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**HEALTH AND SAFETY IN THE BRITISH REGULATORY STATE, 1961–
2001: THE HSC, HSE AND THE MANAGEMENT OF OCCUPATIONAL
RISK**

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Thesis submitted in accordance with the requirements for the degree of

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I, Christopher J. Sirrs, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.



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Table of Abbreviations

ACA	Advisory Committee on Asbestos
ACAI	Alkali and Clean Air Inspectorate
ACMH	Advisory Committee on Major Hazards
ACSNI	Advisory Committee on the Safety of Nuclear Installations
ACTS	Advisory Committee on Toxic Substances
ALARP	As Low As Reasonably Practicable
BEC	British Employers' Confederation
BSE	Bovine Spongiform Encephalopathy
CBA	Cost-Benefit Analysis
CBI	Confederation of British Industry
CCA	Compliance Cost Assessment
CEGB	Central Electricity Generating Board
CSHW	Committee on Safety and Health at Work (Robens Committee)
DE	Department of Employment
DE _n	Department of Energy
DEP	Department of Employment and Productivity
DETR	Department of the Environment, Transport and the Regions
DOE	Department of the Environment
DOSH	Directorate of Occupational Safety and Health, Department of Employment
DOT	Department of Transport
DTI	Department of Trade and Industry
EC	European Community
EDU	Enterprise and Deregulation Unit
EHO _s	Environmental Health Officers
EU	European Union
EMAS	Employment Medical Advisory Service
HELA	Health and Safety Executive/Local Authority Liaison Committee
HSC	Health and Safety Commission
HSE	Health and Safety Executive
HSWA	Health and Safety at Work etc. Act 1974
IAC	Industry Advisory Committee
IAPI	Industrial Air Pollution Inspectorate
ILGRA	Interdepartmental Liaison Group on Risk Assessment
ILO	International Labour Organisation
IHAC	Industrial Health Advisory Committee
IOD	Institute of Directors
ISAC	Industrial Safety Advisory Council

ISSC	Industrial Safety Sub-Committee, National Joint Advisory Council
MAFF	Ministry of Agriculture, Fisheries and Food
MOL	Ministry of Labour
NASHW	National Authority for Safety and Health at Work
NCB	National Coal Board
NII	Nuclear Installations Inspectorate
NIIP	National Institute of Industrial Psychology
NIOSH	US National Institute for Occupational Safety and Health
NJAC	National Joint Advisory Council
NPM	New Public Management
QMV	Qualified Majority Voting
ONS	Office for National Statistics
OSH Act	US Occupational Safety and Health Act 1970
OSHA	US Occupational Safety and Health Administration
OSRPA	Offices, Shops and Railway Premises Act 1963
PPE	Personal Protective Equipment
R2P2	Reducing Risks, Protecting People
RoSPA	Royal Society for the Prevention of Accidents
SAC	Subject Advisory Committee
SEA	Single European Act
SFAIRP	So Far As Is Reasonably Practicable
TLVs	Threshold Limit Values
TOR	Tolerability of Risk
TUC	Trades Union Congress
UKAEA	UK Atomic Energy Authority
WHO	World Health Organisation

A list of major statutory instruments (regulations) referred to by this thesis is provided in Appendix I.

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Abstract

This thesis engages with recent historical scholarship on occupational health and safety by analysing the conditions that shaped the development of British health and safety regulation between 1961 and 2001. Drawing upon a rich vein of archival material as well as oral history interviews, the thesis focuses on the role played by two regulatory bodies, the Health and Safety Commission (HSC) and Health and Safety Executive (HSE), in generating and enforcing this framework of laws and standards.

The thesis illuminates two major historical trends. Firstly, it explores the gradual transformation of the British state in its role as health and safety regulator. Since 1974, the focus of British regulation has been to promote 'self-regulation' by employers and employees, and the thesis analyses the ways in which HSC/E has attempted to foster a 'safety culture' in British industry, in the context of social, political and economic pressures. Secondly, the thesis analyses the evolution of risk in health and safety regulation, from implicit assumptions and practices in policymaking and enforcement, to the formal demand for all employers to conduct written risk assessments.

In so doing, the thesis reconciles various paradoxes. One such paradox is that while the role of the British state in regulating health and safety has ostensibly 'rolled back' (e.g. via deregulation), health and safety has in another sense 'crept forward', extending beyond the workplace to intervene in public safety and environmental issues. Another paradox is that while British health and safety legislation has been ostensibly 'successful' in reducing fatal workplace accidents, it has come under unprecedented public and political scrutiny in recent years. Examining the evolution of health and safety against an extensive theoretical background (e.g. the 'risk society'),

the thesis explains how health and safety has become increasingly central to our work and public lives.

1. Introduction

1.1. Health and Safety in 21st-Century Britain

In Britain and many other developed countries, health and safety has become an integral feature of work and public life. Over the last forty years, legislation originally intended to protect the health and safety of workers has come to protect all of us—whether at work or not—from risks resulting from work activity. All employees, regardless of their occupation or workplace, are now covered by comprehensive laws designed to shield them from accidents and ill-health. As we go about our daily lives, we are increasingly confronted by rules and regulations meant to take us out of harm’s way—an intricate body of law featuring a bewildering array of acronyms such as COSHH and MHSWR.

If health and safety regulation has become more pervasive in modern society, the accompanying bureaucracy and administration has become even more noticeable. New regulatory agencies, such as Britain’s Health and Safety Executive (HSE), have been established to protect people from occupational risks. New chartered bodies, such as the Institution of Occupational Safety and Health (IOSH) have emerged to regulate and certify the health and safety profession.¹ More widely, a health and safety or risk ‘industry’ has developed to provide advice and services to companies.² Formal risk assessments, once the preserve of complex undertakings such as nuclear power

¹ IOSH was founded in 1945 as the Institution of Industrial Safety Officers.

² Michael Power, *The Risk Management of Everything: Rethinking the Politics of Uncertainty* (London: Demos, 2004), 12.

stations, are now a requirement for every employer. All employers are required to provide health and safety instruction to their employees — hence the ubiquitous training course. On a supranational level, health and safety has been given explicit focus in the legislation underpinning the European Union. Throughout our lives, it seems, health and safety rules and regulations have become more prominent. As the sociologist Frank Furedi has observed, ‘society today has turned safety into a veritable religion.’³

With the ‘explosion’ of health and safety into every corner of our lives, it is perhaps unsurprising that we occupy one of the safest work environments in history. Historical comparisons are complicated by the changing nature of reporting requirements. However, it is clear that significant improvements have been made over the last forty years. In industrial sectors which are directly comparable, 85 people lost their lives going about their work in 2013/14.⁴ In 1974, the figure was 651, a decline of 87 per cent. The rate of fatal injury in 2013/14 was one sixth the rate in 1974. The comparisons for non-fatal injury are no less impressive. In 1974, the year of the Health and Safety at Work Act (HSWA), there were 336,701 reports of non-fatal injuries to employees. In 2011/12, the comparable figure was 77,310 (see Appendix II). Evidently, work does not kill or maim in Britain in the same way it did forty or even a hundred years ago.

³ Frank Furedi, *The Politics of Fear: Beyond Left and Right* (London: Continuum, 2005), 165.

⁴ The overall number of fatalities was 133. See “HSE Statistics: Historical Picture,” accessed August 6, 2015, <http://www.hse.gov.uk/statistics/history/>.

This is not to say that regulation has been directly responsible for these changes—or we should be in any way complacent about risks. The HSE has estimated that as much as 50 per cent of the decline in accidents over the past forty years can be explained by structural changes in British industry and employment: the transition from an economy built around manufacturing and manual labour, to one built around services and office work.⁵ The increasing rate of occupational diseases such as mesothelioma dispel any triumphalism about regulation, since people are dying from exposure to toxic substances years, even decades ago. Official statistics fail to capture the true extent of occupational ill-health, while the recognised problem of under-reporting prevents the drawing of firm conclusions.⁶ The economic cost of occupational accidents and ill-health to wider society is estimated to be as high as £14.2 billion.⁷

One would expect such figures to generate calls for a renewed emphasis on health and safety—on economic, if not ethical grounds. If anything, the reverse has happened. Health and safety is now routinely represented by the media as a burden on business and society, as the virtual embodiment of bureaucracy and red tape. Stories propagated by the media allege that health and safety regulations are responsible for an array of petty decisions made by businesses and organisations, ranging from the banning of playground games, to restrictions on hanging baskets.⁸ According to the

⁵ Rhys Davies and Paul Jones, *Trends and Context to Rates of Workplace Injury*, Research Report 386 (Norwich: HSE Books, 2005), 84.

⁶ Steve Tombs, “Death and Work in Britain,” *Sociological Review* 47, no. 2 (1999): 345–67.

⁷ HSE, “Health and Safety Executive Annual Statistics Report 2013/14,” 2014.

⁸ Paul Almond, “The Dangers of Hanging Baskets: ‘Regulatory Myths’ and Media Representations of Health and Safety Regulation,” *Journal of Law and Society* 36 (2009): 352–75.

British Chambers of Commerce, up to a half of British employers find health and safety regulations ‘extremely or fairly burdensome.’⁹

In response to such accusations, HSE has set up a ‘Myth Busters Challenge Panel’ to challenge these stories.¹⁰ However, recent government policy has also identified health and safety as a problem of overregulation and unnecessary bureaucracy. Following its election victory in May 2010, the Coalition government carried out several reviews of health and safety, pledging to restore ‘common sense’ to regulation and tackle the ‘health and safety monster’.¹¹ While these reviews supported the ‘risk based’ ethos of the regulatory system, they also recommended the removal of regulations perceived as unnecessary or outmoded, and the exemption of certain groups, such as the self-employed. The HSE may have survived the ‘bonfire of quangos’, yet according to the government’s critics, deregulatory ideology has created a much smaller organisation, unable to fulfil its statutory functions.¹² Since 2010, the government has slashed the HSE’s budget by over a third, and the number of HSE staff has fallen by over 25 per cent. Moreover, HSE inspectors are no longer carrying

⁹ British Chambers of Commerce, “Health and Safety—A Risky Business?” (London: British Chambers of Commerce, May 2011), 9.

¹⁰ HSE, “Busting the Health and Safety Myths,” accessed August 11, 2015, <http://www.hse.gov.uk/myth/>.

¹¹ Lord Young of Graffham, *Common Sense, Common Safety* (London: Cabinet Office, 2010); Ragnar E. Löfstedt, *Reclaiming Health and Safety for All*, Cm 8219, 2011; Nicholas Watt, “David Cameron Pledges to Tackle ‘Health and Safety Monster,’” *The Guardian*, January 5, 2012, <http://www.theguardian.com/politics/2012/jan/05/david-cameron-health-safety-monster>.

¹² James Chapman, “Cameron Vows to Slash Number of Quangos and Cut Ofcom’s Power,” *Mail Online*, accessed August 10, 2015, <http://www.dailymail.co.uk/news/article-1197744/Conservatives-vow-light-bonfire-quangos-slash-public-spending.html>.

out routine inspections for many workplaces. According to the Trades Union Congress (TUC), ‘the government is hell-bent on trying to reduce health and safety protection.’¹³

An unprecedented and paradoxical situation has thus arisen. Health and safety regulation may have penetrated deep into our everyday lives, but its aims and objectives have never been more questioned by politicians, the media and public. Forty years after the HSWA established a comprehensive system of health and safety protection, the need to take stock of historical developments has never been clearer.

This thesis thus seeks to address a fundamental historical question: how and why did the British system of health and safety regulation develop between 1961 and 2001? In order to interrogate the place health and safety has come to occupy in our lives, it is first necessary to understand the historical forces that have shaped the system of laws and standards that structure efforts to combat accidents and ill-health at work. It is also necessary to understand the pressures on the regulatory bodies (both within and outside the British government), which have developed national health and safety policy, and their approach to workplace hazards. How did the scope of British health and safety regulation evolve between 1961 and 2001? What were the principal changes and continuities in the way it was regulated? Where did new regulatory concerns originate? What were the constraints, if any, on regulators to address these concerns? To date, historians remain to answer these questions in any degree of detail or sophistication.

¹³ TUC, “Toxic, Corrosive and Hazardous: The Government’s Record on Health and Safety” (London: TUC, April 2014).

This thesis does not seek to evaluate the claim that health and safety has ‘gone mad’ or too far. Such evaluations rest on normative assumptions about the purpose and scope of health and safety—the field it should legitimately encompass. Nor is this thesis concerned with exploring changing public perceptions towards health and safety regulation.¹⁴ It is neither a history of health and safety legislation, nor an administrative history of regulatory agencies. Rather, it is a history of health and safety policy, encapsulating legislative, administrative and intellectual-history elements. It charts a complex trajectory, bringing into relief the historical conditions (social, cultural, political and economic), that shaped the British government’s approach towards health and safety, alongside the regulatory agencies ‘hived off’ from central government after the HSWA. The work of two independent, but interconnected agencies dominate my analysis: the Health and Safety Commission (HSC) and Health and Safety Executive (HSE). I refer to the work of these institutions, together with the government, as the British regulatory state.

The ‘state’, of course, remains a contentious historical concept. There is no consensus over its definition, or whether the ‘state’ as an entity even exists.¹⁵ In mid-twentieth-century political theory, it was often abandoned in favour of ‘political system’. However, this too was ambiguous, owing to the interface between politics and

¹⁴ This is the object of a recent study organised by Professor Paul Almond and Dr Mike Esbester of the universities of Reading and Portsmouth, UK.

¹⁵ The Oxford English Dictionary defines ‘the state’ as ‘a nation or territory considered as an organized political community under one government.’ “State - Definition of State in English from the Oxford Dictionary,” accessed August 25, 2015, <http://www.oxforddictionaries.com/definition/english/state>.

wider society.¹⁶ This thesis argues that the ‘state’ remains a compelling way to approach the subject of health and safety regulation. I visualise the state as the extended apparatus through which regulatory power is exercised, encompassing ‘the government’ as a discrete political organisation, as well as the wider field of action referred to by researchers such as Moran as quasi-government: ‘the world of the quango [quasi-autonomous nongovernmental organisation]’.¹⁷

The HSC and HSE are intriguing objects of study because, as quangos, they were at once removed from the British government, yet fundamentally influenced by it. They evince the state’s complex and evolving relationship with health and safety regulation. Established in 1974 and 1975, respectively, the HSC and HSE were formed at arm’s length from central government, to ensure the independence of health and safety regulation from political interference (before 1974, health and safety regulation was the province of government departments).¹⁸ The HSC was established as a negotiating body with overarching responsibility to promote the health and safety of workers and third persons at risk from work activity, such as members of the public. Its duties extended to the provision of information and advice, research and publicity, as well as the development of health and safety policy: new standards, codes of practice, and regulations. Demonstrating the contemporary influence of corporatism, or the formal representation of interest groups in policymaking, the HSC comprised a

¹⁶ Timothy Mitchell, “The Limits of the State: Beyond Statist Approaches and Their Critics,” *The American Political Science Review* 85, no. 1 (1991): 91.

¹⁷ Michael Moran, *The British Regulatory State: High Modernism and Hyper-Innovation* (Oxford: Oxford University Press, 2003), 124.

¹⁸ The HSC was abolished in 2008, when it effectively became the management board of the new unified HSE.

chair appointed by the Secretary of State, in addition to nine or ten other members appointed after consultation with employers' associations, trade unions and local authorities.¹⁹ TUC and Confederation of British Industry (CBI) representatives assumed the first six of HSC's positions, with the remainder occupied by persons representing local authorities and the 'public interest'.

While the HSC assumed policymaking functions previously exercised by government, responsibility for enforcing health and safety legislation in factories, construction yards and other industrial premises after 1974 fell to the HSE. The HSE united 2,800 staff from nine separate government departments and inspectorates. It brought under a single organisation several bodies of inspectors that enforced health and safety before 1974, including HM Factory Inspectorate and the Mines and Quarries Inspectorate. Under the HSWA, the HSE was given responsibility to discharge whatever functions the HSC delegated to it.²⁰ While the HSE was therefore legally independent from the HSC, in practice it acted as HSC's operational arm, promoting and enforcing health and safety in industrial workplaces across Britain (responsibility for non-industrial premises, including offices, fell to local authorities)²¹. Due to its considerable technical expertise, HSE provided HSC with the advice and support it needed to develop health and safety policy. Although the HSC had ultimate power to approve or deny particular proposals, it was HSE's policy branches that

¹⁹ The concept of corporatism has been most fully drawn out by Keith Middlemas. See, in particular *Politics in Industrial Society: The Experience of the British System since 1911* (London: Deutsch, 1979).

²⁰ *Health and Safety at Work Etc. Act 1974*, 1974, sec. 11(4).

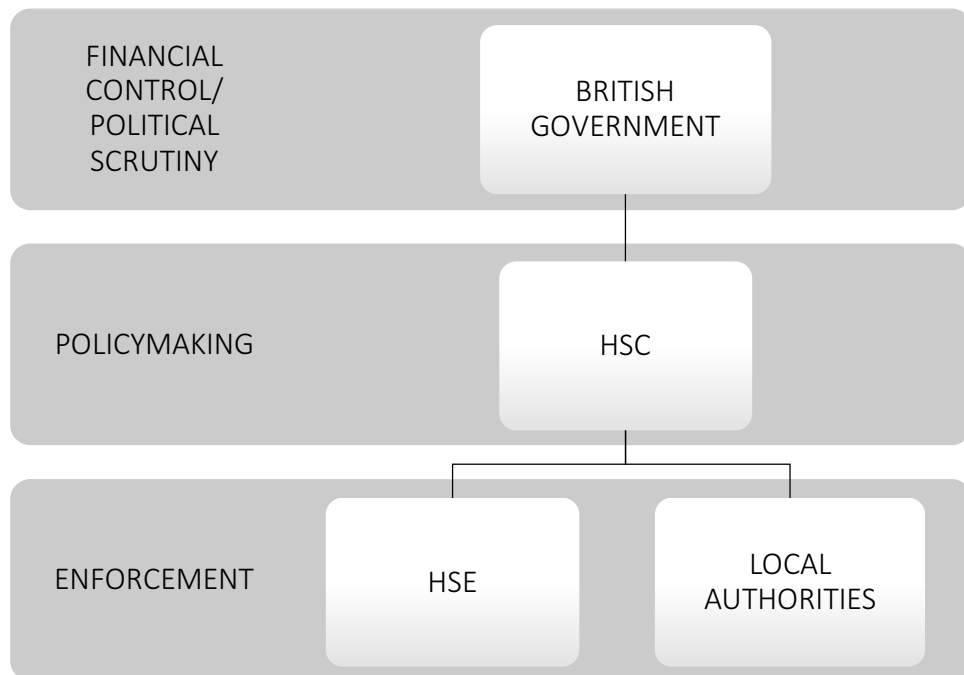
²¹ Since they were enforcement, as opposed to policymaking bodies, this thesis concerns local authorities only as they were influenced by HSC/E policy.

prepared HSC's consultation and discussion documents, composed its draft regulations and codes of practice, and serviced HSC's advisory committees. HSE staff were also present at every fortnightly Commission meeting. The HSE thus played a primary role in the development of British health and safety policy.

Despite the nominal independence of the HSC/E from central government, political control was still exerted over them—thus the need to consider them together (Figure 1). As the socio-legal scholar Keith Hawkins notes, ministers controlled HSC/E's financial resources, scrutinised their activity, was responsible to Parliament for their work, and enacted policies that required HSC/E to behave in particular ways.²² Hence, my thesis serves as an important empirical analysis of how the British government influenced health and safety regulation.

²² Keith Hawkins, *Law as Last Resort: Prosecution Decision-Making in a Regulatory Agency* (Oxford: Oxford University Press, 2002), 159–61; See also Tony Prosser, *The Regulatory Enterprise: Government, Regulation and Legitimacy* (Oxford: Oxford University Press, 2010), 92.

Figure 1. Relationship between the British government, HSC, HSE and local authorities



In analysing the development of the British system of health and safety regulation between 1961 and 2001, this thesis highlights two major trends. First, it shows how the British state's role as health and safety regulator has been reconfigured over the last half century. Since 1974, the expressed ethos of British health and safety regulation has been to promote greater voluntary effort on the part of employers and workers, what was described as 'self-regulation'.²⁵ Although regulations continued to be made, the British state's role was reconceptualised as providing, in the first instance, a supportive framework in which voluntary effort could flourish. Health and safety legislation after 1974 was specifically drafted to ensure that employers assumed greater responsibility for health and safety, while HSC/E's role was principally conceived as

²⁵ Lord Robens, *Safety and Health at Work: Report of the Committee. 1970-72*, Cmnd. 5034, 1972, 12.

providing advice and assistance to employers, negotiating and drafting the rules that allowed employers to take informed action. While HSE inherited an important enforcement role, prosecution was considered a tool of last resort.²⁴ In recent decades, the British regulatory state has assumed a risk management role, identifying, assessing and communicating risks that are acted upon by employers.²⁵

A second major trend highlighted by this thesis is the evolution of the concept of risk in British regulatory discourse. It reveals how ideas and practices inherent in pre-1974 health and safety regulation were made more explicit over the last third of the twentieth century. In response to political and economic pressure, regulators formalised ideas and approaches which were previously ambiguous, such as the demand for employers to carry out risk assessments. Through a process of abstraction and post-hoc rationalisation, by the 1990s regulators had established a systematic approach to workplace hazards based on the explicit assessment and management of risks. This enshrined various assumptions, such as that cost is a valid concern when deliberating control measures.

This introductory chapter describes the conceptual and methodological approach of my thesis. Health and safety is a complex and poorly bounded field of research, which requires a degree of ‘unpacking’ before it can be analysed. In order to examine how and why the British system of health and safety regulation developed, it is thus necessary to ask, what is health and safety?

²⁴ Hawkins, *Law as Last Resort*.

²⁵ Power, *The Risk Management of Everything*.

1.2. What is Health and Safety?

Occupational health and safety refers to rules and regulations that protect workers and the general public from accidents and ill-health resulting from work or industrial activity.²⁶ This simple definition, however, belies a subject of incredible breadth and complexity. Alongside these rules and regulations are a plethora of related activities which make health and safety uniquely difficult to characterise. In examining 'health and safety', simultaneously one can be referring to the rules or regulations themselves, which influence and structure behaviour;²⁷ the work of policymakers in government or regulatory agencies; enforcement by inspectors; efforts by employers and workers to prevent workplace accidents and disease; the activities of voluntary or professional organisations (e.g. IOSH); lobbying by campaign groups; the work of insurers or lawyers; or any number of other things. One can be referring to the health and safety of workers, the wider public, or even the impact of industry on the wider environment. In a broader and more colloquial sense, the phrase 'health and safety' encompasses all of these. In speaking of a health and safety 'system', the work of these various groups are brought together.²⁸ Popular conceptions of health and safety conflate separate areas of statutory regulation: food safety, consumer protection, fire safety and public law and

²⁶ <http://www.oxforddictionaries.com/definition/english/health-and-safety>, accessed August 13, 2015.

²⁷ As Baldwin reminds us, 'those engaged in government may proceed by means other than by the application or promulgation of rules.' (Robert Baldwin, *Rules and Government* (Oxford: Clarendon Press, 1995), 3.) This thesis thus considers 'regulation' as a broad administrative practice utilizing strategies such as education, research, training and guidance, as well as the setting of regulations—legal rules—per se.

²⁸ The CSHW saw the system as comprising both statutory and voluntary elements, i.e. those activities which stem from legal requirements, and those which arise from effort on the part of employers and workers themselves. See Robens, *Safety and Health at Work*.

order. Thus, without strict qualification, health and safety is an extremely tricky object of study. As the Committee on Safety and Health at Work (CSHW) recognised in the early 1970s, ‘safety and health at work is a vast, diverse and complex field of study. No one can speak authoritatively on all its facets and aspects.’²⁹

This thesis concentrates on the approach to health and safety taken by the British government and regulatory agencies established to oversee and enforce health and safety legislation following the HSWA 1974. A major objective is to analyse the changing scope of British health and safety regulation over the last third of the twentieth century, and its demarcation with other fields, such as environmental regulation. In order to meet this objective, and set the boundaries of my research, a working definition of ‘health and safety’ is needed. Perhaps the closest thing we have to an ‘official’ definition comes from the ILO and World Health Organisation’s joint definition not of ‘health and safety’, but of ‘occupational health’:

Occupational health should aim at the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention amongst workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological capabilities and; to summarize: the adaptation of work to man and of each man to his job.³⁰

²⁹ Ibid., 2.

³⁰ G. Coppee, “Occupational Health Services and Practice,” ed. J. Stellman et al., *Encyclopaedia of Occupational Health and Safety* (Geneva: International Labour Office, 1998).

While this definition is normative, it captures the various aims of health and safety, which are not necessarily complementary with each other, or have figured consistently in government or industrial policy. The ILO/WHO's definition encompasses both physical injury (i.e., the 'safety' aspect of health and safety) as well as the prevention of illness and disease (the 'health' aspect). As Chapter 2 highlights, British government policy has demonstrated a historical bias towards 'safety' rather than 'health', primarily, because physical injuries are easier and more economic to control. As a Ministry of Labour (MOL) official explained in 1960, "in practice we classify the work as "safety, health and welfare", which is a more realistic appraisal of its balance, both from the official and industrial point of view."⁵¹

In this thesis, I use the term 'health and safety' in preference to 'occupational health'. This is for three important reasons. Firstly, I believe it better captures the diversity and complexity of the field, as well as the bureaucratic and administrative aspects evoked in the popular imagination. Secondly, health and safety regulation is no longer purely 'occupational'. Since 1974, British health and safety regulation has widened beyond a concern with working conditions to address the impact of industry on the wider public and environment. In recent times, much of HSE's work has been oriented towards public safety rather than workers' health and safety; health and safety regulation has thus become decentralised beyond its traditional area of concern, the workplace. Thirdly, 'occupational health' is used by professionals to refer to more explicitly health-related activities, such as promotional campaigns focusing on the

⁵¹ K. Kenney, "Memo," September 15, 1960, TNA LAB 14/934.

prevention of occupational disease. Regulations focusing on first-aid, health surveillance or toxic substances can be considered to be occupational health—as opposed to safety—regulations. Therefore, it is possible to think of occupational health as a distinct agenda or concern within health and safety regulation.

These conceptual problems are not only relevant to the aims of my thesis. Historically, they have had a substantial bearing on the development of health and safety regulation. For example, the proposed extension of health and safety legislation in the HSWA posed significant administrative problems for civil servants in Whitehall. Health and safety legislation threatened to encroach upon areas of policy under the control of other government departments, such as the Department of the Environment (DOE). The consequent Whitehall row demarcated the boundaries of the post-1974 regulatory system, whereby health and safety legislation was concerned with the wider impact of work on the general public and environment (such as industrial air pollution).

1.3. Literature Review

1.3.1. Situating Health and Safety

This literature review has a dual aim. Its primary purpose is to situate my study within existing academic literature. However, in so doing, I explain my conceptual approach to the subject. I define major concepts such as the ‘regulatory state’ and ‘risk society’, which I suggest are useful ways to think about the development of health and safety regulation.

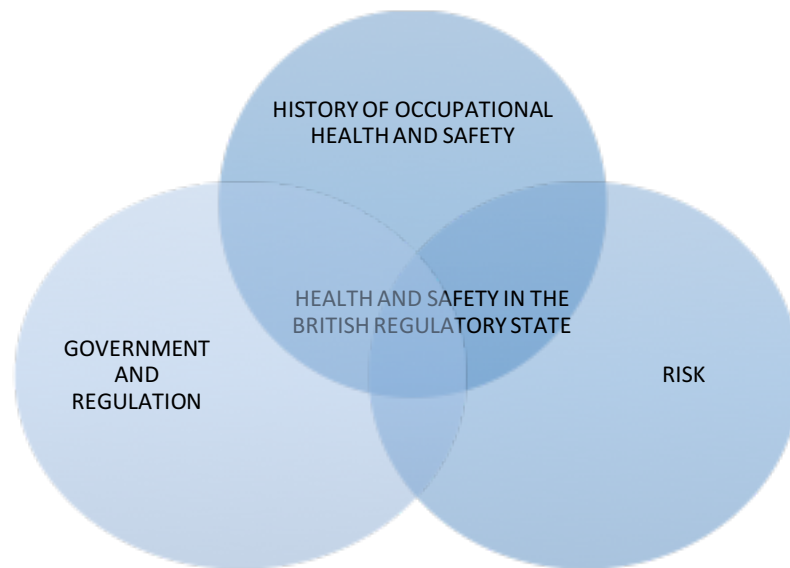
In view of the conceptual and definitional problems surrounding health and safety, it is perhaps unsurprising that the academic literature on health and safety is diverse. Three main bodies of academic literature are directly relevant to my study: the historical literature on occupational health and safety itself, including occupational disease; studies of government and regulation; and the vast literature on 'risk' in the social and political sciences (Figure 2). Besides this academic literature, there is a considerable professional literature on health and safety, primarily directed at practitioners such as occupational hygienists or workplace safety representatives. This literature is not directly relevant to my objectives, although professional texts have introduced me to the foundations of British health and safety law.³² Professional journals such as *Annals of Occupational Hygiene* have included historical articles or retrospectives written by former practitioners or regulatory officials.³³ These articles are considered below where relevant. Moreover, HSC/E have produced historical articles to coincide with landmark events or anniversaries.³⁴ These articles are useful historical aids, but their analyses are largely superficial. They tend to present a sanitised, official version of events, with little exploration of contemporary debates or behind-the-scenes discussions.

³² e.g. Phil Hughes and Ed Ferrett, *Introduction to Health and Safety at Work. The Handbook for the NEBOSH National General Certificate*, 5th ed. (Oxford: Elsevier, 2011).

³³ e.g. Tim Carter, "British Occupational Hygiene Practice 1720-1920," *Annals of Occupational Hygiene* 48 (June 2004): 299–307; Morris Greenberg, "Revising the British Occupational Hygiene Society Asbestos Standard: 1968-1982," *American Journal of Industrial Medicine* 49, no. 7 (2006): 577–604.

³⁴ e.g. HSE, *Thirty Years on and Looking Forward: The Development and Future of the Health and Safety System in Great Britain* (Sudbury: HSE Books, 2004); D. J. Buchanan, *Health and Safety Laboratory. A Pictorial History* (HSL, 2005).

Figure 2. Location of thesis in existing literature



Despite the enormous literature on health and safety, the late-twentieth-century history of British health and safety regulation, and in particular the origins of the HSC/E, remain to be actively studied by historians. In this review, I describe the important contributions these existing literatures have made to our understanding of health and safety in Britain.

1.3.2. History of Occupational Health and Safety

The most directly relevant literature to my thesis is the history of occupational health and safety, which includes the study of occupational diseases such as asbestosis. Little over two decades ago, this was considered a neglected topic, having appeared primarily as contextual background in clinical texts (such as Hunter's *The Diseases of Occupation*), or case studies in books with a wider historical remit (such as Wohl's 1983 study of

Victorian public health).³⁵ However, this is no longer the case. Over the last decade, in particular, several monographs and journal articles have brought occupational health and safety to the forefront of historical attention.

My thesis arguably sits on the crest of a wave of historical interest that began in the 1980s. In 1985, *The Social History of Occupational Health*, edited by Weindling, attempted to place occupational health at the heart of a 'social history of industrialisation'.³⁶ As such, it attempted to foreground workers' experiences of accidents and ill-health, and analyse the response of workers, businesses, governments, trade unions and (in particular) the medical profession to hazards. Emerging out of a Society for the Social History of Medicine conference, the book is notable for contributions focusing on particular hazards, workers' compensation, and accidents, which became a distinct focus of social history in the 1990s.³⁷

To date, the historical literature on occupational health has largely assumed the social-historical mantle laid down by Weindling. McIvor, for instance, has extensively used oral history interviews to give voice to workers' experiences of accidents and ill-health.³⁸ A common approach by historians has been to focus on the diseases of particular occupations, such as asbestosis in the asbestos industry, anthrax in wool-

³⁵ Paul Weindling, ed., *The Social History of Occupational Health* (London: Croom Helm, 1985), 2–3; Donald Hunter, *The Diseases of Occupations* (London: English Universities Press, 1955); Anthony Wohl, *Endangered Lives: Public Health in Victorian Britain* (London: J. M. Dent, 1983); Helen Jones, *Health and Society in Twentieth-Century Britain* (London: Longman, 1994).

³⁶ Weindling, *Social History of Occupational Health*, 2.

³⁷ See Roger Cooter and Bill Luckin, *Accidents in History: Injuries, Fatalities and Social Relations*, *Clio Medica* (Amsterdam: Rodopi, 1997).

³⁸ Arthur McIvor, *Working Lives: Work in Britain since 1945* (Basingstoke: Palgrave Macmillan, 2013).

sorting, and pneumoconiosis in mining.³⁹ This has generated a large body of evidence about how occupational diseases are socially constructed and contested in the workplace. Common debates have surfaced, such as whether regulation has been timely or sufficient (particularly in the case of asbestos), or whether trade unions have prioritised pay or job security over the health and safety of their members.⁴⁰ In this regard, recent evidence suggests that trade unions have played a far more active role in promoting workers' health and safety than previously believed, and that compensation claims formed a legitimate part of their campaigns, especially among smaller unions.⁴¹

The history of occupational health and safety has been most fully elaborated in the USA, and works of note here come from Sellers, Aldrich and Corn.⁴² Sellers' book *Hazards of the Job* explains the origins of industrial hygiene in the USA, and how it evolved to be increasingly environmentally focused, laying the foundations for the

³⁹ Geoffrey Tweedale and Philip Hansen, *Magic Mineral to Killer Dust: Turner & Newall and the Asbestos Hazard* (Oxford: Oxford University Press, 2000); J. Stark, "Bacteriology in the Service of Sanitation: The Factory Environment and the Regulation of Industrial Anthrax in Late-Victorian Britain," *Social History of Medicine* 25, no. 2 (2012): 343–61; Arthur McIvor and Ronald Johnston, *Miner's Lung: A History of Dust Disease in British Coal Mining* (Aldershot: Ashgate, 2007).

⁴⁰ For the historical debate about asbestos see Peter Bartrip, "Too Little, Too Late? The Home Office and the Asbestos Industry Regulations, 1931," *Medical History* 42 (1998): 421–38; Morris Greenberg and Nick Wikeley, "Too Little, Too Late? The Home Office and the Asbestos Industry Regulations, 1931: A Reply," *Medical History* 43, no. 4 (1999): 508–13; For trade unions, see Weindling, *Social History of Occupational Health*, 10.

⁴¹ Vicky Long, *The Rise and Fall of the Healthy Factory: The Politics of Industrial Health in Britain, 1914-60* (Basingstoke: Palgrave Macmillan, 2011), 126–7.

⁴² Christopher Sellers, *Hazards of the Job: From Industrial Disease to Environmental Health Science* (Chapel Hill: University of North Carolina Press, 1997); Mark Aldrich, *Safety First: Technology, Labor and Business in the Building of American Work Safety* (Baltimore: Johns Hopkins University Press, 1997); Jacqueline Corn, *Response to Occupational Health Hazards: A Historical Perspective* (New York: Van Nostrand Reinhold, 1992).

modern environmentalist movement.⁴³ Sellers' argument about industrial hygiene dovetails with arguments made by historians elsewhere about an 'environmental turn' in mid-twentieth-century health and safety discourse, corresponding with the emergence and infiltration of risk-based ideas. Burnham's intellectual history of 'accident proneness' argues that the concept declined in western industrialised countries over the twentieth century, as the safety field became populated by chemists and engineers, and the idea of 'risk grouping' entered the scientific literature on accidents.⁴⁴ In a monograph on British industrial health between 1914 and 1960, Long argues that a more 'holistic vision' of workers' health was lost, as a more environmentally focussed, hygienic conception of health surfaced. The 1972 Robens Report, Long asserts, heralded 'a more circumscribed discourse of risk minimisation'.⁴⁵ My thesis elaborates this idea of an environmental or risk turn. It shows that as workplace risks became delocalised over the twentieth century, extending beyond the factory gates, occupational health and safety regulation broached upon issues concerning the wider environment and public safety. Further, it highlights how risk-based ideas came to forefront of regulatory discourse. This was reflected not only in the demand for employers to conduct formal risk assessments by the 1990s, but for the HSC/E to explain their decision-making in explicit risk terms.

In Britain, historians have focused largely on the nineteenth and early twentieth centuries, and in particular the 1914–1945 interwar period, when statutory

⁴³ Sellers, *Hazards of the Job*.

⁴⁴ John C. Burnham, *Accident Prone: A History of Technology, Psychology and Misfits of the Machine Age* (Chicago: University of Chicago Press, 2009).

⁴⁵ Long, *The Rise and Fall of the Healthy Factory*, 2, 206.

intervention in workers' health and safety was particularly active, owing to the exigencies of national productivity. During this time, Long argues, workers' health was considered more comprehensively, viewed from a wider social and economic perspective. Progressive factory owners introduced welfare measures for their employees, such as canteens and first-aid facilities. Social medicine in the 1930s and 1940s saw occupational and community health to be closely linked. The factory became seen not only as a site of injury and disease, but health improvement and even the delivery of health services.⁴⁶ Long's approach to occupational health contrasts with other historians, who have tended to focus on the hazardous aspects of the workplace, rather than its promotional potential for health and wellbeing.

While the history of occupational health and safety has flourished in general, the same cannot be said of the post-1960 history of British health and safety regulation, in particular developments since the HSWA 1974. This remains a curious area of historical neglect, especially considering the controversial status health and safety has recently assumed. This thesis thus aims to address a glaring lacuna, showing how the British state's approach to health and safety regulation evolved over the last third of the twentieth century.

1.3.2.1. The Origins of British Health and Safety Legislation

⁴⁶ Helen Jones, "An Inspector Calls: Health and Safety at Work in Inter-War Britain," in *The Social History of Occupational Health*, ed. Paul Weindling (London: Croom Helm, 1985); Vicky Long and Hilary Marland, "From Danger and Motherhood to Health and Beauty: Health Advice for the Factory Girl in Early Twentieth-Century Britain," *Twentieth Century British History* 20 (2009): 454–81; Long, *The Rise and Fall of the Healthy Factory*, passim.

Although the British system of health and safety regulation after 1960 remains to be extensively studied by historians, we can glean substantial evidence about its origins from existing literature. Professional texts such as *Redgrave, Fife and Machin* have provided detailed accounts of the development of British health and safety legislation, while the historical work of Bartrip, in particular, has shown how the British government has been concerned about the safety, health and welfare of workers for over two centuries.⁴⁷

The British system of health and safety regulation evolved out of attempts in the early nineteenth century to protect the working hours and conditions of children. In 1802, the Health and Morals of Apprentices Act extended basic requirements to protect the health of pauper apprentices in textile mills, including ventilation and the lime-washing of internal walls (to prevent typhus).⁴⁸ The 1833 Factory Act was notable for creating a permanent inspectorate of four individuals (plus superintendents) to inspect factories and mills in Great Britain and Ireland. The post of Chief Inspector of Factories was created in 1878, and by 1961 the cadre of HM Factory Inspectorate (as it became known) had grown to some 426 inspectors.⁴⁹

The health and safety of adult workers developed as a separate concern. The first safety precautions applying to adults appeared in the 1844 Factory Act, which required

⁴⁷ John Hendy and Michael Ford, *Redgrave, Fife and Machin. Health and Safety* (London: Butterworths, 1993); Peter Bartrip, *The Home Office and the Dangerous Trades: Regulating Occupational Disease in Victorian and Edwardian Britain*, Clio Medica (Amsterdam: Rodopi, 2002), 20.

⁴⁸ Hendy and Ford, *Redgrave, Fife and Machin*, li.

⁴⁹ HSE, *A Brief History of HM Factory Inspectorate* (London: HSE, 1980); Ministry of Labour (MOL), *Annual Report of HM Chief Inspector of Factories 1961*, Cmnd. 1816, 1962, 44.

the fencing of dangerous machinery and the notification of accidents.⁵⁰ As medical knowledge about the occupational causes of disease developed in the late nineteenth century, factory legislation expanded to encompass the health of workers in the ‘dangerous trades’, such as matchmaking. The first medical inspector of factories, Thomas Legge, was appointed in 1898.⁵¹ Around the same time, legal developments placed industrial accident compensation on an insurance model, allowing certain workers to claim compensation regardless of fault. By 1906, certain occupational diseases (such as anthrax) were scheduled alongside accidents in the Workmen’s Compensation Act.⁵²

Outside factories, health and safety legislation was slow to develop. While safety requirements applied to coal mines as early as 1850, it was not until the 1950s that agricultural workers were given statutory protection from occupational accidents and disease, including the toxic effects of pesticides.⁵³ By this time, the notional definition of the ‘factory’ under the Factories Acts had swollen to encompass such diverse premises as warehouses, docks, workshops and construction yards.⁵⁴ However, it was not until 1963 that certain non-industrial workers were covered by the Offices, Shops and Railway Premises Act 1963 (OSRPA).⁵⁵ The HSWA 1974 established a universal

⁵⁰ HSE, *A Brief History of HM Factory Inspectorate*, 5.

