the audits and the standardizing focus of the company worldwide:

> SA: *Audits?*
>
> AMBER: *Yeah, so we've had 25, we're doing reasonably well with them so we're quite happy but it's been a lot of work to get through that. So that's been my focus, so at the end of the day we've got to pass that and that's got to be pretty focused on getting that. We had at least 25 sites we've done this year and we're doing New Zealand, I think they've got about five or ten that they're doing there as well. It's a corporate, basically it's a new initiative from New York that basically they're doing this worldwide, apparently they're doing all of the Asia Pacific as well and they've done 90 sites in Japan and you know its huge absolutely. I guess that comes down to the company saying we'll have one standard for the company worldwide.*
>
> *P33: Interview 1 with Amber.txt - 33:64 (335:344)*

The organization is evaluated as the sum of its parts, from a comparison between nations at one end of the scale and a comparison between individuals at the other. The disciplinary power of assessment results in complex interplay of that which is visible and that which is invisible. The individual is a specific entity within workplace health discourse constructed from each of the health measures, elements made visible in assessment providing comparison and surveillance in a subjective gaze:

> The way in which people are made subject to various physical, academic and psychological examinations; the way in which people are required to carry identity papers; the way in which females are characteristically valued in terms of their looks: all these are examples of the disciplinary power of the gaze.
>
> (Danaher et al., 2000: 59)

The working population is made subject to the gaze of workplace health discourse, constantly examining the behaviours, actions and feelings of themselves and others. The 'most economical form of surveillance is, of course, self-surveillance. Once

people have become docile, they continually check to make sure that they are not doing things that are unhealthy' (Danaher et al., 2000: 76).

8.7 Interpretation: Documenting the Workforce

Techniques of documentation 'bring individuals into the classifying and serializing, categorizing and comparing field of knowledge. The individual is placed in the systems of social exclusion through expanding documentation' (Heikennen et al., 1999: 148). Gordon describes a police that exists in endless lists of measurement and classification. For workplace health discourse, the employee is classified in health, espousing the governed reality, 'a knowledge of inexhaustibly detailed and continuous control' (Gordon, 1991: 10). Labyrinth utilizes information technology as a particular method of handling the data kept on its employees. The company's environment and well-being policy rationalizes an increase in record keeping through the glory of technology discourse:

> *The Well-Being of People - Accent on information*
>
> *In addition to organizational and system changes, new ways of presenting required and useful information were introduced in 1998. After converting four million documents from paper to electronic images, an electronic medical folder is now in use at all Labyrinth U. S. sites. The folder makes records more accessible to Labyrinth physicians nationwide to improve collaborative decision-making.*
>
> *P26: 08-environment and wellbeing.txt - 26:27 (267:270)*

Petersen (1994) and Giddens (1993) discuss the role of surveillance in organizations, detailing both the overt supervision of activities and the more subtle forms of surveillance, which 'consists in keeping files, records and case-histories of employees' (1993: 300). Surveillance of the employee provides the juncture where the problematized aspects of workplace health can be bought together with the conduct of the individual. Surveillance provides detailed description of the conduct of the individual, created and understood within the discourses of workplace health.

Surveillance can construct problem behaviour in health where there was previously none. The Labyrinth employee health assessment for stress re-enforces the need for the acting subject:

When we get stressed, the stress is relayed to the body via the autonomic nervous system. Whilst you may not even realise that you are stressed until you complete this questionnaire, your body does, and it has the means to tell you, providing you are awake and listening. It does not matter whether the causes of your distress are from conscious or unconscious sources, the body will pick it up.

Circle the number appropriate to the degree to which you experience the symptoms listed below. The greater the symptom, the higher the score. Score '0' if you never experience the symptom. Total the score at the bottom of the page.

	None		A little			A fair bit			A lot		
1. Headaches, migraines	0	1	2	3	4	5	6	7	8	9	10
2. Lack of energy and vitality	0	1	2	3	4	5	6	7	8	9	10

P25: 02-Back and neck man.txt - 25:49 (527:530)

For normal healthy people, the symptoms of stress score on the previous page will be less than 15. They experience very few, if any of those symptoms. On the other hand, if you're stressed, it is often the case that the first signs will be physical. The reason is that anxiety stimulates autonomic nervous system dysfunction and lack of physical fitness exacerbates it.

P25: 02-Back and neck man.txt - 25:52 (569:570)

The possibilities for techniques of documentation provided by the glory of technology means information presented on-line is valorized instantly. Consequently, advice to employees can be given electronically, with the expectation of being accepted. This provides another avenue to communicate the responsibilities of the normal worker at Labyrinth:

> *Two safety workbooks were updated in 1998. One covers the responsibilities of Labyrinth managers to provide a safe and healthful workplace, to provide safety and health training, and to report work-related injuries.*
>
> *P26: 08-environment and wellbeing.txt - 26:27 (270:276)*

> *We've developed a health and safety manual in that so it's accessible to everyone electronically.*
>
> *P 8: Health Perceptions.txt - 8:4 (39:40)*

8.8 Interpretation: Normalizing the Workforce

Surveillance, examination and documentation provide a normalizing discipline within workplace health discourse. Discourses actively produce 'scandalous identities or subject roles, such as delinquent, who serve as the 'other' against which normality can be measured' (Danaher et al., 2000: 61). This disciplinary power acts upon and through the individual, constituting the individual as a subject of knowledge. Normalization is a central disciplinary technique:

> in the specific sense of creating or specifying a general norm in terms of which individual uniqueness can be recognized, characterized and then standardized. Normalization in disciplinary sense thus implies "correction" of the individual, and the development of a causal knowledge of deviance and normalization.
>
> (O'Malley 1996: 189)

Normalization requires individualization to divide the mad and sane, the criminal and good, and, for Labyrinth, the healthy and the unhealthy. The Labyrinth assessment opens space for behaviours and subjectivities to be made normal or deviant. The assessment procedure also provides a normalizing discipline of what is normal and not normal. This is highlighted in the value Herbert Johns places on employee assessment:

> *I think when I give them that mind and body profile I think that does make people stand up and take stock, stand up and take notice because they don't realise that some people don't get headaches, don't have sore shoulders, they sleep like kittens, they've got lots of energy. So when you say that normal healthy people get less than 20 on that profile and you've got 130 and the key recipe is getting fitter, some of them, for the first time are confronted by that and they start to take notice.*
>
> *P39: Interview 2 with Herbert Johns.txt - 39:8 (45:50)*

Health constructs a constant gaze, both internal and external, reminiscent of Bentham's Panopticon. The one-way observation system of the Panopticon meant that prisoners were continually under threat of observation but were unaware when observation was occurring. Consequently prisoners would behave as observed whether under surveillance or not. Under this pressure, each prisoner:

> would have to learn to practice self-control to behave as good prisoners who follow prison regulations. Despite the absence of institutionalized physical violence against the prisoners, the constant gaze has normalizing effects on not only the conduct but their self-perception, personality, and way of seeing the world.
>
> (Mehta & Darier, 1998:.2)

The Panopticon reflects a structure designed for the normalization, through surveillance, of targeted (visible) populations. This form of power, rather than being oppressive, creates a state of continual awareness and anxiety in the worker under the threat of continual assessment and judgment against the normal (Andrews, 2000). Judgment and assessment is achieved through providing a numerical representation of the individual, providing a comparison with the suggested norm. The occupational health and fitness summary does this through scoring employees on various scales. Two examples are given here:

RATING
Overall we rate the organisation's level of occupational heath and fitness as **high** and have awarded a rating of 4 on our five point scale. The number of people scoring 70 or more on the Occupational Health and Fitness profile was **excellent**.

P24: 01-ACME CORP summary of occ health and fitness.txt - 24:2 (65:67)

Based on this graph I rate the group as **moderately stressed**, having to put up with more than usual discomfort from insomnia, sore shoulders, crook backs, headaches etc. I put scores over 50 on this questionnaire as scores that are too high and which are drawing attention to the need to spend more time on one's self and get more vigorous physical activity.

In the best group we have seen, scores peaked in the 20's.