⁵¹ Bartrip, *The Home Office and the Dangerous Trades*; Carter, “British Occupational Hygiene Practice,” 305; J. M. Harrington, “1998 and Beyond—Legge’s Legacy to Modern Occupational Health,” *Annals of Occupational Hygiene* 43, no. 1 (1999): 1–6.

⁵² Peter Bartrip and Susan Burman, *The Wounded Soldiers of Industry: Industrial Compensation Policy, 1855-1897* (Oxford: Clarendon Press, 1983); Peter Bartrip, “The Rise and Decline of Workmen’s Compensation,” in *The Social History of Occupational Health*, ed. Paul Weindling (London: Croom Helm, 1985), 157–79.

⁵³ Hendy and Ford, *Redgrave, Fife and Machin*, lii–lv.

⁵⁴ HSE, *A Brief History of HM Factory Inspectorate*, 9–10.

⁵⁵ *Offices, Shops and Railway Premises Act*, Ch. 41, 1963.

system of health and safety protection applying to almost every worker, regardless of occupation or workplace.

Health and safety legislation developed in a piecemeal fashion, responding to particular problems as they arose, rather than taking a principled approach.⁵⁶

Industrial disasters aroused public and political attention, and encouraged the reactive extension of legislation. For example, the 1862 Hartley Colliery disaster, which killed 204 miners, was followed by legislation requiring mines to have two shafts.⁵⁷ In the twentieth century, the Factories Act 1959 contained new fire precautions, following a deadly mill fire in Keighley, Yorkshire which killed 8 people. As late as 1969, the Mines and Quarries (Tips) Act advanced new requirements for spoil tips following the catastrophe at Aberfan, South Wales in 1966.⁵⁸ As the economist Sidney Webb noted in 1910, British health and safety legislation was ‘a typical example of English practical empiricism. We began with no abstract theory of social justice or the rights of man.... Each successive statute aimed at remedying a single ascertained evil.’⁵⁹

By 1961, the result of this practical empiricism was an intricate, detailed and fragmented body of law. Although various attempts had been made since the nineteenth century to consolidate the law and make it more comprehensible (notably, the Factory and Workshop Act 1901 pioneered a new, more flexible legal language,

⁵⁶ Hendy and Ford, *Redgrave, Fife and Machin*, lii; Robens, *Safety and Health at Work*, 4–6.

⁵⁷ Catherine Mills, *Regulating Health and Safety in the British Mining Industries, 1800-1914* (Farnham: Ashgate, 2010), 125.

⁵⁸ Robens, *Safety and Health at Work*, 4.

⁵⁹ B. L. Hutchins and A. Harrison, *A History of Factory Legislation*, 2nd ed. (London: P. S. King & Son, 1911), ix; Robens, *Safety and Health at Work*, 4–5.

using terms such as ‘reasonable’ and ‘sufficient’⁶⁰), as of 1961 some 16 million workpeople remained to be given statutory protection against occupational accidents and disease. Effectively, there was not one ‘system’ of health and safety regulation, but multiple, applying to separate industries and processes. Health and safety was a subject pertinent to the regulation of particular industries, rather than a domain of regulatory activity in its own right.

1.3.2.2. Limitations of the Existing Historical Approach

Although this existing literature has expanded our understanding of health and safety, it suffers from a number of shortcomings. Firstly, as I have already described, while the nineteenth and early twentieth-century history of health and safety in Britain has been widely studied, developments after 1960, particularly since the HSWA, have escaped historical attention. One possible reason is that historians’ view of health and safety has been coloured by a vision of heavy industry that has declined in Britain. Between 1980 and 1990, for example, employment in manufacturing declined by 20 per cent.⁶¹ Health and safety in factories and mines has been well-studied, while non-industrial workplaces have been studied only indirectly. Correspondingly, the literature on occupational health has emphasised acute occupational diseases associated with heavy industry, while chronic conditions such as stress and heart disease have

⁶⁰ Long, *The Rise and Fall of the Healthy Factory*, 59, 63.

⁶¹ David Walters and Philip James, *Robens Revisited: The Case for a Review of Occupational Health and Safety Legislation* (London: Institute of Employment Rights, 1998), 9–12.

been overlooked as occupational health issues (though studied extensively in a wider public health context).⁶²

Secondly, although the post-1960 history of health and safety has not been a distinct period of interest, it has been alluded to in histories focusing on earlier periods. A common argument in recent years is that occupational health declined in importance in late-twentieth-century Britain, particularly after the failure to institute a national industrial health service in parallel to the NHS in 1948.⁶³ However, these historians have overlooked the important circumstances that intervened after 1948, such as the changing shape of the British economy, employment and industrial relations. The HSWA 1974 also introduced a markedly new way of regulating health and safety. My thesis argues that after 1974, health and safety developed under a very different conceptual framework, where ideas about risk became central to the British regulatory approach. It is thus problematic to criticise the post-1974 regulatory system without having understood the conditions which gave rise to it.

Finally, while this hazard or industry-centric approach has provided detailed accounts of efforts to prevent accidents and ill-health in particular areas, what is ultimately lost is an understanding of the systemic way in which risks are regulated by the state, a subject that has been widely explored in the socio-legal and risk literatures

⁶² An exception is perhaps mesothelioma linked to asbestos. See, e.g. Ronald Johnston and Arthur McIvor, *Lethal Work: A History of the Asbestos Tragedy in Scotland* (East Linton: Tuckwell Press, 2000); J. McCulloch and G. Tweedale, *Defending the Indefensible: The Global Asbestos Industry and Its Fight for Survival* (Oxford ; New York: Oxford University Press, 2008).

⁶³ See Long, *The Rise and Fall of the Healthy Factory*; Ronald Johnston and Arthur McIvor, "Whatever Happened to the Occupational Health Service?," in *The NHS in Scotland*, ed. Chris Nottingham (Aldershot: Ashgate, 2001), 79–106.

(see below). In examining the development of the British system of regulation between 1961 and 2001, I aim to contribute to the historical literature on occupational health and safety by bringing these systemic dimensions into focus.

This is not to argue that a systemic or statist approach, focusing on regulation and government, is inherently superior to a social historical, hazard or industry-based approach. My thesis does not seek to replace the valuable research conducted in recent years, which has brought workers' agency to the forefront of historical attention. Rather, it seeks to complement such approaches, highlighting how efforts to combat workplace accidents and disease have been structured and shaped by developments at the systemic, regulatory level. In so doing, this thesis seeks to enrich our historical understanding of developments in Britain since 1961.

1.3.3. Government and Regulation

Of course, regulation has been widely studied in other contexts in the history of science, technology and medicine. In his study of the Food and Drug Administration in the USA, Carpenter demonstrated how concerns about image and reputation pervade regulatory decision-making.⁶⁴ This finding is apposite to the study of British health and safety regulation: as Hawkins discovered in his ethnographic study of prosecution decision-making in the HSE, in an attempt to promote voluntary effort or 'self-regulation' among employers and workers, HSE consciously projects an image of itself as a 'watchdog' and advisor, as opposed to a judge or police officer. HSE is also aware

⁶⁴ Daniel Carpenter, *Reputation and Power: Organizational Image and Pharmaceutical Regulation at the FDA* (Princeton: Princeton University Press, 2010).

of the symbolic impact of prosecution as a way of deterring employers from breaching the law.⁶⁵

In terms of health and safety at work, however, regulation has been most actively explored in socio-legal studies. Since the early 1980s, the Oxford Centre for Socio-Legal Studies has illuminated the politics of British health and safety regulation. More widely, it has opened up regulation and government to academic study: here, the focus is less on health and safety per se, than health and safety in a legal context and for its analytical value in terms of the operation of law and government. As Hawkins makes clear in terms of his study, the focus is on ‘the regulatory bureaucracy as a legal organization, rather than on the victims or their accidents.’⁶⁶ Consequently, health and safety regulations are analysed for their legal status, rather than the requirements they impose in the workplace.

The socio-legal literature has deconstructed the political philosophy behind British health and safety regulation. Wilson argues that the British system, with its emphasis on discretion and consensual decision-making, is inherently less confrontational than the American system, presided over by the Occupational Safety and Health Administration (OSHA).⁶⁷ Baldwin criticises Robens’ idea of an ‘identity of interest’ between employers and workers, claiming it stems from a naive view of rules and enforcement.⁶⁸ Socio-legal historians have traced this ‘conciliatory’ philosophy back to the nineteenth-century Factory Inspectorate. Carson argues that

⁶⁵ Hawkins, *Law as Last Resort*.

⁶⁶ *Ibid.*, 8.

⁶⁷ Graham K. Wilson, *The Politics of Safety and Health: Occupational Safety and Health in the United States and Britain* (Oxford: Clarendon Press, 1985).

⁶⁸ Baldwin, *Rules and Government*, 140.

the Factory Inspectorate's very existence as a prosecuting authority, separate from the police, resulted in the 'conventionalization' of white-collar factory crime.⁶⁹ Bartrip notes that while the first factory inspectors had sweeping powers by twenty-first-century standards, including the ability to enter premises at any time, their readiness to prosecute declined over the nineteenth century. They fell back on a principle of 'negotiated compliance', whereby employers were persuaded, rather than coerced, to meet their legal obligations. This was for several reasons, including the need to efficiently allocate scarce resources, avoid alienating middle-class businessmen, many of whom were magistrates, and to fit in with the management style of their parent department, the Home Office.⁷⁰ The effect of this, according to Moran, was 'even when the Victorian regulatory state developed the formal apparatus of state regulation — through inspectorates empowered by law — it nevertheless practised something that approximated to self-regulation: that is to say, it developed a style of cooperative regulation that disavowed sanctions, especially legal sanctions, in the inspection process.'⁷¹ As Hawkins has shown, this philosophy persists in the self-regulatory ideal of HSE inspectors, who use administrative sanctions (improvement and prohibition notices) to encourage compliance with the law, in preference to prosecution.⁷²

The political science literature is relevant to this thesis in a more theoretical way. To understand the conditions that have shaped British health and safety regulation, it

⁶⁹ W. Carson, "The Conventionalization of Early Factory Crime," *International Journal of the Sociology of Law* 7 (1979): 41–60.

⁷⁰ Bartrip, *The Home Office and the Dangerous Trades*, 38–42; Hawkins, *Law as Last Resort*, 18.

⁷¹ Moran, *British Regulatory State*, 61–62.

⁷² Hawkins, *Law as Last Resort*.

is necessary to study wider changes in the nature of government and regulation over the last third of the twentieth century. Over the last two decades, a powerful metaphor has come to inform academic understanding of these developments: the ‘regulatory state’.

The regulatory state does not merely refer to the work of regulatory bodies, such as government departments or agencies such as HSC/E. In the work of political theorists such as Majone, it refers to an interlinked series of changes—a reconfiguration—in the way states have gone about regulation. From their perspective, the last third of the twentieth century saw a crisis in centralised state control, and traditional modes of regulation inspired by Keynesian notions of economic management.⁷³ While the late nineteenth and early twentieth centuries saw the state intervene in many previously unregulated areas of work and public life (demonstrated, for example, by the New Deal in the USA), in the late twentieth century, they argue, it began to retreat from many of these activities. Since the 1980s, in particular, governments have divested themselves of public ownership of industry, one of the principal ways they previously exercised regulatory control. Regulation has been devolved from central government departments (such as the Department of Employment (DE) or Treasury) to independent agencies (such as the HSC or Bank of England) which are nominally free from political interference.⁷⁴ Command-and-control forms of regulation, whereby activities are regulated directly through legislation, have

⁷³ Giandomenico Majone, *Regulating Europe*, European Public Policy Series (London: Routledge, 1996), 2; Moran, *British Regulatory State*, 5; John Braithwaite, “The New Regulatory State and the Transformation of Criminology,” *British Journal of Criminology* 40, no. 2 (2000): 222–38.

⁷⁴ Majone, *Regulating Europe*, 2.

given way to forms based on compliance and regimes of enforced self-regulation.⁷⁵ As a result (in the words of Hutter), government has become ‘less direct and less visible’.⁷⁶

A new regulatory state has emerged.⁷⁷ As Moran explains:

[T]he state’s rhetoric ... shifted, becoming ‘regulatory’ in a more or less exact sense. The most straightforward meaning of regulation is to govern in the sense of balancing a system: the regulator in a mechanical system, like a steam engine or central heating system, works in exactly this way. That new image of a state steering and balancing social and economic systems is exactly captured in the famous metaphor offered in the most influential public management handbook of the 1990s: the metaphor of a new kind of state that concentrates on ‘steering’ rather than ‘rowing’—on making strategic decisions about the direction of government rather than on delivering services.⁷⁸

This view of decentralised, almost invisible government has obvious parallels with the work of Foucault on ‘governmentality’, which influenced the regulatory literature from the 1990s. In Foucault’s work, successful government depended on governments exercising their power indirectly, getting the governed to modify their own behaviour,

⁷⁵ Braithwaite, “The New Regulatory State.”

⁷⁶ B. M. Hutter, “The Attractions of Risk-Based Regulation: Accounting for the Emergence of Risk Ideas in Regulation,” in *Discussion Paper 33* (ESRC Centre for Analysis of Risk and Regulation, London School of Economics and Political Science, 2005), 3.

⁷⁷ See also Christopher Hood, Henry Rothstein, and Robert Baldwin, *The Government of Risk: Understanding Risk Regulation Regimes* (Oxford: Oxford University Press, 2001), 4.

⁷⁸ Moran, *British Regulatory State*, 5; See also D. Osborne and T. Gaebler, *Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector* (Reading, MA: Addison Wesley, 1992).

almost unconsciously.⁷⁹ As I demonstrate, one of the overriding aims of British health and safety regulation since 1974 has been to create a self-regulating health and safety ‘culture’ in British industry, encouraging employers and workers themselves to take the initiative in promoting a safe, hygienic work environment.

The notion that a new form of state has emerged over the last few decades is linked with an associated concept. Since at least the early 1980s, it is suggested, there has been an acute ‘regulatory crisis’ in which the fundamental rationale of statutory regulation has been questioned. As Hutter argues,

There was a strong deregulatory rhetoric, centring on alleged over-regulation, legalism, inflexibility and an alleged absence of attention being paid to the costs of regulation. Regulatory officials, policies, agencies and rules were all subject to criticism and political attack. They were accused of ‘burdening industry’ and inefficiency and ineffectiveness in their own operations. During the mid 1980s Britain witnessed waves of deregulatory initiatives concerned with the costs of compliance, the over-regulation of business and institutional reforms to control this.⁸⁰

Political studies of British health and safety regulation have highlighted how a ‘neoliberal’ deregulatory rhetoric emerged under the Conservative government from 1979, and was carried over into the policies of New Labour from 1997. Further, they

⁷⁹ Braithwaite, “The New Regulatory State,” 225; Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (London: Penguin Books, 1991); Graham Burchell, Colin Gordon, and Peter Miller, *The Foucault Effect: Studies in Governmentality* (Chicago: University of Chicago Press, 1991).

⁸⁰ Hutter, “The Attractions of Risk-Based Regulation,” 1–2.

have shown how the ‘consensualist’ philosophy of regulation embodied in the HSWA—whereby representatives of trade unions and employers’ associations took the lead in developing health and safety policy—exposed health and safety to deregulatory pressures.⁸¹ As Tombs and Whyte argue, ‘put simply, self-regulation is necessarily vulnerable to regulatory degradation: if government withdraws from regulatory enforcement ... and in the absence of countervailing power of trades union within and beyond workplaces, then regulation becomes increasingly reliant upon market-based mechanisms.’⁸²

These arguments about deregulation tap into a critical strand of expert commentary about British health and safety regulation which has existed since the early 1970s. As Chapter 3 shows, the 1972 Robens Report, which recommended a radical overhaul of the existing system of health and safety regulation, was broadly accepted at the time by both the Conservative and Labour parties. However, within and outside academia, several experts alleged that the CSHW had made invalid assumptions about accidents, regulation and the state: namely, that workplace accidents stemmed from ‘apathy’ on the part of employers and workers; that there was an ‘identity of interest’ between employers and workers in preventing accidents and ill-health; and that the overdevelopment of British health and safety regulation had

⁸¹ Matthias Beck and Charles Woolfson, “The Regulation of Health and Safety in Britain: From Old Labour to New Labour,” *Industrial Relations Journal* 31 (2000): 35–49; S. Tombs and D. Whyte, “A Deadly Consensus: Worker Safety and Regulatory Degradation under New Labour,” *British Journal of Criminology* 50, no. 1 (2009): 46–65.

⁸² Tombs and Whyte, “A Deadly Consensus,” 5.

resulted in widespread confusion about legal responsibilities, promoting inertia.⁸³

Recent works, such as the 2013 edited volume *Safety or Profit?*, show how these assumptions continue to inform British health and safety regulation.⁸⁴

In the extreme, this critical discourse suggests that the state has withdrawn from direct intervention in the workplace. However, this interpretation is too simplistic. Deregulation can be considered part of the same series of changes that accompanied the 'regulatory state': rather than intervening in the workplace through public ownership or command-and-control legislation, the state now exercises its power more indirectly (though no less powerfully). In recent years, for example, the state has assumed a more self-conscious role as 'risk manager', identifying, assessing and communicating risks. As Power argues, much of regulators' recent emphasis to open up their policymaking and 'proceduralise' their approach to risk stems from a need to protect their reputation and legitimise their activities.⁸⁵

1.3.4. Risk

As Power's argument suggests, there is a significant interface between the literature on government and regulation and the substantial literature on risk in the social sciences. A key text which unites the literature on risk with regulation is *The Government of Risk*, which analyses differences between and within states regarding risk regulation. It does

⁸³ See in particular Theo Nichols and Pete Armstrong, *Safety or Profit: Industrial Accidents & The Conventional Wisdom* (Bristol: Falling Wall Press, 1973); Patrick Kinnersly, *The Hazards of Work: How to Fight Them* (London: Pluto Press, 1973).

⁸⁴ Theo Nichols and David Walters, eds., *Safety or Profit? International Studies in Governance, Change and the Work Environment* (Amityville, New York: Baywood Publishing Company, Inc., 2013).

⁸⁵ Power, *The Risk Management of Everything*.

this by advancing the device of the ‘risk regulation regime’ — ‘the complex of institutional geography, rules, practice, and animating ideas that are associated with a particular risk or hazard.’⁸⁶ It thus aims to bring analytical weight to macroscopic theories such as the ‘risk society’ which overlook crucial national considerations (see below), as well as microscopic approaches which focus on particular hazards.⁸⁷ It is this ‘meso-level’ approach, between transnational histories on the one hand, and hazard-focused case studies on the other, that I am broadly seeking to emulate.

A key objective of this thesis is to analyse the changing conceptualisation of risk in British health and safety regulation. The concept of risk has been studied by historians before, in more explicitly health-related contexts, such as epidemiology and medical technology.⁸⁸ The history of risk has also been examined in more popular works.⁸⁹ The sociological literature explores how and why risk has increased in salience in modern Western society over the past thirty to forty years, employed in diverse contexts ranging from financial services to social welfare and the mass media.⁹⁰ A key text in this regard is Ulrich Beck’s *Risk Society*, first published in German in 1986.⁹¹ *Risk Society* considers how the institutions of modern Western society, from science to marriage, have been reorganised in response to the changing social and

⁸⁶ Hood, Rothstein, and Baldwin, *The Government of Risk*, 9.

⁸⁷ *Ibid.*, 14.

⁸⁸ William Rothstein, *Public Health and the Risk Factor: A History of an Uneven Medical Revolution* (Rochester, NY: University of Rochester Press, 2003); Thomas Schlich and Ulrich Tröhler, *The Risks of Medical Innovation: Risk Perception and Assessment in Historical Context* (Abingdon: Routledge, 2006).

⁸⁹ Peter L. Bernstein, *Against the Gods: The Remarkable Story of Risk* (New York: John Wiley & Sons, 1998).

⁹⁰ See Jakob Arnoldi, *Risk: An Introduction* (Cambridge: Polity Press, 2009), 2.

⁹¹ Ulrich Beck, *Risk Society: Towards a New Modernity* (London: Sage, 1992).

technological dimensions of risk. Beck defines risk as ‘a systematic way of dealing with hazards and insecurities induced and introduced by modernization itself.’⁹² According to Beck (and other sociologists sharing his view, such as Giddens⁹³), modern Western society has undergone a significant rupture over the last thirty to forty years: we have entered a new phase of modernity (the risk society) where society has become more concerned with the risks of modernisation—with science and technology—than with the risks of nature, or what Beck terms the ‘classical industrial society’. (Giddens refers to these risks as ‘manufactured risks’.⁹⁴) The risks of the risk society have several features which set them apart from earlier risks: they are often catastrophic in their impact, irreversibly altering the wider environment; delocalised, exerting their effects far and wide; invisible, requiring scientific observation to render them comprehensible; uncertain, eluding easy representation or characterisation; and insidious, only manifesting after several years or generations.⁹⁵ These new dimensions of risk have had profound societal effects: not least, they have generated a paradox whereby science and technology are relied upon more and more to identify and control risks, at the same time that scientific authority and reputation is eroded.⁹⁶

The fundamental idea that a ‘rupture’ has occurred in industrial society remains controversial among historians. Since Beck’s work is theoretical, it has promoted empirical research to justify his claims. Historians such as Boudia and Cooper have not

⁹² Ibid., 21.

⁹³ Anthony Giddens, *The Consequences of Modernity* (Cambridge: Polity Press, 1991).

⁹⁴ Anthony Giddens, “Risk and Responsibility,” *The Modern Law Review* 62, no. 1 (1999): 1–10.

⁹⁵ Beck, *Risk Society*, 22–3.

⁹⁶ Ibid., 14.

only tried to historicise the ‘risk society’, but critique the idea that the risks confronted by people in the past differed greatly from those confronted by people today.⁹⁷ Rather, perceptions of risk are historically contingent. As Fressoz argues, ‘the historical narrative underlying contemporary literature on technological risk is (in part at least) a construction which, for the sake of sociological argument, has reduced past risks to somewhat reassuring categories.’⁹⁸ Notwithstanding these efforts, other academics such as Green have claimed that the burgeoning literature on risk no longer serves any fruitful purpose. This is because the concept of risk is a ‘second order’ level of inquiry which obscures the real object of study, such as citizenship.⁹⁹

Risk might be a second order level of inquiry—in the same respect as industrial change, political developments or economic trends—but one which is nevertheless central to the development of regulatory systems. British health and safety regulation is now specifically couched in terms of risk. Not only is formal risk assessment an established part of the regulatory approach to occupational hazards, but HSE has produced a sophisticated treatment of the risk-based principles that inform its decision-making.¹⁰⁰ In order to understand the development of the British system of health and safety regulation, therefore, it is essential to account for the emergence and evolution of

⁹⁷ Soraya Boudia and Nathalie Jas, “Introduction: Risk and ‘Risk Society’ in Historical Perspective,” *History and Technology* 23, no. 4 (2007): 317–31; Timothy Cooper and Sarah Bulmer, “Refuse and the ‘Risk Society’: The Political Ecology of Risk in Inter-War Britain,” *Social History of Medicine* 26, no. 2 (2012): 246–66.

⁹⁸ Jean-Baptiste Fressoz, “Beck Back in the 19th Century: Towards a Genealogy of Risk Society,” *History and Technology* 23, no. 4 (2007): 334.

⁹⁹ Judith Green, “Is It Time for the Sociology of Health to Abandon ‘Risk’?,” *Health, Risk & Society* 11 (2009): 493–508.

¹⁰⁰ HSE, *Reducing Risks, Protecting People: HSE’s Decision-Making Process* (Sudbury: HSE Books, 2001).

these ideas.¹⁰¹ My concern is with how British regulators (including HSC/E) explicitly recognised and responded to the changing dimensions of risk. Thus, health and safety provides a critical case study of the emergence and application of risk in a major area of regulation and political concern.

1.3.5. Summary

My thesis draws upon the contributions of several disciplines. The history of occupational health and safety forms the core foundation for my thesis, and is my primary field of contribution. However, to date the post-1960 history of health and safety regulation in Britain has not received adequate attention. Regulation has been extensively studied elsewhere, notably in the political sciences. However, the exercise here has not been to understand health and safety per se, but law or government: health and safety as a case study. Finally, considering the relevance of risk to health and safety—risk assessments are a cornerstone of health and safety regulation today—it is remarkable that no formal effort has been made within the history of science, technology and medicine to integrate it with the historiography of occupational health. A history that, inter alia, considers how officials responded to the changing dimensions of risk, regulation and governance in Britain, thus has an enormous contribution to make to our understanding of health and safety.

¹⁰¹ Hutter, “The Attractions of Risk-Based Regulation.”

1.4. Method

1.4.1. Chronological Scope

This thesis covers an eventful forty-year period in the history of British health and safety regulation. I decided to concentrate on the period 1961–2001 principally because it has received very little historical attention. This is despite significant events during the period that shaped the current regulatory system: the HSWA 1974, for instance, established a comprehensive system of protection that extended statutory coverage to every worker. The forty-year timeframe was sufficiently broad to analyse the evolution of particular ideas in British regulatory discourse (such as risk), without the topic being unmanageable. The period is bounded by two important events in the history of British health and safety regulation: the passage of the Factories Act 1961, the last of the Factories Acts dating back to the early nineteenth century, and the publication of HSE's discussion document *Reducing Risks, Protecting People* in 2001, which outlined its risk-based approach to decision-making.¹⁰² This is arguably an unusual choice of timeframe, because it has been customary for academics and professionals (including HSE) to start their studies from either 1972, the publication of the Robens Report, or 1974, the year of the HSWA.¹⁰⁵ However, it is an illuminating one: by commencing my research from 1961, I have been able to set developments after 1974 in wider historical context. I have been able to analyse the major changes in regulation that accompanied the HSWA, and the development of ideas that that informed the current regulatory

¹⁰² HSE, *Reducing Risks, Protecting People*.

¹⁰⁵ See, e.g. HSE, *Thirty Years on and Looking Forward*.

system. This is vital to understand the development of these ideas over the subsequent thirty years.

1.4.2. Data Collection and Sources

In order to deconstruct the historical conditions that shaped the British system of health and safety regulation, my thesis draws upon a wide range of material, including archival sources, published documents, and oral history interviews. It is principally comprised of an analysis of written material (both published and archival) pertaining to the HSC, HSE and their predecessors in the British government from 1961. The goal of my analysis was to identify major events, moments or changes in the regulatory system, as well as important developments in regulatory policy (for example, the need for regulators after 1980 to carry out formal cost-benefit analyses of new proposals). My analysis was also designed to identify the wider historical conditions that shaped, influenced or gave rise to these developments: economic factors such as recession, political factors such as deregulatory rhetoric, and social factors such as regulators' awareness of the changing public perception of risks.

These objectives were achieved by analysing a wide range of primary sources. Their historical significance was deconstructed by cross-referencing them with alternative sources from the same and other periods. I focused on the informational content of the sources (for example proposals for new regulations) and in particular the language employed by historical actors, such as HSE officials. I analysed the situational and institutional context of the sources (that is, who the sources were written by, to whom they were directed, when and in what setting), and I explored their wider context by comparing them with sources from 'outside' the regulatory

system (such as contemporary news stories), and secondary sources such as studies of government and regulation.¹⁰⁴ Central to my analysis is an understanding of the historical connotations of particular concepts, such as ‘health and safety’ and ‘risk’. My perspective here was both ‘diachronic’ and ‘synchronic’ —that is, I sought to understand how the meanings of these terms changed over time, and identified multiple expressions of them at particular historical moments and junctures.¹⁰⁵

My research had two initial starting points. The first was the published annual reports of the HSC/E and inspectorates that enforced health and safety legislation before 1974 (such as HM Factory Inspectorate). These publications — aimed technically at Secretaries of State, but in practice a professional audience — contained a wealth of material about contemporary hazards, regulatory activities (such as campaigns or initiatives, new regulations or codes of practice), statistical data, as well as administrative information such as financing and staffing. Forewords gave concise and often frank information about the challenges faced by officials. While intended, in part, to influence government ministers and therefore not a completely unbiased account of their activities (for example, HSC/E reports in the early 1980s expressed concern about the impact of financial cuts), a preliminary analysis of these documents enabled me to identify events which had lasting implications for the British regulatory system, such as the passing of the European Framework Directive on Safety and

¹⁰⁴ Miriam Dobson and Benjamin Ziemann, eds., *Reading Primary Sources: The Interpretation of Texts from Nineteenth- and Twentieth-Century History* (Abington: Routledge, 2009), 12.

¹⁰⁵ *Ibid.*, 6.

Health in 1989.¹⁰⁶ Moreover, they allowed me to identify general political and economic trends, which were analysed in further depth using archival sources and oral history interviews. Annual reports thus formed the surface level of my analysis.

My second starting point was the 1972 report of the Committee on Safety and Health at Work (CSHW).¹⁰⁷ The culmination of a two-year inquiry, the report recommended a radical overhaul of the existing regulatory approach, which had developed since the nineteenth century. The majority of its proposals were enacted in the HSWA 1974, which established the current, 'risk based' regulatory system, as well as HSC/E. By analysing the report's proposals, and the rationale for these changes, I could identify the ideas and principles on which the current regulatory system rested. I could also evaluate the major differences in approach between the current (HSWA) and former (Factories Act) models of regulation. An analysis of the Robens Report, together with its volume of written evidence, was thus vital to understand the evolving dimensions of the British regulatory system.

Other essential sources included proceedings into major disasters (such as the 1966 Aberfan Disaster), HSE discussion, consultation and guidance documents, Parliamentary bills and Acts, and major UK statutory instruments (regulations) made under the HSWA. The government website, www.legislation.gov.uk was a crucial digital resource for historical and current legislation. More generally, this thesis has

¹⁰⁶ Of course, no historical document provides a completely objective account of events; the author must have had an agenda to write it in the first place. A key challenge for the historian is to identify what this agenda was.

¹⁰⁷ Robens, *Safety and Health at Work*; Lord Robens, *Safety and Health at Work: Report of the Committee. 1970-72. Volume 2. Selected Written Evidence*, 2 vols. (London: HMSO, 1972).

relied on digitised historical records. House of Commons Parliamentary Papers proved indispensable in terms of government reports, command papers and reports of Parliamentary committees. Further, Hansard provided a vital gateway into historical government policy. While the aim of this thesis was *not* to analyse changing public attitudes towards health and safety in Britain, it has been necessary to consult some historical newspaper articles to situate developments in wider social and political context. The Times Digital Archive was useful in this respect, as was the digitised archive of *The Daily Mail*.

Physical archival material came from two main sources. The National Archives (TNA) in Kew, Surrey was the main source of archival material. As the national repository for historical government records, it contains the papers of government departments, such as the Ministry of Labour (MOL) and Department of Employment (DE), which regulated health and safety before 1974. The records of the HSC/E are also available. Material of interest from TNA included the memoranda and reports of HSC advisory committees, correspondence between civil servants on major aspects of health and safety policy, Cabinet Office minutes and the agenda, and the minutes and circulated papers of the CSHW. Despite the existence of the 'thirty-year rule' for disclosure of government records, more recent records of the HSC/E have been opened to public access. This meant I was able to access material from as recently as 2005 without the need to file freedom of information requests.

A second major source of archival material was the Modern Records Centre at the University of Warwick. This contains the archives of the Trades Union Congress (TUC), the Confederation of British Industry (CBI), and its predecessor, the British Employers' Confederation (BEC). An analysis of trade union and employer documents

was necessary to explore the wider political dimensions of particular developments, such as the making of new regulations. Health and safety policy in these bodies was coordinated by two major committees: the TUC Social Insurance and Industrial Welfare Committee, and the CBI Safety, Health and Welfare Committee. Due to their close relationship with the HSC, however (both the TUC and CBI were represented on the Commission), the National Archives also proved a fruitful source for trade union and employer material. For instance, consultation documents described in detail the reaction of employers, trade unions and other groups to proposed health and safety policies. Correspondence between the government, TUC and BEC/CBI also allowed me to analyse the political context of particular developments. Since these went back and forth, the content of these archives was often complementary (respondents to letters or memoranda often keeping copies of the original). This revelation during my research enabled me to focus the majority of my efforts on the National Archives, and the policy documents that circulated between the major actors (the HSC, HSE, TUC, CBI and British government departments such as the DE). Nevertheless, the TUC and CBI archives were vital for more private views which were not widely aired. A further, more condensed source of 'political' material, however, was the records of Parliamentary committees such as the House of Commons Employment Committee. Their scrutiny of British health and safety legislation and the operation of HSC/E in the 1980s and 1990s helped bring employer and union views to the surface.

The volume and diversity of archival material meant I had to choose my sources carefully. To locate necessary files, I employed keyword searching of archival catalogues. Preliminary analysis of published documents enabled me to identify relevant keywords and phrases (such as 'risk assessment', 'COSHH' or 'European

Commission'). These were then inputted into search engines and the results filtered by date and department to retrieve documents, which were prioritised for viewing depending on their relevance. A limitation of this approach was that it was dependent on the extent to which the archive was indexed. However, in cases where meta-data was insufficient or vague (for example, the minutes of the CSHW) this was counteracted by viewing records chronologically to find material of interest. A serendipitous benefit of this approach, however, was that relevant material was found outside the archives of the HSC/E; for example, I retrieved material from the Civil Service Machinery of Government group, which deliberated the establishment of the HSC/E following the publication of the Robens Report between 1972 and 1974.

A final source of material was my interviewees, who kindly lent me their private books, documents and memoranda. These provided an invaluable snapshot of political decision-making at particular points in time, and may never have been made accessible through other sources.

1.4.3. Oral History Interviews

Health and safety policy makes for dry and impersonal reading without an appreciation of the efforts of those who have worked and campaigned for it.

Supplementing my document analysis was therefore an oral history project collecting the spoken testimonials of former staff and policymakers in the HSC/E, including trade union and employer representatives. My objective was twofold: to unearth details which were unavailable or hidden in documents, and to emphasise the personal experiences and memories of those who helped draft, negotiate and implement important health and safety policies and legislation. These interviews were patently

'elite' in character, directed at highly skilled, professional persons. My intention was to collate a range of responses from individuals about events and trends in the regulatory system. Although I discussed technical topics, my intention was not to elicit 'official' versions of events, but personal experiences and opinions. This was reflected in my decision to adopt a semi-structured rather than closed interview format.

The technical nature of health and safety meant that the interviews had a high 'barrier to entry' in terms of factual knowledge. To compensate for this, I conducted significant background research before each interview, for example on health and safety law. The difficulties posed by 'barriers to entry' to my research were very similar to those confronted by the labour historian Beatrice Webb (wife of Sidney, quoted above), who wrote in 1926: 'To cross-examine a factory inspector without understanding the distinction between a factory and a workshop ... is an impertinence. Especially important is a familiarity with technical terms and a correct use of them. To start interviewing any specialist without this equipment will not only be a waste of time, but may lead to more or less courteous dismissal, after a few general remarks and some trite opinions....'¹⁰⁸

Initially, informants were identified through word of mouth (including LSHTM professional networks) and archival research. After initial contact was made with respondents, identification proceeded in a naturalistic 'snowball' fashion so that access to further informants was granted. As a supplementary source of data designed to illuminate the personal agency of individuals rather than to construct generalisations

¹⁰⁸ Quoted in Paul Thompson, *The Voice of the Past: Oral History*, 3rd ed. (Oxford: Oxford University Press, 2000), 224.

about policymakers, my aim was not to gather a 'representative sample' of interviewees. However, over the course of two years I managed to interview eight individuals from HSC/E, including TUC and CBI representatives. Unfortunately, it proved difficult to arrange interviews with certain individuals who have been outspoken in their criticism of British health and safety policy. Nevertheless, through personal correspondence I was able to take account of their opinions, and I was also pointed in the direction of valuable journal articles, news stories, interviews and other documents.

My interviews were tailored to each individual, and drew on a mixture of direct and open-ended questions. This allowed the informant to guide the conversation into areas they found interesting, as opposed to relying on prompts.¹⁰⁹ While each interview was conducted separately, on one occasion, the interview was conducted in the presence of another individual I had previously interviewed. This generated a different dynamic to my other interviews, but a productive one: according to Berridge, the presence of a familiar individual 'can strike sparks and give material which would never come from an individual interview.'¹¹⁰ At the same time, however, I was conscious that my informants could (re)write their own histories. Some of my interviewees had well-documented opinions on particular events or phenomena in the British regulatory system, although these were not necessarily 'official' narratives. For

¹⁰⁹ Donald Ritchie, *Doing Oral History*, Twayne's Oral History Series (New York: Twayne Publishers, 1995), 12.

¹¹⁰ Virginia Berridge, "'Hidden from History'?: Oral History and the History of Health Policy," *Oral History* 38 (Spring 2010): 95.

that reason, the necessity to gather different opinions and perspectives on particular topics was paramount.

With the exception of one interview, conducted at LSHTM, all interviews were conducted at mutually convenient times at the informants' own homes. This was not merely for my informants' convenience (though this was important), but to promote an atmosphere conducive to candour. The length of each interview was decided by my informants. They ranged from one hour to over three and a half.

My original intention was not to fully transcribe these interviews, due to time constraints. Nevertheless, over the course of writing this thesis it proved useful to partially transcribe them, primarily to bring to the fore personal agency, but also to facilitate analysis. I transcribed my interviews with varying degrees of detail, depending on the content of the discussion: they ranged from more note-like records of conversation, to more in-depth transcripts.

Naturally, ethical considerations were central to my methodology. Aside from the 'expert' status of my informants, their age and health were important factors: while giving them ample opportunity to contribute their experiences, I did not want to put undue pressure on them. Thus, in addition to deciding the time, length and location of our meeting, my informants could decide to stop the interview, or withdraw from the study, at any time. Memory was a significant additional issue, with retirees in their seventies and eighties being prompted to reflect back on events thirty or even forty years ago. This demanded that I pay particularly close attention to the subjectivity of my informants' accounts: their artificiality, variability and partiality as well as intersubjective factors arising out of the interaction between interviewer and

informant.¹¹¹ To ensure that I developed a considered account of historical events and trends, I cross-referenced my informants' accounts with each other and with historical documents.

My project was granted ethical approval from the LSHTM Observational Research Ethics Committee. The approval process ensured that I had fully considered my informants' legal and moral rights: these included their right to know my aims, the purpose of their contribution, any resulting copyright implications, and what would happen to research material at the end of the study. Informed consent was therefore vital. To achieve this, a detailed information sheet and consent form was sent to my informants in advance of the interview, and further explained in person. The consent form explicitly required my informants to specify whether they gave me permission to audio record the interview, publish direct named quotations (consulting with them where appropriate), and whether I could deposit the recordings and related material in a public archive. If so desired, my informants could choose to remain anonymous. However, all chose to ultimately waive this right to allow me to directly attribute their experiences. An example consent form is found in Appendix VI. This form closely followed the ethical guidelines for historians laid down by the UK Oral History Society.¹¹²

While the majority of my informants gave unqualified permission for me to publish direct quotes, three requested that I consult them in the event of publication, to give them opportunity to clarify, amend or expand on certain remarks. As a result of

¹¹¹ See Alessandro Portelli, "What makes oral history different," in *The Oral History Reader*, ed. Robert Perks and Alistair Thomson (London: Routledge, 2003).

¹¹² <http://www.ohs.org.uk/advice/ethical-and-legal/>, accessed January 28, 2016.

the electronic publication of this thesis, minor alterations have been made to certain quotes to reflect my informants' preferences, although none of these alterations change the overall meaning of the quotes in any significant way.¹¹³

Respecting the wishes of my informants, and following ESRC funding guidelines, arrangements will be made to deposit the audio recordings at the UK Data Archive in Colchester, Essex, following completion of the study.

1.5. Thesis Overview

With multiple overlapping and intersecting themes, the history of British health and safety regulation eludes both a straightforward chronological narrative and thematic approach. To structure this thesis, I have therefore taken advantage of major developments, ruptures and periods of transformation in British health and safety legislation. For example, Chapter 2 focuses on the period leading up to the appointment of the CSHW, under the pre-1974 Factories Act model of regulation. In contrast, Chapter 4 focuses on HSC/E's inaugural decade. Between 1974 and 1984, HSC/E operated under the same chair and Director-General. It therefore forms a discrete period where I can analyse the impact of the new regulatory bodies.

¹¹³ It is commonplace for many historians to return transcripts back to informants for correction, especially when the subject-matter is highly technical. This was not done in my case, but the implications for 'approved quotations' are the same: informants can correct misunderstandings or expand on certain comments, bringing useful new information to light. At the same time, however, they can also put a new slant on their original words, creating new meaning. To avoid 'weaken[ing] the authenticity' of my oral evidence, my informants' original comments will be made available through the archived audio recordings. See Thompson, *The Voice of the Past*, 263.