P24: 01-ACME CORP summary of occ health and fitness.txt - 24:18 (167:170)

These scales provide a counterpoint for the judgment of the individual. Measures taken can be used to describe the workforce as within or outside the normal range. Comparisons also occur with elites, as described in the occupational health and fitness summary of chemical intake at Labyrinth:

Chemical intake

1. Only one serious smoker. That's good and well below the community average of about 25%.
2. The alcohol level is very good, though as I mentioned in my talk I see too many senior executives who have '3 clarets a night'.
3. Caffeine intake is high for some people. Recommend encouragement of decaffienated coffee and tea products throughout the organisation.
5. Confectionary intake high for some people.

Overall score was very good.

P24: 01-ACME CORP summary of occ health and fitness.txt - 24:26 (207:215)

Another example at Labyrinth is the constant surveillance provided by information technology. Individual assessment is conducted on-line for health, safety, ergonomics and so on. Information technology allows Labyrinth to construct a panopticon around its employees. Mehta and Darier (1998) argue that the Internet provides ‘instances where employees in the private and public sectors, students, and others have been observed by their respective employers and administrations, thus creating mini-panopticons throughout the Internet’ (1998: 3). The Internet provides a new method for continuous evaluation. The monitoring of product purchasing, financial transactions and health records is paralleled in the use of employee health records. Further ‘increasingly sophisticated new data-processing technology enables the effective sorting of large amounts of information’ (Mehta & Darier, 1998: 3).

8.9 Interpretation: Binding the Workforce in Relations of Power

The ordering of forces examines how the modern worker is bound in the forces of workplace health, analysing 'how power as power is exercised as a tactical and strategic game from innumerable points; from below, imminently in other relationships, both intentionally and non-subjectively' (Heikkenen et al., 1999: 146). The ordering of forces relates to the power in:

> a total structure of actions brought to bear upon possible actions; it incites, it induces, it seduces, it makes easier or more difficult; in the extreme it constrains or forbids absolutely; it is nevertheless always a way of acting upon an acting subject or acting subjects by virtue of their acting or being capable of action. A set of actions upon other actions.
>
> (Foucault, 1982: 220)

For workplace health, the governing forces are ordered around the health of the working population. This ordering valorizes self-assessment, individual responsibility and congruence between corporate and individual ideals. The goals of the organization and the individual are continually linked in the discourses of workplace health. An example is provided in the description of the ill effects of back injury:

> There are high costs to pay, personally and organisationally for employees and organisations that choose to do nothing. For individuals the cost is in a diminished quality of life. For organisations it is in lower levels of productivity and higher costs associated with presentism, absenteeism and workers compensation.

P25: 02-Back and neck man.txt - 25:29 (248:252)

Discipline is achieved through constant surveillance and the provision of norms in interaction, personally and electronically. Assessment is maintained in lists and employee health reports to construct the normal worker at Labyrinth as a healthy, self-maintaining individual. This disciplining relies on various forms of communication, including managerial decrees, group e-mails and company health

initiatives. A new mode of communication is provided through the glory of technology, once more linking employee's actions to the advancement of the company:

> In its drive for continual improvement, Labyrinth has implemented a new Well- Being Management System (WBMS). This system provides the framework for Labyrinth to effectively plan, communicate and implement new or existing health, safety and wellness programs and services, then review, verify and report on their effectiveness. In this undertaking, employee well-being is recognized as a fundamental value that is critical to Labyrinth 's continued business success.
>
> *P26: 08-environment and wellbeing.txt - 26:37 (215:221)*

This system reflects the normal worker at Labyrinth, being able to review, verify and report on their effectiveness in maintaining normal conduct.

8.10 Explanation: New Ways of Governing the Workforce

The disciplinary procedures of surveillance, the panopticon and the gaze can be traced to a shift in the patterns of work represented by the industrial revolution. The industrial revolution required techniques for a sober, healthy and willing workforce, resulting in initiatives that address the behaviour of the working population. A change in the nature of work results in the changing needs of the workforce. 'The need for workers in industrial factories has declined, and there has been a growth in post-industrial, high-technology fields such as computer science' (Danaher et al., 2000: 57). The worker is constructed as responsible for their suitability (in health) to work regardless of time and space, much as work has developed to treat time and space as irrelevant. The disciplinary procedures move outside the workplace, continuing work into private life through the glory of technology, risk, and the need for a healthy lifestyle. Only occupational health and safety remains confined to the

workplace. Thus, the techniques of discipline and punishment have eradicated the boundary between working and private self.

Usher argues that the stimulation of the subjective in the workplace is positive power, the 'stimulation of subjectivity, the emphasis on the self, on knowing and managing and on self-change, that is the way of maximizing capacities and dispositions in the workplace' (1999: 3). The stimulation of the subjective constructs the individual as free to choose, allowing the employee to consider their lives worthwhile and as having space for self-actualization and self-realization. Thus the active subject runs their life as a project of themselves. A new discipline evolves interested in the actions, rather than the value of bodies:

> This new mechanism of power is more dependent upon bodies and what they do than upon the Earth and its products. It is a mechanism of power which permits time and labour, rather than wealth and commodities, to be extracted from bodies. It is a type of power which is constantly exercised by means of surveillance rather than in a discontinuous manner by means of a system of levies or obligations distributed over time. It presupposes a tightly knit grid of material coercions rather than the physical existence of a sovereign.
>
> (Foucault, 1980: 104).

The regulation and supervision of conduct remains an important element of the social, but becomes a problem for the community rather than the state or the government. A new focus on liberty suggests that 'conduct is best regulated *in* society… as 'natural' processes of social interaction in which the freedom of participants… is seen as essential to their functioning (Dean & Hindess, 1999: 5).

Rose describes the 'expertise of subjectivity' tying knowledge and power within a transformation towards congruence between the objectives of self and life through health, work, and a myriad of other social interactions:

> The self-steering capacities of individuals are now construed as vital resources for achieving profit, public tranquility, and social progress, and interventions in these areas have also come to be guided by the regulatory norm of the autonomous, responsible subject, obliged to make its life meaningful through acts of choice. Attempts to manage the enterprise to ensure productivity, competitiveness, and innovation, to regulate child rearing to maximize emotional health and intellectual ability, to act upon dietary and other regimes in order to minimize disease and maximize health no longer seek to discipline, instruct, moralize, or threaten subjects into compliance. Rather, they aspire to instill and use self-directing propensities of subjects to bring them into alliance with the aspirations of the authorities.
>
> (Rose, 1996: 160)

8.11 Conclusion

This chapter sketched the landscape of relations of government at Labyrinth constructed in the discourses of workplace health. It showed the individualizing practices of assessment, which led to the isolation of the employee's body and behaviour as problems to be managed. This individualization was found to construct a moral imperative for the employee to manage their own health as an ethical project. A disciplining force was identified in the techniques for examination, documentation and assessment within each of the discourses. In particular the glory of technology was found to valorize the storage and management of increasingly personal health data in the name of good health. Normalizing practices were identified as a part of the deviant and accepted subject positions within each discourse. The normal worker at Labyrinth is built as self-assessing, physically fit, healthy, mentally strong, and highly productive. The deviant worker is plagued by risk, is a drain on their workmates, and cannot manage their own affairs. Each of the techniques for distributing power is achieved in the name of workplace health. This orders the forces and constructs a link between the health of the employee and the health of the company.

The following chapter provides a summary of the preceding work and draws together the main themes of this study. This includes a revisiting of the discourses of workplace health at Labyrinth and their effects.

9 Epilogue: The Discourses of Workplace Health

9.1 Introduction

In the preceding chapters, I have identified and examined the main discourses of workplace health in Labyrinth, an international information technology company. These discourses were: Occupational Health and Safety (OH&S), Occupational Health as Fitness (OH&F), Risk, and The Glory of Technology. My initial analysis developed the dichotomy between health and safety and moved to concentrate on constructs of health and health promotion.