The thesis is presented chronologically where possible, with temporary diversions to set particular developments in wider context. For example, in explaining how and why the HSC/E systematised their approach to risk management in Chapter 6, I break away from the wider timeframe of the chapter (1992–2001) to show how developments in British government and society since the early 1980s encouraged regulators to open up their policymaking process. To aid navigation, however, I have adopted certain conventions. For instance, following the introduction and overview in every chapter, I have a contextual section analysing the wider influences on regulation, such as changes in British politics, the economy or structure of industry.

Chapter 2 analyses the period between the Factories Act 1961 and the appointment of the Committee on Safety and Health at Work (CSHW). It highlights how a distinct set of political, economic, legal and epidemiological pressures converged over the 1960s to call into question the state's existing approach to health and safety regulation, which was largely based on the piecemeal development of detailed and prescriptive laws. These encouraged the British government, by 1970, to seek an entirely new approach to regulation.

Chapter 3, focusing on the period 1970–1974, considers the enormous changes set in motion by the CSHW and HSWA 1974. During this time, important decisions were made, including by Whitehall officials, which determined the subsequent shape, scope and style of the British regulatory system, as well as the roles of the proposed HSC/E. The CSHW's fundamental conclusion was that the existing regulatory approach was no longer adequate to protect workers and others who could be injured or made ill by work activity. It therefore recommended a radical overhaul of regulation, including a new, single comprehensive statute. Chapter 3 shows that British

health and safety regulation became dominated by concerns about voluntary effort or 'self-regulation', and that the HSWA implicitly incorporated risk-based ideas and principles.

Chapter 4 focuses on the newly established HSC/E, and charts their efforts to improve health and safety over their inaugural decade (1974–1984). Examining the impact of the Thatcher government from 1979, it reveals how scientific and political demands were instrumental in establishing the conditions for an explicit 'risk management' approach to regulation. Not least, techniques of risk analysis and assessment were pioneered during these years that were later promoted across British health and safety regulation as a whole. The emergence of a strong deregulatory rhetoric under the Thatcher government (1979–1990) also placed pressure on the HSC/E to justify new regulations on the basis of risk, through formal cost-benefit analysis.

Chapter 5 examines the period 1984–1992, corresponding to the time between the passing of the Control of Industrial Major Accident Hazard Regulations 1984 (CIMAH), and the European 'six-pack' of 1992. This package of six sets of regulations contained provisions, such as for display screens and manual handling, which are now an integral part of British (and European) health and safety regulation. During this period, HSC/E's responsibilities increased significantly, promoted by factors beyond their direct control (such as industrial disasters). At the same time, the British government stepped up pressure to deregulate the system and make it more efficient. The European Commission began to play a dominant role in setting the British policy agenda, supplanting the HSC as the primary source of health and safety regulations. Most importantly, the language and practice of risk management began to crystallise,

as an explicit and formalised means for employers to evaluate and control hazards. Risk assessments became an overt requirement for employers under a host of new regulations, most notably the Control of Substances Hazardous to Health Regulations 1988 (COSHH).

The final chapter, Chapter 6, analyses the period between the passing of the six-pack and the publication of HSE's discussion document, *Reducing Risks, Protecting People* in 2001.¹¹⁴ During this time, HSC/E elaborated and systematised their approach to risk management as a way of justifying their decision-making to government, interest groups and the wider public. Occupational health rose up the policy agenda, and was linked to wider public health strategies. Further, the Labour government (1997–2007) introduced a new strategy to 'reboot' the British health and safety system as it entered the twenty-first century. However, while the British workplace was in some respects safer than ever before, the right-wing British media began to criticise health and safety regulation as a problem of bureaucracy and red-tape. As the twentieth century drew to a close, the foundations for the current public and political malcontent with 'elf and safety' had been firmly laid.

This thesis presents a complex argument of continuity and change. It shows that many of the principles that informed pre-1974 health and safety regulation, and even Victorian regulation, were alive and well under the HSWA, and continue to influence regulation. However, the state's role in promoting health and safety has been completely reconfigured. Over the last forty years, it has sought to progressively distance itself from direct intervention in the work environment, promoting self-

¹¹⁴ HSE, *Reducing Risks, Protecting People*.

regulation on the part of employers and workers, and delegating regulatory responsibility to quangos outside the central government machine, overseen by representatives of interest groups. Yet, this must not be interpreted as a complete withdrawal, or abrogation of responsibility: through risk, the state has assumed a new supervisory role that allows it to take heed of public opinion, and conduct its policymaking in an ostensibly transparent, informed manner. Ultimately, the British system of health and safety regulation has been shaped by a host of political, economic, social and cultural pressures. However, by analysing the system's changing dimensions, we can examine the increasingly central but controversial position health and safety has assumed in our lives.

2. A Broken System, 1961–1970

2.1. Introduction

Chapter 2 highlights how a distinct set of political, economic, legal and epidemiological pressures converged over the 1960s to call into question the British state’s approach to occupational health and safety regulation.¹ As Chapter 1 described, the British state’s interest in protecting the safety, health and welfare of workers evolved piecemeal since the nineteenth century. In 1961, the Factories Act consolidated a series of measures developed over the twentieth century to safeguard workers in factories, construction yards and other industrial premises. The 1961 Act formed the last in a long line of statutes dating back to 1802, and advanced a detailed, prescriptive approach to working conditions. By 1967, Ministry of Labour (MOL) officials had identified the need to revise the 1961 Factories Act. However, by this time political concerns had emerged that questioned the effectiveness of the Factories Act model of regulation. In 1970, the Employment and Productivity Secretary, Barbara Castle, appointed the Committee on Safety and Health at Work (CSHW) to review the existing approach. The CSHW’s appointment marks the point at which the British government lost faith

¹ Research presented in this chapter has contributed to two forthcoming publications: Christopher Sirrs, “Accidents and Apathy: The Construction of the ‘Robens Philosophy’ of Occupational Safety and Health Regulation in Britain, 1961–1974,” *Social History of Medicine*, n.d.; Christopher J. Sirrs, “Risk, Responsibility and Robens: The Transformation of the British System of Occupational Health and Safety Regulation, 1961–1974,” in *Governing Risks in Modern Britain, 1800–2000*, ed. Tom Crook and Mike Esbester (Basingstoke: Palgrave Macmillan, n.d.).

with the ability of the existing system to address the evolving problems of safety and health in the British workplace, and sought an entirely new solution to these problems.

Considering the lengthy history of British statutory intervention in working conditions, this chapter seeks to understand why it was only in the 1960s that the Factories Act model of regulation began to be openly questioned by government officials, trade unionists and others with an interest in health and safety. It demonstrates how several trends particular to the 1960s came together to promote a reappraisal of the British state's role in regulating health and safety. In particular, Britain's industrial accident record and changing industrial landscape exposed the deficiencies of a detailed, prescriptive approach. New, more complex risks emerged that required new solutions on the part of government and industry. Together with concerns about Britain's low productivity and deteriorating industrial relations, regulatory attention turned to the management of health and safety, and the promotion of voluntary effort by employers and workers. By the late 1960s, factory inspectors and other officials believed that the further proliferation of health and safety law was no longer viable.

While the British state's role in regulating occupational hazards came under political scrutiny, the scope of health and safety legislation also increased dramatically. The Offices, Shops and Railway Premises Act 1963 (OSRPA) extended legal coverage to an estimated 8 million workers in non-industrial premises for the first time. However, by 1970 some 5–8 million workers still remained outside its protective remit, and government efforts began to extend comprehensive statutory protection to all employees. Questions also emerged towards the end of the decade about the health and safety of non-employees who could be harmed by work activity. Industrial disasters,

such as the landslide at Aberfan, Wales in 1966, revealed how occupational hazards could extend beyond the work gates to devastate entire communities. Such catastrophes highlighted the delocalised nature of risks in a fast developing industrial society, and how employers needed to consider the impact of their activities on the wider populace.

Despite these questions about the nature and scope of health and safety legislation, Castle's decision to appoint the CSHW was ultimately taken strategically. In the political climate of the day, the appointment of an 'independent' committee representing a broad spectrum of political opinion was one of the few ways that radical solutions could be sought which were acceptable to 'both sides of industry': trade unions and employers. The CSHW was thus used as a device to break through the political impasse that inhibited earlier reform efforts.

During this period, trade unions and employers assumed different beliefs about the direction of health and safety. Trade unions, represented by the Trades Union Congress (TUC), thought that existing health and safety law needed strengthening, while large employers, represented by the British Employers' Confederation (BEC) and its successor, the Confederation of British Industry (CBI), believed that the law was too complex, discouraging individual responsibility. Regardless of these differences, health and safety was an active area of cooperation between the TUC and BEC/CBI in the 1960s. They were represented on several committees and councils at industry and national level that advised the government on health and safety issues. They also carried out joint initiatives to promote industrial accident prevention. The question of whether a true political 'consensus' existed between government, industry and the trade unions at this time is a fiercely debated historical topic (see below).

However, the close relationships evidenced in the health and safety field demonstrate that it was one area where employers and trade unions could fruitfully engage with each other, if not always agree.

2.2. Overview

The nature of the political relationship between the British government, trade unions and employers is analysed below. My evidence demonstrates that attempts by the British government to intervene in workplace health and safety closely followed its wider industrial relations policy. In section 2.4, however, I continue the historical discussion of health and safety legislation in Chapter 1 by describing the regulatory landscape in the 1960s: a labyrinthine and fragmented mass of law which left up to 16 million workers without statutory protection from industrial harms. The chapter proceeds to analyse the two major trends outlined above: the calling into question of the prevailing model of regulation, and the growing need to extend statutory coverage to all British workers and ‘third persons’ at risk from work activity.

2.3. The Politics of Safety and Health in 1960s Britain

While there is a vast literature on 1960s British industrial relations, little has been written on the politics of health and safety immediately prior to the CSHW. As Chapter 1 explained, historians have tended to concentrate on the nineteenth and early-twentieth-century history of health and safety. The Committee and its report is often viewed as the de facto start of the ‘modern’ system of health and safety regulation, rather than the product of longer-term historical trends. Consequently, its 1972 report is often viewed in isolation.

There are two notable exceptions. In a work on safety management and self-regulation, Dawson and her colleagues attempt to place the CSHW in contemporary political and legislative context.² They note that efforts to legislate for safety committees in the late 1960s were intimately bound with moves by the British government to intervene more strongly in industrial relations. The CSHW's appointment, they suggest, could only occur at a time when the prevailing philosophy of voluntarism in industrial relations was under political attack. Beck and Woolfson have similarly placed the CSHW in the contemporary industrial relations context.³ They argue that the CSHW was prompted by rising political concern about industrial accidents, and trade union demands for worker safety representatives to be given a statutory right of inspection.

This chapter offers a more nuanced understanding of the rationale for regulatory reform, drawing upon a rich vein of archival material. It shows that while reform was indeed prompted by rising concern about accidents, factory inspectors and other government officials had lost confidence in the system's effectiveness. By 1967 administrative needs had also emerged that required revision of existing health and safety legislation.

Demand for reform emerged from a unique set of economic and political circumstances. During the 1960s, the trade unions were at their strongest, politically and in terms of membership. As of 1964, 10 million workers—44 per cent of British

² Sandra Dawson et al., *Safety at Work: The Limits of Self-Regulation* (Cambridge: Cambridge University Press, 1988), 10–11.

³ Beck and Woolfson, "The Regulation of Health and Safety in Britain," 37.

employees—were trade union members.⁴ This compared to 7.4 million workers, 29.1 per cent, in 2003.⁵ Historians often interpret the early 1960s to constitute a period when the alleged ‘post-war consensus’ in British politics remained intact. Definitions of ‘consensus’ vary, but in general, it is argued that both Conservative and Labour governments after the Second World War shared certain convictions, for instance a belief in the welfare state, full employment, economic management, and the close incorporation of trade union and employer viewpoints in policymaking (corporatism).⁶ In the sphere of industrial relations, both Conservative and Labour governments adopted laissez-faire or abstentionist policies, believing that collective bargaining was best pursued voluntarily.

Towards the end of the 1960s, it is suggested, the post-war consensus began to come under strain.⁷ From 1965, Harold Wilson’s Labour government attempted to intervene more strongly in industrial relations to arrest the growing problem of strikes. While the 1965–68 Donovan Commission on Trade Unions and Employers’ Associations broadly endorsed the voluntarist approach (see below), the 1969 white

⁴ John McIlroy and Alan Campbell, “The High Tide of Trade Unionism: Mapping Industrial Politics, 1964-1979,” in *British Trade Unions and Industrial Politics: The High Tide of Trade Unionism, 1964-1979*, ed. John McIlroy, Nina Fishman, and Alan Campbell (Aldershot: Ashgate, 1999), 99.

⁵ Stephen Hicks and Tom Palmer, “Trade Union Membership: Estimates from the Autumn 2003 Labour Force Survey,” *Labour Market Trends* March (March 2004): 99.

⁶ Sid Kessler and Fred Bayliss, *Contemporary British Industrial Relations* (London: Macmillan, 1992), 2.

⁷ *Ibid.*, 16–7; Dennis Kavanagh, “The Postwar Consensus,” *Twentieth Century British History* 3, no. 2 (1992): 175–90; Ben Pimlott, Dennis Kavanagh, and Peter Morris, “Is the ‘Postwar Consensus’ a Myth?,” *Contemporary Record* 2, no. 6 (1989): 22–15.

paper *In Place of Strife* proposed several contentious new policies, including a mandatory 28-day cooling-off period for strike action.⁸

The issue of whether a true political consensus, or corporatist system of government existed at this time is hotly debated.⁹ Certainly, it is the case that trade unions and employers' associations were closely consulted by the government on health and safety and other issues, sitting on several bodies at industry and national level which advised ministers. These included the Industrial Safety Sub-Committee of the National Joint Advisory Council (NJAC), a tripartite body that advised the MOL on industrial relations, first established in 1939.¹⁰ Employers and trade unions were also represented on the Industrial Health Advisory Committee (IHAC), a body charged with coordinating and promoting the development of industrial health services, first established in 1943.¹¹

Despite growing disagreement between the government, trade unions and employers over economic and industrial relations policy in the late 1960s, Chapter 2 demonstrates that health and safety was relatively uncontentious. This interpretation is supported by other studies, which emphasise the relative harmony of the British approach to health and safety, in comparison to the 'adversarial' approach of other

⁸ *In Place of Strife. A Policy for Industrial Relations*, Cmnd. 3888, 1969.

⁹ Richard Toye, "From 'Consensus' to 'Common Ground': The Rhetoric of the Postwar Settlement and Its Collapse," *Journal of Contemporary History* 48, no. 1 (2013): 3–23; David Marsh and Wyn Grant, "Tripartism: Reality or Myth?," *Government and Opposition* 12, no. 2 (1977): 194–211.

¹⁰ In 1967 this was replaced by the Industrial Safety Advisory Council (ISAC), a body with wider membership drawn from professional and voluntary organisations, including the British Insurance Association, Royal Society for the Prevention of Accidents, and nationalised industries.

¹¹ Long, *The Rise and Fall of the Healthy Factory*, 161–173.

countries, especially the USA.¹² While the TUC and CBI disagreed on particular issues, such as safety committees, a broad consensus emerged by the end of the 1960s that the regulatory system needed urgent reform.

2.4. The Regulatory Landscape in the 1960s

British health and safety legislation in the 1960s was highly complex. A multitude of separate Acts protected workers in separate industries and occupations. These Acts, along with their subordinate regulations, had their own unique histories: they were administered by separate government departments, and enforced by several government inspectorates. Effectively, there was not one 'system' of health and safety regulation, but multiple competing and overlapping systems.

As of 1961, four Acts directly legislated for workers' health and safety (Figure 3). Mines and quarries were regulated by the Mines and Quarries Act 1954, which was administered by the Ministry of Power, and enforced by HM Mines and Quarries Inspectorate. Work in agriculture was covered by two Acts: the Agriculture (Poisonous Substances) Act 1952, and the Agriculture (Safety, Health and Welfare Provisions) Act 1956. These were enforced by officials reporting to the Ministry of Agriculture, Fisheries and Food (MAFF), in England and Wales, and the Department of Agriculture and Fisheries in Scotland. A diverse range of other industrial premises, including factories, workshops, docks and construction yards, were regulated by the Factories Act 1961. This was administered by the MOL and enforced, primarily, by

¹² e.g. Wilson, *The Politics of Safety and Health*.

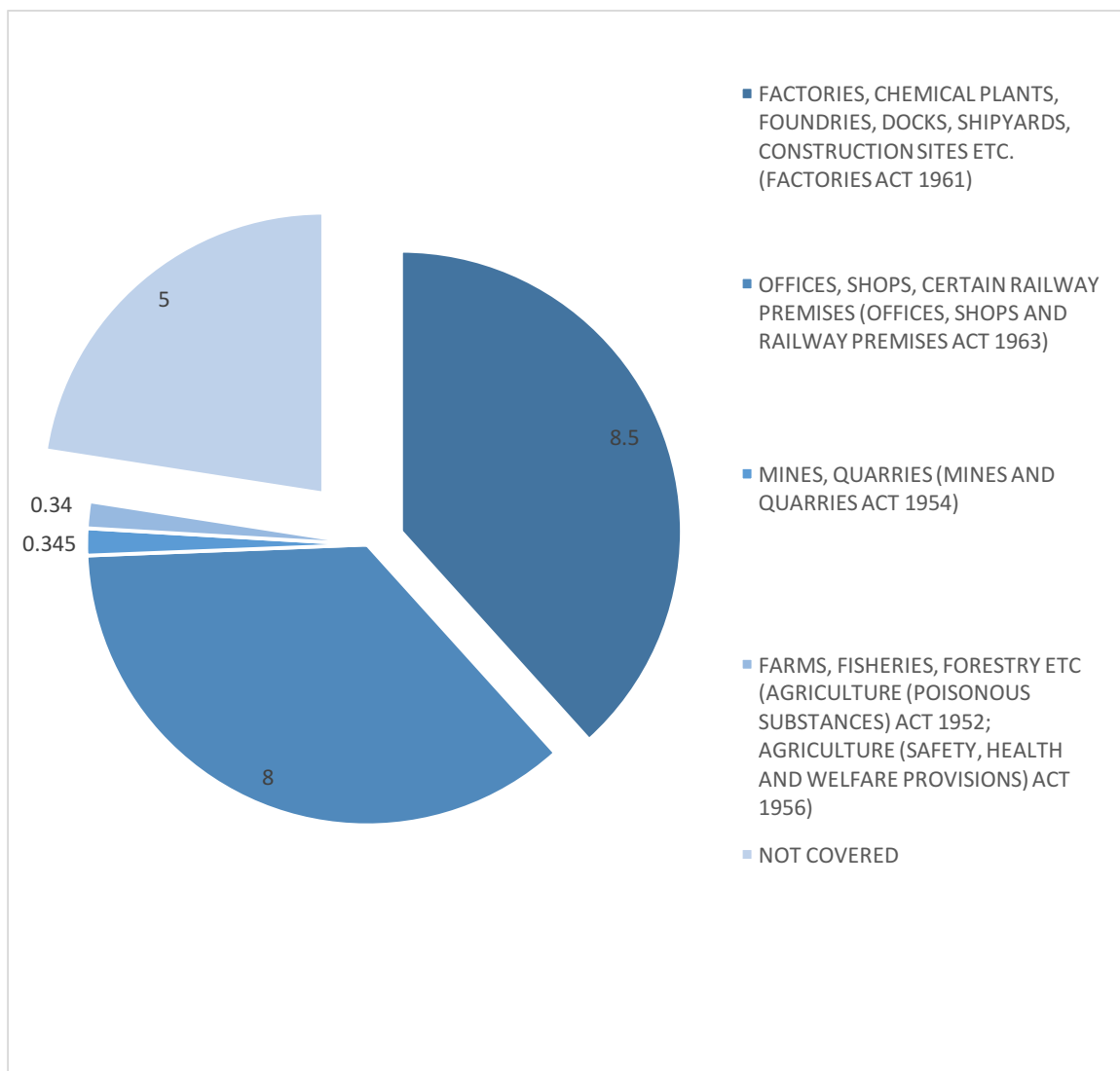
HM Factory Inspectorate.¹³ The Factory Inspectorate was by far the largest of the government inspectorates in the health and safety field, employing 426 inspectors as of December 1961.¹⁴ The Inspectorate was organised on a regional basis throughout the country, and had responsibility for 230,000 registered premises.¹⁵ Across Britain, local authorities had additional responsibilities under the Factories Act. These included enforcing provisions relating to sanitary conveniences in factories, and health provisions, such as the prevention of overcrowding, in factories without mechanical power, usually small workshops.

¹³ Robens, *Safety and Health at Work*, 5–6.

¹⁴ MOL, *Annual Report of Chief Inspector of Factories 1961*, 44.

¹⁵ *Ibid.*, 102.

Figure 3. Statutory coverage of workers (millions) under pre-1974 health and safety legislation.¹⁶



At this time, occupational health and safety legislation was for all intents and purposes *industrial* health and safety legislation. Excluding agriculture (historically deemed non-industrial employment), the Factories and Mines Acts constituted a special sphere of legislation, laying down detailed minimum standards and

¹⁶ Robens, *Safety and Health at Work*, 5.

requirements for industrial workers which were not shared by workers in non-industrial premises, such as offices and shops. Other forms of legislation, such as public health, did notionally cover these workers, but as the Gowers Committee on Non-Industrial Employment had concluded in 1949, this legislation was too vague and indiscriminate to offer workers any real protection.¹⁷ Legislation was highly prescriptive: section 3(1) of the Factories Act, for example, specified that:

Effective provision shall be made for securing and maintaining a reasonable temperature in each workroom, but no method shall be employed which results in the escape into the air of any workroom of any fume of such a character and to such extent as to be likely to be injurious or offensive to persons employed therein.¹⁸

(Here, the use of the phrases 'shall' and 'shall not' indicated that employers had little choice over how they complied with the requirement.)

Despite this complex web of legislation, in 1961 as many as 16 million British workers fell through the gaps of protective coverage.¹⁹ Since coverage was principally based on workplace or industrial process, even workers in ostensibly 'industrial' workplaces could be excluded, if they happened to work in part of a building that fell

¹⁷ Home Office and Scottish Home Department, *Health, Welfare and Safety in Non-Industrial Employment; Hours of Employment of Juveniles; Report by a Committee of Enquiry*, Cmd. 7664, 1949, 10–12.

¹⁸ *Factories Act*, Ch. 34, 1961, sec. 3(1).

¹⁹ Figures vary as to the number of people newly covered by health and safety legislation after 1961. However, it is estimated that 8 million workpeople were covered by the OSRPA 1963, and a further 5–8 million by the HSWA 1974. See HC Deb 15 November 1962 vol. 667 col. 589; MOL, *Annual Report of HM Chief Inspector of Factories 1962*, Cmd. 2128, 1963, 9; Robens, *Safety and Health at Work*, 10; HSC, *Report 1974-76* (London: HMSO, 1977), 2.

outside its strict legal definition.²⁰ An example was factory offices, where clerical workers were unprotected under the Factories Act while employees on the factory floor were covered. This was a glaring omission when, under the same Act, inspectors were empowered to enter factory offices to inspect statutory registers of accidents and employed young persons.²¹

The 1961 Factories Act was the latest addition to this body of legislation. It was a consolidation exercise, amalgamating earlier Acts of 1937, 1948 and 1959 as well as Acts relating to lead paint and the employment of women and young persons. As a consolidating measure, it could not amend the existing law, and thus advanced no new requirements.²² The last major revision of the Factories Act was in 1959, which advanced new fire precautions following a mill fire in Keighley, West Yorkshire in 1956.²³ The 1961 Act is notable for being the last in a long line of Factories Acts dating back to the advent of the factory system of production. The HSWA introduced a markedly new style of legislation that largely superseded the 1961 Act, although the Act is still nominally in force today.

A dominant feature of 1960s health and safety legislation was a preoccupation with physical conditions. Legislation was oriented to the elimination or control of hazards: that is, anything that had the potential to cause harm to people in the workplace, regardless of their likelihood or severity. The word 'risk' was not a major

²⁰ Agriculture is an exception: here, legislation applied to employees themselves. See *Agriculture (Safety, Health and Welfare Provisions) Act*, Ch. 49, 1956, sec. 1.

²¹ *Factories Act 1961*, Ch. 34, sec. 140, 146. For definition of "factory", see sec. 175.

²² Sutherland, "Letter to Honey (BEC)," April 7, 1961, TNA LAB 14/934.

²³ Robens, *Safety and Health at Work*, 4.

feature of the legal language at this time.²⁴ This hazard-centric approach manifested itself in provisions relating to ‘health’, ‘safety’ and ‘welfare’, the boundaries of which were ill-defined. The Factories Act 1961 propagated the concern with physical conditions, laying down detailed requirements for such matters as temperature, overcrowding and cleanliness (under ‘health’); machinery, dangerous substances and fire prevention (under ‘safety’); and washing facilities and first-aid (under ‘welfare’). The layout of the Act—‘health’ provisions coming first, then ‘safety’, then ‘welfare’—was less a reflection of the relative importance attached to these subjects than an outcome of the Act’s piecemeal evolution: as one MOL official explained in 1960, ‘in practice we classify the work as “safety, health and welfare”, which is a more realistic appraisal of its balance, both from the official and industrial point of view.’²⁵ As David Eves, HSE’s former Deputy Director-General remarked, ‘the health side of the business was quite problematic. It wasn’t that we didn’t know about industrial diseases, quite a lot was known ..., but the enforcement of the law was quite tricky.’²⁶

Other statutes had a similar ‘physical’ bent. The Mines and Quarries Act 1954, for example, extended detailed controls over matters such as the provision of shafts and outlets, maintenance of underground roads, ventilation and dust. One important provision, not reflected in the Factories Act, was the empowerment of workmen to undertake inspections, for instance to ascertain the causes of an accident.²⁷

²⁴ Jim McQuaid, Interview, June 27, 2014.

²⁵ Kenney, “Memo.”

²⁶ David Eves, Interview, May 12, 2014, pt. 2.

²⁷ *Mines and Quarries Act*, Ch. 70, 1954.

Despite the emphasis on physical conditions, inspectors were increasingly vocal in the 1960s about the social or organisational factors behind workplace accidents and ill-health, calling for arrangements to secure safe and healthy systems of work, and for workers to participate in safety management. Trade unions and safety charities demanded that safety organisations should be established at workplace and industry level as a focused response to the accident problem. Contemporary economic and political developments amplified these concerns, encouraging regulators to focus on the promotion of voluntary effort, as opposed to the further extension of health and safety law.

2.5. From the Physical to the Social Environment

2.5.1. Voluntary effort and safety management

By the 1960s, therefore, British inspectors were increasingly concerned about the social or organisational factors behind safety performance. However, this movement in regulatory attention, from the physical environment of the workplace, to the social or managerial, was not a new phenomenon.

Since the First World War, voluntary organisations such as the Royal Society for the Prevention of Accidents (RoSPA), and later, the British Safety Council, had encouraged the management of safety as part of everyday business.²⁸ These organisations promoted arrangements such as training schemes, the appointment of professional safety officers, local safety groups, and joint safety committees, bringing

²⁸ The British Safety Council was established in 1957.

together worker and management representatives to discuss workplace safety problems.²⁹ As early as 1913, factory inspectors noted how the ‘reduction of accidents can be best secured by obtaining the interest and co-operation of operatives and officials through Safety Committees’, and in 1927, the government threatened certain heavy industries with legislation if they did not do more to promote them.³⁰ In 1956, the NJAC re-emphasised the importance of safety organisation and demanded an increase in safety committees.³¹ These developments urged industry to bear greater responsibility for safety and take proactive steps to prevent accidents, instead of addressing hazards after an accident had occurred, or following statutory intervention (for example, inspection). Despite these efforts, in 1961 the Chief Inspector of Factories, McCullough, painted a grim picture of industrial safety organisation:

Too many firms still have no safety organisation whatever, or where it exists it is ineffectual.... Many employers appear to rely on H.M. Inspectors to deal with the safety problems in their works. Inspectors are, of course, always ready to give advice on the best means of promoting safety and health, but responsibility in these matters rests on the occupier. Only through better realisation of that responsibility leading in turn to better

²⁹ Richard T. Booth and Anthony J. Boyle, “Occupational Accident Prevention,” in *Occupational Hygiene*, ed. Kerry Gardiner and J. Malcolm Harrington (Oxford: Blackwell, 2005), 404–5; Eves, Interview, pt. 2.

³⁰ Factories and Workshops, *Annual Report of the Chief Inspector of Factories and Workshops for the Year 1913*, Cd. 7491, 1914, 18; Factories and Workshops, *Annual Report of the Chief Inspector of Factories and Workshops for the Year 1927*, Cmd. 3144, 1928, 15.

³¹ Ministry of Labour and National Service, *Industrial Accident Prevention: A Report of the Industrial Safety Sub-Committee of the National Joint Advisory Council* (London: HMSO, 1956), 9–13.

safety organisation at the place of work, and constant day-to-day attention to safe working practices, is substantial progress to be expected.³²

A sharp rise in the number of reported accidents under the Factories Act had by this point called into question industry's commitment to accident prevention. Reversing the downward trend of previous years, the number of reported accidents rose almost 13 per cent between 1958 and 1961.³³ Successful accident prevention, McCullough explained, depended on industry incorporating various safe behaviours into its everyday operation. Industry had given safety insufficient priority:

A successful accident prevention policy must be related to the general policy of the firm; production planning should include safety planning, personnel policy should include safety training, proper induction and supervision; and efficient management will ensure the maintenance of high standards of tidiness and housekeeping, which would help to reduce many of the accidents from such simple causes as falls and handling, which go to make up the greater part of the accident totals.³⁴

2.5.2. A Quality of Mind: Safety Consciousness and Industrial Self-Help

In an attempt to reverse the deteriorating accident trend, the British government embarked on a new drive in the 1960s to encourage industry to manage safety more effectively. In the 'industrial self-help campaign', the government tried to promote health and safety as part of the efficient management of the workplace in several ways:

³² MOL, *Annual Report of Chief Inspector of Factories 1961*, 8.

³³ *Ibid.*, 7.

³⁴ *Ibid.*, 25.

workers' safety representatives; joint safety committees; the safe supervision of employees, particularly young recruits; the introduction of training courses and industrial health services; local safety groups and other arrangements to increase the participation of workers and management in accident prevention. One important element of the campaign was the MOL's decision to cooperate with the TUC and BEC in developing accident prevention organisations in industries where they were absent, such as shipbuilding.³⁵ Such organisations could assist the government by collating and processing accident statistics, operating training schemes, and producing publicity and guidance material.³⁶ Another example of the government's cooperative approach was its invitation, in 1965, to fund RoSPA in developing safety organisation on a regional basis throughout Britain. Seven 'regional industrial safety organisers' were appointed to encourage local efforts, such as accident prevention groups.³⁷ Financial difficulties, however, meant that the scheme was scaled back just two years later.³⁸

Crucially, the industrial self-help campaign was not motivated by any desire on the part of government to legislate for safety organisation, although the sluggish response of industry to the demand for safety committees later prompted the 1964–70 Labour government to attempt to legislate in this particular area. Rather, taking its cue from the Factory Inspectorate's conciliatory enforcement philosophy, and the British government's abstentionist stance towards industrial relations, the campaign was

³⁵ Ibid., 8.

³⁶ "Safety and Health," *BEC Bulletin* 177, February 28, 1962, 2, TNA LAB 14/1197.

³⁷ MOL, *Annual Report of HM Chief Inspector of Factories 1965*, Cmnd. 3080, 1966, 15.

³⁸ DEP, *Annual Report of HM Chief Inspector of Factories 1967*, Cmnd. 3745, 1968, 3–4.

driven by a paternalistic desire to help industry ‘voluntarily’ meet its legal obligations. Committed to collective bargaining with a minimum of statutory interference, the TUC at this time also believed that safety organisation was best pursued by voluntary means. While its Social Insurance and Industrial Welfare Committee urged the government to boost the number of factory inspectors and enforce the law more vigorously, it also conceded that ‘legislation [alone] could not not invariably prevent accidents and that it was very necessary to educate people to work safely.’³⁹

The British government framed the industrial self-help campaign as a drive to inculcate a ‘safety consciousness’ in industry. ‘Safety consciousness’, McCullough explained, ‘is a form of foresight or alertness, a quality of mind which has to be developed and nurtured.’⁴⁰ Hence, the government relied on strategies such as education, advice and persuasion to encourage voluntary effort. These strategies were delivered through a variety of media including face-to-face advice, publications, films, conferences and exhibitions.⁴¹ One such conference was the TUC/BEC conference on industrial safety in November 1962, which precipitated several joint efforts to stimulate safety awareness over the 1960s.⁴² The Industrial Health and Safety Centre on Horseferry Road, London, also served as a physical forum for safety education until financial cuts forced its closure in 1980.⁴³ Opened in 1927 as the Home Office

³⁹ “Prevention of Industrial Accidents. Report of Meeting with Minister of Labour,” January 22, 1962, 2, TUC MSS.292B/146/1.

⁴⁰ MOL, *Annual Report of HM Chief Inspector of Factories 1962*, 56.

⁴¹ The use of the phrase ‘safety consciousness’ predates the use of the term ‘safety culture’, which is often used in a similar context today.

⁴² “Reducing Accidents at Work: Minister of Labour Urges ‘All Out Effort by Industry,’” November 13, 1962, TUC MSS.292B/146/2.

⁴³ HC Deb 06 May 1980 vol. 984 col. 5W.

Industrial Museum, the Centre featured several exhibits demonstrating the latest thinking about safety engineering and protection, and attracted a wide audience, from industrial apprentices to trade unionists.⁴⁴

One form of safety education still widely used in the 1960s was the safety poster. Since 1917, RoSPA had used posters as a graphic and colourful way to engage workers' attention in safety issues⁴⁵. In 1968, as many as one million were still being printed each year.⁴⁶ However, over the decade officials in the safety movement began to question the effectiveness of this device. As *The Observer* reported in 1968, 'at the moment, it is commonly agreed, there is too large a gap between the safety poster on the factory wall, and actually seeing that its exhortation is acted upon.'⁴⁷ Undertaking a survey to ascertain the causes of the accident increase in 1967, two factory inspectors observed that while 'nearly all the factories visited were making use of safety posters ... management and unions alike seemed to lack faith in [their] impact'.⁴⁸ While RoSPA viewed safety posters to be an effective promotional device, they cautioned they were not 'the be-all and end-all of industrial accident prevention' and more research was required to assess their effectiveness.⁴⁹ As Lord Robens wrote in 1970,

⁴⁴ Long, *The Rise and Fall of the Healthy Factory*, 64; MOL, *Annual Report of HM Chief Inspector of Factories 1962*, 52–3.

⁴⁵ Mike Esbester, "The Discipline of Safety: Preventing Accidents in Britain after 1913," (paper presented at "Accidents and Emergencies: Risk, Welfare and Safety in Europe and North America, c.1750–2000," conference, Oxford Brookes University, Oxford, 9–11 September 2013).

⁴⁶ "The Royal Society for the Prevention of Accidents. RoSPA's Experience with Posters as an Aid to Accident Prevention," 1968, TUC MSS.292B/146.17/2.

⁴⁷ David Haworth, "Works Accidents Soar—but How Real Are They?," *The Observer*, May 8, 1966.

⁴⁸ "Ministry of Labour. An Investigation into the Reasons for the Increasing Number of Reported Accidents in Factories," 1967, 16, TUC MSS.292B/146/5.

⁴⁹ "RoSPA's Experience with Posters."

‘safety in the place of work is so important from every point of view that it just cannot be left to the display of safety posters.’⁵⁰

It would be over-simplistic to suggest that this voluntarist approach extended from the government’s desire to shirk its responsibility for health and safety. From the perspective of Foucault’s work on ‘governmentality’, it also represented an attempt by government to exercise its power more diffusely.⁵¹ Attempts by officials to encourage ‘safety consciousness’ in industry relied on it instilling discipline among employers and workers: forms of behaviour and workplace organisation that were seen to promote health and safety. As shown above, a variety of media were used to promote the safety message. As such, the self-help campaign reflected the British government’s ambition to get industry to govern itself: factory inspectors and other officials would only step in where necessary, for instance to advise and prosecute employers who flouted the law.

2.5.3. *The Big Five*

The industrial self-help campaign was premised on an important belief about accidents, which was reinforced over the 1960s. Factory inspectors and other government officials increasingly accepted that the vast majority of workplace accidents, the so-called ‘Big Five’, included an intrinsically ‘human’ dimension that resisted legislative control. The ‘Big Five’ were accidents resulting from manual handling, falls, use of hand tools, strikes against objects, and strikes from falling objects. In 1962, they

⁵⁰ Lord Robens, *Human Engineering* (London: Jonathan Cape, 1970), 126.

⁵¹ Foucault, *Discipline and Punish*; Burchell, Gordon, and Miller, *The Foucault Effect*.

accounted for 64 per cent of all reported accidents under the Factories Act (Figure 4).

As R. K. Christy, the Chief Inspector of Factories, explained in his 1963 report,

While a proportion of the “Big Five” accidents may be connected with breaches of factory legislation, experience has shown that the majority occur in circumstances which cannot readily be controlled by legislation, for example lack of attention to good industrial housekeeping.... The errors arising from human behaviour unlike the requirement to fence a dangerous machine do not, except to a very limited extent, lend themselves to control by legislation.⁵²

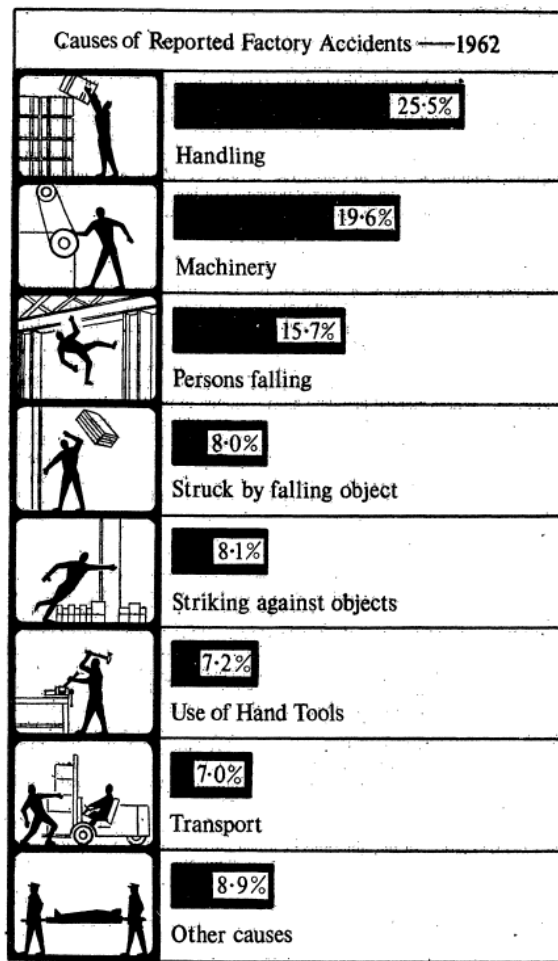
This was later reduced ad absurdum: ‘Passing a law does not prevent a man from dropping something on another man’s head or from attempting to lift or move a weight beyond his capacity.’⁵³

⁵² MOL, *Annual Report of HM Chief Inspector of Factories 1963*, Cmnd. 2450, 1964, 8–

9.

⁵³ MOL, *Annual Report of HM Chief Inspector of Factories 1966*, Cmnd. 3358, 1967, 8.

Figure 4. Causes of reported factory accidents, 1962.⁵⁴



While this belief was undoubtedly influenced by the Factory Inspectorate's enforcement philosophy, prevailing models of accident causation also entrenched the assumption that many accidents were beyond legislative control. In his seminal 1931 volume, *Industrial Accident Prevention: A Scientific Approach* (the fourth edition of which was published in 1959), the American safety engineer Herbert William Heinrich claimed that 88 per cent of all workplace accidents were attributable to 'man failure' or

⁵⁴ MOL, *Annual Report of HM Chief Inspector of Factories 1962*, 16.