My interest in workplace health began with the effects of work on the health of people. It soon became clear that there were many different ways of 'doing' workplace health, and each saw health in different ways, applying their own values, ideas, and methods. My interests moved to examine the ways health is constructed at work. Examining the discourses of workplace showed that each produced very different understandings of health for employees. A postcritical discourse analysis allows insight into the texts, discourse practices, and socio-historic influences of the discourses of health within a particular workplace. My research into the competing discourses of workplace health promotion was informed by three initial questions:

1. **What are the discourses of workplace health?**
2. **How do these discourses affect the understanding of the health of the employee?**

3. **What other implications do these discourses have for the experience of workplace health?**

9.2 What Are the Discourses of Workplace Health?

My postcritical discourse analysis at Labyrinth Computing identified four main discourses: Occupational Health and Safety, Occupational Health and Fitness, Risk, and Information Communication Technology. Occupational Health and Safety is the dominant discourse of workplace health. Health and safety are not equal partners in this relationship but are produced as two distinct, opposite poles of OH&S discourse. Safety is dominant across workplace health, structured tightly around health and safety legislation and the associated litigious threat. This is evident in the employees awareness of safety issues, the health managers continual reference to legislative responsibility and the overwhelming amount of safety documentation produced by Labyrinth.

In Chapter 4, I showed how safety in OH&S discourse constructs health as a function of the relationship between the worker's body and physical working space. Health is achieved when injury is avoided and the physical hazards of the workplace are kept separate from the worker's physical body. Safety is characterized by expert technical approaches that construct systematic physical barriers between hazards and workers. These approaches hold a strong knowledge position, and dispense knowledge about hazards to employees in the expectation that workers will manage their relationship to identified hazards. Hazard assessment identifies threats to health and determines the course of health interventions.

Health is reduced within OH&S discourse to see health promoting interventions as gimmicks offered to gain favor with employees. Haphazard interventions and

varying level of qualification and experience of practitioners characterize initiatives; subsequently employers see those health initiatives outside safety as less serious than initiatives relating to safety. Health focuses in particular on physical activity (occupational health and fitness) and the lifestyle of employees, health at Labyrinth includes the discourses of risk and the glory of technology.

In Chapter 5, I identified the Occupational Health as Fitness discourse, which focuses heavily on physical activity and the choices individuals make about their style of life. The discourse produces an athletic metaphor in pushing employees to undertake the behaviours of the elite athlete as part of being a normal worker. Occupational health as fitness discourse produces the elite as normal, where working superhuman hours to achieve superhuman productivity is part of working at Labyrinth. This discourse ascribes health in the measurement of the physical fitness of individuals. This is evident in the description of health in terms of levels of physical activity. OH&F also produces the lifestyles of employees as dangerous, a risk to health.

In Chapter 6, I identified Risk discourse, which examines closely individual choices about lifestyle. The decisions workers make about every aspect of their lives become potentially fatal. These affects are often hidden, and are only revealed in predictions about the long-term effects of certain behaviours. Employees are exhorted to correct these behaviours to avoid the future ill-health consequences. Risk discourse includes all employees, as all elements of lifestyle contribute to risk. Employees acting outside the healthy norm are brought within expert attention through assessments that identify risks. The management of risk becomes an individual responsibility to undertake less risky behaviours under the direction of health professionals.

Chapter 7 identified The Glory of Technology discourse. The nature of the Labyrinth Computing business means that information communication technology plays a large role in the way employees understand work. Information Communication Technology's (ICTs) are produced as a singularly positive force, and reflects a prevalent method for delivering health messages. Almost all communication throughout the company occurred through information technology, and the technology used was portrayed almost exclusively in a positive light. ICTs are capable of solving any problem, and particularly those relating to health. The discourse also constructs technology as an evolutionary force, enabling the continual updating of practices to achieve greater productivity with fewer resources. To access any information relating to health, employees must interact with a computer, submitting health information to the mainframe and receiving responses about the appropriate behavioural response based on their scores. Health exists in the space between the individual and the ICT, constructed in the shared confessions about health behaviour. To understand their health, the employee must share it with their personal computer, workers become cyborgs, part human and part machine.

Each discourse provides an individualizing force on employees, separating and measuring the health of the worker as an individual. OH&S measures and acts upon individual bodies while risk and OH&F concentrates on individual behaviours. The capture and management of large data sets about individuals allows for examination in infinite detail. This individualising force produces active subjects who must take responsibility for their own health, actively devolving responsibility for health toward the individual and away from working conditions. The assessment of individual health in OH&F, Risk and ICT discourses allows Labyrinth to look further and further into the private lives of their employees. No aspect of an employee's

working or private life is free from the gaze. ICT forms the new panopticon where employees willingly submit to electronic surveillance for the sake of health, lifestyle and productivity.

Health is linked to the productivity of the organization placing pressure on the employee to maintain their health. The unhealthy, the injured, the risky, and those who cannot use computers, become deviant. Employees who suffer ill health are treated with derision by their co-workers. Employees govern each other through health discourse, making judgments and creating a pressure to meet norms of the healthy Labyrinth worker. Those suffering illness are constructed as weak or lazy. This treatment of the deviant also serves as a warning for other employees.

In Chapter 8, I detailed the implications for governing the conduct of individuals inherent in each of the discourses identified. The discourses of workplace health are informed by expert knowledge, and favor the ruminations of experts over the experience of employees. Professional knowledge is applied to the assessment and maintenance of health and, within these knowledge positions, value judgments are made about employees. The individualizing discursive practices of assessment ignore broad, social or environmental influences on health. Conditions of production, pressure to remain employed and organizational deadlines are ignored, resulting in a de-politicizing of organizational influences on health.

The discourses of workplace health are continually in competition with each other over the ways of seeing, understanding and doing health. Competition exists both within, and as an extension of, Occupational Health and Safety. Safety is the priority, and seeks to describe health as a problem of bodies in space, at risk and requiring management. Occupational Health and Fitness seeks to view health as a problem of

behaviours and feelings of employees. OH&F discourses uses risk and ICT to describe and manage the behaviours and feelings of employees. The distinct nature of safety within OH&S discourse gives it strength in comparison to OH&F. While the objective of OH&S is clearly the reduction of illness and injury caused by work, OH&F has a far broader, indeterminate aim. OH&F aims variously to improve fitness, productivity, reduce stress, improve family relations, and so on. In the face of this multiplicity, health is unclear and impossible to grasp as a single entity. The division of OH&F discourse into multiple parts reduces its strength in competition with the singular OH&S discourse.

Safety is also dominant due to the pressure of sanctions against companies breaching the law. Safety represents the majority of those concerns at Labyrinth dealing with 'health'. This strength is anchored in the history of health interventions in the workplace. The horrific injuries caused during the industrial revolution meant initial workplace health practice was directed at reducing injury. The focus on injury reduction continues to direct contemporary practice.

All discourses construct the idea that intervening in the health of the worker will improve the productivity of the company. Each discourse describes health programs as providing a benefit to the organization. Benefits to the employee as a part of workplace health programs is secondary. The discourses of workplace health view health as a resource owned not by the individual but by the company. This manifests in producing subject positions of the normal elite: the employee who assesses and adjusts their health and risk behaviours at all times to ensure they are working to their maximum capacity. The improvement in health means an increased ability to serve the company, health discourse links improved employee health to increased productivity across the organization. Those who are healthy are a low risk to employ,

far more alert, more active, contribute to their organization, and have clear goals and objectives. The unhealthy employee is lazy, ignorant of the correct way to manage their health, and a burden upon those around them.

9.3 How Do These Discourses Affect the Understanding of the Health of the Employee?

The discourses of workplace health at Labyrinth have very real implications for the way that each employee understands their own health. The effects go deeper than mere understanding, providing a reference point for employees to evaluate themselves and others in health. The values associated with various states of health and health behaviour means that employees construct their own world-view in relation to the discourses of workplace health. The discursive practices of workplace health also serve to reinforce social customs and mores. In particular the continual call to professional knowledge for a judgment about safety, health, risk and technology all reinforce the need to externalize knowledge. This provides a subject position of accepting 'other' health knowledge as correct. The individual's experience of health becomes secondary to expert technical opinion and often not considered at all.

The methodology employed here is sensitive to the effect of the work setting on subjective experience. In this study, it was clear that information technology was a central discourse at Labyrinth Computing. Within an alternate setting, such as a construction yard, this discourse may have been less prevalent or not existed at all. Future research extending this methodology could include an expansion to other work settings; one example may be the discourses of teacher stress and its consequences for conduct of teachers within schools (Kelly & Colquhoun, in press). Of interest would be a comparative discourse analysis between different working

environments to see whether the communication of values and beliefs around health exists in a similar way to Labyrinth. An application of this methodology to other elements of work would also be useful in gaining fresh insight into the ways we understand health.