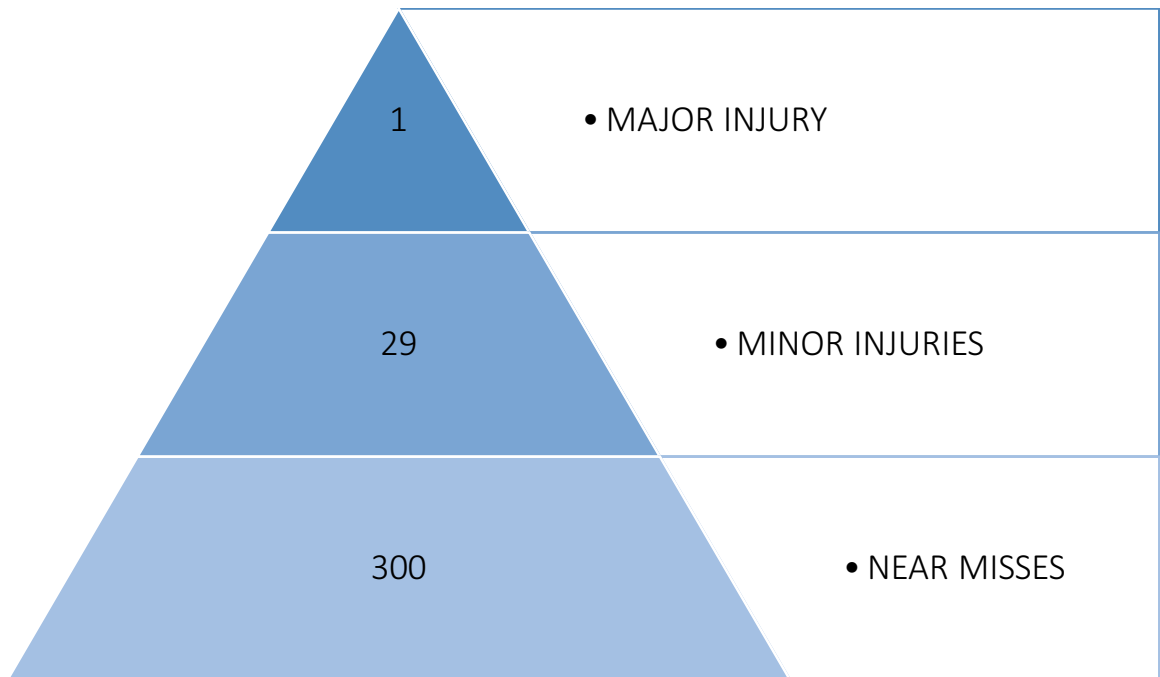
error on the part of workers. Just 10 per cent were due to problems in the physical environment, such as dangerous machinery.⁵⁵

By the 1960s, the scientific discourse on industrial accidents had begun to widen beyond a concern with the individual worker to address wider social or managerial factors. In 1959, Heinrich suggested that for every 300 non-injury events, there were 29 minor injuries and one major or severe injury. Visualised as a triangle or pyramid (Figure 5), these ratios encouraged employers to record and study 'near misses' to guide accident prevention efforts. Developing this model, the safety engineer Frank E. Bird showed how costs arising from physical injuries were the tip of the iceberg of wider costs to the business, in terms of damage to property, plant and equipment. Accidents could thus be used by firms (and insurers) as an inroad to wider organisational problems.⁵⁶

⁵⁵ H. W. Heinrich, *Industrial Accident Prevention* (New York: McGraw-Hill Book Company, 1931); Burnham, *Accident Prone*, 92–3.

⁵⁶ S. Mannan, ed., *Lees' Loss Prevention in the Process Industries: Hazard Assessment, Identification and Control* (Oxford: Elsevier, 2005), sec. 1/10.

Figure 5. Heinrich/Bird accident triangle.⁵⁷



The effect of these developments was that by the end of the 1960s, factory inspectors and other government officials suspected that most accidents preventable by physical, engineering means, such as machine guards, had already been prevented.⁵⁸ With the diminishing returns of engineering solutions, it was suggested, the solution to Britain's accident problem was not more regulation, more inspectors or stronger enforcement, but a more scientific approach to accident prevention and a more concerted effort by industry to manage hazards. As the Chief Inspector of Factories, Bryan Harvey argued in his 1970 report, 'some of the traditional hazards of the physical environment have been brought under control over the past years. What we

⁵⁷ Mannan, ed., *Lees' Loss Prevention in the Process Industries*, sec. 1/10.

⁵⁸ DEP, *Annual Report of HM Chief Inspector of Factories 1968*, Cmnd. 4146, 1969, xiv; DEP, *Annual Report of HM Chief Inspector of Factories 1969*, Cmnd. 4461, 1970, xiv.

must now increasingly tackle is the social or management environment which may underlie poor safety performance.⁵⁹

2.5.4. *The Accident Trend*

As mentioned above, the British government's campaign to encourage industry to develop safety organisation was linked to concerns about the rising number of reported accidents under the Factories Act. From 1959, an upward trend in the number of reported accidents was observed, reversing the decline seen in previous years. Between 1958 and 1961, the total increased from 167,697 to 192,517, almost 15 per cent.⁶⁰

In 1964, however, a further, more significant spike was recorded.⁶¹ The total of 268,648 accidents in 1964 represented an increase of almost a third since 1963, and the highest reported figure since the Second World War.⁶² The underlying causes of this increase were unknown, although improved reporting since the start of the campaign, increased industrial production, and the serious winter of 1962/3 (the 'big freeze') were all thought to have contributed.⁶³ Nevertheless, the increase was a great concern, especially to the TUC, and the Chief Inspector of Factories, Christy believed that even with these mitigating factors, it was clear that a serious deterioration had occurred.⁶⁴

⁵⁹ DE, *Annual Report of HM Chief Inspector of Factories 1970*, Cmnd. 4758, 1971, xiv.
⁶⁰ MOL, *Annual Report of Chief Inspector of Factories 1961*, 7.

⁶¹ An accident was notifiable if it resulted in an employee's death, or "disabled" the employee for more than three days from earning full wages in his/her work. See *Ibid.*, 61.

⁶² MOL, *Annual Report of HM Chief Inspector of Factories 1964*, Cmnd. 2724, 1965, 7, 44.

⁶³ *Ibid.*, 13; "Report of Meeting of NJAC Industrial Safety Sub-Committee," June 2, 1964, TUC MSS.292B/146.17/1.

⁶⁴ MOL, *Annual Report of HM Chief Inspector of Factories 1964*, 7; "Memo of Chief Inspector of Factories," December 1965, TNA LAB 14/1493.

Developments in the 1960s demonstrated how accident statistics could stimulate regulatory action, despite the significant uncertainty that accompanied them.⁶⁵

Accident statistics were a particular cause for political concern in the 1960s, owing to the recognised problem of under-reporting (see below), lack of knowledge about numbers at risk, and inconsistencies in the way accidents were recorded.⁶⁶

Nevertheless, crude 'headline' totals of accidents were sufficient in the 1960s to galvanise political attention, even though the number of *fatal* workplace accidents continued to fall, and the increase in reported accidents was largely confined to premises under the Factories Act (Figure 6, a–c). During a Parliamentary debate on accident causation in 1965, the Joint Parliamentary Secretary to the MOL, Ernest Thornton, argued:

The conclusion that there has been a real and substantial rise in the incidence of accidents seems, I am afraid, quite inescapable. This is an intolerable situation. It is one of which all of us, Government, employers, workers, and the public, ought to be ashamed. A sense of shame is often a prerequisite for reform, and it is reform that we need—a new sense of determination through industry to stop the human suffering and waste of our scarce manpower resources which these appalling accident figures represent.⁶⁷

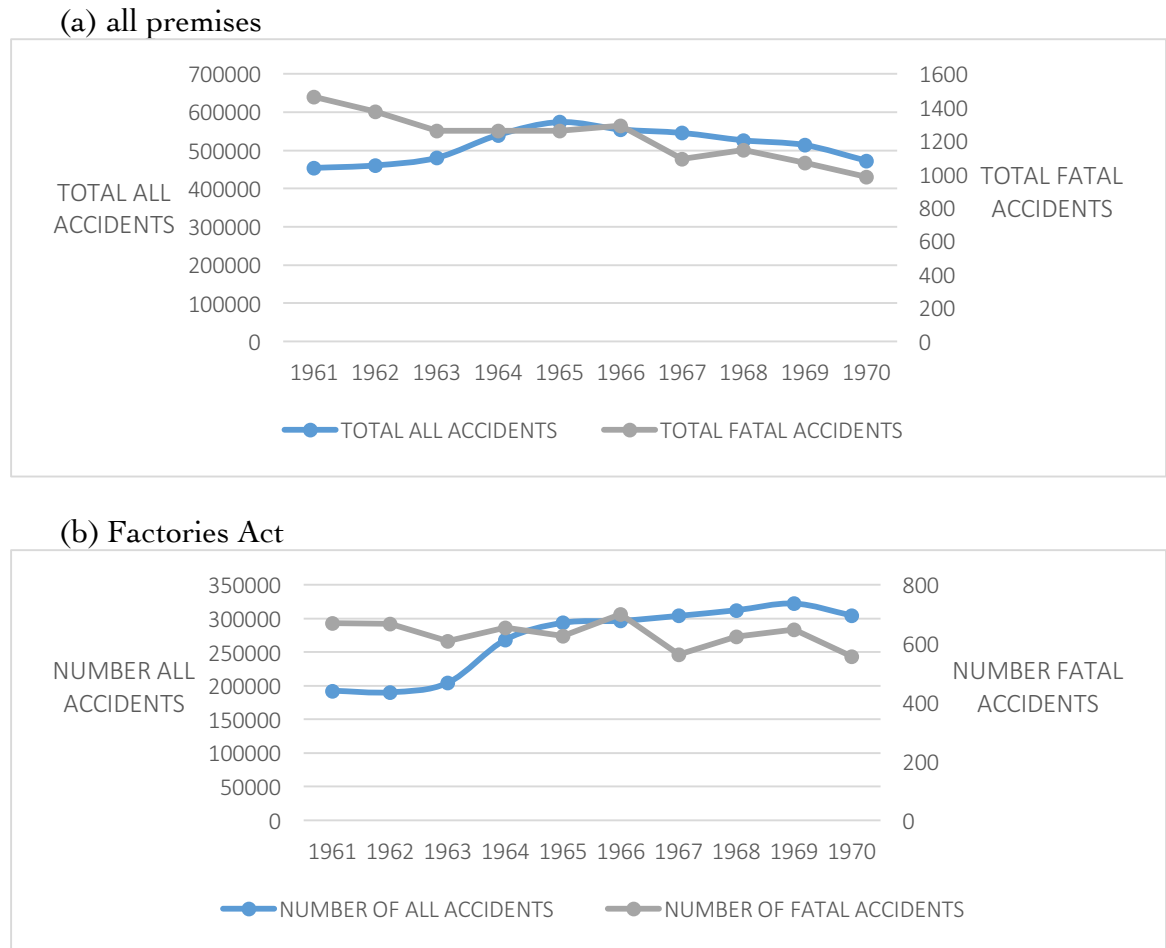
⁶⁵ See Tombs, "Death and Work in Britain."

⁶⁶ See Robens, *Safety and Health at Work*, chap. 15.

⁶⁷ HC Deb 25 February 1965 vol. 707 col. 781.

He added, 'I think that we must appreciate that accidents of this kind cannot easily be reached by legislation, or prevented by factory inspectors. They can, however, be prevented if management and workers develop an active safety consciousness.'⁶⁸

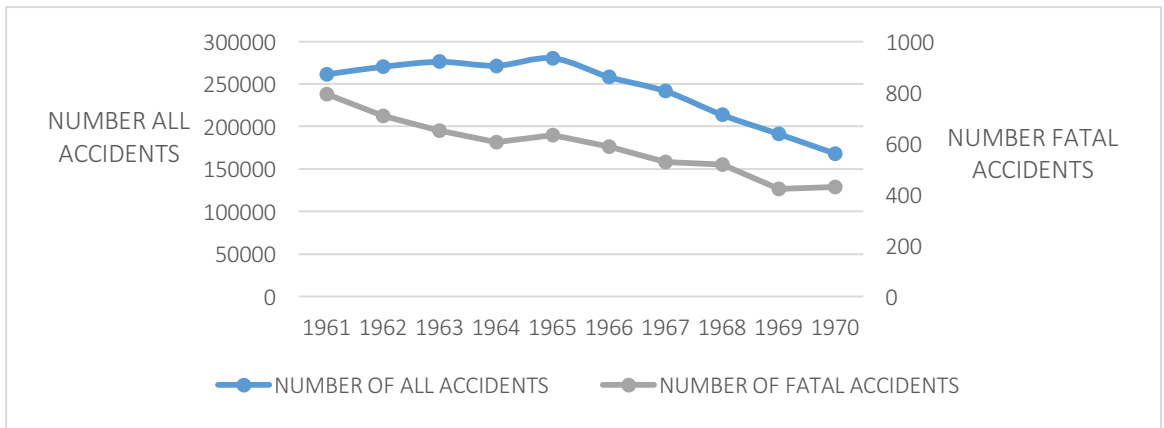
Figure 6. Work accidents in Great Britain, 1961–70.⁶⁹



(c) Other premises

⁶⁸ Ibid.

⁶⁹ Robens, *Safety and Health at Work*, 161–2. Figures for 'other premises' between 1961–4 include estimated figures for accidents in offices, shops and railway premises before OSRPA 1963.



The accident trend generated a scientific as well as political response. Since the reasons behind the increase were unknown, from 1965 regulatory attention focused on understanding the causes of accidents and the factors affecting workplace safety performance. Firstly, the Factory Inspectorate detached two inspectors from normal duties to undertake a pilot study into the accident experiences of 45 factories across the country. While the study did not produce any clear conclusions about the accident increase, it controversially claimed that improved employee benefits were partly responsible. In response to a hostile reaction from the TUC, in 1968 the MOL, now the Department of Employment and Productivity (DEP), published a watered-down version of the report in its *Employment and Productivity Gazette*.⁷⁰

Secondly, in 1970 a dedicated Accident Prevention Studies Unit was established in the Factory Inspectorate to study, among other things, why some firms had a better accident record than others.⁷¹

Thirdly, in 1965 the British government placed a £45,000 research contract with the National Institute of Industrial Psychology (NIIP) to undertake a four-year comparative study on accident causation.⁷² The study found, among other things, that ‘at shop floor level, there is often what appears to be an attitude of apathy towards safety matters.’ Workers, supervisors and managers often blamed accidents on ‘carelessness’, resulting in a pessimistic attitude towards prevention, while an ‘us and

⁷⁰ “Letter to Factory Occupiers,” n.d., TNA LAB 14/1493; “Inquiry into Reported Accidents in Factories,” October 1968, TNA LAB 14/1718; E. Rylands, “Memo,” December 1, 1967, TNA LAB 14/1718; “Minute 68,” May 21, 1968, TNA LAB 14/1718; “SHW 670/1966,” n.d., TNA LAB 14/1718; “Minutes 73–4,” n.d., TNA LAB 14/1718.

⁷¹ DE, *Annual Report Chief Inspector of Factories 1970*, xiv.

⁷² MOL, *Annual Report of Chief Inspector of Factories 1965*, 38.

them' attitude between the office and shop floor allowed hazards to persist.⁷³ The NIIP's 1971 report supported the Factory Inspectorate's focus on safety organisation, arguing the emphasis of future prevention efforts should be the promotion of training and safe systems of work.⁷⁴

2.5.5. *Accident Reporting*

Whatever the reasons behind the rising number of accidents in the 1960s, the accident trend focused political attention on recalcitrant employers. The sharper increase after 1964 followed soon after reports suggesting that a significant section of industry had either ignored, or was unaware of, its obligation to report accidents. In the early 1960s, the government observed that claims to industrial injuries benefit outweighed the number of non-fatal accidents reported to the Factory Inspectorate.⁷⁵ To evaluate this discrepancy, in 1962 the MOL, in conjunction with the Ministry of Pensions and National Insurance, carried out a survey comparing the level of non-fatal accidents reported under the Factories Act, with industrial injuries benefit, correcting for accidents which were not reportable. The survey revealed that out of 3,928 reported accidents, fewer than 60 per cent were correctly reported.⁷⁶ The MOL suggested that 'failure to report is, in many cases, due to ignorance both of the need to report accidents and of the type of accident for which a report is required.'⁷⁷ Its proposals,

⁷³ NIIP, *2000 Accidents: A Shop-Floor Study of Their Causes Based on 42 Months' Continuous Observation* (London: National Institute of Industrial Psychology, 1971), 5–6.

⁷⁴ *Ibid.*, 36–7.

⁷⁵ MOL, *Annual Report Chief Inspector of Factories 1963*, 20.

⁷⁶ *Ibid.*; MOL, "Failure to Report Accidents," n.d., TUC MSS.292B/146.17/1.

⁷⁷ MOL, "Failure to Report Accidents."

therefore, included educating employers about reporting requirements, crucially, as part of the wider drive to inculcate 'safety consciousness' in industry. A flyer was subsequently sent to factory occupiers reminding them of the need to report, and that failure to comply could incur prosecution or a fine.⁷⁸

Despite such efforts, however, a follow-up enquiry in 1964 revealed that industry had made poor progress. In general, across the whole of the Factories Act, two out of every five reportable accidents went unreported. A shocking 70 per cent of all accidents to young persons in the construction industry were never notified, while in small factories (those which employed fewer than 100 people), half of all accidents were never reported. These factories employed a third of Britain's entire factory workforce.⁷⁹

2.5.6. Safety Committees and Safety Representatives

The sheer level of under-reporting exposed by these surveys demonstrated that despite the government's efforts, many employers were unprepared to prevent accidents. Unfortunately, the slow response of industry was not confined to accident reporting. As described above, since 1956 the NJAC had promoted joint works committees as a way to prevent accidents. A paper prepared for its Industrial Safety Subcommittee in 1964 revealed that despite industry's promise to increase the number of safety

⁷⁸ "Draft Leaflet of Notification of Accidents and Dangerous Occurrences," n.d., TUC MSS.292B/146.17/1.

⁷⁹ MOL, *Annual Report of HM Chief Inspector of Factories 1964*, 24; "Note for ISSC Meeting of 17 November 1964 Prepared by National Union of Dyers, Bleachers and Textile Workers. Comments on 'Non-Reporting of Accidents' (paper 58) Prepared by the Safety, Health and Welfare Department of the Ministry of Labour," 1964, TUC MSS.292B/146.17/1.

committees, the number in the largest, and supposedly better organised firms had decreased since 1956, rather than increased.⁸⁰

It was at this point that the TUC called for the compulsory establishment of safety committees, in a resolution moved by the Amalgamated Union of Foundry Workers at the 1964 Blackpool Congress: 'While the General Council have hitherto [sic] favoured voluntary development of joint consultation, they have repeatedly made it clear if this failed, a compulsory system was the only alternative.'⁸¹

The BEC steadfastly opposed any question of compulsion. While they were open in principle to joint consultation, they believed that a legal requirement would undermine voluntary efforts already underway, and encourage a minimal, begrudging response by employers.⁸² This was a claim the BEC's successor, the CBI, repeated in its submission of evidence to the Committee on Safety and Health at Work (see Chapter 3).⁸³

Examining the previous reassurances made by industry, the MOL concluded that industry's commitment to joint consultation was 'open to serious doubt'.⁸⁴ At a Parliamentary question on works safety committees in 1966, Shirley Williams warned:

⁸⁰ "Note for ISSC Meeting of 17 November 1964 Prepared by National Union of Dyers, Bleachers and Textile Workers. Comments on Paper 59," 1964, TUC MSS.292B/146.17/1.

⁸¹ "Note for ISSC Meeting of 17 November 1964 Prepared by National Union of Dyers, Bleachers and Textile Workers. Comments on Paper 60," 1964, TUC MSS.292B/146.17/1.

⁸² "Joint Consultation on Safety," July 1965, TUC MSS.292B/146.17/1.

⁸³ Robens, *Selected Written Evidence*, 118–20.

⁸⁴ "Joint Consultation on Safety."

[U]nless there is satisfactory progress over the next few years in the setting up of joint works safety committees on a voluntary basis, [the Minister of Labour] will feel obliged, when the next major revision of the Factories Act takes place, to seek power to require the establishment of machinery for joint consultation in appropriate cases.⁸⁵

Following this threat, the number of safety committees in British industry increased by 69 per cent, from 5,826 in 1966 to 9,847 in 1969.⁸⁶

That same year, the Employment and Productivity Secretary, Barbara Castle, attempted to legislate for safety committees in the Employed Persons (Health and Safety) Bill.⁸⁷ The Bill provided for recognised trade unions to appoint worker safety representatives in premises where 10 or more persons were employed. In premises where over 100 persons were employed, the employer was required to establish a safety committee if the representative(s) requested.

While Castle's Bill was lost following Labour's election defeat in 1970, the desire to increase worker involvement in health and safety decision-making accorded with the British government's wider industrial relations policy. The white paper *In Place of Strife*, introduced by Castle in 1969, attempted to strengthen collective bargaining in the workplace by encouraging workers to participate in management decision-making, for instance by sitting on company boards.⁸⁸ It was not until 1977, following the HSWA,

⁸⁵ HC Deb 11 July 1966 vol. 731 col. 955.

⁸⁶ Robens, *Safety and Health at Work*, 19.

⁸⁷ Employed Persons (Health and Safety) Bill (1969–70, Bill 104).

⁸⁸ *In Place of Strife*, 16–7.

that recognised trade unions won the right to appoint safety representatives, in one of the few significant changes to the CSHW's recommendations.⁸⁹

2.6. Safety, Productivity and Self-help

In addition to accidents, economic and political concerns in the 1960s promoted a movement of regulatory attention onto safety organisation. Anxiety about Britain's low industrial output compared to its competitors, and its disorganised industrial relations, encouraged the government to closely scrutinise the management of British industry. By 1970, a growing synergy between questions of safety, productivity and industrial self-help had emerged in British regulatory discourse, creating a unique set of circumstances that promoted regulatory reform.

The 1960s were not the first time that concerns about productivity had encouraged the British government to examine workers' health and safety. Historians have written at length about how the militaristic needs of the British state in both the First and Second World Wars acted to focus political attention on the needs of the industrial worker. In the Second World War, for example, new orders were made under the Factories Act, introducing requirements for lighting, canteens and first-aid. There was an implicit understanding in government that national productivity went hand-in-hand with improved working conditions: in the 1918–39 inter-war period, as Long suggests, the physical and mental health of the industrial worker was viewed more holistically, set in wider social and environmental context.⁹⁰ The link between

⁸⁹ Safety Representatives and Safety Committees Regulations 1977 (SI 1977/500).

⁹⁰ Long, *The Rise and Fall of the Healthy Factory*, 23.

productivity and health and safety—‘good health is good business’—has been expressed at various times over the last century, most recently by Dame Carol Black in her 2008 *Review of the Health of Britain’s Working Age Population*.⁹¹ In the 1990s, the HSE explicitly invoked this link to appeal to employers’ self-interest. However, the link does not appear to have been invoked consistently: in different times and contexts, the link has been invoked in different ways.

In the 1960s, it was not the militaristic needs of the British state, but the exigencies of global trade that highlighted the economic consequences of workplace accidents and disease. Over the decade, Britain’s share of world trade declined, from 20 per cent in 1955 to 13 per cent in 1970.⁹² In 1965, comparative levels of industrial output per capita were 32 per cent higher in West Germany, and a remarkable 84 per cent higher in the USA.⁹³ Annual growth rates in 1960s Britain averaged at 2.8 per cent, compared 4.8 per cent in Germany and 6 per cent in France.⁹⁴ Britain’s declining productivity fuelled a growing trade deficit, prompting the Prime Minister, Harold Wilson, to devalue sterling in November 1967. Within this economic context, the costs of absenteeism, sickness and injury resulting from industrial accidents and disease became an increasingly thorny political issue (Figure 7). In 1967, the number of

⁹¹ Dame Carol Black, *Working for a Healthier Tomorrow: Dame Carol Black’s Review of the Health of Britain’s Working Age Population* (London: TSO, 2008); Long, *The Rise and Fall of the Healthy Factory*.

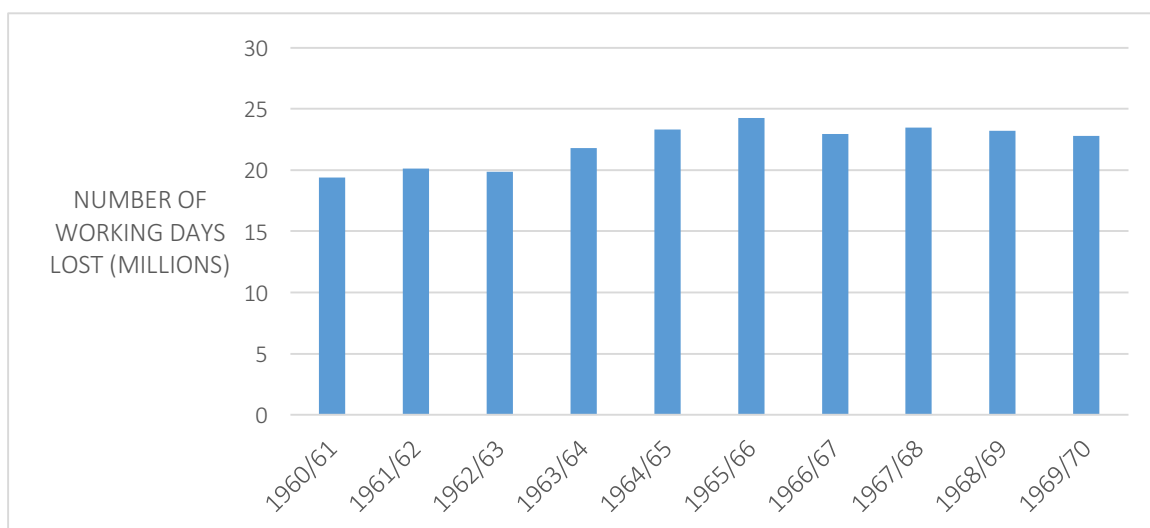
⁹² Robens, *Human Engineering*, 8.

⁹³ Donovan, *Royal Commission on Trade Unions and Employers’ Associations; 1965-1968*, Cmnd. 3623, 1968, 74.

⁹⁴ McIlroy and Campbell, “The High Tide of Trade Unionism,” 93–4.

working days lost per year to occupational accidents and disease was estimated at 23 million—ten times the comparable number lost to strikes, both official and unofficial.⁹⁵

Figure 7. Number of working days lost as a result of industrial accidents and prescribed diseases in Great Britain, 1961-1970.⁹⁶



In an era of full employment and concerns about inflation, generating government calls for the unions to exercise wage restraint, the key to productivity was increasingly seen to lie in improving industrial efficiency, of which safety was a core component. Industrial training was one area where safety and economic needs converged. In 1962, the government established that lack of skilled labour was one of the main factors holding back Britain's economy. Comments about the 'barely adequate' standard of many industrial training schemes chimed with comments by factory inspectors about the cursory treatment given to safety training in many firms,

⁹⁵ DEP, *Annual Report Chief Inspector of Factories 1967*, xi; Donovan, *Royal Commission*, 97.

⁹⁶ Robens, *Safety and Health at Work*, 163.

especially for young persons entering work for the first time.⁹⁷ The Industrial Training Act 1964 attempted to remedy this situation by establishing Industrial Training Boards in the major industries, financed by a levy on employers.⁹⁸ Their role was to coordinate, develop and operate training schemes, establish policy, standards and qualifications, and approve schemes run by external bodies, such as RoSPA. The Act provided an invaluable opportunity for the government to influence young people before they started work.⁹⁹ As Christy explained, ‘young men and women do not become responsible overnight. Safety consciousness must be inculcated as part of the transition from school to factory environment. To disregard the safety training of young persons is not merely short-sighted but is also culpably negligent.’¹⁰⁰

The link between safety, productivity and self-help was also reflected in British industrial relations. Between 1956 and 1966, the number of strikes in industries outside mining increased 142 per cent.¹⁰¹ The growing problem of strikes motivated the 1964–70 Labour government to appoint a Royal Commission in 1965, ‘to consider relations between managements and employees and the role of trade unions and employers’ associations in promoting the interests of their members and in accelerating the social and economic advance of the nation.’¹⁰² Chaired by the judge and former Labour MP Lord Donovan, the Royal Commission on Trade Unions and Employers’ Associations brought together members from across the political spectrum, including the TUC

⁹⁷ MOL, *Annual Report of Chief Inspector of Factories 1961*, 3; MOL, *Industrial Training: Government Proposals*, Cmnd. 1892, 1962, 8.

⁹⁸ *Industrial Training Act*, Ch. 16, 1964.

⁹⁹ MOL, *Annual Report of Chief Inspector of Factories 1965*, 16.

¹⁰⁰ MOL, *Annual Report of HM Chief Inspector of Factories 1964*, 9.

¹⁰¹ Donovan, *Royal Commission*, 19, 98–9.

¹⁰² *Ibid.*, 1.

General Secretary, George Woodcock, and the professor of labour law, Otto Kahn-Freund. Lord Robens, then chair of the National Coal Board (NCB), was also a member.

In its 1968 report, the Donovan Commission concluded that there were 'two systems' of British industrial relations, in conflict with one another. There was the 'formal system', comprising official institutions and industry-wide collective agreements, and there was the 'informal system', comprising the actual behaviour of workers, managements, shop stewards and others in the workplace.¹⁰³ The fundamental problem with British industrial relations, the Commission argued, was that the informal system was beginning to dominate, and undermine, the formal system.¹⁰⁴ Their proposed solution was statutory intervention to bolster *voluntary* arrangements that regulated industrial relations at workplace level, including a new Industrial Relations Commission and Industrial Relations Act (later implemented by the 1970-74 Heath government). Safety was included as an explicit objective in these proposals, providing for 'regular joint discussion of measures to promote safety at work.'¹⁰⁵ While the Donovan Commission did not recommend the *statutory* regulation of industrial relations ('there is no case for legislation which would transform ... [collective] agreements into legal contracts'), the state was conceptualised as providing a supportive framework that strengthened voluntary arrangements.¹⁰⁶ In a similar vein,

¹⁰³ Ibid., 12.

¹⁰⁴ Ibid., 13–18, 36.

¹⁰⁵ Ibid., 45.

¹⁰⁶ Ibid., 279.

the CSHW would later advance the HSWA as a statutory framework to improve self-regulation by employers and employees.

2.7. The Changing Dimensions of Occupational Risk

2.7.1. *A New Technology*

Thus far, we have seen how economic and political developments over the 1960s conspired to focus regulatory attention on the management of health and safety at work. These developments revealed the limitations of a prescriptive legal approach, and instead focused attention on the strengthening of voluntary arrangements, such as safety committees, which were seen to promote accident prevention.

However, this movement in regulatory attention left intact the underlying structure of the regulatory system. As highlighted above, in 1961 as many as 16 million British workers were excluded from health and safety legislation. Although the OSRPA 1963 reduced this to 5–8 million, in workplaces such as schools, hospitals, airports and universities, ordinary members of the British public were also excluded, who could be injured or made ill by work activity.

Pressures in the latter part of the 1960s, however, accumulated that demanded a fundamental rethink of regulation, including the need to take into account the health and safety of the public. In addition to the economic and political pressures described above, one of the key pressures was the changing dimensions of the risks accompanying industrial development. However, these pressures only gave added urgency to what had already become, by 1967, a recognised administrative problem with health and safety legislation.

The Chief Inspector of Factories, Bryan Harvey, expressed his anxiety about these changing dimensions of risk in his 1970 report:

We now face a new technology. The Inspectorate is now concerned with an industrial system where virtually anything is possible. Not only can natural materials be handled and worked in totally new ways, but we can manipulate molecular structures to make new materials with virtually any property or characteristic which we desire. Above all, we can now do this on a scale which only a few years ago would have been regarded as wholly unbelievable.¹⁰⁷

2.7.2. Risk and Industrial Hygiene

Factory inspectors were among the first to recognise that industrial development, which accelerated over the 1960s, was changing the very nature of the risks confronted by workers. As industrial risks became more complex, the Factory Inspectorate, in response, had to become better informed and more proactive. This professional development is evident from the Inspectorate's attempts to improve the calibre of its recruits (from 1970, the Inspectorate began to forge links with the University of Aston), as well as improvements in the science which underpinned its work, notably industrial hygiene.¹⁰⁸

Industrial development had long generated new risks. In the late nineteenth-century, for example, regulatory concern about workers' safety broadened to encompass the health of workers in the 'dangerous trades', including match-making and lead smelting.¹⁰⁹ As early as 1900, regulators were aware of the dangers of

¹⁰⁷ DE, *Annual Report Chief Inspector of Factories 1970*, xii.

¹⁰⁸ Ibid., xi; DEP, *Annual Report Chief Inspector of Factories 1969*, xi–xii.

¹⁰⁹ Bartrip, *The Home Office and the Dangerous Trades*.

asbestos, while in the twentieth century, ‘miners’ lung’ or pneumoconiosis became one of the greatest areas of occupational health concern.¹¹⁰

In the late 1960s, however, factory inspectors recognised that occupational risks were rapidly changing on both a macroscopic and microscopic scale. On the macroscopic scale, the scale of major hazards, inspectors identified that industrial processes were becoming bigger and faster. Chemical plants, for example, were storing and processing explosive or flammable substances (such as liquid oxygen) in unprecedented quantities, and increasingly jeopardised the safety of surrounding communities.¹¹¹

On the microscopic scale, the scale illuminated by sciences such as industrial hygiene, industrial chemicals were being produced, virtually unchecked by regulators, at an accelerating pace. In the early 1960s, the environmental effects of chemical pesticides were brought home to British and American audiences by Rachel Carson’s *Silent Spring*, helping fuel a burgeoning environmental movement.¹¹² The ongoing asbestos controversy highlighted how, unlike ‘physical’ hazards such as machines, chemical hazards often exerted their effects insidiously, with a long time lag between exposure and the onset of symptoms. This complicated regulatory intervention in work activity, serving to reinforce the focus on self-help. For example, it became important for employers in some industries to proactively measure risk through routine

¹¹⁰ Geoffrey Tweedale and David Jeremy, “Compensating the Workers: Industrial Injury and Compensation in the British Asbestos Industry, 1930s-60s,” *Business History* 41 (1999): 102–3; McIvor and Johnston, *Miner’s Lung*.

¹¹¹ DEP, *Annual Report Chief Inspector of Factories 1967*, xii–xiii.

¹¹² Rachel Carson, *Silent Spring* (Harmondsworth: Penguin in association with Hamilton, 1965).

environmental monitoring, and take commensurate steps to protect their employees, such as medical surveillance and the use of personal protective equipment.¹¹³

Political concern about toxic substances was reflected in new regulations and tighter standards. The Carcinogenic Substances Regulations 1967, for example, required controlled carcinogenic substances to be kept in sealed containers displaying the name of the substance. It also required factory occupiers to take necessary steps to protect workers from exposure, including medical examinations of workers every six months.¹¹⁴ The 1969 Asbestos Regulations adopted new quantitative exposure limits for airborne concentrations of asbestos dust. In March 1970, new standards for dust in coal mines were also established.¹¹⁵

The increasing profile of occupational health risks was linked to their growing detectability. Technical improvements in industrial hygiene and toxicology rendered risks 'visible' by providing tools to identify, measure and control them.

The science of industrial hygiene has a long history. Sellers points to its origins in early twentieth-century USA, while Carter argues that its various elements were evident in Britain at least two centuries before this date.¹¹⁶ However, it was only in the 1960s that the science began to play a prominent role in setting the health and safety policy agenda in Britain, for instance, by setting threshold limit values (TLVs) for substances such as asbestos. The relative underdevelopment of industrial hygiene in

¹¹³ DEP, *Annual Report Chief Inspector of Factories 1967*, xiii.

¹¹⁴ *Ibid.*, 41.

¹¹⁵ DE, *Annual Report Chief Inspector of Factories 1970*, xvi; DEP, *Annual Report Chief Inspector of Factories 1969*, 14–5; Lord Robens, *Ten Year Stint* (London: Cassell, 1972), 242–3.

¹¹⁶ Sellers, *Hazards of the Job*; Carter, "British Occupational Hygiene Practice."

Britain compared to the USA is reflected in the fact that, until the 1980s, Britain continued to rely on figures produced by the American Conference of Intergovernmental Industrial Hygienists.¹¹⁷ Nevertheless, the increasing centrality of industrial hygiene to British health and safety policy was reflected in the establishment of a dedicated Industrial Hygiene Unit in the Factory Inspectorate in 1966. Encouraged by the British government, from 1967, factory inspectors were equipped with portable instruments, allowing them to measure environmental contaminants in the work environment without relying on central laboratories. By 1969, the Factory Inspectorate's laboratories occupied more than 10,000 square feet, and between 1969 and 1970 tests of toxic substances increased by almost a half.¹¹⁸

The ascendancy of industrial hygiene was also reflected in the changing place of clinical medicine in occupational health and safety regulation. As Harvey explained in 1970:

Formerly, basic standards of good practice, coupled with a vigilant medical arm of the Inspectorate to identify physical changes in the health of workers, was for the most part used to ensure proper control of health risks. But it is now possible to set down generally agreed standards for a safe working environment.... Instead of relying solely on physical appearances and the application of basically sound principles, it is now possible to quantify risk and to advise on measures to control it on a scientific basis without waiting for actual symptoms of ill-health to prove that conditions need to be improved.¹¹⁹

¹¹⁷ HSC, *Report 1981/82* (London: HMSO, 1982), 14.

¹¹⁸ Barbara Castle, "Letter to TUC," March 26, 1969, TUC MSS.292B/145.85/2.

¹¹⁹ DE, *Annual Report Chief Inspector of Factories 1970*, xvi.

By the early 1960s, therefore, questions had emerged about the use of doctors in factory regulation, and the application of medical services in the wider employment field.¹²⁰ In 1964, an IHAC subcommittee was established to review the operation of the Appointed Factory Doctor Service—doctors within industry appointed to undertake routine examination of young persons, and adults entering hazardous occupations. The subcommittee reported in 1966, and recommended the abolition of the service along with the routine examination of young persons, which it considered a waste of scarce medical manpower. This was in favour of its more discriminating deployment under a new Employment Medical Advisory Service (EMAS), which would focus on examining young people whose school medical records suggested were at particular risk. EMAS' brief would encompass the entire field of employment and, concordant with the wider political focus on productivity, provide a centre of expertise for government and industry, providing medical advice in relation to employment, training, and the rehabilitation of disabled persons.¹²¹

Although clinical medicine continued to play an important role in health and safety regulation after 1970, especially in hazardous occupations where medical surveillance was required, industrial hygiene thus increasingly took its place in the primary control of occupational risk. Consequently, parallel to the movement in

¹²⁰ R. T. S. Henderson, "The Employment Medical Advisory Service," *Postgraduate Medical Journal* 66 (1990): 457–61.

¹²¹ DEP, *Annual Report Chief Inspector of Factories 1968*, xi–xii; DEP, *Annual Report Chief Inspector of Factories 1969*, 34; MOL, *Annual Report of the Chief Inspector of Factories on Industrial Health 1966*, Cmnd. 3359, 1967, 23–4; Robens, *Safety and Health at Work*, 117, 119.

regulatory attention from the physical to the social conditions of work, there was a scientific movement, from biological to environmental monitoring. This observation concurs with other historical evidence about a wider ‘environmental turn’ in twentieth-century health and safety discourse.¹²²

2.7.3. Risk, Reactivity and the Public

As this chapter has demonstrated, a significant feature of 1960s health and safety regulation was that despite the plethora of legislation, some 5–8 million British workers (after 1963) remained outside its scope. In addition to these workers were millions of ordinary members of the British public, who had no specific protection against occupational risks. Incidents and disasters over the 1960s, however, challenged the fragmentary nature of the existing system. As a result, by 1967 the trade unions and British government increasingly considered that comprehensive health and safety legislation was necessary, to protect every worker, regardless of occupation or workplace. Further, there had to be a statutory, as well as common law duty for employers to consider public health and safety.

One such incident occurred in June 1964, when the jib of a crane in Brent Cross, London, collapsed over a passing coach, killing seven passengers. The subsequent investigation revealed that a faulty gate section made for the crane by its manufacturers was primarily to blame. However, a crucial recommendation was that consideration should be given to bringing the public under the Factories Act. Since the

¹²² e.g. Sellers, *Hazards of the Job*; Burnham, *Accident Prone*; Long, *The Rise and Fall of the Healthy Factory*.

notional definition of a factory had broadened since the nineteenth century to include such varied premises as docks and construction yards, the inquiry noted, it was only logical that the public should now be encompassed.¹²³ However, the MOL resisted this proposal at the time, believing that the incidental protection afforded by the Factories Act was sufficient.¹²⁴

A second incident in 1966, however, challenged the government's assumption that public safety was adequately protected under existing legislation. On the 21 October 1966, a colliery spoil heap, positioned on a mountainside above the Welsh mining village of Aberfan, collapsed, burying a school and eighteen houses. 144 people, including 116 children died: the worst mining catastrophe in Britain since the Senghenydd Colliery Disaster of 1913.¹²⁵ At the Davies Tribunal, convened to ascertain the causes of the disaster, the Divisional Inspector of Mines submitted that HM Mines and Quarries Inspectorate had never before considered tips to be a danger—to miners, let alone the public: 'while the coal industry has had a high accident rate, until this horrible disaster there is no previous case of loss of life due to tip instability known to the Inspectorate.... The problem of tip stability has never been looked on as a safety problem meriting close inspection or recommendation by the Chief Inspectors.'¹²⁶ Indeed, unlike for inspections underground, there was no official requirement for inspectors on the surface to record which area, or item of plant,

¹²³ *Report of the Investigation of the Crane Accident at Brent Cross, Hendon, on 20th June 1964*, HL 316/HC 553 (London: HMSO, 1965), 26; Eves, Interview, pt. 2.

¹²⁴ HC Deb 1 December 1966 vol. 739 col. 149W.

¹²⁵ *Report of the Tribunal Appointed to Inquire into the Disaster at Aberfan on October 21st, 1966*, HL 316/HC 553 (London: HMSO, 1967).

¹²⁶ *Ibid.*, 35.

machinery and equipment they had inspected.¹²⁷ Nor, disturbingly, was there a statutory requirement for colliery owners to report accidents or dangerous occurrences affecting the public—only ‘death of, or serious bodily injury to, a person employed at the mine.’ Consequently, since no worker was injured or killed that day, the colliery manager was not obliged to report a single casualty.¹²⁸

The Aberfan disaster dramatically demonstrated how, not just individuals, but entire communities could be devastated by modern industry. Occurring in an era of television news, footage of the disaster scene and relief operation was relayed to members of the British public in their homes. Aberfan was significant in a second crucial way: it demonstrated the essential reactivity of the British system of health and safety regulation. This was demonstrated once again in 1969, when in response to the disaster, the government passed the Mines and Quarries (Tips) Act, empowering local authorities to prevent danger to the public arising from tips.¹²⁹ Writing in 1972, the CSHW took up this theme of reactivity, placing Aberfan alongside the thalidomide scandal as evidence of the reactivity of British legislation in general (see Chapter 3).¹³⁰ According to the Committee, as industry became increasingly complex, and threatened workers and the public in new ways, a new, more proactive system of risk surveillance was needed. The existing legal framework, this chapter has shown, was inadequate to deal with the evolving risks of British industry.

¹²⁷ Ibid., 36.

¹²⁸ Ibid.; *Mines and Quarries Act*, Ch. 70, sec. 116.

¹²⁹ *Mines and Quarries (Tips) Act*, Ch. 10, 1969.

¹³⁰ Robens, *Safety and Health at Work*, 4.

2.8. The Reform Process, 1967–1970

Despite these various pressures, by 1967 administrative developments had already suggested that health and safety legislation required urgent revision. On 30 June 1967, Ray Gunter, the Minister of Labour, announced that preliminary work had begun to revise the Factories Act 1961 and OSRPA 1963, and consolidate them under a single statute.¹³¹ In December that year, the MOL circulated detailed proposals. 700 organisations were invited to comment, including trade unions, employers' associations, professional associations, and government departments.¹³² In a letter to the TUC's General Secretary, George Woodcock, Gunter assured that the plans would go some way to meet the TUC's calls for comprehensive safety and health legislation, voiced at that year's Congress.¹³³

In 1970, the DEP, which had inherited responsibility for health and safety legislation after the MOL's dissolution, outlined its rationale for why a new comprehensive statute was required. Firstly, technical matters had accumulated which required revision of the Factories Act. Secondly, there was dissatisfaction with the Act because it was overly long, detailed and confusing. Much of its wording was obscure or vague, and many of its provisions were inconsistent or antiquated. Thirdly, with two Acts administered by the DEP in force side by side (the Factories Act and OSRPA), administration and enforcement of health and safety legislation had become overly

¹³¹ HC Deb 30 June 1967 vol. 749 col. 149W.

¹³² DEP, "First Consultative Document," December 1967, TUC MSS.292B/145.85/1, Appendix; DEP, "Committee on Safety and Health at Work. Background Paper on the Preparation of Comprehensive Safety, Health and Welfare Legislation," 1970, TNA LAB 96/332.

¹³³ Ray Gunter, "Letter to George Woodcock (TUC)," December 1, 1967, TUC MSS.292B/145.85/1.

complicated. Demarcation issues arose where it was difficult to tell which Act applied, and if one Act and its subordinate regulations had to be revised, there was pressure to follow suit with the other.¹³⁴

These problems are insightful insofar as they demonstrate *bureaucratic* disapproval with the existing system. While the various developments described above were integral to the demand for regulatory reform, purely on an administrative level the maintenance of existing law had become too onerous.

The MOL's 'First Consultative Document' attempted to address these problems, and 'meet the needs of a rapidly developing industrial society', by proposing a new comprehensive Act of a more 'enabling' character than existing legislation.¹³⁵ By 'enabling', it was meant that the proposed Act would contain requirements of a more general or widely applicable nature, with matters of detail left to subordinate regulations. Drafted in such a way, it was argued, safety and health legislation would be more flexible and adaptable, able to keep pace with industrial development.¹³⁶ The First Consultative Document also acknowledged various ongoing concerns. The proposed legislation advanced new requirements relating to safety training and instruction, and extended new controls over the safety of machinery, plant and equipment.¹³⁷

However, there was a critical problem with these proposals, which remained unresolved by 1970. They remained trapped within the established logic of the

¹³⁴ DEP, "Background Paper on the Preparation ..."

¹³⁵ DEP, "First Consultative Document", covering letter.

¹³⁶ Ibid.

¹³⁷ Ibid.; DEP, "Background Paper on the Preparation ..."

Factories Act model of regulation. For example, while intended to be 'enabling', the proposed legislation continued to prescribe detailed requirements for matters such as temperature and space. Workplace, as opposed to employment, continued to be used as the basis for statutory coverage, although included at this stage were select 'work operations', such as window cleaning, which would be covered regardless of where they were performed. Although the proposals included 'any premises, whether in the open air or otherwise, in which ... persons are employed', there were significant exceptions, including premises covered by laws administered by other government departments.¹⁵⁸ Excluded from the proposals, implicitly or explicitly, were the self-employed, homeworkers, and most seriously, the public. Effectively, the 1967 proposals thus left intact the existing fragmented arrangements.

The First Consultative Document's fundamental problem, therefore, was its lack of an imaginative solution to health and safety problems in, and beyond, the British workplace. What was being proposed, in effect, was a cautious re-enactment of the existing state of affairs, albeit on an augmented scale. Although consultations with interested parties continued throughout 1968, they were not fruitful. By 1969, it is evident that Castle and her DEP colleagues were dissatisfied by the lack of progress. The wider government shared their pessimism: in January 1969, the Home Affairs Committee ruled out comprehensive legislation in the 1969–70 session, effectively placing responsibility for the proposals in the hands of the next (as it transpired,

¹⁵⁸ DEP, "First Consultative Document", Appendix; DEP, "Background Paper on the Preparation ..."

Conservative) government.¹³⁹ Consequently, Castle's Employed Persons (Health and Safety) Bill, introduced in February 1970, attempted to make progress on just two of the many problems requiring attention by the late 1960s, namely, joint consultation and the establishment of EMAS. While it was not the all-embracing Act sought after by the government, Castle hailed the Bill an important step forward in 'industrial democracy', and a repudiation of the belief that health and safety could be promoted 'simply on paternalistic lines'.¹⁴⁰ Charles Sisson, a DE official, perhaps put it more accurately: the Bill was an example of 'practical politics'.¹⁴¹

In reality, progress was stuck on all other issues and Castle was resigned to the conclusion that more time was needed to study them. In September 1969, Sir Denis Barnes, the DEP's Permanent Undersecretary, mooted the prospect of a wide-ranging inquiry into health and safety legislation among government departments. While officials cautiously welcomed the plans, concerns were expressed about the possible extension of DEP legislation onto territory occupied by other departments, such as schools.¹⁴² This was a polite precursor to a much more vicious Whitehall row that erupted over the CSHW's recommendations in 1972 (see Chapter 3).

Despite these concerns, Castle was convinced that an inquiry was necessary. In a letter to Victor Feather, the TUC General Secretary, Castle explained that while the

¹³⁹ Barbara Castle, "Memorandum," February 1970, TNA LAB 96/447; "H(69), 2nd Meeting," January 24, 1969, 2, TNA CAB 134/2862.

¹⁴⁰ HC Deb 2 March 1970 vol. 797 col. 44.

¹⁴¹ "Note of Address by C. H. Sisson, Safety, Health and Welfare Division, Department of Employment," February 1971, TNA LAB 96/466.

¹⁴² "Summary of Replies to Sir Denis Barnes' Letter of 5 September 1969 about a Possible Inquiry into Accident Prevention and Related Matters," 1970, TNA LAB 96/447.

First Consultative Document's proposals were useful, they did not go far enough. They retained the existing patchwork of legal coverage, which had its recognised flaws:

The conclusion I have come to is that the matter can be satisfactorily dealt with only by having a high-level outside enquiry. I have in mind a small body—perhaps a chairman and 3 or 4 members—who could, without going into the detail of the existing legislation, take a general look at the way the present system works right across the field.¹⁴³

At Feather's suggestion, on the 29 May 1970, just as Parliament dissolved pending the general election, Castle appointed Lord Robens of Woldingham to head this enquiry.

2.9. Conclusion

This chapter has analysed the development of the British system of health and safety regulation at a critical historical juncture. Between 1961 and 1970, the Factories Act model of regulation, based on an ever increasing corpus of law covering separate industries and processes, began to be called into question by inspectors, politicians, civil servants and others. Developments over the 1960s highlighted the inherent limits of statutory intervention in the workplace, including the effectiveness of detailed, prescriptive legislation in controlling hazards. Regulatory attention thus increasingly shifted onto the management of health and safety by workers and employers themselves, and the promotion of voluntary effort.

¹⁴³ Barbara Castle, "Letter to Victor Feather (TUC)," February 24, 1970, TUC MSS.292B/145.85/2.

In the late 1960s, the innate reactivity of the regulatory system was exposed by the rapidly changing industrial landscape and dimensions of occupational risk. This was confirmed by the 1966 Aberfan disaster, which demonstrated how occupational risks could now extend far beyond the factory fence. Officials thus recognised the need for health and safety legislation to encompass all workers, as well as non-employees such as the public who could be injured or made ill by work activity.

By 1967, administrative developments had already highlighted the need to revise health and safety law. However, while the First Consultative Document envisaged the significant expansion of legislation, it left intact the established model. Castle's decision to appoint an independent committee of inquiry in 1970 not only reflected political realities, but also the fact that a more radical and creative solution was considered necessary.

A paradox is perhaps evident here. It seems counterintuitive that the government campaign to promote voluntary effort or 'safety consciousness' in the 1960s was borne out of government efforts to penetrate deep in the everyday running of the firm, initially, through a voluntarist campaign of education and encouragement, later, compulsion. Christy once remarked, 'safety consciousness cannot be inculcated by legislation.'¹⁴⁴ However, in terms of safety committees and safety representatives, that is exactly what happened by the end of the 1960s, as the Labour government relaxed its abstentionist stance towards industrial relations, and threatened to legislate if industry did not do more to improve standards.

¹⁴⁴ MOL, *Annual Report Chief Inspector of Factories 1966*, 8.

This paradox can be easily resolved. Firstly, industry was too slow to react to voluntary encouragement in the early 1960s, particularly in respect of accident reporting and safety committees. As in the 1920s and 1950s, industry did not live up to its promises, and the post-1964 Labour government lost patience. Although encouraging progress was seen in the late 1960s, this was not merely due to greater effort on the part of industry, as the CBI later argued, but the direct threat of legislation.¹⁴⁵

Secondly, while legislation was deemed a blunt instrument to promote health and safety, it was still considered necessary to bring into line the worst offenders and lay down common standards for industry. The conciliatory enforcement philosophy developed by the Factory Inspectorate in the nineteenth century was alive and well in the 1960s: the law could be used symbolically to promote ‘voluntary’ compliance.¹⁴⁶

Thirdly, from a Foucauldian perspective of governmentality, the 1960s approach was not about the British state relinquishing its responsibility for health and safety. Rather, governmental power was exercised more indirectly: state resources were put into moulding an individual and collective sense of responsibility, or discipline for health and safety, what was referred to as ‘safety consciousness’ (the term health and safety ‘culture’ is more commonplace today). Through the use of various media, employers and workers were encouraged to shoulder greater responsibility for health and safety, by internalising and enacting various ‘safe’ behaviours. Like Foucault’s

¹⁴⁵ Robens, *Selected Written Evidence*, 119–20.

¹⁴⁶ For discussion of this philosophy in terms of HSE, see Hawkins, *Law as Last Resort*.

argument about panopticism, the government's approach was about getting employers and workers to govern themselves, only stepping in to punish where necessary.¹⁴⁷

It has been customary for academics to view the 1972 Robens Report as the effective start of the 'modern' British system of health and safety regulation. However, this chapter has shown that this view is too simplistic. Many of the Committee's most important arguments about health and safety regulation, such as the counter-constructive effects of prescriptive legislation, were in currency among those who administered and enforced regulation before 1970. This chapter has thus begun to place the CSHW in wider historical context, by showing how its appointment was not inevitable. A unique set of circumstances converged in the 1960s which meant that an expected revision of the Factories Act, along traditional lines, was transformed into something more radical.

The next chapter elaborates these arguments by demonstrating how the HSWA and HSC/E were by no means established facts even after the CSHW presented its conclusions. Exploring the appointment and operation of the Committee, as well as its aftermath, the chapter reveals that in the two years between the publication of the report and the passing of the HSWA, a vicious Whitehall row erupted. Disagreements between officials over the report's recommendations exposed the divergent sympathies of government departments as well as differing ideas as to what a proposed new regulatory agency would look like. What ultimately transpired was significantly shaped by the CSHW, but had several critical differences.

¹⁴⁷ Foucault, *Discipline and Punish*, 202-3.

3. Transforming the System, 1970–1974

3.1. Introduction

This chapter analyses a period of profound transformation in the structure and style of British health and safety regulation. Under Lord Robens, in 1972 the Committee on Safety and Health at Work (CSHW) recommended a radical overhaul of the existing approach to health and safety regulation. Embodied in the HSWA 1974, which remains on the statute book to this day, the Committee's conclusions continue to frame the way occupational hazards are conceptualised and addressed in twenty-first-century Britain.

The CSHW's overriding conclusion was that the existing mass of health and safety legislation no longer sufficiently protected workers and others, such as members of the public, who could be harmed by work activity. Fragmented and overly prescriptive, the law generated considerable confusion among employers and workers, and led them to believe that health and safety was primarily the government's concern. Instead, the Committee argued, 'a more effectively self-regulating system' was needed to ensure that employers and workers exercised greater responsibility.¹ The Committee recommended a wholesale redistribution of responsibility, away from government effort and statutory regulation, towards voluntary effort and 'self-regulation' by employers and workers. While health and safety regulation would still remain, it would

¹ Robens, *Safety and Health at Work*, 12.

be reconfigured to support 'the conditions for more effective self-regulation by employers and workers jointly.'²

The far-reaching consequences of this reconfiguration are analysed in the later chapters of this thesis, which focus on the HSC/E. This chapter is concerned with the administrative processes through which the CSHW's work was organised, its ideas developed, and recommendations translated into policies which had significant implications for the way health and safety was subsequently regulated in Britain. By focusing on these processes, this is not to argue that the CSHW developed its ideas in isolation. As suggested previously, it has been customary for many academics and professionals to view the CSHW in just this way. In contrast, this chapter draws upon a range of material, including archival material from the Committee itself, to deconstruct the historical conditions that shaped its key arguments and proposals. It also covers the immediate aftermath of the Robens Report, marked by a fierce Whitehall row which reveals the opposition of various government departments towards the CSHW's proposals. Such an account enables a more nuanced understanding of the emergence of the present (post-1974) regulatory system than previously developed by historians, as well as an appreciation of the considerable practical and conceptual difficulties that confronted civil servants when navigating the CSHW's far-reaching proposals.

² Ibid., 151.

3.2. Overview

Several of the trends which influenced British health and safety regulation in the 1960s continued to have implications for the development of regulatory policy in the early 1970s, and in fact grew in significance. Section 3.3 elaborates the argument on consensus, arguing that between 1970 and 1974, health and safety emerged as an area of relative political agreement in a country otherwise embroiled in industrial conflict. In the early 1970s, politicians and regulators perceived more clearly the deleterious consequences of industrial development on health and the environment. Section 3.4 highlights the key role played by the British media and environmental movement in shaping the political perception of risk. In response to the changing risk environment, the CSHW recommended a more all-embracing vision of health and safety regulation, to embrace the health and safety of the public and the emission of toxic gases into the atmosphere.

The important work of the CSHW is analysed in section 3.5. Among its many recommendations was the establishment of a National Authority for Safety and Health (NASHW), to physically embody the concept of self-regulation and act as a centre of expertise in the health and safety field. Section 3.6 highlights how, despite the Committee's sweeping recommendations, one of the few areas of political controversy was the NASHW's consequences for the machinery of government. Following the Robens Report, there was 'a prolonged and intensive period of interdepartmental consultation' (actually, a vicious Whitehall row), during which the proposed NASHW was separated into two institutions: the HSC and HSE.³

³ HC Deb 3 April 1974 vol. 871 col. 1287.

Section 3.8 moves beyond the administrative detail to consider the HSWA's major implications for British health and safety regulation. Firstly, health and safety regulation ceased to be merely 'occupational': after 1974, regulation expanded to encompass issues of public safety and the environment, which not only brought every British employee under the remit of statutory protection, but also (theoretically) every British person.

Secondly, the role of the British state was recast as providing, in the first instance, a framework of law, advice and good practice through which employers and employees could take the initiative in promoting health and safety. While the British government extensively promoted voluntary effort before 1974, following the HSWA, the British health and safety system was openly presented as a regime of self-regulation.

Finally, the HSWA embedded certain ideas and policies which were integral to the development of an overt, risk-based philosophy in health and safety regulation. For example, the requirement for written safety policies was predicated on the idea that employers should assess occupational risks, and take proportionate steps to control them. British health and safety regulation after 1974 was thus implicitly 'risk based', although in practice it was still a long way from the explicit, systematic and formalised approach to risk management HSE developed in the late 1980s and 1990s.

3.3. Conflict and Consensus: Health and Safety in the 1970s

As explained previously, little has been written on the politics of health and safety immediately prior to the CSHW. In contrast, early-seventies British industrial relations have received a great deal of historical attention.

Between 1970 and 1974, health and safety emerged as a remarkable area of political consensus in a country engulfed by industrial conflict. The period 1970–1974, corresponding with the Conservative government of Edward Heath, is often regarded by historians as a period of ‘tumult’.⁴ In a context of rapid inflation, worsened by the 1973 oil crisis, trade union demands for pay rises and widespread opposition to a new, more restrictive industrial relations law (the Industrial Relations Act 1971) resulted in increased militancy, power shortages, and ultimately, emergency measures introduced by the government to conserve energy (the ‘three-day week’). As Kessler and Bayliss observe, ‘industrial relations reached right into people’s homes—their lights went out—and that raised the significance of industrial action ... to a new political level.’⁵ By 1972, the number of working days lost to industrial disputes surged to 24 million, primarily due to the national coal strike.⁶ This exceeded the figure of 23 million working days lost as a result of occupational injury and illness, first advanced by the Donovan Commission in 1968.⁷

Following the election victory of the Conservative Party in 1970, pressure on the supposed ‘post-war consensus’ mounted further. The Conservatives entered under a mandate to liberalise the economy, abolish Labour’s prices and incomes policy and curb trade union power. The Industrial Relations Act 1971 closely followed the Donovan Commission’s recommendations, establishing a new Commission on

⁴ Kessler and Bayliss, *Contemporary British Industrial Relations*, 21.

⁵ *Ibid.*, 23.

⁶ *Ibid.*; ONS, *Social Trends 30* (London: TSO, 2000), 78. The 1972 national coal strike was the first such strike since 1926, and accounted for 45 per cent of the 24 million working days lost that year.

⁷ DEP, *Annual Report Chief Inspector of Factories 1967*, xi.

Industrial Relations and National Industrial Relations Court. These policies, however, are widely interpreted to have been a failure: the need to reintroduce an incomes policy following the 1972 national coal strike, as well as the depth of political opposition to the Industrial Relations Act, meant that consensus was reinforced.⁸ In the ‘social contract’, Labour returned to power in 1974 offering the trade unions a raft of political concessions in exchange for support on wage restraint. Consequently, the HSWA formed part of a series of measures to appease the unions and improve workers’ rights, including the Sex Discrimination Act 1975 and Employment Protection Act 1975.⁹

Within this context of unrest, health and safety was a rare oasis of calm, forging substantial agreement between the TUC, CBI and two main political parties. As Dawson argues, health and safety represented ‘a relatively stable framework of ... law across an economically and politically turbulent period.’¹⁰ This is evident from the fact that in 1973, following the Robens Report, the TUC and CBI jointly lobbied the government to have the HSWA speedily enacted. This reveals how the need for systemic reform was seen to transcend any differences of opinion between them, for instance in terms of the form and content of new legislation.¹¹ In 1972, shortly after the controversial imprisonment of five striking dockworkers, Feather remarked just how progressive the Robens Report was, and how history needed to remember its publication.¹² This was in spite of the TUC losing out in the Robens Report, having

⁸ Moran, *British Regulatory State*, 3.

⁹ Dawson et al., *The Limits of Self-Regulation*, 5.

¹⁰ Ibid., xv.

¹¹ Whitehorn and Victor Feather, “Joint Letter to Maurice Macmillan (DE),” February 20, 1973, TNA BA 17/859.

¹² Victor Feather, “‘Two Challenges’. Commentary in AUEW Journal,” September 1972, TNA LAB 96/476.

pushed for more detailed, rigorously enforced regulation while the CSHW recommended a greater emphasis on voluntary effort and self-regulation.

Consensus is also evident from the way political action on health and safety was sustained despite two successive changes of government. The Conservatives inherited the CSHW from the previous Labour government, and were receptive to its proposals. Likewise, the HSWA was passed by a minority Labour government in July 1974, with only minor changes to a Conservative Bill introduced seven months earlier. Some of these minor changes, however, had major consequences: one of Labour's concessions to the trade unions was a clause whereby they alone had the right to appoint worker safety representatives.¹³ This was a significant departure from the CSHW's argument that every worker, unionised or not, had the right to participate in health and safety management, and provided the grounds for one of the few areas of political contention in the passing of the Act.

Pressure to secure cooperation came from multiple sources. Ultimately, both sides of industry had a common interest in seeking reform of the regulatory system, despite differences over the exact nature of these reforms. The TUC believed that the system was too weak and required strengthening, while the CBI believed that the system was overly prescriptive and detrimental to voluntary effort. The two main political parties, on the other hand, were publicly committed to action on health and safety, and feared a political backlash if they either reneged on their commitment, or

¹³ John Locke, "The Politics of Health and Safety: Text of the Alexander Redgrave Memorial Lecture" 1981, 4–5, HSE archive 351.824.1:613.6:614.8 VF; McIvor, *Working Lives*, 182.

presented watered-down proposals.¹⁴ Moreover, the recommended reforms were diverse enough to garner cross-party political support, even if they did not meet every demand or criticism. Self-regulation appealed to business interests, for example, while the proposed extension of legislation to cover all employees also met some of the demands of labour. Pressure to secure cooperation also came from economic and political developments. This is evidenced by a revealing letter from Jim Prior, the Lord President of the Council, to Maurice Macmillan, the Employment Secretary, reminding him of ‘the value [of the HSWA] in providing an opportunity for fruitful co-operation between the Government, employers and employees, and in contributing towards the establishment of a climate which will be helpful for ... our counter-inflationary policies.’¹⁵

At least on one level—the need for systemic reform—there were thus pressures during 1970–74 that promoted political agreement on health and safety, even if the outcome of reform was not visualised in the same way on all sides. This is not to overstate ‘consensus’: as demonstrated below, there were some serious criticisms of the Robens Report from certain quarters of British politics, academia, the press and safety movement, largely revolving around its philosophy of self-regulation. Nevertheless, the source of major conflict during 1970–74 was from Whitehall itself. Certain departments, including the Department of the Environment (DOE), bitterly opposed the Committee’s recommendation they should rescind their policymaking functions to a

¹⁴ Castle, “Memorandum”; “Summary of Replies”; “C(73), 26th Conclusions,” May 10, 1973, 12, TNA CAB 128/52/4.

¹⁵ James Prior, “Letter to Maurice Macmillan (DE),” September 28, 1973, TNA BA 17/864.

new NASHW. This was a significant barrier to the wider, more all-embracing concept of health and safety advanced by the CSHW.

3.4. Risky Business: Occupational Risk in the 1970s

The early 1970s saw major developments not only in industrial politics, but the occupational and environmental risk environment. These had substantial bearing on the CSHW's conclusion that a 'thoroughgoing overhaul' of the health and safety system was needed.¹⁶

As Chapter 2 explained, in the late 1960s regulators were increasingly conscious of the rapidly changing industrial landscape, which altered the nature of the risks workers confronted. This awareness was linked, in part, to the newfound sophistication of industrial hygiene and its growing centrality to health and safety policymaking. The industrial experience of factory inspectors also informed them that plants were growing in scale and catastrophic potential. However, the British media and nascent environmental movement also played a critical role in this development, helping focus the political perception of occupational risk.

In 1968 alone, the British media reported adeno-carcinoma of the nose among furniture workers in High Wycombe, mesothelioma in asbestos workers, and scrotal cancer in workers handling mineral oil.¹⁷ At the time, factory inspectors and other officials interpreted such media attention as an increase in public interest in health and safety, although, in reality, such 'interest' is difficult to disentangle from actual

¹⁶ Robens, *Safety and Health at Work*, 12.

¹⁷ DEP, *Annual Report Chief Inspector of Factories 1968*, xvi–xvii.

concern. John Plumbe and his successor, Bryan Harvey, wrote of the fragile and symbiotic relationship between media and regulator, how the power of the media needed to be exploited to ‘harness the force of ... informed opinion to the improvement of industrial conditions’, while being aware of how it could ‘magnify the effect on the public conscience of a happening which in earlier years might have received little attention.’¹⁸

Media interest in health and safety corresponded with growing public interest in the environment in general: in the 1960s, Owens explains, ‘the environment ... emerged as a distinct category of public and political concern.’¹⁹ In particular, the publication of Rachel Carson’s *Silent Spring* in 1962 helped stimulate public interest in the environment, and imparted momentum to a burgeoning environmental movement.²⁰ The book, about the ecological and health effects of chemical pesticides, was first published in Britain in 1965. Following public concerns about atomic energy and thalidomide, the book generated significant political awareness about the risks industry posed to human health and the environment. The relevance to health and safety is that while Carson was careful not to recommend a complete ban on chemical pesticides, she emphasised their possible long-term health effects, words which resonated among a British audience waking up to the insidious risks of asbestos, smoking and thalidomide.

¹⁸ Ibid., xvi; DE, *Annual Report of HM Chief Inspector of Factories 1972*, Cmnd. 5398, 1973, vii.

¹⁹ Susan Owens, “Experts and the Environment — The UK Royal Commission on Environmental Pollution 1970-2011,” *Journal of Environmental Law* 24, no. 1 (2012): 2.

²⁰ Samuel P. Hays, “The Environmental Movement,” *Journal of Forest History* 25, no. 4 (1981): 219–21; e.g. Ralph H. Lutts, “Chemical Fallout: Rachel Carson’s *Silent Spring*, Radioactive Fallout, and the Environmental Movement,” *Environmental Review* 9, no. 3 (1985): 210–25; Carson, *Silent Spring*.

Carson's work suggested, at least implicitly, that regulators had failed in their duty of preventing risks to the public in relation to new technologies. Lord Shackleton, introducing the British edition, made this connection clear: 'the tragedies of Thalidomide, of lung cancer from smoking, and many other examples, all these are a measure of the failure to foresee the risk and act quickly enough.'²¹

In the early 1970s, Carson was joined by authors such as Taylor and Ehrlich in predicting a dystopian future brought about by humankind's unbridled faith in technological and industrial 'progress'.²² Alongside other events that brought conservation issues to the forefront of public and media attention, such as the moon landing, by the early 1970s 'the environment' had become a major media topic, appearing as a regular column in *Time* magazine as early as August 1969.²³ New voluntary organisations were also established around this time: Friends of the Earth was established in 1969, while Greenpeace originated around 1970.

Wider social and epidemiological trends were interwoven with this 'awakening' of media interest in environmental and occupational health.²⁴ Harvey recognised how as acute infectious and childhood diseases declined, more insidious, chronic diseases were coming under regulatory focus.²⁵ In his book *Human Engineering* (1970), Lord Robens wrote evocatively of new social expectations about health and the environment in general:

²¹ Carson, *Silent Spring*, 16.

²² Gordon R. Taylor, *The Biological Time-Bomb* (London: Thames & Hudson, 1968); Paul Ehrlich, *The Population Bomb* (New York: Ballantine Books, 1968).

²³ Stuart Allan, *Media, Risk and Science* (Buckingham: Open University Press, 2002), 103–4.

²⁴ DEP, *Annual Report Chief Inspector of Factories 1969*, xv.

²⁵ DE, *Annual Report of HM Chief Inspector of Factories 1971*, Cmnd. 5098, 1972, xiii.

In recent years there has been a bold renewal of man's urge to 'have a say' in the things that happen around him. In some instances this has resulted more in 'having a go' than 'having a say'. Unfortunately these cases have been the ones that have attracted the sharp focus of public attention. I certainly do not know why this movement has recurred just now—we must leave future historians to unravel the causes—but it has happened and it is force to be reckoned with.²⁶

Certainly, improved living and social conditions were partly responsible for rising public awareness of risks. As incomes rose and the post-1945 welfare state removed or ameliorated many of the 'bread and butter' problems facing British workers, public attention shifted to wider environmental problems. As Robens wrote: 'There are demands to eradicate the pollution of the air, to clean up the rivers and the seas around the populated coasts, and to clear up the thousands of acres of blighted areas of dereliction left by the ravages of industry on its way by.'²⁷

As a consequence of these developments, workers and the general public grew more aware of occupational hazards, and demanded greater information about risks they were exposed to. This demand placed increasing pressure on regulators over the last third of the twentieth century. It was met through traditional means of communication such as face-to-face advice, publications and exhibitions, as well as innovations such as the technical data note, leaflets that displayed information about hazards in condensed form, which were handed out free of charge by inspectors when

²⁶ Robens, *Human Engineering*, 175.

²⁷ *Ibid.*, 8.

visiting workplaces.²⁸ Over, the 1970s, informational films also became a prominent source of public information about health risks, sponsored by organisations such as the Central Office of Information. Films about work safety were circulated to a widespread audience including workers, safety professionals, and at least in one notable case (the 1977 film *Apaches*, about the dangers of playing on farms) to schoolchildren. As one commentator wrote in 1980, 'from a time when there were precious few training films, and nobody was prepared, speculatively, to produce any, we have moved to a time when there is almost an *embarras de richesse* of training programmes for sale or hire.'²⁹

In the early 1970s, public demand for information about risks became transformed into something approaching a democratic right. Political demands for joint consultation were complemented by a demand for access to information about hazardous materials. Following cases of lead poisoning at the Rio Tinto Zinc (RTZ) smelter in Avonmouth in 1972, a Committee of Inquiry was sent to investigate under the chairmanship of the radiologist, Sir Brian Windeyer. The RTZ smelter was newly built in 1969, and at the time was the largest lead and zinc smelting plant in the world.³⁰ The Windeyer Committee was tasked with finding the cause of the poisonings, and reporting in relation to the work of the CSHW, of which Windeyer and his colleagues were also members. Windeyer recommended that RTZ workers should be better informed about health hazards, and that more information should be

²⁸ DEP, *Annual Report Chief Inspector of Factories 1969*, xv.

²⁹ Clive Jones, "Industrial Training: Instructive Films Increasingly Popular," *The Times*, January 25, 1980, TDA.

³⁰ Peter Harvey, "Poison Risks Close Lead Smelter Plant," *The Guardian*, January 22, 1972, TNA LAB 96/209.

provided to workers about levels of environmental contamination and absorption of lead into the blood.³¹ In his 1971 report, Harvey remarked how such an obligation was not confined to the lead industry, but existed across industry as a whole: at a time when the public expected to be better informed about risks they were exposed to, and reassured that preventive measures were being taken, communication about risks needed to be industry-wide.³²

Cause and effect in this period is difficult to unravel. Increasing public concern about environmental and occupational health risks — or more precisely, increasing regulatory perception of such concern — grew in tandem with science unveiling those risks. The identification of new occupational health risks further accelerated in the 1970s. New occupational hygiene laboratories were opened in Cricklewood, North London in 1973, and between 1970 and 1973 tests of toxic substances in the Industrial Hygiene Unit further rose from 7,100 to 12,850. This represented an enormous increase of 836 per cent since 1966.³³ The newfound power of these sciences was confirmed in 1974, with the ‘sudden recognition’ that vinyl chloride, a monomer used in the production of the plastic, PVC, resulted in the cancer angiosarcoma. As HSE’s former Director of Medical Services, Tim Carter recalled, this resulted in a widespread panic, especially in the British chemical companies responsible for its production.³⁴ The rapid development of a code of practice for vinyl chloride revealed how even under

³¹ Sir Brian Windeyer, *Report of a Committee under the Chairmanship of Sir Brian Windeyer Appointed to Inquire into Lead Poisonings at the RTZ Smelter at Avonmouth*, Cmnd. 5042, 1972, 15.

³² DE, *Annual Report Chief Inspector of Factories 1971*, xiii.

³³ DE, *Annual Report Chief Inspector of Factories 1970*, x; DE, *Annual Report of HM Chief Inspector of Factories 1973*, Cmnd. 5708, 1974, viii.

³⁴ Tim Carter, Interview, August 28, 2013, pt. 1.

conditions of scientific uncertainty, the findings of these regulatory sciences could be quickly translated into practical action to minimise workers' exposure.³⁵

Outside occupational health, major hazards such as chemical plants continued to develop as sources of public and regulatory concern. With memories of Aberfan still recent, a string of high-profile industrial accidents at Mitcham, Pembroke, Sheffield and Flixborough brought into sharp relief the deadly implications of the scaling-up of industrial plants. These added to the growing public anxiety around new industrial developments, such as plans for an oil terminal on Canvey Island, sensationally described as 'an Island of Fear' by the British Safety Council's magazine, *Safety and Rescue*.³⁶ As the local MP, Bernard Braine, warned, 'I have no wish to be alarmist.... But the Aberfan disaster crept upon us largely unawares precisely because no one ever thought that it was his responsibility to calculate the risks being taken.'³⁷

Such comments were perceptive, for as Harvey remarked in 1972, a reactive approach to major hazards, like environmental contaminants, could no longer be tolerated:

It is clear that we can no longer afford to take a chance in many plants. In these circumstances a very detailed calculation of the sorts of problems which are likely to arise will be necessary.... If it is not possible to develop adequate measures of controlling the hazards which some processes create then industry may well have to take a decision not to

³⁵ DE, *Annual Report of HM Chief Inspector of Factories 1974*, Cmnd. 6322, 1975, vi.

³⁶ "Extract from 'Safety and Rescue,'" April 1971, TNA LAB 96/223.

³⁷ HC Deb 24 February 1970 vol. 807 col. 378.

develop a particular plant or process until the way ahead for both workers and the environment is clear.³⁸

These developments prompted a striking change in the role of factory inspectors in the early 1970s. In his 1973 report, Harvey remarked how ‘the whole of the Inspectorate is now geared to the enforcement of the health requirements of the legislation in terms of the scientific measurement of risk and the scientific monitoring of precautions which are taken to minimise it’: the factory inspector was adopting a new scientific persona.³⁹

HSE’s former Deputy Director-General, David Eves, recounted the basic equipment offered to trainee factory inspectors in the mid 1960s:

The equipment was rudimentary, to say the least. It was a six-inch metal ruler — imperial, not metric ..., there was a pair of internal and external callipers ..., for measuring the diameter of shafting ..., no protective clothing, and no eye protection, no safety boots, no overall, nothing. So the culture was to inspect in your suit, looking ... as smart as possible.... You get a notebook, and you’d get a government-property pen ..., [but] that was about it really.⁴⁰

By the early 1970s, however, this was beginning to change. Supported by improved regulatory science, trained to an increasingly high calibre, and armed with new portable sampling instruments, factory inspectors were assuming a new ‘forensic

³⁸ DE, *Annual Report Chief Inspector of Factories 1971*, xvi.

³⁹ DE, *Annual Report Chief Inspector of Factories 1973*, viii.

⁴⁰ Eves, Interview, pt. 1.

capability'.⁴¹ 'Empirical' approaches to regulation and enforcement, such as the routine cyclical inspection of workplaces, were questioned during this period as inspectors moved towards more technical, 'risk based' approaches.⁴² These included the prioritisation of larger premises, or those which statistics revealed to pose a disproportionate risk to employees (through a numerical rating system), and the promotion of environmental monitoring in hazardous industries.⁴³

It was in this context of regulatory, technological and epidemiological change that the CSHW carried out its detailed review. From the perspective of factory inspectors and the British government, the existing approach to health and safety regulation was no longer effective in protecting workers and the wider public against occupational risks. As Harvey's comments about risk indicated, a more proactive system was desired, one that could keep abreast of technological change, and put the burden of evaluating and controlling risk on those who generated them in the first place.

3.5. The Committee on Safety and Health at Work

3.5.1. Appointment and terms of reference

The CSHW was the first ever comprehensive inquiry of the British health and safety system. Although several committees and Royal Commissions had been established

⁴¹ Ibid.; DEP, *Annual Report Chief Inspector of Factories 1969*, xv; DE, *Annual Report Chief Inspector of Factories 1972*, xv; DE, *Annual Report Chief Inspector of Factories 1973*, xii; HSE, *A Brief History of HM Factory Inspectorate*, 15–6.

⁴² Eves, Interview, pt. 2.

⁴³ DE, *Annual Report Chief Inspector of Factories 1973*, ix–x.

over the decades to inquire into specific aspects of health and safety, never before had their remit been so vast.⁴⁴ The Committee's terms of reference are worth quoting in full. These were:

To review the provision made for the safety and health of persons in their course of employment (other than transport workers while directly engaged on transport operations and who are covered by other provisions) and to consider whether any changes are needed in: (1) the scope or nature of the major relevant enactments, or (2) the nature and extent of voluntary action concerned with these matters, and to consider whether any further steps are required to safeguard members of the public from hazards, other than general environmental pollution, arising in connection with activities in industrial and commercial premises and construction sites, and to make recommendations.⁴⁵

As these terms suggest, the Committee's role was carefully drafted to avoid contention with policy domains that other government departments controlled, or considered to be outside the remit of 'health and safety'. From 1970, the question of environmental pollution was also under consideration by a Royal Commission, chaired by the botanist, Sir Eric Ashby.⁴⁶ Thus, the Committee's terms of reference were written to provide it with maximum depth of focus, while avoiding these sensitive areas.

However, the interconnectedness of health and safety problems, exacerbated by the delocalisation of risk, meant that the CSHW found it extremely difficult to restrict its work. An integrated approach to the control of dangerous substances, for example,

⁴⁴ Robens, *Safety and Health at Work*, 2.

⁴⁵ *Ibid.*, v.

⁴⁶ See Owens, "Experts and the Environment."

naturally raised the issue of their transport, while the control of toxic substances within the workplace highlighted contradictory standards concerning the same substances when emitted into the external environment. ‘Safety and health at work,’ Robens conceded in 1972, ‘is not a subject that is easily delimited.’⁴⁷

Considering the enormity of the subject, the DEP wanted the CSHW to reflect a broad range of industrial and technical expertise. Robens himself was an interesting choice of chair for the Committee. Having had both direct and indirect experience of health and safety policy over his long career, as well as experience in industrial relations, Robens was uniquely placed to weave together contemporary ideas about safety, productivity and self-help into a coherent regulatory philosophy.

The son of a cotton salesman, Robens had industrial relations experience from an early age. Robens began his career as a clerk for the Manchester and Salford Cooperative society and later, as an official for the Union of Shop and Distributive Workers. Following the Second World War, Robens became a Labour MP for the mining constituency of Wansbeck, and then Blyth in Northern England. A swift rise in the ministerial ranks saw Robens briefly in the role of Minister of Labour and National Service, before the Conservative’s 1951 general election victory.⁴⁸ In opposition, Robens was a passionate advocate of industrial safety, lobbying the government to expand health and safety legislation to non-industrial premises.⁴⁹ In 1960, despite his socialist leanings, the Prime Minister, Harold Macmillan invited Robens to chair the

⁴⁷ Robens, *Safety and Health at Work*, xv.

⁴⁸ Geoffrey Tweedale, “Robens, Alfred, Baron Robens of Woldingham (1910-1999),” in *Oxford Dictionary of National Biography* (Oxford University Press, 2010).