The meaning-making potential of health promotion means that health messages should be carefully designed. The multiple, haphazard nature of health promotion programs can be countered by well-designed, well-implemented and evaluated interventions. The existing cynicism among employees about the use and purpose of workplace health produces a barrier to the success of most health interventions. This is doubly true due to the time pressure on employees and the expert technical approach of program designers. In many cases, the experience and understandings employees have around their health is ignored completely. The reliance on professional knowledge means that qualifications for practitioners are essential, but these qualifications could include an awareness of the importance of the employee's subjective experience. The workplace health promotion practitioner must design programs with employees, not with the employee in mind. This is not a new idea, however my observations of the lack of employee involvement at Labyrinth reflect the practices of many companies. In particular, the 'corporate cowboys' of workplace health promotion could be closer regulated to regain credibility for the promotion of health at work. The drill instructor who can hammer the troops into shape with a program of discipline, punishing physical activity and hard work, does not improve the standing or acceptance of workplace health promotion.

Health initiatives that are backed by legislative pressure are quickly accepted and undertaken. The finality of legislation around health means there is little room or point to deny interventions. This is reflected in the strength of OH&S discourse and

more recently, for example, in the acceptance of the Victorian Smoke-Free Dining legislation. Debate about legislation concentrates on ‘compliance’ or ‘fidelity’ rather than whether or not the policy is meeting the needs of all involved. When given little choice about health programs, employers will implement them and ensure employee compliance through fear of litigation.

An alternative to the current top-down development of policy could include the voice of employees in design and implementation. This improves the chances for success of any change and increases the relevance of policy to employees. At Labyrinth, what is most obviously missing is the voice of the worker. The worker’s health is seen as a separate entity to the worker, a resource to be ‘managed’ and intervened upon to improve the productivity of the company. Health becomes just one more resource, along with buildings, grounds, and equipment, from which the company needs to leverage the best result. As a result, health programs become financial decisions, another element of the cost-benefit relationship. Health programs are sold on their ability to improve productivity, a separate element from the worker and one more factor in production. An alternative is to approach health at work as a settings problem; following current leading thinkers like Chu et., al. (1997) who see the workplace as an environment to be made healthier for all of those within it. Some other examples of this approach include the Health Promoting University (Tsouros, Dowding, Thompson &Dooris, 1998), the Health Promoting Schools (Colquhoun, Goltz & Sheehan, 1997), and Health Promoting Palliative Care (Allender & Colquhoun, 1999). This means altering the work setting, rather than the individuals within, to improve health.

9.4 What Other Implications Do These Discourses Have for the Experience of Workplace Health?

My methodology provides a voice for the worker within workplace health programs. It provides a unique insight into the way the discourses of workplace health are produced and reproduced. This approach to researching work can be applied to other workplaces or other interesting facets of work. The same methodology could be applied to workplace health on a building site, at a hospital, or in any other workplace. It can also be used to examine other elements of work, perhaps the discourses of professionalism at work, gossip, production; the possibilities are endless.

The framework for undertaking postcritical discourse analysis provides a means to track the effectiveness of communications. It also maps the complex web of communication through ICTs in workplace health programs, and worker's subjective understandings of health and health policy. A postcritical discourse analysis of the workplace forms a lens through which we can examine workplace health and how the conduct of workers is governed. Using this method, an understanding can be gained of what is acceptable and what is unacceptable, the values, beliefs and behaviours that are part of the work setting. This enables programs to be relevant for employees, in turn enhancing the chance of positive health outcomes. The representation of the employee's views within this postcritical discourse analysis provides improved equity within the workplace. Inequities can be identified in an analysis of discursive practices from the employee's point of view. This method allows for their identification, management, and evaluation of change in a way that will be satisfactory to all.