⁴⁹ HC Deb 1 April 1955 vol. 539 col. 757.

organisation running the nationalised coal industry in Britain, the NCB. This combined Robens' two great passions: 'mining and men at work'.⁵⁰

As NCB chair, Robens became closely acquainted with health and safety in a major hazardous industry, albeit one in serious decline. Even though the coal industry contracted sharply over the 1960s (output fell from 194 million tons per year in 1960 to 142 million by 1970), 316 men were killed and over 1,500 suffered serious injury in 1960 alone.⁵¹ As a nationalised industry able to draw upon public funds, the NCB developed a more comprehensive approach to health and safety compared to other industries.⁵² In response to the high accident rate among miners, Robens raised the status of professional safety staff, and pioneered a variety of methods to disseminate the safety message: publications, posters, league tables, as well as shock films, 'more horrific than any Hammer Films production.'⁵³

Robens became infamous for his love of the trappings of power, including a Daimler (registration NCB1), a private plane, and an exclusive apartment in Eaton Square, London. At a time when the coal industry was declining, Robens earned himself the unfortunate nickname, Old King Coal. However, it was the events of 21 October 1966 that defined much of his later career. As NCB chair, Robens was lambasted by the media for his mishandling of the relief effort at Aberfan. Notoriously, rather than attend the scene immediately, Robens preferred to honour his instatement as Chancellor of Surrey University.⁵⁴ At the Davies Tribunal, Robens was criticised for

⁵⁰ Robens, *Ten Year Stint*, 2; Tweedale, "Robens, Alfred."

⁵¹ Robens, *Ten Year Stint*, 234; Tweedale, "Robens, Alfred."

⁵² See McIvor and Johnston, *Miner's Lung*.

⁵³ Robens, *Ten Year Stint*, chap. 16.

⁵⁴ Tweedale, "Robens, Alfred."; Robens, *Ten Year Stint*, 247–8.

his inconsistent evidence. The Tribunal demonstrated that while Robens had suggested to a reporter ‘it was impossible to know that there was a spring in the heart of this tip which was turning the centre of the mountain into sludge’, the NCB had technology at its disposal which could have detected its presence.⁵⁵

Despite the reputational damage Robens suffered at Aberfan, the fact it was Feather, the TUC General Secretary, who proposed his name to Castle suggests that Robens retained credibility among the trade union movement.⁵⁶ Indeed, having been appointed to the NCB by a Conservative Prime Minister, Robens had a degree of political acceptability across ‘both sides of industry’, and was well versed in arbitrating between employers and trade unions. In the 1960s, Robens was a member of the Donovan Commission, which recommended statutory support (but not regulation) of industrial relations. As NCB chair, Robens was also aware of the link between safety and productivity, claiming that the pits with the best safety records were generally those which hauled the most coal out of the ground.⁵⁷

In 1970, before he was appointed to the CSHW, Robens published an evocatively titled book which demonstrated the influence of contemporary political and economic trends on his thought. In *Human Engineering*, Robens advocated a comprehensive overhaul of British industrial relations, boosting national productivity by finding ways to exploit ‘the vast potential of the manpower of this country, the native genius and natural initiative.’⁵⁸ Robens suggested that the primary reason why

⁵⁵ *Report of the Tribunal*, 89–92.

⁵⁶ “Safety and Health Inquiry: Membership. Brief for the First Secretary’s Meeting with Mr Feather on 20 April,” 1970, TNA LAB 96/447.

⁵⁷ Robens, *Ten Year Stint*, 238.

⁵⁸ Robens, *Human Engineering*, 9.

Britain was lagging behind its competitors, such as the USA, was because it was unable to utilise its labour efficiently. In Robens' view, poor health and safety standards were symptomatic of an inefficient and badly managed workplace, where workers had little stake in the decision-making affecting their work. Arrangements such as safety committees that encouraged safety as part of everyday business should therefore be encouraged by the government, and used in preference to detailed legislation, which encouraged the notion it was the government, not industry, who had primary responsibility for controlling hazards. Suggesting how Robens had in mind a redistribution of responsibility for health and safety before the CSHW was even formed, he wrote: 'Not until wise managements recognise the importance of safety at the place of employment as an integral part of efficiency will the requirement for inspectors and enforcement virtually disappear.'⁵⁹ Robens carried these ideas and beliefs into his deliberations on the Committee.

The other members of the CSHW were carefully assembled by Castle and her DEP colleagues, before the 1970 general election called time on Labour's six years in government. In addition to Robens, members included the Professor of Law, John Wood; the Conservative MP, Mervyn Pike; the radiologist and chair of the University of London, Brian Windeyer; the General Secretary of the National Union of Shoe and Boot Operatives and chair of the TUC Social Insurance Committee, Sydney Robinson; the chair of British Titan Products and the British Standards Institute, George Beeby; and the management consultant, Anne Shaw.⁶⁰

⁵⁹ Ibid., 123–4.

⁶⁰ See TNA LAB 96/447 for papers relating to the setting up of the CSHW.

The place of these individuals on the Committee was highly significant. Not only were 'both sides of industry' represented, but also a broad spectrum of political opinion. Robens, for example, was a former Labour Minister, while Pike was a Conservative backbencher. Wood's place on the Committee highlighted the importance of legal knowledge, while Beeby's recognised the centrality of non-statutory standards to health and safety policy. Shaw's membership of the Committee was also significant, suggesting how management consultancy was becoming more prominent as a profession and field, at a time when the efficient management of industry and the wider British economy was a top political priority. Shaw was a British pioneer of motion study, a scientific management technique, and a student of Frank and Lillian Gilbreth, two notable American early industrial psychologists.⁶¹

3.5.2. Operation

The CSHW's first official meeting was on 23 June 1970 at Hobart House, London, although due to the absence of several members, the Committee first met in full on 14 July. Robens opened the June meeting by declaring how the Committee had 'accepted a task of great magnitude and complexity', with 'a great impact on future developments in safety and health arrangements affecting many millions of workpeople.'⁶²

Indeed, the task at hand was so complex that it would have been inordinately difficult for a small committee to go about it alone. The Committee was thus assisted by a secretariat composed of seconded civil servants, led by Matthew Wake of the DE.

⁶¹ Harold Williams, "Roots: The Pioneers — Anne Shaw, CBE 1904-1982," *Management Services* 35, no. 8 (1991): 26–28.

⁶² "Minutes RCM1," June 23, 1970, TNA LAB 96/481.

The secretariat helped organise the Committee's work, preparing briefing notes, processing written and oral evidence, and scheduling meetings and visits. They acted as a vital bridge between the Committee, which was largely composed of individuals with limited or indirect health and safety experience, and those in the British government with direct, full-time experience of health and safety policy. In the early stages of its work, the CSHW was also assisted by the DE itself, which prepared several detailed background documents to get the Committee started.⁶³

The Committee processed a veritable mountain of material. In two years, the Committee collected written and oral evidence from over 200 individuals and organisations with an interest in health and safety, including government departments, local authorities, trade unions, employers' associations, insurers, professional associations and safety charities. Before written evidence was invited between August and November 1970, a series of informal talks was held with senior figures of these bodies, helping the Committee form an initial impression of the regulatory system, and identify the main differences of opinion.⁶⁴ Outside research was commissioned, aiding the understanding of complex topics such as accident prevention. This exhaustive process of evidence gathering was complemented by a programme of visits at home and abroad. In Britain, Committee members shadowed inspectors on their daily work, and visited mines, factories, farms and construction yards. International visits included West Germany (March 1971), Sweden (September 1971), Canada (May 1971) and

⁶³ e.g. "Document 4," May 1970, TNA LAB 96/465.

⁶⁴ Robens, *Safety and Health at Work*, xv.

the USA (May 1971). These junkets were intended to familiarise the CSHW with foreign regulatory and industrial compensation systems.

These visits were highly orchestrated, intended to attract maximum media interest. Newspapers were given advance warning about Committee visits, and press releases circulated to give workers, employers and the general public the impression the Committee was serious about tackling Britain's health and safety problems. Despite this effort, media exposure fell short of the Committee's initial expectations, with only two photographers attending the Committee's first full meeting in July 1970, one of whom had been specifically invited as an 'insurance'.⁶⁵ Disappointment was later expressed by trade unions, safety charities and the government about the level of publicity attracted by the Robens Report (see below).

3.5.3. International Visits

As mentioned above, the CSHW embarked on several international visits between March and September 1971, to experience the health and safety systems of other countries.

Health and safety was regulated in these countries very differently to in Britain, although each had potential lessons to offer. In the USA, President Nixon had recently passed the Occupational Safety and Health Act 1970 (OSH Act). Designed 'to assure so far as possible every working man and woman in the Nation safe and healthful working conditions', the Act was the first federal foray into occupational health and

⁶⁵ Charles Neale, "Letter to Matthew Wake," September 22, 1970, TNA LAB 96/467.

safety legislation. Previously, such legislation was handled by individual states:

Massachusetts was the first state to advance industrial safety legislation, requiring the fencing of dangerous machinery from 1877.⁶⁶

As with the HSWA, the OSH Act was prompted by political concerns about the rising level of industrial accidents. In 1970, a shocking 14,000 American workers were killed at work. The OSH Act established a general duty for employers to provide work free from recognised hazards, and enabled the Secretary of Labor to make new standards. These were developed through a network of advisory committees and national standard-making organisations, after taking into account the views of interested parties.⁶⁷ The CSHW considered that the use of voluntary standards, given statutory approval by the government, was an important regulatory tool, and that further weight should be attached to them in Britain in future.⁶⁸

Another similarity with the HSWA was that the OSH Act provided for new national institutions to develop and enforce health and safety standards. The Occupational Safety and Health Administration (OSHA) was established as a new federal enforcement agency, while the National Institute of Occupational Safety and Health (NIOSH) conducted scientific research and developed new standards.

Sweden offered an alternative vision of health and safety regulation, firmly grounded in joint consultation. There, the Workers' Protection Act had established

⁶⁶ Occupational Safety and Health Administration, *Reflections on OSHA's History* (OSHA, 2009), 1–4.

⁶⁷ Wilson, *The Politics of Safety and Health*, 3, 27–8; W. Kip Viscusi, *Risk by Choice: Regulating Health and Safety in the Workplace* (Cambridge, MA: Harvard University Press, 1983), 2, 6–7.

⁶⁸ Robens, *Safety and Health at Work*, 46–8.

comprehensive protection against occupational accidents and disease in 1949, and provided for the appointment of safety representatives and safety committees.⁶⁹

Swedish arrangements for joint consultation were looked upon by British trade unions particularly favourably in the 1960s and 1970s, and were considered a possible model for British arrangements at a time when industry's commitment to accident prevention was open to doubt.⁷⁰

3.5.4. Evidence

While domestic and international visits were crucial to the development of the CSHW's ideas, the Committee was also heavily influenced by the people who supported and administrated its work. The role of the secretariat and DE in filtering the CSHW's conceptualisation of health and safety regulation has not been acknowledged by historical studies to date. These have tended to focus on the Committee and its published report, which obscure the influences on its collective opinion. What becomes apparent through an analysis of their work is that while the Committee was ostensibly free to draw its own conclusions, the close relationship between the CSHW and its sponsoring department, the DE, meant that the Committee was necessarily more exposed to the DE's political agenda than any other government department or organisation.⁷¹

An early background paper prepared by the DE, for example, painted a picture of the British regulatory landscape that was wholeheartedly accepted by the CSHW,

⁶⁹ Ibid., 177.

⁷⁰ "Joint Consultation in Sweden," 1964, TUC MSS.292B/146.17/1.

⁷¹ "Minutes RCM1."

highlighting ‘the multiplicity of enforcing agencies, the multiplicity and overlap of statutes, the distinction between safety and health of employed persons and safety and health of members of the public, [and] gaps in the coverage of the legislation.’⁷²

Moreover, an early review of evidence, just six months into the Committee’s proceedings, noted ‘the existence of a mass of detailed restrictive legislation may inhibit the natural development of self-help and continuous self-regulation by industry itself.’⁷³

This was uncannily similar to the Committee’s eventual conclusion: ‘the existence of such a mass of law has an unfortunate and all-pervading psychological effect. People are heavily conditioned to think of safety and health at work as ... a matter of detailed rules imposed by external agencies.’⁷⁴

Economists such as Stigler have pointed to the capture of regulatory bodies by special interests such as large industries.⁷⁵ This can occur when the composition of regulatory bodies is biased towards a particular viewpoint, or when the thinking of such bodies is slanted towards a particular ideology, or perception of problems. In this case, the CSHW’s thinking was skewed towards the DE and its Factory Inspectorate. DE officials had been preparing comprehensive safety and health legislation since 1967. By presenting a vision of the health and safety system that was already largely accepted, officials gently prodded the CSHW towards reforms under the DE’s sphere of influence.

⁷² “Document 4.”

⁷³ “Minutes RCM37,” November 1970, TNA LAB 96/465.

⁷⁴ Robens, *Safety and Health at Work*, 7.

⁷⁵ e.g. George J. Stigler, “The Theory of Economic Regulation,” *The Bell Journal of Economics and Management Science* 2, no. 1 (1971): 3–21.

The CSHW's written and oral evidence also suggests a cognitive bias towards the DE and Factory Inspectorate's views. One of the first presentations delivered to the Committee was from the Chief Inspector of Factories, Plumbe, who repeated his assertion that the Factory Inspectorate's work was suffering from diminishing returns. An increase in prosecution, Plumbe suggested, would be counter-constructive to health and safety, since it would 'reduce the "public image impact" of prosecution action.' Instead, the Factory Inspectorate considered the law 'a powerful reinforcement of their persuasive functions ...one to be kept in the background and used as last resort.'⁷⁶ This belief, of huge importance to the enforcement of health and safety, received no critical scrutiny from the CSHW and found its way directly into its report. The idea that excessive legislation undermined or deterred individual responsibility, of course, accorded with Robens' own expressed opinion in *Human Engineering*.

On the other hand, the CSHW appears to have dismissed alternative views out of hand. In its submissions of evidence, the TUC argued that the government needed to devote more resources to accident prevention, in both human and financial terms. The government needed to increase the number of factory inspectors, as well as the level of fines imposed in court. In his oral evidence, C. R. Dale, the Secretary of TUC's Social Insurance and Industrial Welfare Committee, argued for the continuation of detailed, prescriptive laws, because more general and flexible requirements were harder to enforce. For the TUC, the primary question concerning health and safety regulation was not whether the balance between statutory and voluntary effort was correct, as the

⁷⁶ "Note of Committee's Informal Discussion with W. J. C. Plumbe," July 21, 1970, TNA LAB 96/481.

CSHW's terms of reference implied, but whether this balance could be *sustained*. In Dale's view, neither was there sufficient enforcement, nor too many regulations.⁷⁷

With the exception of joint consultation, the CSHW was more sympathetic to the CBI.⁷⁸ The CBI argued in contrast to the TUC that the proliferation of health and safety law was no longer tenable. Detailed, prescriptive legislation obscured the employers' common duty of care, and the CBI proposed that legislation should emphasise general duties. As a CBI briefing note suggested, 'what is wanted is not just new legislation but a completely new approach and method of presentation centred upon the predominance of the basic common law principle which places responsibility on every individual for reasonable conduct in his relationship with others.'⁷⁹

The CBI agreed with the DE that existing health and safety law was unintelligible and required urgent rationalisation. Just like the DE, the CBI argued that an 'enabling' Act would be more easily understood by employers; complex matters could be dealt with through subordinate regulations and codes of practice. On the vexed issue of safety committees, the CBI repeated its belief that statutory compulsion was unlikely to work, since it depended on the goodwill of both sides of industry.⁸⁰ For the CBI, the CSHW's secretariat noted, "compulsory joint consultation" was a contradiction in terms.⁸¹

⁷⁷ "Note of Committee's Informal Discussion with C. R. Dale," August 18, 1970, TNA LAB 96/481.

⁷⁸ CBI, "'Working Party on Evidence to Robens Committee', Minutes," September 30, 1970, 2, CBI MSS.200/C/3/EMP/4/168.

⁷⁹ CBI, "Industrial Safety and the Law. Practical Implications," 1970, CBI MSS.200/C/3/EMP/4/168.

⁸⁰ Robens, *Selected Written Evidence*, 119.

⁸¹ "Note of Informal Discussion with CBI Representatives," September 29, 1970, TNA LAB 96/481.

Submissions of evidence to the CSHW help illuminate the wider considerations that informed its thinking. They are more revealing than the minutes of the Committee itself, which largely concentrate on logistical matters (such as upcoming visits), and tend to obscure differences of opinion between Committee members. Nevertheless, minutes reveal that the CSHW reached some of its most fundamental decisions relatively early in its proceedings. By January 1971, for example, the Committee had already determined there should be a new comprehensive Act applying to all employees. However, there was a limit to what legislation could achieve, and in future, there should be renewed focus on voluntary effort and individual responsibility for workplace health and safety.⁸²

3.5.5. The Robens Report

The Robens Report was published on 19 July 1972. Like its subject, the Report was vast, exceeding over 200 pages. Taking a panoramic view across Britain's health and safety landscape — not just regulation — it covered such diverse topics as accident prevention, occupational medicine, statistics and insurance. However, it had a single, fundamental conclusion: *'There are severe practical limits on the extent to which progressively better standards of safety and health at work can be brought about through negative regulation by external agencies. We need a more effectively self-regulating system.'*⁸³

This argument was not just based on the wealth of industrial experience the Committee had tapped into through its industrial visits and submissions of evidence. It

⁸² "Minutes," January 19, 1971, TNA LAB 96/481.

⁸³ Robens, *Safety and Health at Work*, 12. Italics in original.

was based on a singular, controversial diagnosis which continues to divide academic opinion to this day: ‘the most single reason for accidents at work is apathy.’⁸⁴

In making this assertion, the CSHW was not necessarily blaming workers for their own accidents and ill health, as some commentators have argued.⁸⁵ The Committee considered ‘apathy’ to be pervasive and industry-wide, applying equally, if not more, to employers: *‘The primary responsibility for doing something about the present levels of occupational accidents and disease lies with those who create the risks and those who work with them.’*⁸⁶ The sheer mass of law, the Committee believed, undermined health and safety since it encouraged employers and workers to think of it as the government’s responsibility.⁸⁷ The law had developed piecemeal and unsystematically over time, reacting to events through a process of ‘practical empiricism’.⁸⁸ However, this empiricism and creeping legislative extension was now being called into question, not least because of the growing toll of industrial accidents, disasters, and the changing dimensions of risk.⁸⁹

The state’s role in health and safety regulation, the Committee argued, did not encourage employers to understand and honour their legal responsibilities. Since existing laws were overly prescriptive, they encouraged employers to meet minimum standards rather than do their utmost to promote safe and hygienic working conditions. The law was immensely confusing, even for those who administrated and

⁸⁴ Ibid., 1.

⁸⁵ See, e.g. McIvor, *Working Lives*, 174.

⁸⁶ Robens, *Safety and Health at Work*, 7, italics in original.

⁸⁷ Ibid.

⁸⁸ Ibid., 4–5.

⁸⁹ Ibid., 1–2.

enforced it.⁹⁰ Moreover, many health and safety requirements were archaic and inappropriate for modern industrial conditions. The law was thus highly atavistic, as requirements persisted that reflected a by-gone industrial age.

Another significant problem was the tendency of health and safety legislation to focus on physical conditions and hazards, at the expense of social conditions, personal attitudes, and safety organisation.⁹¹ As factory inspectors had argued over the 1960s, the most common workplace accidents were due to factors beyond legislative control.

The CSHW believed that it was not only health and safety legislation in urgent need of rationalisation. The institutional machinery for health and safety regulation also required reform. The jungle of legal provisions was a constant headache for officials: multiple statutes led to demarcation problems and disputes between authorities; often, significant time would be spent simply deliberating whether the law applied. On the one hand, some complex workplaces, such as chemical plants, were subject to multiple statutes, conflicting legal standards and systems of inspection. On the other hand, other workplaces, such as hospital wards, were excluded from health and safety legislation altogether. The 'labyrinthine' structure of health and safety law resulted in gaping blind spots where up to 5 million employees had no legal protection from occupational hazards.⁹² Outside employment, 'third persons', such as members of the public, were also at risk from occupational accidents and ill-health. As Brent Cross, Aberfan, and later, Flixborough revealed, such persons required statutory protection.

⁹⁰ Ibid., 7.

⁹¹ Ibid., 7–8.

⁹² Ibid., 9–10.

Unsurprisingly, considering their close relationship, the CSHW largely followed the DE's template for reform. The CSHW argued that a more comprehensive and ordered system of regulation was needed, one which anticipated risk and kept abreast of technological change. It needed to be structured in such a way that industry bore the brunt of responsibility, while also being flexible and amendable with new developments. To counteract 'apathy', and stimulate safety awareness, 'an accumulation of influences and pressures' was needed across the health and safety system.⁹³ The CSHW's recommendations thus applied to all three levels of the British health and safety system: the workplace, industry and the British state.

3.5.5.1. Workplace

At workplace level, the CSHW's view of statutory regulation was indebted to the paternalistic, managerial approach of the Factory Inspectorate, who considered the law a blunt instrument to prevent occupational accidents and disease. The Committee argued that the most effective way to improve health and safety standards was by 'creating the conditions for more effective self-regulation by employers and workpeople jointly', using tools such as education, advice, and voluntary standards to raise the profile of health and safety in the firm.⁹⁴ As in *Human Engineering*, Robens emphasised that health and safety was an essential feature of good management, and needed to be treated in the same way as other business operations, such as personnel management.⁹⁵ Safety performance could only be improved if everyone at work, from

⁹³ Ibid., 1–2.

⁹⁴ Ibid., p.151.

⁹⁵ Ibid., 15–16.

the company director to shop-floor operative, knew what their responsibility was, and exercised it accordingly. In order to clarify and allocate responsibilities, the CSHW recommended there should be a legal requirement for companies to produce a written statement of their safety policy, detailing safety procedures and arrangements. Written safety policies placed an implicit demand on employers to consider the particular hazards in their workplace, and take commensurate steps to protect the health and safety of their employees.⁹⁶

According to the Committee, for this redistribution of responsibility to be successful, there needed to be regular joint discussion of health and safety issues in the workplace. The question of joint consultation, of course, was a complex and sensitive issue at a time of strained industrial relations. Throughout the early 1970s, the TUC continued to push for the statutory recognition of safety committees and representatives, a position it had maintained since 1964. The CBI, on the other hand, remained firmly opposed, arguing that for such arrangements to work, they needed the full support of both sides of industry.⁹⁷ While the CSHW recognised the importance of joint consultation, it ultimately stopped short of recommending the statutory compulsion of safety committees. As the CBI, it believed that industrial conditions varied so widely it was unwise to define particular arrangements, or threaten existing arrangements by imposing a particular model. Instead, there should be simply a statutory requirement for employers to consult their employees, an approach endorsed by Windeyer in his report on the RTZ lead poisoning controversy.⁹⁸

⁹⁶ Ibid., 23–24.

⁹⁷ Robens, *Selected Written Evidence*, 119, 671–673.

⁹⁸ Robens, *Safety and Health at Work*, 21–2.

3.5.5.2. Industry

At the level of industry, the CSHW acknowledged the valuable work of voluntary organisations such as RoSPA and the British Safety Council. In addition, it praised the role of the TUC and CBI in directing and coordinating accident prevention efforts, the various joint standing committees appointed under existing health and safety legislation, and voluntary industry-based safety committees, trade and research associations. The CSHW believed that these arrangements should be allowed to continue without being unnecessarily hindered by legislation or the state. However, it also accepted that without statutory coordination, they lacked aim and focus; this was exacerbated by fragmented legislative and administrative arrangements. What was needed, therefore, was a 'better mechanism for linking up voluntary and statutory activities in a more comprehensive way.'⁹⁹

3.5.5.3. Unified Legislation

The CSHW's most far-reaching recommendations concerned health and safety at the level of the British state. The Committee argued that the nine main groups of Acts and 500 regulations that littered the statute book should be scaled back, simplified, and reorganised under a single 'enabling' Act.¹⁰⁰

By presenting enabling legislation as the solution to many of the problems that beset British health and safety law, the CSHW endorsed the views of the DE and CBI as they had developed from the late 1960s. The Committee pictured a central Act of a

⁹⁹ Ibid., 30.

¹⁰⁰ Ibid., 6–7.

general and widespread application to all employees, with specifics left to an organised framework of subordinate regulations, standards and codes of practice. The Act would detail the basic responsibilities of all individuals, presented in flexible, 'goal based' terms. In this way, health and safety law would complement the general duty of care of all individuals.

In future, the Committee stressed, codes of practice and voluntary standards should be used in preference to prescriptive statutory regulation. Overall, the quantity of health and safety regulations should be reduced.¹⁰¹ This structure of law was perceived to have manifest benefits. It was arguably more flexible and amendable, allowing redundant legal provisions to be more quickly removed or replaced. By prioritising the use of voluntary standards and codes of practice, industry was given greater responsibility for health and safety regulation. The use of more general and flexible legal requirements also reflected the Committee's aim to promote greater safety awareness in industry. As it asserted, 'a positive declaration of over-riding duties, carrying the stamp of Parliamentary approval, would establish clearly in the minds of all concerned that the preservation of safety and health at work is a continuous legal and social responsibility of all those who have control over the conditions and circumstances in which work is performed.'¹⁰²

The relegation of legal detail to a second tier of law also had a crucial role to play in the rationalisation of health and safety legislation. According to the Committee, the detail of existing statutes, such as the Factories Act 1961, could be re-enacted through

¹⁰¹ Ibid., 45.

¹⁰² Ibid., 41.

subordinate legislation, and reshaped to conform with the style and character of the new Act. This programme of legal rationalisation would likely take many years to achieve, and the Committee was conscious of the demands it placed on administrators. To ensure statutory protection remained unaltered while rationalisation took place, it would be necessary for existing Acts to remain in force as 'relevant provisions' of the new, comprehensive Act.¹⁰³ This is why, albeit nominally, the Factories Act 1961 remains in force today.

Perhaps the Committee's most far-reaching proposal was that comprehensive legal protection should be extended to all employees against occupational accidents and disease. The CSHW believed that the existing patchwork approach not only generated many of the system's legal and administrative problems, but also promoted confusion and inertia on the part of employers. From the Committee's perspective, it was bizarre that workers in schools, airports and hospitals were still excluded from health and safety legislation, unless they happened to work in notional 'shops', 'factories' or 'offices' within them. It was also strange how one workplace could be protected under health and safety legislation, while another, because of its purpose, could be excluded, even if for all intents and purposes it was identical to the first. As the Committee argued, 'we consider the present anomalous situation to be indefensible.'¹⁰⁴ By switching the basis of legal protection to *employment*, such anomalies could be avoided, while extending coverage to the estimated 5 million British workers without statutory protection.

¹⁰³ Ibid., 157.

¹⁰⁴ Ibid., 52.

Remarkably, the Committee proposed that this comprehensive system of protection should be extended still further. At the time, the self-employed had no obligations under health and safety legislation. The CSHW argued that, insofar as their actions endangered others, they too should be encompassed.¹⁰⁵ Even more significantly, the Committee recommended the extension of health and safety legislation to cover members of the public and other ‘third persons’ at risk from work activity. The CSHW argued that the legislative demarcation between ‘occupational’ and ‘public’ health and safety was artificial—‘as if there were some invisible ring-fence around the occupational safety system, with the general public left outside.’¹⁰⁶ While many occupational hazards posed only small-scale risks to the public in terms of numbers affected at any one time (for example, slips, trips in shops), others were potentially large-scale, and dramatic. The Brent Cross and Aberfan inquiries had criticised the exclusion of the public from health and safety legislation, on account of these delocalised effects. Although some government officials believed that the public would be covered by default if existing legislation was followed, these incidents demonstrated that unless the public was explicitly recognised, unforeseen and potentially catastrophic situations could arise.¹⁰⁷

The CSHW did not stop there. Another major recommendation, which was to prove more contentious among government officials, was that relevant *environmental* and *public safety* statutes should be incorporated under the new Act, to ensure a coordinated approach to the control of dangerous and toxic substances. As mentioned

¹⁰⁵ Ibid., 54–5.

¹⁰⁶ Ibid., 89.

¹⁰⁷ Ibid.

above, environmental pollution was excluded from the Committee's terms of reference, since it was being considered separately by Ashby's Royal Commission. However, since the CSHW's terms of reference embraced the issue of public safety in relation to industrial and commercial activity, the Committee felt compelled to comment in this area. The Committee argued that while existing Acts, such as the Alkali Act 1906, were primarily oriented to public health or 'amenity' rather than workers' health and safety, it was unwise to separate control arrangements when the offending substances came from the same technical source (that is, the factory). However, as the RTZ lead poisoning scare demonstrated, toxic substances could have delocalised effects far beyond the originating workplace. The CSHW thus recommended that existing control arrangements should be brought together where relevant.¹⁰⁸

3.5.5.4. Unified Administration

According to the CSHW, for this new integrated framework of health and safety legislation to work, there should be a new, single authority to supervise and enforce it, one that could act as the definitive 'voice' of health and safety in Britain. The Committee's major innovation in this area was its proposal to establish a new, quasi-independent National Authority for Safety and Health at Work (NASHW), with policymaking, research and enforcement functions. This authority would be free from the day-to-day control of central government, having its own director, staff and budget. However, it would be ultimately reliant on the Treasury for funding (through a

¹⁰⁸ Ibid., 34.

grant-in-aid) and legally accountable to Parliament through the Employment Secretary.¹⁰⁹

There was a significant precedent for such an arrangement in the British government. While semi-independent bodies had long been part of the British political landscape, the role of quangos in advancing policy was extended following the election victory of Labour in 1964, in pursuit of a more interventionist economic strategy (the National Board of Prices and Incomes being a major result). In 1968, the Fulton Report on the Civil Service further extended the role of quasi-government by promoting the hiving-off of government functions to new independent authorities. The rationale was that public bodies were more accountable when separated from the 'central government machine'; as Robens argued in *Human Engineering*, 'hived off' authorities could play a crucial role in making the British government more efficient and business-like. Consequently, in 1969, the Post Office was established as a separate agency of the British government, while in 1971 the Civil Aviation Authority was established as the regulatory body for civil aviation.¹¹⁰

Another significant feature of the proposed National Authority was its corporatist structure. In the same way that the CSHW advocated a formal dialogue between employers and employees elsewhere, the Committee argued that trade union and employer representatives should play a central role in the management of the new authority, actively taking over a regulatory role previously assumed by the British

¹⁰⁹ Ibid., 38.

¹¹⁰ Lord Fulton, *Report of the Committee of Inquiry on the Civil Service*, Cmnd. 3638, 1968, 61–2; Robens, *Human Engineering*; Michael Cole, "Quangos: The Debate of the 1970s in Britain," *Contemporary British History* 19, no. 3 (2005): 321–52.

government. The NASHW's management board would be executive in character, rather than advisory. It would thus be able to directly intervene in health and safety, rather than simply make recommendations, as was the case with the government's existing advisory committees, such as the IHAC. The management board would be composed of representatives of various 'user interests': trade unions, employers, local authorities and medical organisations. It would have a full-time chair, an executive director responsible for day-to-day operations, and several paid, part-time directors.¹¹¹

The CSHW saw 'little logic in any organisational separation between general administration and inspection services', a stance that would be substantially modified by the government between 1972 and 1974 (see below).¹¹² The various inspectorates that enforced health and safety legislation would be amalgamated under the new organisation, along with supporting bodies of research and scientific expertise.¹¹³ This required an extensive reorganisation of inspectorates in the field, and the CSHW recommended a new field structure of 30 large area offices, situated in major centres of industry and commerce.¹¹⁴ Local authorities, on the other hand, would continue to enforce health and safety legislation in non-industrial workplaces. However, their role would be widened to encompass new premises, such as primary schools, that would enter health and safety legislation for the first time.¹¹⁵

In recommending a radical overhaul of existing statutory arrangements, the CSHW went further than either TUC or CBI recommendations. The CBI, while

¹¹¹ Robens, *Safety and Health at Work*, 37.

¹¹² *Ibid.*, 62.

¹¹³ *Ibid.*, 62–63.

¹¹⁴ *Ibid.*, 68.

¹¹⁵ *Ibid.*, 76–78.

supporting a unified inspectorate, resisted a hived-off authority, arguing that a unified inspectorate would be better placed in a government department, ideally the DE.¹¹⁶

The TUC, in contrast, was not so much interested in institutional arrangements as the overall resources dedicated to health and safety. They preferred an organisation with a coordinating role across the field: privately, in the 1960s, they had toyed with the idea of a national safety and health council.¹¹⁷ As described below, however, while the DE supported the hiving-off of health and safety to a new quasi-independent authority, other government departments with existing policymaking and enforcement functions were bitterly opposed.

3.5.6. A Warm Reception?

The Robens Report was accompanied by an extensive publicity campaign. Lord Robens appeared on radio and television, and gave a press conference where he stressed how the Report tackled ‘real flesh-and-blood problems, concerning the well-being of millions of people in their daily work’.¹¹⁸

Despite this publicity campaign, the Robens Report did not achieve its anticipated impact, and there were various criticisms in print and private that it had gone unnoticed. While the Report did receive some exposure in the national press, coverage was uneven. The prominent tabloid, *The Sun*, did not mention the Report at all, much to the chagrin of its industrial correspondent. In a letter of sympathy, the

¹¹⁶ Robens, *Selected Written Evidence*, 111.

¹¹⁷ *Ibid.*, 676.

¹¹⁸ “Draft: Robens Report – Press Conference. Introductory Remarks by Lord Robens,” 1972, TNA LAB 96/473.

government's Chief Information Officer, Bernard Ingham wrote, 'please do not be upset ... safety and health is a very difficult subject to get in the newspapers.'¹¹⁹

Frustration was also felt by the trade unions and safety charities. The TUC General Secretary, Victor Feather fumed that 'more people are interested in the antics of a certain lady and her butler ... than safety in industry' (a reference to the ITV television series *Upstairs, Downstairs*).¹²⁰ The British Safety Council, meanwhile, conducted a straw poll suggesting that a majority of people were either unaware of the Report, or misinformed about its conclusions.¹²¹ In private, the CSHW's own members expressed concern about industry's responsiveness to the Report: Beeby, invited to speak at an industry conference, complained that his audience was 'totally and absolutely uninterested'.¹²²

In general, however, the Report was welcomed, with both the CBI and TUC believing that they had taken something away from it, even if they had not won on every issue. For example, in an article for the Amalgamated Union of Engineering Workers, Feather suggested that the Report was a major landmark, writing how at a time of sensitive industrial relations, history needed to remember its publication.¹²³ Commentators in the press praised the speed at which the Committee had come to its

¹¹⁹ Bernard Ingham, "Letter to Keith Mason," July 20, 1972, TNA LAB 96/473.

¹²⁰ "More Interest in Sex Than Safety," *The Daily Telegraph*, August 1972, TNA LAB 96/476.

¹²¹ "Public Is Uninformed on Robens," *Safety and Rescue*, September 1972, TNA LAB 96/476.

¹²² "Document 53," 1972, TNA LAB 96/474.

¹²³ Feather, "'Two Challenges'. Commentary in AUEW Journal."

conclusions. *The Daily Mirror* favourably reported how the Report formed ‘a real drive to improve [Britain’s] shaming record of human suffering and economic loss.’¹²⁴

Nevertheless, there were some significant criticisms of detail, in particular the Report’s emphasis on self-regulation. While the CSHW believed that employers and workers shared a common interest in health and safety (‘there is no legitimate scope for ‘bargaining on safety and health issues’), some commentators thought this idea was at best, naive, and at worse, deadly.¹²⁵ For instance, the safety campaigner Patrick Kinnersly, writing in 1973, argued that the idea of an ‘identity of interest’ was ‘a dangerous myth’, while *The Guardian* reported how by emphasising self-regulation, the Committee placed ‘too much faith in human nature.’¹²⁶ *Safety and Rescue* reported how a pressure group connected to the American environmental activist, Ralph Nader, was attempting to muster opposition to the Robens Report, on the basis that it was ‘little more than a statement of faith in the existing principles.’¹²⁷ In Parliament, the Labour backbencher Neil Kinnock characterised the Report as ‘if we have less law, we shall have more safety.’¹²⁸

Criticism came from other quarters. Medical professionals, such as Richard Schilling of the TUC Centenary Institute for Occupational Health, criticised the Report’s treatment of occupational health, which focused on the prevention of

¹²⁴ “Ending a Reproach to Britain,” *The Daily Mirror*, July 1972, TNA LAB 96/476.

¹²⁵ Robens, *Safety and Health at Work*, 21.

¹²⁶ Kinnersly, *The Hazards of Work*, 10; “The Weak Arm of the Law,” *The Guardian*, June 20, 1972, TNA LAB 96/476.

¹²⁷ “‘Kill Robens Report’ Call to MPs,” *Safety and Rescue*, September 1972, TNA LAB 96/476.

¹²⁸ HC Deb 21 May 1973 vol. 857 col. 69.

occupational hazards and safety management as opposed to occupational medicine's positive contribution to workers' health. A letter to the *British Medical Journal Supplement* warned that by accepting the DE's evidence at face value, the CSHW had 'unquestionably weakened the intended purpose to achieve better safety and health at work.'¹²⁹ Such contemporary criticisms support Long's argument that the Robens Report advanced a reductive view of occupational health, proclaiming 'a more circumscribed discourse of risk minimisation'.¹³⁰

For his part, Robens appears to have anticipated some of these criticisms. For example, following the Report's publication, Robens was at pains to show that his proposals did not represent a structural weakening of workers' protection. Rather, he suggested, his proposals allowed for the more 'discriminating' use of health and safety law—in some areas, especially those of a more technical or catastrophic nature, the CSHW argued that even stronger legal provisions were needed.¹³¹

While the Robens Report attracted significant criticism, there is little evidence to suggest they truly hit the mark. Contemporary criticisms were relatively few in number, and directed at specific aspects of the Report, rather than its overall recommendations. By the early 1970s a broad political consensus had emerged that urgent regulatory reform was needed. Since the perceived need was so great, and the CSHW's proposals so wide-ranging, specific criticisms relating to the form or content of new legislation had little catch. The perceived advantages of the Committee's

¹²⁹ "From the Committees," *British Medical Journal Supplement*, September 9, 1972; "Reactions to Robens," *Industrial Safety*, September 1972, TNA LAB 96/476.

¹³⁰ Long, *The Rise and Fall of the Healthy Factory*, 206.

¹³¹ Robens, *Safety and Health at Work*, 46.

reforms, most notably the extension of comprehensive legislation, were generally seen to outweigh any disadvantages. This explains the broad welcome given by groups such as the TUC towards the CSHW's proposals, despite specific criticisms over the style of the proposed new legislation.

3.6. 'A Prolonged and Intensive Period of Interdepartmental Consultation'

3.6.1. A Wrench in the Machine

Although the Robens Report was generally welcomed, it posed enormous difficulties for officials in terms of the administration of health and safety regulation. Its recommendations proposed meddling with arrangements that had developed virtually untouched for over a century; as the CSHW itself realised, this was not a task to be taken lightly.

The major issues of contention were the structure and status of the proposed NASHW, and its relationship with ministers and Parliament.¹⁵² In their evidence to the CSHW, several government departments made the case that their policy domains required special treatment. The Department of Trade and Industry (DTI), for example, maintained that mines and nuclear power stations were sufficiently different from factories to warrant separate legal provisions and enforcement, while the Ministry

¹⁵² "HS(72), 30th Meeting. 'Follow Up of Robens Report on Safety and Health at Work,'" December 8, 1972, TNA BA 17/855.

of Agriculture, Fisheries and Food (MAFF) argued that farm safety required specialist inspectors acquainted with the problems of agricultural machinery.¹³³

Of course, such anxieties also stemmed from ministerial anxieties about political prestige and power. Ministers feared that loss of their inspectorates to a new 'hived off' authority would undermine the links with industry and technical expertise they relied upon for policymaking. This amounted to a rejection of the CSHW's integrated approach: although the Employment Secretary, Maurice Macmillan attempted to placate ministers by suggesting they could still exercise direction over the new authority, a vicious Whitehall row erupted over the contents of the Robens Report.¹³⁴ This was euphemistically described by the Labour Employment Secretary Michael Foot, on presenting the HSW Bill in 1974, as 'a prolonged and intensive period of interdepartmental consultation'.¹³⁵

As we have seen, the DE anticipated administrative conflict before the CSHW was even established. Yet, such 'inter-departmental sensitivities' were not merely an esoteric administrative concern.¹³⁶ Whitehall departmentalism constituted a significant practical and conceptual barrier to the more all-embracing vision of health and safety demanded by the Robens Report. It threatened to confine health and safety regulation within the work gates, and propagate a fractured and disjointed system. It also slowed the passage of new health and safety legislation: frustration is evident from the way the

¹³³ Robens, *Selected Written Evidence*, 374; "Subject Brief 2," n.d., TNA LAB 96/485.

¹³⁴ "Follow Up of Robens Report."

¹³⁵ HC Deb 3 April 1974 vol. 871 col. 1287.

¹³⁶ "Document 10," n.d., TNA LAB 96/214.