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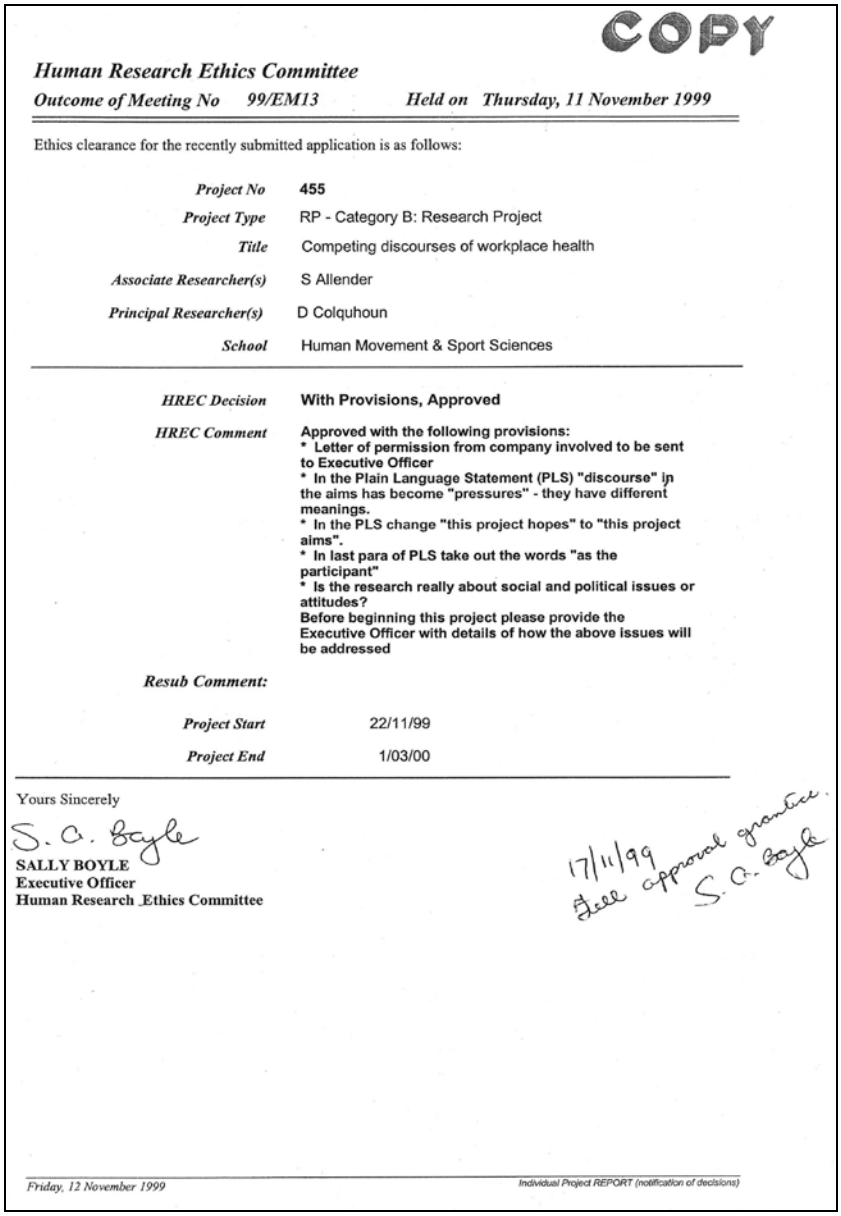
Appendix 1: Letter of Ethics Approval



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Human Research Ethics Committee

Outcome of Meeting No 99/EM13 *Held on Thursday, 11 November 1999*

Ethics clearance for the recently submitted application is as follows:

Project No	**455**
Project Type	RP - Category B: Research Project
Title	Competing discourses of workplace health
Associate Researcher(s)	S Allender
Principal Researcher(s)	D Colquhoun
School	Human Movement & Sport Sciences
HREC Decision	**With Provisions, Approved**
HREC Comment	**Approved with the following provisions:** *** Letter of permission from company involved to be sent to Executive Officer** *** In the Plain Language Statement (PLS) "discourse" in the aims has become "pressures" - they have different meanings.** *** In the PLS change "this project hopes" to "this project aims".** *** In last para of PLS take out the words "as the participant"** *** Is the research really about social and political issues or attitudes?** **Before beginning this project please provide the Executive Officer with details of how the above issues will be addressed**
Resub Comment:	
Project Start	22/11/99
Project End	1/03/00

Yours Sincerely

S. A. Boyle

SALLY BOYLE
Executive Officer
Human Research Ethics Committee

17/11/99
Full approval granted.
S. A. Boyle

Friday, 12 November 1999 *Individual Project REPORT (notification of decisions)*