TUC and CBI, in 1973, jointly lobbied the government to bring forth legislation as soon as possible.¹³⁷

The resolution of these debates ultimately permitted occupational health and safety regulation to encompass contingent policy domains, such as public safety in relation to occupational hazards, and the release of noxious industrial gases into the atmosphere. It conferred newfound status and significance to health and safety: after 1974, British health and safety regulation ceased to be merely ‘occupational’.

3.6.2. A National Authority for Safety and Health at Work

During these strained months, the Civil Service Department (CSD) arbitrated between government departments, attempting to broker agreement on the Robens Report by constructing a series of models for the new NASHW.¹³⁸ Closely assisting the DE, they analysed the work of existing inspectorates, and formulated tests to determine whether or not they should be included in the new authority. These included asking departments questions, such as ‘what effect would exclusion of the inspectorate have on the viability of the concept of an Authority for safety and health strategy over all of industry?’¹³⁹ The CSD’s role here was as a supposedly ‘impartial’ mediator with none of the baggage of the departments with existing administrative responsibilities. This included the DE, to whom responsibility for coordinating the new arrangements

¹³⁷ Whitehorn and Feather, “Joint Letter to Maurice Macmillan (DE).”

¹³⁸ The CSD was a newly established entity, established in 1968 following the recommendations of the Fulton Report.

¹³⁹ “HS(72), 30th Meeting. ‘Possible Models for an Authority for Safety and Health at Work. Note by Officials,’” January 1973, TNA BA 17/855.

fell to the career civil servant, John Locke, who became the HSE's first Director-General.¹⁴⁰

Three models were eventually constructed, envisaging authorities of various size and degrees of ministerial control. Having abandoned the idea of a fully independent executive authority owing to departmental objections, these models ranged from Model A, a semi-independent executive authority amalgamating all the inspectorates (favoured by the DE), to Model B, an authority without any central inspectorates or executive functions, only a broad, coordinating role. A third intermediate model proposed by the DTI, MAFF and DOE proposed an authority with executive control over uncontested policy domains such as factories, while exercising an advisory and coordinating role over other areas. The contested inspectorates would remain with their respective departments.¹⁴¹

Model B was rapidly discarded since it did not meet any of the Robens Report's recommendations. This situation was potentially embarrassing to the government owing to its stated intention to enact its proposals. By April 1973, however, nearly nine months after the CSHW had reported, agreement had still not been reached between departments, and the Home Secretary, Robert Carr, was forced to refer the decision to Cabinet.¹⁴² At the Cabinet meeting of 10 May 1973, Carr suggested that unless urgent action was taken to rationalise existing arrangements, it would appear that the government had caved to 'vested departmental interests'. Moreover, 'acceptance of the Report should yield substantial political advantages, whereas its rejection would

¹⁴⁰ Locke, "The Politics of Health and Safety," 1.

¹⁴¹ "Possible Models for an Authority for Safety and Health at Work."

¹⁴² "HS(73), 13th Meeting," April 17, 1973, 3, TNA BA 17/857.

involve the loss of a valuable opportunity for tripartite co-operation; and any suggestion that the Government were indifferent to the safety and health of workers would be liable to produce a hostile reaction by public opinion.¹⁴³ The Prime Minister, Edward Heath, along with fellow Cabinet ministers, subsequently concluded 'Model C would involve so substantial a reduction in the benefits to be expected from the reorganisation that it might well not be worth disturbing arrangements.'¹⁴⁴ Ultimately, ministers thus adopted Model A, although a compromise was allowed, whereby minimal deviations could be permitted from the model, on application to the Home Secretary.

Anthony Stodart at MAFF, and Geoffrey Rippon of the DOE subsequently wrote to Carr, justifying their respective cases. However, only Stodart was eventually successful: while the various other government inspectorates were amalgamated under HSE in 1975, agriculture was retained by MAFF until 1976. In relation to Rippon and the possible exclusion of the Alkali and Clean Air Inspectorate (ACAI), Carr wrote to Heath, 'this seems a major departure from the Robens recommendations and one which—despite the views of some of the interests concerned—we should not find too easy to justify.'¹⁴⁵

Jenny Bacon, HSE's Director-General from 1995–2000, was part of the working group that planned the HSC/E in the 1970s:

¹⁴³ "CM(73), 26th Conclusions," May 10, 1973, 11–12, TNA CAB 128/52/4.

¹⁴⁴ "CM(73), 26th Conclusions."

¹⁴⁵ Robert Carr, "Letter to Edward Heath," May 16, 1973, TNA BA 17/857.

Virtually nobody wanted their inspectorates to be put into HSE to begin with, and I think at a very early stage we said, ‘come on’, and got a pretty firm diktat come back down, ‘make this work chaps!’...

I think the logic was publicly accepted that it makes a great deal of sense to try and regulate what goes up the chimney and what comes out of the chimney and the process that leads to things going up the chimney all as part of one.... Apart from Ministerial opposition – Geoffrey Rippon – I think most people on the working group and indeed on the steering group said, look, it would make a great deal of sense for the Alkali Inspectorate to come in.¹⁴⁶

3.6.3. The HSC and HSE

Another significant development during this period was officials’ decision to separate the single authority proposed by the CSHW into two separate, but closely linked statutory bodies: a ‘Safety and Health Commission’ and ‘Safety and Health Executive’. While the CSHW had not seen any benefits from separating administration from enforcement, a two-tier structure had various practical and constitutional advantages. Firstly, it mirrored the approach to other employment services such as rehabilitation and training, which in the early 1970s were hived off to two new agencies, the Employment Services Agency and Training Services Agency, under the control of the tripartite Manpower Services Commission.¹⁴⁷ Secondly, it eased inspectors’ concern that they would lose their independence or authority if they were subject to the direct control of trade unions and employers’ associations. It was important that while

¹⁴⁶ Jenny Bacon, Interview, January 15, 2015, pt. 1.

¹⁴⁷ “Separation of the Commission and Executive,” July 9, 1973, TNA BA 17/860.

employers and unions had a say in the making of health and safety regulation, and were accountable to ministers for general policy, they could not interfere with enforcement.¹⁴⁸ Enshrined in statute, an institutional separation between administration and enforcement could ensure this independence.

However, this two-tier structure was opposed by the Treasury, who thought it was overly complicated and made financing more difficult.¹⁴⁹ Furthermore, civil servants expressed a practical concern that if they left the central government machine to join a non-Crown body, they would cease to be civil servants, with all their attendant perks and privileges.¹⁵⁰ A two-tier structure thus ensured that civil servants transferred to the new Executive would continue to be civil servants, and responsible to the Crown, while members of the new Commission would be ‘Crown appointees’, performing functions on behalf of the government, but not directly employed by it. John Rimington, HSE’s former Director-General, explained this relationship further:

[I]t’s very difficult to invent a body that can go about telling people what to do, and prosecuting them and having this disciplinary relationship with them, if those people haven’t got the firm hand of the government on them; if they’re not civil servants. It’s a kind of different idea: they’re warranted individuals, rather like the police. In fact a HSE inspector has more power, many more powers, than the police. And HSE is itself a prosecuting authority, like the Crown Prosecution Service. So for that reason ... HSE

¹⁴⁸ Ibid.

¹⁴⁹ J. B. Pearce, “Letter to Andrew,” May 18, 1973, TNA BA 17/857.

¹⁵⁰ J. B. Pearce, “National Authority for Safety and Health at Work,” May 14, 1973, TNA BA 17/857.

people remained civil servants. So in effect you had this situation where representatives of industry, trade unions and the public, were telling civil servants what to do.¹⁵¹

3.7. The Health and Safety at Work Bill

William Whitelaw, the new Conservative Employment Secretary, introduced the HSW Bill on the 24 January 1974.¹⁵² However, despite the long and and protracted debate over the Robens Report and HSW Bill, progress was lost following the snap general election of February 1974, which occurred in the midst of a second major national coal strike. The general election saw the Labour party returned to power under a minority Wilson government.

Despite major political differences between the Conservative and Labour parties elsewhere, Labour was supportive of the HSW Bill and pledged to enact it early in the new session. A Labour Bill was introduced by Michael Foot on 21 March 1974 with only minor changes to the Whitelaw Bill, namely a concession to the trade unions whereby they had exclusive right over the appointment of safety representatives in the workplace.¹⁵³ The HSWA received Royal Assent on the 31 July 1974. The Act is summarised in Appendix III.

¹⁵¹ John Rimington, Interview, April 15, 2014.

¹⁵² HC Deb 24 January 1974 vol. 867 cols 1904–5.

¹⁵³ HC Deb 21 March 1974 vol. 870 col. 1351.

3.8. Implications of the Robens Report and Health and Safety at Work Act

The HSWA instigated a profound transformation in the structure and form of British health and safety regulation. In this section, I move beyond the administrative detail of the CSHW and HSWA to analyse the nature of these changes. I deconstruct them along three interrelated dimensions: the movement of health and safety regulation beyond the workplace to address wider issues of public safety and the environment; the establishment of a self-regulatory system of health and safety; and the evolution of a risk-based approach to regulation.

3.8.1. *Beyond the Workplace*

According to Ulrich Beck, over the last fifty years western industrialised countries have witnessed a 'break within modernity'. Enormous changes have occurred in the social, political and technological dimensions of risk, dissolving many of the former institutions and certainties of life in the 'classical industrial society', which was predominantly based on a logic of wealth distribution. In their place, a new society has emerged based on the production and distribution of societally generated risks, which Beck terms the 'risk society'.¹⁵⁴

The notion there has been a rupture, or shift in industrialised society remains controversial among academics. In particular, since Beck's work is theoretical, it remains to be fully historicised, although notable efforts on this front have commenced

¹⁵⁴ Beck, *Risk Society*.

in recent years.¹⁵⁵ However, one of Beck's defining features of the 'risk society' is that risks over the last fifty years have become delocalised: they have extended beyond the workplace and even the geographical confines of the nation-state to affect the entire world.

In the early 1970s, Chapter 3 has shown, British regulators were increasingly conscious of how workplace risks could extend beyond the work gates, threatening entire communities and ecosystems. As a result, 'occupational', 'public' and 'environmental' concerns came into alignment, requiring a more complex and coordinated statutory response. Political concern converged around areas such as pollution, where the idea of separate statutory controls and standards for the 'external' and 'internal' environment of the workplace was perceived to be no longer workable. The RTZ lead poisoning controversy, for example, not only generated concerns among politicians and trade unions about workers' health, but parallel concerns among Medical Officers of Health about the effects of lead on vegetation and the health of local residents.¹⁵⁶ Similar fears about lead poisoning were expressed in other British towns and cities in the 1970s, including Birmingham and London.¹⁵⁷ These controversies demonstrated that even the oldest occupational hazards, when combined with the latest technology and industrial processes, could have major public health effects beyond the work gates.¹⁵⁸

¹⁵⁵ See, in particular, Boudia and Jas, "Risk and 'Risk Society' in Historical Perspective".

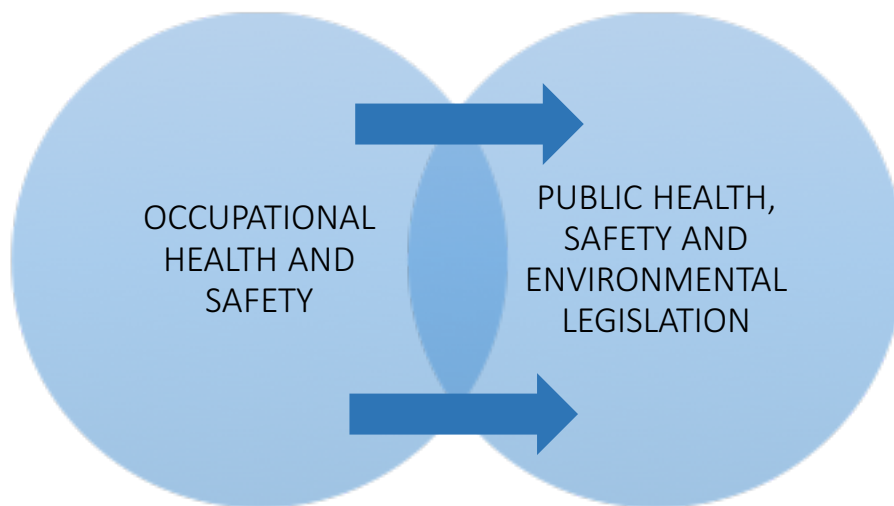
¹⁵⁶ DE, *Annual Report Chief Inspector of Factories 1972*, ix.

¹⁵⁷ HL Deb 29 November 1972 vol. 226 cols. 726-50.

¹⁵⁸ See, e.g. HL Deb 28 February 1973 vol. 339 col. 727.

The effect of this delocalisation was that by the early 1970s, occupational health and safety policy, which had hitherto been largely confined to questions of workers' health and safety, intruded, or threatened to intrude, upon wider questions concerning public health, safety and the environment (Figure 8). These areas were traditionally the responsibility of government departments other than the DE, and as we have seen, the CSHW's recommendations posed considerable practical and conceptual difficulties for officials in terms of the administration of health and safety regulation.

Figure 8. Delocalisation of occupational health and safety legislation



Effectively, the Robens Report and HSWA instigated a shift in the nature of administrative boundary problems in occupational health and safety regulation. The fragmentation of health and safety legislation before 1974 meant that debates had frequently emerged among officials about whether a particular workplace fell under the ambit of legislation, or which inspectorate had jurisdiction. By extending

comprehensive legislation to all employees, regardless of workplace or occupation, the HSWA largely resolved such *internal* questions. Administrative boundary problems now shifted to the *periphery* of health and safety legislation: that is, where ‘occupational’ health and safety legislation ended, and where ‘public’ health, safety or environmental legislation began. This shift was invoked by a DOE official when warning Macmillan about the implications of the HSW Bill for the control of dangerous substances: ‘In an attempt to unify one aspect of a highly complex subject, the legislation you have in mind will in fact produce much worse divisions elsewhere.’¹⁵⁹

In practical terms, the HSWA augured a new era of comprehensive statutory protection against occupational risks. The Act not only brought under statutory protection some 8 million workers in premises such as hospitals and schools, but also (at least in theory) extended statutory protection to all British citizens. Section 3 of the HSWA required employers to consider the impact of their activities on persons other than their employees. The implications of this were staggering: prisons had a statutory duty of care for their prisoners, teachers their pupils, and factory owners the residents in the surrounding community. While, in one sense, this was merely a statutory elaboration of existing common law duties, the fact that this radical extension of health and safety law was not debated in Parliament is remarkable.¹⁶⁰ It only serves to underline the depth of contemporary divisions over the nature of political representation in the workplace, as well as the consensus that surrounded regulatory

¹⁵⁹ DOE, “Letter to Maurice Macmillan,” October 17, 1973, TNA BA 17/865.

¹⁶⁰ Locke, “The Politics of Health and Safety.”

reform. After 1974, British health and safety regulation ceased to be merely 'occupational'.

3.8.2. Enshrining Self-Regulation

Another major implication of the HSWA was the recognition that statutory effort alone was ineffective in protecting the health and safety of British workers and citizens. Instead, the state's role was recast as providing an institutional, legal and judicial framework that allegedly supported voluntary effort in the control of occupational accidents and disease. The regulatory system after 1974 was overtly described as one of 'self-regulation', even if statutory regulation still remained, and the judicious enforcement of existing legislation resulted in something approximating self-regulation in practice.¹⁶¹ In promoting self-regulation, the HSWA united two threads of historical development that had previously been separate. Voluntary and statutory effort were brought together in a coherent regulatory framework.¹⁶²

This did not entail, as some commentators have suggested in light of later deregulatory trends, the retrenchment of the state from health and safety. Instead, its fundamental roles and responsibilities were reconfigured. To draw upon a Foucauldian argument once again, the government was attempting to exercise its power more indirectly, equipping others with the concepts and tools they needed to successfully regulate themselves. In a practical sense, this meant that the government now supported the HSC/E financially, via a grant-in-aid from the Treasury. Civil servants

¹⁶¹ Moran, *British Regulatory State*, 61–2.

¹⁶² Booth and Boyle, "Occupational Accident Prevention."

in the HSE enforced health and safety legislation, and advised the HSC about the form and content of health and safety policy. In these respects, and more, the state continued to exert authority over the HSC. However, responsibility for the negotiation of national health and safety policy was now vested in representatives of major interest groups, endowed with legal authority to make new regulations and codes of practice.

The incorporation of government research laboratories under the HSE, and its role giving policy advice to the HSC, also indicated a new regulatory role for the state: the provision of information and expert guidance about risk. Chapters 4–6 reveal how HSE's role in 'risk communication' expanded enormously between 1974 and 2001. Risk, however, played a more widespread and implicit role in the regulation of health and safety after 1974.

3.8.3. A Risk-Based Approach to Health and Safety

Perhaps the most important change prompted by the HSWA was a movement from an empirical, piecemeal approach to regulation, to an approach that was ostensibly more considered, proportionate, and 'risk based'. The CSHW's key insight was that the existing 'architecture' of health and safety law (the Factories Act, OSRPA, etc.) bore little relationship, in conceptual or practical terms, to the 'actual' risks of the British workplace. Central to restoring balance was not only placing the burden of responsibility for controlling risks on employers and employees, but reorganising existing statutory arrangements so that these risks could be addressed more effectively.

For example, the demand for employers and employees to take the lead from the government in preventing accidents and ill-health relied on them assessing risks and taking commensurate steps to control them. As the CSHW argued, 'the nature of the

problems must be methodically assessed, and the assessments translated into practical objectives and courses of action.¹⁶³ While this was by no means the explicit, formalised approach to risk management HSE promoted in the 1980s and 1990s, the requirement for companies to produce written safety policies, in particular, recognised that employers needed to evaluate the hazards created by their activities.¹⁶⁴

An implicit, unwritten form of risk assessment was promoted elsewhere in the Act. The legal qualification ‘so far as is reasonably practicable’ (SFAIRP), used throughout the general duties of the Act, suggested that employers should embark on a process of risk calculation when adopting particular health and safety controls. The phrase was given legal definition by the Court of Appeal in the 1949 case, *Edwards vs. National Coal Board*. There, Lord Asquith concluded:

‘Reasonably practicable’ is a narrower term than ‘physically possible’ ... a computation must be made by the owner in which the quantum of risk is placed on one scale and the sacrifice involved in the measures necessary for averting the risk (whether in money, time or trouble) is placed in the other, and that, if it be shown that there is a gross disproportion between them – the risk being insignificant in relation to the sacrifice – the defendants discharge the onus on them.¹⁶⁵

The *concept* of risk, therefore, was only implied in the HSWA, evident between the lines of the legislation. While the *word* ‘risk’ was used extensively throughout the Act (for

¹⁶³ Robens, *Safety and Health at Work*, 14.

¹⁶⁴ Bacon, Interview.

¹⁶⁵ ‘Edwards vs. National Coal Board, 1949, 1 All ER 743 CA.’

example, employers had the duty, so far as was reasonably practicable, to provide plant and systems of work that were safe and without risks to health), the Court of Appeal ruled in 1993 that it carried the meaning of 'hazard'—that is, anything which had the potential to cause danger, regardless of its likelihood or severity.¹⁶⁶ Thus, it was only later, in the 1980s and 1990s, that the concept of risk began to be fully drawn out and explicated in British health and safety discourse. In the early 1970s, the concept of risk was still embryonic.

On an administrative level, however, developments in this period also paved the way for a more implicitly risk-based approach. For example, the abandonment of routine cyclical inspection in the Factory Inspectorate, and the use of targeted inspection based on accident statistics, represented a move to a more scientific, risk-based approach to enforcement. More broadly, the increasing use of quantification in regulatory science and standard-setting reflected the notion that a balance should be sought between economic development and workers' health. For instance, TLVs for substances such as asbestos implied that while there was an upper boundary of exposure above which a substance should be prohibited, under this there were permissible concentrations or doses under which exposure could legitimately occur.

Over the next thirty years, this thesis argues, the political demand for health and safety regulation to be related more explicitly and proportionately to risk grew ever louder. This demand culminated, by the 1990s, in the requirement for employers to

¹⁶⁶ 'Regina vs. Board of Trustees of the Science Museum, 1993, 1 WLR 1171 CA'; HSE, *Reducing Risks, Protecting People*, 15-16; HSWA 1974, sec. 2(2).

conduct formal written risk assessments, and the HSE developing a systematic risk-based regulatory framework.

3.9. Conclusion

Chapter 3 has focused on a major period of reflection and change in the British system of health and safety regulation. Between 1970 and 1974, the nature and scope of existing health and safety regulation was questioned, and the administrative structure of a new, integrated, 'risk based' system deliberated. This had major ramifications for how health and safety was subsequently conceptualised and regulated in Britain. The HSWA established a new legislative basis for health and safety, extending comprehensive statutory protection to workers by virtue of their employment, rather than occupation or workplace. It also established a new institutional focus for the promotion and enforcement of health and safety: the HSC/E. More broadly, the Act marked a sweeping change from a fragmented, confusing, prescriptive and reactive system, to a system that was supposedly more rational, flexible, anticipatory, and geared towards greater responsibility on the part of those who created and worked with risks. The state's role was reconceptualised as providing the supportive arrangements for effective 'self-regulation' by employers and workers.

However, by extending the scope of occupational health and safety regulation to cover industrial air pollution, and 'third persons' at risk from work activity, the HSWA had more significant, far-reaching effects. The Act established a new and more 'universal' conceptualisation of 'health and safety', which extended beyond the work gates to encompass contingent issues of public safety and the environment. 'Health and safety' was cemented as a new, more powerful field, multi-disciplinary in character, but

arguably more coherent and with the possibility of a unified, more corporate regulatory identity. McIvor's recent argument that the HSWA represented 'the most important change since the Second World War in the regulation and control of workplace dangers' is thus, if anything, understated.¹⁶⁷

The Act culminated the lengthy reform process that began in 1967 in the MOL. The CSHW, while supposedly given the freedom to recommend a new basis for British health and safety regulation, can actually be seen to have formed part of this longer-term process. As this chapter has argued, the full 'independence' of the Committee is debatable. Sponsored and assisted by the DE, and seconded DE staff, the Committee's thinking was heavily skewed towards DE proposals. The same weight was simply not attached to proposals from elsewhere, whether from trade unions or government departments. Within a matter of months, the Committee had concluded that reform along DE lines was the most desirable course of action. The CSHW thus justified Castle's original decision to set up a committee of inquiry. It cut through the inertia that previously hindered reform, and conferred an aura of critical independence and objectivity that promoted public and political support.

However, this capture of the Committee — not by employer or worker interests, but by its sponsoring department — was tacitly recognised within Whitehall, an unspoken secret explaining much of the initial angst generated by the Committee's terms of reference, as well as the subsequent Whitehall row. It is highly revealing that on presenting the Committee's Report in 1972, Robens remarked: 'It has been said that a Committee of Inquiry is not a device for digging out the truth, but for digging it in....'

¹⁶⁷ McIvor, *Working Lives*, 180.

Certainly, when we started, it was well dug in.’¹⁶⁸ A sense of direction was already apparent in the DEP’s 1967 proposals. Further reflection and deliberation was needed, however, to make this direction clear and politically acceptable.

This begs the question, other than supposed critical objectivity, what else the CSHW offered that an alternative political strategy, such as commissioned research, could not. The CSHW displayed many of Hennessy’s three signs of success, namely ‘speed’, ‘terseness of presentation’ and ‘vitality of language’.¹⁶⁹ The Committee examined an enormous field and came up with its recommendations within two years, an admirable feat considering its complexity. It also presented its arguments rationally, coherently, and with a vim which has prompted academic and professional reflection ever since. This promoted an awakening of political interest in health and safety at the time—perhaps the real point of the Robens Report.

The Whitehall row of 1972–74 reveals how health and safety was an area of broad political and public consensus at a time of great industrial and economic turmoil. With the exception of worker safety representation, there were few areas of political disagreement in the passing of the Act and certainly none over its more radical elements, such as the extension of legislation. In any case, disasters such as Flixborough served as a dramatic reminder to officials of the need to bring members of the public under health and safety legislation. By 1974 this matter was therefore uncontroversial.

¹⁶⁸ “Press Conference.”

¹⁶⁹ Peter Hennessy, *Whitehall* (London: Pimlico, 2001), 37–8.

Conflict was instead Whitehall-focused. Arguably more so than the Robens Report, the arguments and agreements of Whitehall officials defined the subsequent shape, scope and structure of the regulatory system, allowing a wider, more universal conceptualisation of health and safety to become possible. Fear of public embarrassment and a backlash from trade unions and employers ensured action was taken on the Robens Report rather than abandoning or diluting its proposals. Even so, the Whitehall row postponed action on the HSWA until 1974, when Labour was returned to power and therefore able to control its enactment. The important changes that took place over this period—not least the decision to create two statutory authorities in place of a single NASHW—reveal the significant compromises that had to occur before this landmark Act could be passed.

4. Integrating the System, 1974–1984

4.1. Introduction

Chapter 4 analyses the historical conditions that shaped the development of the ‘new’, integrated system of health and safety regulation in its inaugural decade, 1974–1984, described as a ‘period of initiation and consolidation’ by HSC’s second chair, John Cullen.¹ During this time, the newly established HSC/E attempted to ‘initiate’ the CSHW’s vision of a comprehensive, forward-looking and goal-based system. Under the leadership of two individuals – HSC’s chair, Bill Simpson, and HSE’s Director-General, John Locke – HSC/E began the difficult task of replacing fragmented pre-1974 laws with more comprehensive regulations, codes of practice and guidance under the HSWA. New regulations were introduced, such as the Health and Safety (First Aid) Regulations 1981, which applied health and safety legislation across the entire British labour force for the first time.

Between 1974 and 1984, HSC/E also attempted to ‘consolidate’ their authority as regulatory bodies, and create the conditions for ‘self-regulation’ in British industry. Not least, this took the form of statutory and administrative efforts to extend joint consultation throughout the regulatory system: in 1977, new regulations were made to formalise the appointment of safety representatives and safety committees, giving the exclusive right to appoint safety representatives to recognised trade unions.²

¹ HSC, *Report 1985-1984* (London: HMSO, 1984), 3.

² Safety Representatives and Safety Committees Regulations 1977.

The period 1974–1984 was ‘consolidative’ in another, more literal respect. For the first time, the various inspectorates, policy units and research laboratories that administered, enforced or supported health and safety regulation operated alongside each other, in a unified framework. This framework was now hived-off from central government, under the control of quasi-independent agencies, with the HSC acting as a negotiating body, directly representing the interests of employers, employees and the public (through local authority members). The period 1974–1984 was thus the first time that health and safety crystallised as a coherent domain of regulatory policy in Britain, rather than a subject pertinent to the regulation of particular industries.³

The transition from a fragmented to an integrated system, however, was not an easy one to navigate for HSE’s constituent organisations. These were recognised as authorities in their particular fields, and were accustomed to working independently. Over the decade, HSE thus struggled to gel as a single corporate entity.⁴ Initially, the ten organisations amalgamated under HSE maintained their own distinct professional identities. The distinctiveness of their particular fields, and differences in their histories, working cultures and enforcement practices, inhibited their seamless integration. Professional rivalry among the different groups, revolving around issues of relative size, status and pay, resulted in Locke abandoning his attempts to establish a single chief inspector, as recommended by the Robens Report. Eventually, by 1987,

³ John Rimington and James McQuaid, “A Systems-Based Approach to Health and Safety Regulation: Analysis, Experience and Results of the 1974 Reform of UK Administration” (Accident and Emergencies: Risk, Welfare and Safety in Europe and North America, c. 1750-2000, Oxford Brookes University, 2013).

⁴ Ibid., 4; House of Commons, “The Employment Committee. The Working of the Health and Safety Commission and Executive: Achievements since the Robens Report. Minutes of Evidence Wednesday 16 June 1982,” HC 400-ii, (1982), 58.

this tribalism secured the extraction of the Industrial Air Pollution Inspectorate (IAPI) from HSE.⁵

In its formative years, therefore, HSE was not the single unified inspectorate envisaged by the CSHW. Rather, it was a loose federation of separate bodies, loosely bound by the HSWA.⁶ Further, since the HSC had not been delegated responsibility for all areas of health and safety policy from central government, including offshore and railway safety, it could not speak as the definitive health and safety authority. While much improved from before 1974, coordination remained a central issue, especially in relation to local authorities.⁷ In administrative terms, therefore, the post-1974 system of health and safety regulation was still very much divided.

Chapter 4 considers the policies, regulations and other measures enacted by the HSC/E to further the ‘Robens philosophy’ of health and safety regulation outlined in the previous chapter. It also considers the many difficulties HSC/E encountered furthering their aims, most notably the complexities introduced by membership of the European Community (EC), economic recession, budgetary constraint and the Thatcher government’s deregulatory agenda. The burdens imposed by these developments had lasting implications for HSC/E and their regulatory priorities. By

⁵ Rimington and McQuaid, “A Systems-Based Approach to Health and Safety Regulation,” 4; House of Commons, “The Employment Committee. The Working of the Health and Safety Commission and Executive: Achievements since the Robens Report. Minutes of Evidence Wednesday 23 June 1982. Appendix. Tuesday 6 July 1982.,” HC 400-iv, (1982), 129; Rimington, Interview.

⁶ Rimington and McQuaid, “A Systems-Based Approach to Health and Safety Regulation.”

⁷ House of Commons, “Employ. Cttee. Wed 16 June 1982,” 53–4; House of Commons, “The Employment Committee. The Working of the Health and Safety Commission and Executive: Achievements since the Robens Report. Minutes of Evidence Wednesday 9 June 1982,” HC 400-i, (1982), 6, 20.

the 1990s, they encouraged HSC/E to systematise their 'risk management' approach to health and safety policy (see Chapter 6).

4.2. Overview

Chapter 4 consists of five main sections. Section 4.3 elucidates the politics of health and safety in the new HSC, arguing that one of its great successes during its inaugural period was the promotion of a consensual approach to policymaking.

Section 4.4 explores the HSC/E's immediate steps to realise the CSHW's ambitious proposals, and the teething problems they encountered. These steps included the extension of joint consultation throughout the regulatory system, as reflected in safety representatives, safety committees, and HSC's advisory committees. The HSC/E also had to make arrangements for enforcing the newly expanded sphere of health and safety legislation, which brought around 8 million workers under statutory protection for the first time. Despite these considerable challenges, exacerbated by constraints on public expenditure from 1979, the HSC/E had to ensure that momentum on pre-1974 policy was not lost, and that health and safety standards did not deteriorate as industry and workers adjusted to the HSWA.

Section 4.5 explains how European legislation assumed a growing influence over British health and safety regulation after the UK joined the European Community (EC) in 1973. While the influence of Europe over British policy was tempered by the voting situation in the European Commission, whereby the UK could exercise a veto over new proposals, international, and in particular European policy developments added considerably to HSC/E's workload during their inaugural period.

Section 4.6 examines the constraints imposed by economic and political developments on the HSC/E's work, in particular the impact of Margaret Thatcher's Conservative government from 1979. Entering government with a neoliberal, free-market agenda, the Conservatives set about cutting the civil service, of which the HSE remained part. Government funding of HSC/E was reduced, and the number of inspectors declined through redundancy and natural wastage. Consequently, HSE inspectors made fewer visits and prosecutions, and the average duration between workplace inspections increased. Despite the assumption of new responsibilities over the 1980s, such as the safety of mains gas supply, the HSE encountered a 'damaging contraction' in manpower that persisted into the 1990s.⁸ Such pressure threatened to undermine the HSWA, and even reverse progress in reducing occupational accidents and disease.

The final section, 4.7, explores policymaking in three of the most important domains of HSC/E's activity: major and nuclear hazards, asbestos, and other toxic substances. It focuses on the role played by HSC's representative advisory committees, and highlights their shared need for comprehensive information on risk to support new policies. These committees, in conjunction with HSE's policy branches, formulated some of the most significant pieces of legislation in the modern regulatory system (for example, the Control of Substances Hazardous to Health Regulations, COSHH). Their work between 1974 and 1984 anticipated important later developments in terms of the evolution of HSC/E's risk management approach.

⁸ HSC, *Annual Report 1993/94* (London: HMSO, 1994), xvii.

Chapter 4's central argument is that while the HSWA implicitly placed risk at the heart of British health and safety regulation, scientific and political demands between 1974 and 1984 were instrumental in establishing the conditions for an explicit risk management approach. In response to political concern about toxic substances and major hazards, for example, techniques of risk analysis and assessment were pioneered during these years that were later promoted in health and safety regulation generally. The emergence of a strong deregulatory rhetoric in the British government, culminating in the demand in 1980 for HSC/E to conduct formal cost-benefit analyses of all new regulations, also placed pressure on HSC/E to justify new regulations on the basis of risk. This was fundamental to the development of an explicitly risk-based approach, since risk allowed conflicting political interests to be weighed against each other, and accounted for, in an ostensibly transparent and principled manner. The systematisation of HSC/E's approach demanded that concepts and beliefs which had previously been implicit in British health and safety regulation were explicated, defined, and related to each other in an orderly way.

4.3. A Healthy Consensus? HSC and the Politics of Health and Safety

While the Conservative Party was influential during the latter half of this period in shaping the British system of health and safety regulation, HSC/E's establishment must be seen in the context of the 1974–79 Labour government and its industrial relations policies. Labour was re-elected in 1974 in the midst of a second major national coal strike, seeking to repair the damage inflicted by the Conservatives' Industrial Relations Act, and restore British industrial relations to an earlier,

voluntarist framework. The ‘social contract’, agreed between the government and trade unions, offered the unions a raft of political concessions in exchange for commitment on wage restraint, during a turbulent inflationary period. Between July 1974 and July 1975, inflation soared by 26 per cent.⁹ Concessions included greater consultation on government policy, new workers’ rights (for example, on sexual and racial discrimination), as well as representation on a host of state bodies and quangos.¹⁰ As McIlroy and Campbell argue, ‘the “corporate bias” of the British state, its tendency to progress policy by involving capital and labour in informal consultation, bargaining and compromise in “the corridors of power”, blossomed.’¹¹

The HSWA and HSC, therefore, were fundamentally linked with this movement to extend workers’ rights, and the prevailing belief in corporatism as a means of reaching political settlement. They were also established in the context of strong labour, when trade union influence over government policy was at its peak. In 1979, 13.3 million British workers, over 50 per cent of all employees, were members of trade unions. This compared to just 8.3 million workers in 1994 (Figure 9).¹²

Notwithstanding the extraordinary influence of trade unions at this time, one the great successes of British health and safety regulation after 1974 was the empowerment of workpeople and other interests with policymaking responsibility for health and

⁹ Kessler and Bayliss, *Contemporary British Industrial Relations*, 29–32; C. Wrigley, *A History of British Industrial Relations, 1939-1979: Industrial Relations in a Declining Economy*, ed. C. Wrigley (Cheltenham: Edward Elgar, 1996), 7.

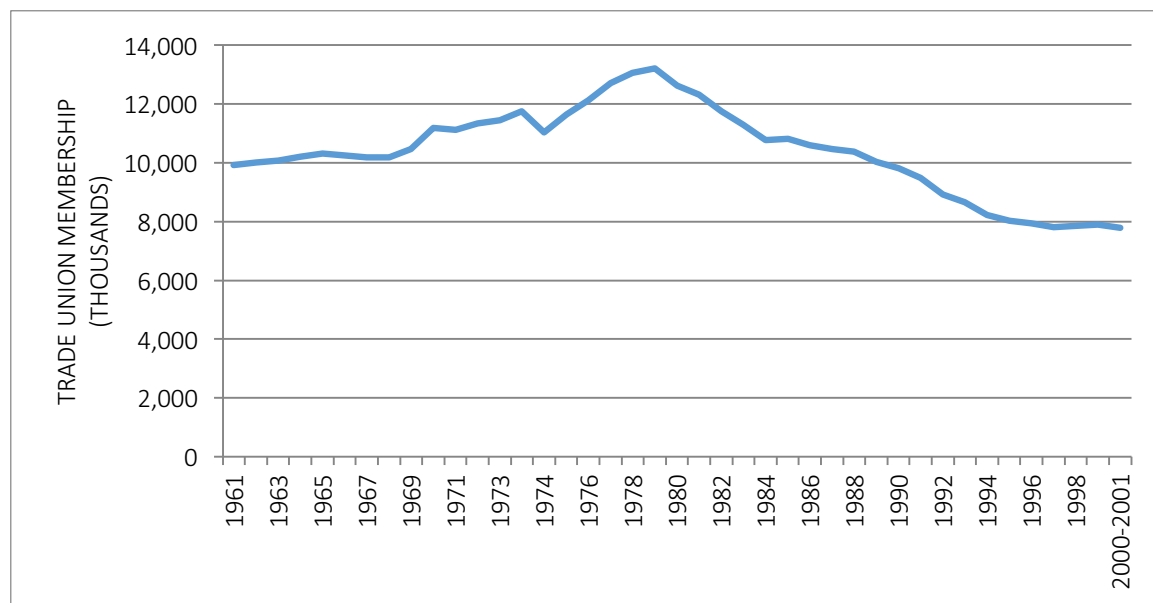
¹⁰ Wrigley, *A History of British Industrial Relations*, 8.

¹¹ McIlroy and Campbell, “The High Tide of Trade Unionism,” 94.

¹² P. Maguire, “Labour and the Law: The Politics of British Industrial Relations, 1945-79,” in *A History of British Industrial Relations, 1939-1979*, ed. C. Wrigley (Cheltenham: Edward Elgar, 1996), 59; Walters and James, *Robens Revisited*, 11; McIlroy and Campbell, “The High Tide of Trade Unionism,” 99.

safety, both at the level of the workplace, and at the level of national policy. Former TUC and CBI commissioners recalled the professional and organised nature of HSC meetings, with members working to large, and frequently technical agendas on a

*Figure 9. Trade union membership in Britain, 1961–2001.*¹⁵



fortnightly basis. While members worked to the brief of their respective organisations, and lively debates occurred from time to time (notably over the SRSC regulations), my interviewees suggested that relations on the HSC were generally cordial, even friendly. The decision by HSC’s first chair, Bill Simpson to make decisions by consensus meant that HSC policymaking was defined by persuasion and compromise. As one former CBI commissioner described, ‘we were all pals outside the meeting and you didn’t fall out over it, it was a negotiation.’¹⁴

¹⁵ “*Trade Union Statistics 2014.*” Accessed September 4, 2015. <https://www.gov.uk/government/statistics/trade-union-statistics-2014>.

¹⁴ Rex Symons, Interview, January 30, 2015.

At workplace level, the SRSC regulations gave unionised workpeople an unprecedented platform to influence health and safety policy.¹⁵ At national policy level, HSC's consensual approach conferred a degree of resiliency that allowed health and safety regulation to weather choppy economic and political waters.¹⁶ As Wilson notes, consensus avoided the adversarial relations that characterised American health and safety regulation, by giving employers and workpeople a direct stake in policymaking.¹⁷ The CSHW's principle of 'self-regulation' was thus realised in this important respect, although the wider success of this principle is open to debate.¹⁸ As Steve Tombs, Matthias Beck and others have argued, consensus had its downsides. Political consensus exposed health and safety to 'regulatory degradation', whereby standards are compromised if fewer resources are put into enforcement, as happened following cuts to HSE's budget in 1980.¹⁹ While political controversy was avoided in the making of new health and safety regulations, consensus also came at the expense of speediness, and a degree of ambition that can accompany policymaking when unconstrained by compromise.²⁰ Consensus allowed the regulatory system to weather the political storm, but in the process the ship became progressively weakened.

On the other hand, a point that is neglected by critics of self-regulation such as Tombs is that trade unions acquiesced to this consensus, since they attained greater

¹⁵ Peter Jacques, Interview, November 21, 2013.

¹⁶ HSC, *Report 1979-80* (London: HMSO, 1980), 1.

¹⁷ Wilson, *The Politics of Safety and Health*, 152.

¹⁸ See Tombs and Whyte, "A Deadly Consensus."

¹⁹ *Ibid.*, 46–65; Beck and Woolfson, "The Regulation of Health and Safety in Britain."

²⁰ House of Commons, *Sixth Report from the Employment Committee. The Working of the Health and Safety Commission and Executive: Achievements since the Robens Report*, HC 400, 1982, v.

leverage over health and safety policy. It was not without reason that the TUC argued to the House of Commons Employment Committee in 1982 that the HSWA had ‘greatly extended the opportunities which ... unions [had] to influence the scope and content of new health and safety proposals.’²¹ Moreover, by handing political power to interest groups, policymaking responsibilities were removed from government departments which had a sponsoring role for particular industries. As the inquiries into the Piper Alpha disaster and Clapham rail crash in the 1980s demonstrated, major conflicts of interest can occur when the same government department has regulatory, enforcement and sponsorship functions.

4.4. Establishing the Framework

4.4.1. *Institution and Identity*

As the 1972–74 Whitehall debate testified, the creation of an integrated system of health and safety regulation generated significant political and administrative challenges for British officials. The CSHW’s radical proposals required innovations not only in regard to policymaking—the delegation of policymaking responsibility to representatives of interest groups—but also enforcement. In particular, the merger of thousands of civil servants into a single HSE posed considerable difficulties for the governance of the new regulatory body and the promotion of an *esprit de corps*.

²¹ House of Commons, “Employ. Cttee. Wed 16 June 1982,” 33.

The HSC was inaugurated on 1 October 1974. For a new corporate body, composed of mostly part-time officials, HSC's early programme of work was substantial. With the exception of its very first meeting, held at Baynard's House in Westbourne Grove (headquarters of the Factory Inspectorate), HSC's meetings were held fortnightly at the DE in St James's Square, Westminster. Bill Simpson, the former General Secretary of the Amalgamated Union of Engineering Workers and chair of the Labour Party, was appointed full-time chair of HSC by the Employment Secretary, Michael Foot.²² His first majority priority, along with his eight fellow Commissioners (three representing trade unions, three representing employers' associations, and two representing local authorities) was overseeing arrangements for bringing the HSWA into force.

Being a vast and complex piece of legislation, the HSWA was implemented gradually. Sections of the Act relating to the HSC came into force on 1 October 1974, with sections relating to the HSE and enforcement coming into force on 1 January 1975. Sections related to the general duties of employers, employees and the self-employed followed on 1 April.²³ During these formative months, the HSC played an important role, along with the staff of existing departments, such as the DE, in bringing the new system into operation. The HSC had to quickly appoint the HSE's first Director-General, as well as the two additional members of the statutory Executive (the legally defined body of three individuals as opposed to the entire

²² Dawson et al., *The Limits of Self-Regulation*, 183.

²³ *The Health and Safety at Work Etc. Act 1974 (Commencement No. 1) Order 1974*, 1439 (C. 26), 1974.

organisation of inspectors, scientists and administrators).²⁴ This was important not only because of the HSE's enforcement role, but because of its vital administrative responsibility, servicing the HSC in terms of policy advice and expertise. At its seventh meeting on 19 November 1974, the HSC recommended that John Locke, the former Director of Occupational Safety and Health at the DE, should be appointed HSE's first Director-General.²⁵

Former members of the HSC/E recalled Locke as a gifted and colourful official with a fearsome and shrewd reputation.²⁶ A statistician and mathematician by training, Locke was a career civil servant for thirty years, serving as an under-secretary in the Cabinet Office before being 'lured' by Castle into the Ministry of Transport, where he assumed responsibility for the rationalisation of passenger transport services. There, Locke impressed Castle sufficiently for her to invite him to join the DEP.²⁷ As Director of the DE's health and safety division, Locke was one of the primary 'architects' of the HSWA, overseeing the interdepartmental negotiations which resulted in the HSC/E. As Locke reflected on his invitation to head the HSE in 1974, 'I felt enough responsibility for the new creation — and enough curiosity about whether I could run a sizeable organization — to accept.'²⁸

Locke's enormous task, as its first Director-General, was to corral the new organisation together. On 1 January 1975, some 2,800 personnel from ten separate

²⁴ HSC, *Report 1974-76*, 21.

²⁵ HSC, "Minutes," November 19, 1974, 2, TNA EF8/8.

²⁶ Eves, Interview, pt. 4.

²⁷ Locke, "The Politics of Health and Safety," 1; Barbara Castle, *The Castle Diaries 1964-1976* (London: Papermac, 1990), 132.

²⁸ Locke, "The Politics of Health and Safety," 1.

government bodies transferred to the HSE (Figure 10).²⁹ In March 1976, these officials were joined by staff from agricultural departments, following the removal of the special provisions for agriculture in the Employment Protection Act 1975. This process of institutional consolidation was completed in 1977, when farm safety inspectors entered the fold. By 1 April 1976, the total complement of HSE staff stood at 3,400, a 20 per cent increase over its inaugural level.³⁰ An organisation chart of HSC/E as of January 1975 is provided below (Figure 11).

Figure 10. Organisations amalgamated under HSE in 1975

PARENT DEPARTMENT	INSPECTORATES AND OTHER UNITS TRANSFERRED
Department of Employment (DE)	Directorate of Occupational Safety and Health (DOSH) HM Factory Inspectorate Explosives Inspectorate Employment Medical Advisory Service (EMAS)
Department of Energy (DEn)	Safety and Health Division Mines and Quarries Inspectorate Nuclear Installations Inspectorate (NII) Safety in Mines Research Establishment
Department of the Environment (DOE)	Alkali and Clean Air Inspectorate (ACAI)
Other	British Approvals Service for Electrical Equipment in Flammable Atmospheres

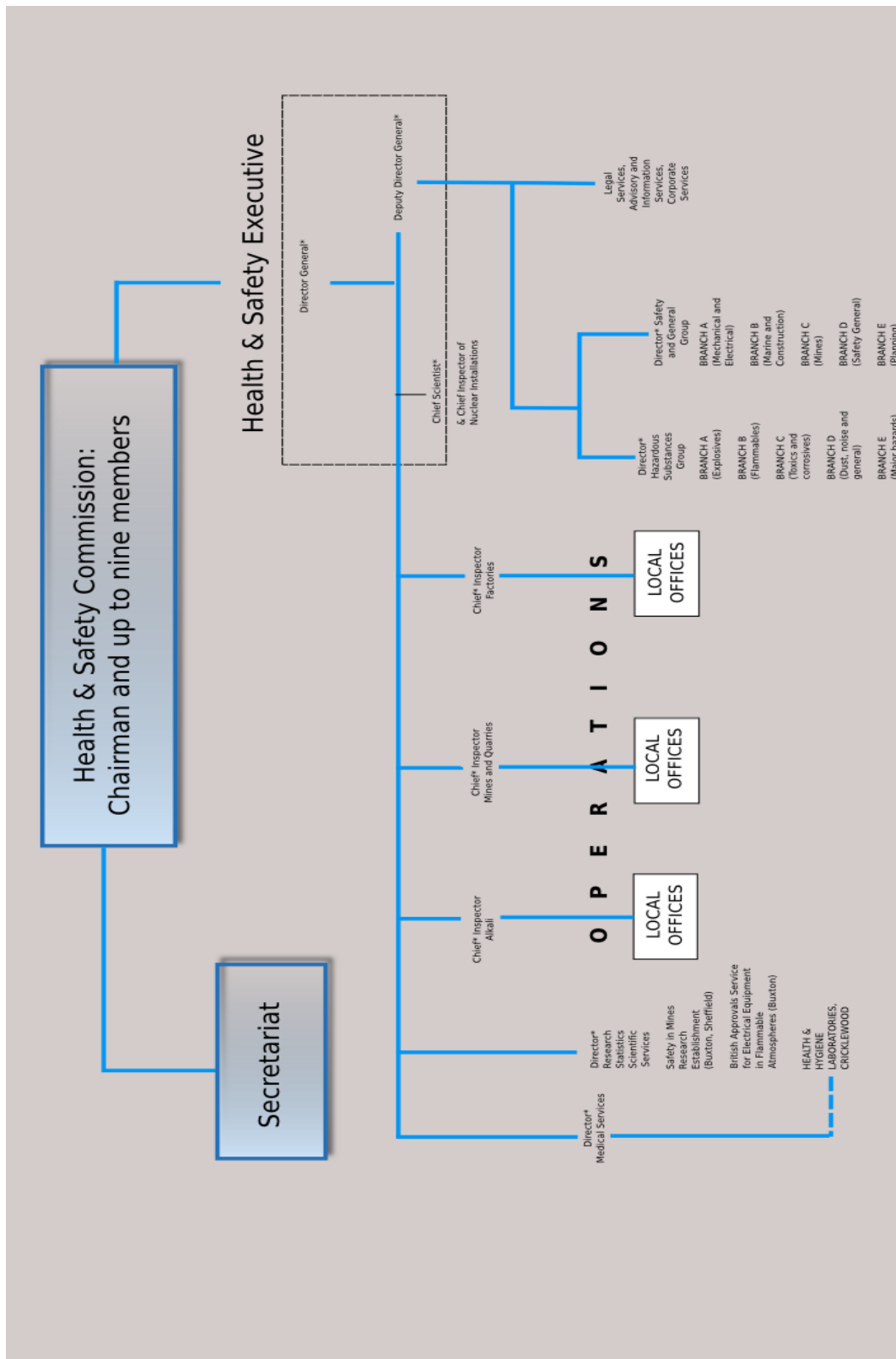
²⁹ HSC, *Report 1974-76*, 24.

³⁰ HSC, *Report 1974-76*.

In 1976, an Order in Council subsequently extended the HSWA to divers and other offshore workers, in recognition of the hazards associated with North Sea oil and gas. Under this arrangement, the HSC was charged with developing occupational health and safety policy for both onshore and offshore workers. However, the Department of Energy (DEn) retained responsibility for 'structural' aspects of offshore safety, such as the prevention of blowouts, as well as the inspection of offshore installations, conducted by its Petroleum Engineering Division.³¹ Effectively, the

³¹ Ibid., 3.

Figure 11. HSC/E organisational structure, January 1975.³²



enforcement of offshore health and safety was left with the government department responsible for sponsorship of the energy industry: this was a fraught arrangement that, in the words of HSE's second Director-General and Chief Scientist, 'unravelling spectacularly' following the 1988 Piper Alpha explosion.³³

Considering the fracas that accompanied the HSE's inception, it is perhaps unsurprising that Locke found it problematic to merge the HSE's constituent parts into a coherent whole. David Eves was appointed Director of Corporate Services by Locke in 1978, with responsibility for finance, training and pay. He recalled how

Locke ... held the thing together, but with difficulty.... [W]e had a particular problem ... in that, looking just at the inspectorates ... there were a host of different grades and each one had a particular pay scale attached to it. And some inspectors were paid more than others, historically, and this bred a certain amount of resentment among those who weren't paid as much.³⁴

The new HSE was beset by tribalism and in-fighting, and relative pay was only part of the problem. The Factory Inspectorate was the oldest and largest of the pre-1974 inspectorates, and in the words of its own Chief Inspector, 'tended to think of themselves as a group apart.'³⁵ Other inspectorates were resentful of the Factory Inspectorate's size and pull over health and safety policy: as the Factory Inspectorate

³² HSC, *Report 1974-76*, 36.

³³ Rimington and McQuaid, "A Systems-Based Approach to Health and Safety Regulation," 4.

³⁴ Eves, Interview, pt. 4.

³⁵ "Note of Committee's Informal Discussion with W. J. C. Plumbe."

was allied to the DE, many of the Inspectorate's staff, such as Harvey, had moved into more senior positions in the new authority than personnel from elsewhere.³⁶ Due to their divergent histories and working cultures, the separate inspectorates also had very different enforcement standards. Although the Factory Inspectorate had long promoted a conciliatory approach to enforcement, it ultimately prosecuted firms who failed to make improvements. In contrast, other inspectorates, such as the Alkali and Clean Air Inspectorate (ACAI), prosecuted rarely. Each inspectorate also had its own constituency. The Mines and Quarries Inspectorate, for instance, was staffed by former mining officials and remained closely aligned to the coal industry, while ACAI retained close relationships with the chemical industry, and wished to retain a certain degree of control over their operations.³⁷

The incorporation of ACAI under HSE was a continuing bone of contention in HSE's inaugural decade. In 1976, the Royal Commission on Environmental Pollution criticised the CSHW for recommending ACAI's inclusion:

There is clearly a need for liaison between the Alkali and Factory Inspectorates where internal and external air pollution arises from the same sources. However ... This ignores the great differences in the nature and scope of the interests of the two Inspectorates. The Factory Inspectorate are principally concerned with the protection of workers, and of the public near the workplace, from hazards arising directly from industrial processes.... The Alkali Inspectorate, on the other hand, are concerned solely with air pollution and with its effects on the population on the whole and on the wider environment.... [T]he

³⁶ Rimington, Interview.

³⁷ Carter, Interview.

incorporation of the Alkali Inspectorate in the Health and Safety organisation is potentially damaging to the interests of the environment.³⁸

As the debate over ACAI indicated, questions of regulatory identity were not just relevant in terms of HSE's status or authority. Decisions about where the inspectorates belonged affected the integrity of the regulatory system and the coordination of the regulatory response to risks: in other words, what the field of health and safety legitimately encompassed. The HSWA had not definitively answered these questions, at least to the satisfaction of those officials who found themselves in the HSE.

Ultimately, in 1987 ACAI—renamed the Industrial Air Pollution Inspectorate (IAPI)—was extracted from HSE, to form part of an integrated pollution inspectorate in the DOE.³⁹ This shows that an integrated field of 'health and safety' regulation was by no means a *fait accompli* in the 1980s. It would be several more years, the 1990s, before the inspectorates were fully integrated, and HSE began to look and behave like a single organisation.

4.4.2. Self-Regulation and Participation in Policymaking

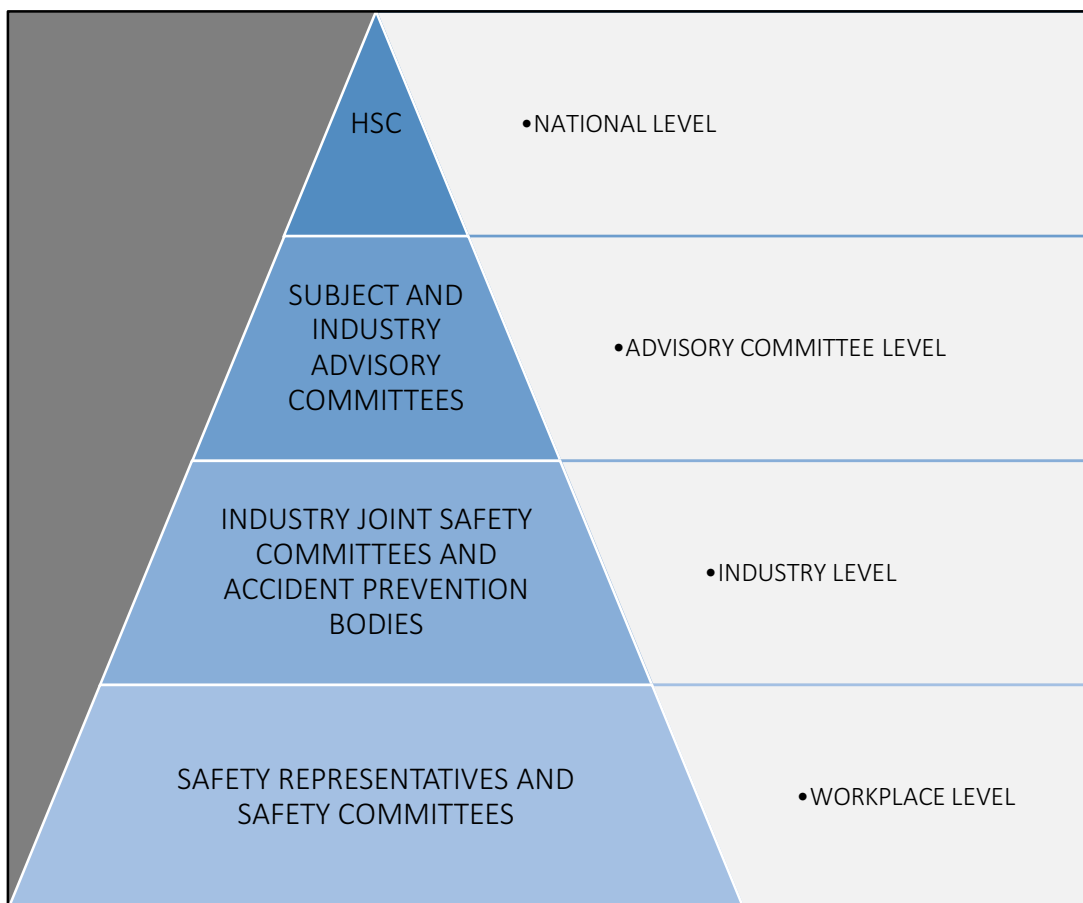
A fundamental principle of the 'self-regulatory' framework was that employers, workers and other interests had access to forums where they could deliberate and influence health and safety policy. One of HSC's major priorities in its early days was thus the extension of joint consultation throughout the regulatory system. As my

³⁸ Sir Brian Flowers, *Royal Commission on Environmental Pollution, Fifth Report: Air Pollution Control: An Integrated Approach*, Cmnd. 6371, 1975, 69–71.

³⁹ This eventually morphed, by 1995, into the new Environment Agency.

previous chapters showed, this was a sensitive political issue, particularly in regard to the recognition and status of trade unions. The extension of joint consultation required arrangements to formalise the appointment of safety representatives and safety committees, as well as the establishment of expert advisory committees to advise the HSC on particular aspects of health and safety policy. By the early 1980s, these efforts created a chain of collective effort, ranging from safety representatives and safety committees in the workplace, to voluntary advisory committees and accident prevention bodies at the level of industry, HSC's advisory committees, and at the apex, the tripartite HSC (Figure 12).

Figure 12. Levels of joint consultation in the post-1974 regulatory system



Described by Simpson as HSC's 'most important single package of legislation', the Safety Representatives and Safety Committees Regulations (SRSC) were made in 1977.⁴⁰ The regulations brought to an end over a decade of political wrangling over the statutory compulsion of safety committees. However, an issue that confronted the HSC when drafting them was concern about the potential costs they imposed on the public sector, at a time when public finances were under considerable strain. In September 1976, Britain was forced to apply for an emergency loan of \$3.9 billion from the International Monetary Fund (IMF), to control inflation and support the pound. Repayment of the loan was conditional upon swingeing cuts in public expenditure, which were announced by the Chancellor, Denis Healey, in December 1976. As part of these cuts, the mechanism which funded local authorities in Britain, the rate support grant, was frozen.⁴¹

Local authorities were concerned about the potential cost of implementing the new arrangements in the public sector. In 1978, the DOE estimated that the cost of implementing the SRSC regulations among English and Welsh local authorities was £25.8 million.⁴² This prompted the government to delay the coming into force of the new regulations until 1978, a decision that angered the HSC's trade union members. The TUC believed that the costs of implementing the regulations had been exaggerated, while the long-term benefits, in terms of improved health and safety

⁴⁰ HSC, *Report 1982-1983* (London: HMSO, 1983), iv; SI 1977/500.

⁴¹ See Kathleen Burk and Alec Cairncross, *"Goodbye, Great Britain": The 1976 IMF Crisis* (New Haven and London: Yale University Press, 1992), HC Deb 15 December 1976 vol. 922 cols. 1525–1528.

⁴² HC Deb 24 October 1978 vol. 955 col. 855W.

awareness and prevention of accidents and ill-health, ignored.⁴³ It seemed that the government wished to apply one rule for itself, and another for industry. However, impatience and frustration also lay behind the TUC's response: the TUC had pressed for the statutory appointment of safety representatives and safety committees since 1964. Unions had also pledged support for wage restraint in exchange for political concessions in the social contract. The delay for a further year was thus inflammatory.

Initially, it appears that the SRSC regulations were successful in boosting the number of safety committees in organised firms, not least because of the new bargaining power they offered unions. A HSE survey in 1979 revealed that almost three quarters of workers in manufacturing now had safety representation, although uptake in some problematic industries, notably construction, remained slow.⁴⁴ In a revealing memo submitted to the Employment Committee in 1982, the TUC described how 'over 130,000 health and safety "watchdogs"' safeguarded workers as a result of the SRSC regulations; unsurprisingly, the TUC considered the regulations 'one of the most successful pieces of legislation enacted within the framework of the HSW Act.'⁴⁵ For the TUC, the success of the SRSC regulations demonstrated their commitment to health and safety and bolstered their image as the only true advocate of workers' rights.

Evidence elsewhere, however, paints a more nuanced picture of this development. As Dawson et al show, many safety committees had been established in

⁴³ HSC, *Report 1976-77* (London: HMSO, 1978), 7.

⁴⁴ HC Deb 15 April 1985 vol. 77 col. 47W; House of Commons, "Employ. Cttee. Wed 16 June 1982," 39; HSC, *Report 1982-83*, iv.

⁴⁵ House of Commons, "Employ. Cttee. Wed 16 June 1982," 32.

name only, and empty positions indicated that workers were not always eager to participate as safety representatives.⁴⁶ Such studies dispel the TUC's rhetoric around safety committees, and suggest that workers and trade unions were not uniformly enthusiastic about health and safety. Rather, trade unions were enthusiastic only when it suited their immediate purposes.

The TUC's reaction to the issue of *non-unionised* employees is illuminating in this respect. The SRSC regulations did not benefit all working people. Since the regulations only applied to recognised trade unions, safety representatives could not be appointed in workplaces without recognised union representation, and safety committees were only required if two or more trade union safety representatives requested the employer in writing.⁴⁷ For non-unionised workers, a vital mechanism to influence decision-making was thus absent, and it does not appear that the TUC was particularly concerned about their interests. As the former HSC Commissioner Peter Jacques put it:

[W]e weren't going to let non-unionists be safety representatives, or necessarily members of the safety committee. They had to be members of recognised trade unions, that was our concession to the employers, that the unions had to be recognised. And anybody from a union which was not recognised, they didn't have to have representation. So there was no question of non-unionists as far as we were concerned of being part of this system at all...

⁴⁶ Dawson et al., *The Limits of Self-Regulation*, 268; Beck and Woolfson, "The Regulation of Health and Safety in Britain," 43.

⁴⁷ SRSC Regulations 1977, no. 9.

We're not having non-trade unionists representing trade union members who are at risk.
It's as simple as that.⁴⁸

This suggests that TUC support for the SRSC regulations extended just as much from a political desire to consolidate their bargaining position, as from a moral desire to protect workers and the general public.

This issue was highly pertinent. The health and safety representation of non-unionised workers was a growing issue in the 1980s and 1990s, as trade union membership declined, and the workforce moved to sectors with historically weak union representation. By the late 1990s, HSC's chair, Sir Frank Davies mooted the problem: 'Who else is there ... with the knowledge, representative nature and commitment of the TUC?'⁴⁹ Deindustrialisation and industrial fragmentation was a direct threat to the TUC's legitimacy on the HSC, and the wider effectiveness of joint consultation.

Trade union and employer input to health and safety policy was secured elsewhere in the regulatory system. Following the SRSC regulations, one of the most significant tasks for the HSC and its chair, Bill Simpson was to develop a representative advisory committee structure. The aim behind this was to 'reflect the interests concerned in a similar fashion to the Commission, but with more specific remits to consider problems related to particular hazards or industries.'⁵⁰ In order to develop a 'self-regulatory' system in which major interests took the lead in policy

⁴⁸ Jacques, Interview.

⁴⁹ HSC, *Health and Safety Commission Annual Report and the Health and Safety Commission/Executive Accounts 1998/99* (London: TSO, 1999), xi, 12.

⁵⁰ HSC, *Report 1974-76*, 9.

development, it was essential that their views were incorporated in a far tighter and more coordinated way than before 1974. Advisory committees created formal spaces where interests could discuss and develop policy, and provide expert advice to the HSC. They acted as a vital link between workplace safety committees and the HSC, acting as an ‘early warning system’ that kept the HSC abreast of technical and other developments.⁵¹ In addition, advisory committees allowed more interests to contribute to policymaking, without diluting the HSC’s tripartite composition.⁵² Their existence thus freed the HSC to concentrate on higher and more general levels of policy, rather than on technical matters. Advisory committees resolved basic disagreements before a particular proposal was handed to HSC for final deliberation. In this way, advisory committees preserved HSC’s ability to make decisions by consensus.⁵³

The separation between policymaking and enforcement functions in the HSC/E was not clear cut. The HSE played a central role servicing and chairing HSC’s advisory committees, bringing its significant operational and technical experience to bear.⁵⁴ In addition to employer and worker representatives, members of HSC’s advisory committees typically included academics, industrialists, safety officers, physicians and other professionals. The number of members varied, with some of the largest (such as the Advisory Committee on Major Hazards) incorporating almost twenty members. Additional members were co-opted to serve on subcommittees and

⁵¹ Ibid., 9–11.

⁵² “Structure of Advisory Committees,” October 31, 1974, TNA EF7/19.

⁵³ Jacques, Interview.

⁵⁴ HSC, “Committee of Experts on Major Hazards: Composition,” October 15, 1974, 3, TNA EF7/5.

working groups.⁵⁵ The absence of a particular organisation did not mean they were excluded from consultation altogether: these organisations were invited to respond to consultations directly, or had the opportunity to respond to proposals once they were published. Hence, the HSC/E attempted to foster the total involvement of British industry, commerce and workpeople in policymaking. This was vital to secure the CSHW's vision of a self-reliant health and safety culture.

An urgent task confronting the HSC upon its formation was the appointment of a Committee of Experts on Major Hazards, following the devastating explosion at Flixborough in June 1974. The Advisory Committee on Major Hazards (ACMH), as it became known, assumed operation in January 1975. In subsequent years, the HSC appointed many other committees to consider and advise on particular issues. Subject Advisory Committees (SACs) considered hazards that occurred industry-wide, such as asbestos, while Industry Advisory Committees (IACs) considered the problems of particular industries. The HSC's first IAC, for agriculture, first met in January 1977. IACs allowed a more detailed analysis of industrial hazards than the HSC could perform on its own, and while many of these committees were new, others, such as the Foundries Advisory Committee, replaced standing committees set up under pre-1974 legislation.⁵⁶ Alongside the HSC itself, this advisory committee structure therefore enabled pre-1974 advisory bodies, such as the IHAC, to be gradually replaced. The CSHW had considered these committees to be ineffective, and they had declined in

⁵⁵ HSC, "Committee of Experts on Major Hazards: Composition."

⁵⁶ HSC, *Report 1976-77*, 3–6; HSC, *HSC Report 1979-80*, 12.

importance since the late 1960s.⁵⁷ The work of four of HSC's advisory committees, the Advisory Committees on Major Hazards, the Safety of Nuclear Installations, Asbestos and Toxic Substances, is examined below.

4.4.3. A Comprehensive System of Health and Safety

Given the enormous increase in scope of health and safety legislation after the HSWA, one of the HSC's urgent priorities upon its establishment was securing the protection of the 8 million workers coming under the ambit of health and safety legislation for the first time. This entailed clarifying the enforcement roles of HSE and local authorities, and signing agreements with smaller official bodies to act as agents where their advice or expertise was needed. Besides HSC's arrangement with the the Department of Energy, other agents included the Railway Inspectorate of the Department of Transport, which enforced the HSWA on the railways, and the National Radiological Protection Board, which carried out inspections in workplaces with radiation hazards, such as dental surgeries.⁵⁸

The HSC had many issues to consider when making new regulations to allocate enforcement functions between the HSE and local authorities. Firstly, there was the question of their general relationship and field of responsibility. The Robens Report had supported the demarcation in enforcement responsibility established in the OSRPA 1963, arguing that local authorities should be primarily responsible for 'non-

⁵⁷ M. Barger, "Health and Safety Commission – Advisory Committees," November 1, 1974, 12, TNA EF7/17; M. Barger, "Health and Safety Commission – Advisory Committees. Appendix B. The Industrial Health Advisory Committee," November 1, 1974, 1, TNA EF7/17.

⁵⁸ HSC, *Report 1974-76*, Appendix 3.

industrial' workplaces such as offices, while the HSE (or more precisely, the proposed NASHW) should be primarily responsible for 'industrial' concerns such as factories.⁵⁹ Complexities, however, were introduced by the large number of new premises coming under legislation for the first time, many of which presented special hazards despite their 'non-industrial' status. For example, universities often used complex laboratory and industrial equipment which posed hazards to staff, students and the public. For this reason, the CSHW had argued that inspectors should exercise flexibility, taking into account the workplace's purpose, and any special hazards involved.⁶⁰ The HSWA incorporated this flexibility, allowing for adjustments in enforcement responsibility to be made by local agreement.⁶¹

Secondly, there was the need for enforcement to be efficient and equitable. While the HSWA simplified enforcement arrangements, improving the coordination of inspection and advice, it was important that HSE and local authority inspectors (Environmental Health Officers) were not responsible for enforcing health and safety in their own type of premises. This was because employees had the right for their working conditions to be independently assessed; with local government and much of the public sector coming under health and safety legislation for the first time in 1974, it was unfair that local authorities potentially had responsibility for local government premises, while workers elsewhere were subject to external inspection. This problem was compounded by the fact that local authorities could not prosecute themselves.⁶²

⁵⁹ Robens, *Safety and Health at Work*, 76.

⁶⁰ *Ibid.*, 76–8.

⁶¹ See HSWA, sec. 18 and HSC, "Allocation of Duties to Local Authorities," October 14, 1974, 2, TNA EF7/6.

⁶² *Ibid.*, 4.

This was a problem for Crown bodies in general, including the NHS, and meant not only that HSE could not prosecute them—thereby protecting workers in these premises—but it could not serve them with improvement and prohibition notices. This was an embarrassing situation which undermined the HSWA’s principle of shared responsibility for health and safety. It implied that the British state enjoyed a form of legal immunity that was not available to private-sector employers.⁶³

In its early years, therefore, HSC/E campaigned to have Crown immunity revoked. In the meanwhile, they developed an administrative sanction, coming into effect by 1978, whereby special Crown enforcement notices could be served on Crown employers as if they were regular enforcement notices.⁶⁴ These notices had no formal legal status, and hence were purely symbolic. However, by shaming Crown employers into action, they had their intended effect, and very few were formally challenged.⁶⁵ Between 1988 and 2001, HSE recorded 25 cases (censures) whereby, if not for Crown immunity, there was sufficient evidence to prosecute a Crown employer for health and safety offences.⁶⁶

Finally, there was the need for close liaison between HSE and local authorities, and the uniform application of health and safety standards across Britain. This was a longstanding issue in British health and safety regulation, and continued to be a problem after 1974. As of 1972, there were over 1,600 local authorities enforcing health

⁶³ To this day, there continues to be Crown immunity to prosecution under British health and safety law.

⁶⁴ HSC, *Report 1976-77*, 2; HSC, *Report 1977-78* (London: HMSO, 1978), 12.

⁶⁵ HSC, *Report 1979-80*, 18; HSC, *Report 1981-82*, 28.

⁶⁶ SIM 07/2001/34, ‘Enforcement procedures for Crown bodies’, 2001, http://www.hse.gov.uk/foi/internalops/sims/pub_serv/7_01_34/index.htm (last accessed 10 June 2015).

and safety legislation across Britain. A decade later, the CBI was still complaining to the Employment Committee about the variability and inconsistency of local authority enforcement standards.⁶⁷ Coming from a different regulatory context and working culture, Environmental Health Officers (EHOs) had very different standards to HSE inspectors. As Rimington explained:

Now ... health and safety got itself a bad name, not because the Environmental Health Officers are stupid or bad inspectors, it's partly because of course they have different standards. HSE is all about reasonable practicability, balancing against cost, but if what you're most used to is inspecting food shops, the restaurants and things like that, your standards are absolute. So you're not used to the kind of inspection that HSE [does].... And of course in service premises the risks are on the whole much lower. So HSE do the high-risk end of the business, as far as inspection is concerned. But they set the standards, and actually setting standards for local authorities is very difficult.⁶⁸

The need for consistency at the highest levels of policymaking was reflected in local authority representation on the HSC. In the HSE, a new Health and Safety Executive/Local Authority Liaison Committee (HELAL) was established to harmonise enforcement policy with local authorities, and discuss matters of mutual concern.⁶⁹ Coordination was also strengthened in the field. A new arrangement was established whereby a member of HSE staff, normally the Area Director, would take an active role

⁶⁷ Robens, *Safety and Health at Work*, 72; House of Commons, "Employ. Cttee. Wed 9 June 1982," 2, 6–7.

⁶⁸ Rimington, Interview, pt. 1.

⁶⁹ HSC, *Report 1982-85*, 34.

coordinating the efforts of HSE and local authority inspectors in his or her area. This 'partnership' extended to formal and informal meetings between inspectors, for instance between alkali inspectors and EHOs in cases of pollution, or between factory inspectors and EHOs in cases of occupational noise.⁷⁰ In 1982, these arrangements were cemented by the establishment of a dedicated Local Authority Unit in HSE, to prepare and publish guidance on matters relevant to local authorities.⁷¹ These coordinating arrangements became increasingly important over the 1980s and 1990s, as occupational risks became delocalised, and workers transferred from industries primarily under HSE's jurisdiction, such as manufacturing, to industries under local authorities' jurisdiction, such as financial services.

The allocation of enforcement functions, however, ran into the same administrative hurdle as the SRSC regulations. Financial constraints in the public sector meant that local authorities were unable to assume the full range of functions originally envisaged for them.⁷² In 1975, local authorities' funding was frozen, and this constraint, amounting to a reduction of 1.5 per cent in 'other environmental services' (including health and safety), severely impacted their ability to assume additional responsibilities.⁷³ The HSE was reluctantly forced to absorb responsibility for these premises, a situation that imposed considerable financial and physical burdens.⁷⁴

⁷⁰ HSC, *Report 1976-77*, 8; Robens, *Safety and Health at Work*, 74–5.

⁷¹ HSC, *Report 1982-83*, 34.

⁷² Burk and Cairncross, *"Goodbye, Great Britain": The 1976 IMF Crisis*.

⁷³ HC Deb 15 April 1975 vol. 890 cols. 294-8; HC Deb 5 August 1975 vol. 897 cols. 115-6W; Ferguson, "Letter to Richardson (HSE)," June 6, 1975, TNA EF7/72; HSC, "Local Authority Expenditure," May 2, 1975, TNA EF7/72; HSC, "Allocation of Duties to Local Authorities," September 1975, TNA EF7/73.

⁷⁴ HSC, *Report 1974-76*, 25.

Following negotiations, local authorities agreed only to a limited increase in their responsibility to cover residential and catering premises, which could be met under existing funds.⁷⁵ Regulations embodying this agreement, the Health and Safety (Enforcing Authority) Regulations, were made in 1977.⁷⁶

Eves was briefly chair of HELA in the 1980s. He explained how HELA was developed to share thinking between HSE and local authorities on matters of mutual concern, and supported the CBI's view that local authority enforcement was inconsistent, though not always tending towards over-enforcement:

I don't think it was the case that we in HSE were pretending to know it all, because we didn't. We were learning as we went about applying this new Act, we had ... 8 million employees who'd suddenly come under the Act for the first time.... We soon discovered through this Committee ... a very uneven range of performance, as you would expect actually, [with] the 460-odd [local authorities].... But when we discovered that some were practically not expecting anything at all, it rather put the lie to the idea that local authorities over-enforced....⁷⁷

On the HSC, local authority representatives do not appear to have held the balance of power between CBI and TUC representatives, as might be assumed in such a tripartite configuration. As Wilson notes, 'as local authority representatives on the Commission are not assertive, it is in practice dominated by the TUC and CBI.... [T]he CBI and

⁷⁵ HSC, *Report 1976-77*, 8.

⁷⁶ SI 1977/746.

⁷⁷ Eves, Interview, pt. 2.

TUC dominate the Commission both in members and in ethos.⁷⁸ My oral history evidence supports Wilson's observation. While my interviewees recalled local authority representatives making important contributions, they all agreed that the essential dynamic of HSC policymaking was set by the TUC and CBI. For example, as Rimington recalled:

The big boys, you know, when you've got top trade unionists on the committee and people who were directors of major firms, they're not people who can be sort of brushed aside by people representing local authorities.... No, the true battle was always between the 'two sides of industry', as they used to be called.... Sometimes the local authority representatives exerted a kind of mollifying influence; they made a contribution....⁷⁹

As a CBI representative, Rex Symons informed me, the TUC and CBI representatives on the Commission were extremely well briefed and supported by their organisations.⁸⁰ It is insightful however that neither my TUC or CBI interviewee remembered the names of local authority commissioners, while they readily recalled personal exchanges between TUC and CBI members. My TUC interviewee, Peter Jacques, summed up the local authority issue most succinctly: 'I don't know what they were doing there.'⁸¹

⁷⁸ Wilson, *The Politics of Safety and Health*, 113–4.

⁷⁹ Rimington, Interview, pt. 1.

⁸⁰ Symons, Interview.

⁸¹ Jacques, Interview, pt. 1.

4.5. International Developments: The European Equation

As evident from the previous discussion, the HSC/E had a formidable task in bringing to life the CSHW's vision of a comprehensive, self-regulatory system. However, on top of their domestic policy programme, they also had important international obligations to fulfil.

The international influence over British health and safety policy stemmed from two main sources. The first was the International Labour Organisation (ILO). Since 1919, the ILO had established the right for employees to be protected against accidents and diseases resulting from work, and promoted international standards on worker protection.⁸² In 1974, the HSC assumed responsibility for advising the British government on the ratification of ILO conventions and recommendations, such as the 1974 Convention and Recommendation on Occupational Cancer.⁸³

The second major source of international influence was the European Community (EC). European legislation assumed a growing influence over British health and safety policy after the UK joined the EC in 1973. Europe's role in promoting national cooperation on health and safety standards was established in the 1950s, when the European Coal and Steel Community initiated a programme of research and standard-setting in the steel and coal industries. In 1957, the Euratom Treaty promoted national cooperation on radiological and nuclear standards. In terms

⁸² Gerry Rodgers et al., *The International Labour Organization and the Quest for Social Justice, 1919-2009* (Ithaca: ILR Press, 2009), 8.

⁸³ HSC, *Report 1974-76*, 4.

of general worker protection, the 1957 Treaty of Rome allowed the Council of Ministers to adopt health and safety standards by unanimous decision.⁸⁴

Two particular articles of the Treaty of Rome were significant in terms of the historical development of European health and safety legislation. Article 100 provided for measures to harmonise national legislation affecting the functioning of the common market, such as the removal of non-tariff barriers to trade. While worker protection was not its explicit aim, Article 100 allowed maximum standards to be made in relation to goods and materials (such as work equipment), which could produce barriers to trade if member states adopted different standards. Article 118 concerned collaboration between member states on social issues such as employment, workers' rights and social security. Industrial hygiene was included within this remit, and the article provided for minimum standards to protect workers against occupational accidents and disease.⁸⁵

European health and safety policy, therefore, was dominated by an inherent tension and dual concern. On the one hand, health and safety was an important dimension of economic harmonisation – that one nation was not at an economic disadvantage to another if it adopted more stringent standards (for instance, on the protection of workers from exposure to asbestos). On the other hand, health and safety was fundamentally related to workers' rights and protection. This concern was not necessarily moralistic: from the late 1980s, the ambition of the European Commission's

⁸⁴ Alison Wright-Reid, Martin McKee, and Laura MacLehose, "Closing the Gap: Health and Safety," in *Health Policy and European Union Enlargement*, ed. Martin McKee, Laura MacLehose, and Ellen Nolte, European Observatory on Health Systems and Policies Series (Maidenhead: Open University Press, 2004), 180–1.

⁸⁵ Ibid., 181; R. F. Eberlie, "The New Health and Safety Legislation of the European Community," *Industrial Law Journal* 19, no. 2 (1990): 81–97, 85.

president, Jacques Delors, was to advance the 'social' dimensions of the common market in tandem with economic and political integration.⁸⁶ Health and safety was thus related to a wider desire on the part of European officials to promote common European ideals and a shared sense of citizenship.

Although European health and safety legislation became more prominent in the late 1980s and 1990s, the achievements of Europe during the inaugural decade of the HSC/E were limited, and the domestic policy agenda retained precedence.⁸⁷ In 1974, the Council of Ministers initiated a Social Action Programme that included workers' health and safety as an explicit policy aim. In June 1978, the European health and safety agenda was developed further in an Action Programme on Safety and Health at Work. Shortly after, the European Advisory Committee on Safety, Hygiene and Health Protection at Work was established as a mechanism to debate European health and safety policy. Tripartite representation was provided by all member states, with nominees from the HSE, TUC and CBI providing UK representation.⁸⁸ While the Social Action Programme gave impetus to European health and safety policy, between 1970 and 1985 only six directives were adopted that specifically concerned workers' health and safety: a directive on safety signs, a framework directive on physical, chemical and biological agents (80/610/EEC), and four daughter (subordinate) directives on lead, asbestos, noise and vinyl chloride. While other directives were

⁸⁶ Wilson, *The Politics of Safety and Health*, 145.

⁸⁷ Eberlie, "New Health and Safety Legislation of the European Community," 89; John Rimington, "Valedictory Summary of Industrial Health and Safety Since the 1974 Act" 1995, 6–7.

⁸⁸ Wright-Reid, McKee, and MacLehose, "Closing the Gap," 181; HSC, *Report 1974-76*, 4.

passed with major implications for British health and safety policy, such as the Seveso Directive on Major Accident Hazards (see below), worker protection was not their primary or exclusive aim. Economic harmonisation, public safety and environmental protection were also important goals.⁸⁹

One of the factors that impeded European health and safety legislation before 1986 was the condition of unanimity attached to votes in the Council of Ministers. This meant that proposals originating from the European Commission could be held up if member states exercised a veto. For example, in the 1980s, European asbestos regulations were delayed owing to German objections about their effect on workers' overtime.⁹⁰ While obstructing new legislation, however, unanimity served British and other national interests. It increased the power of national legislatures relative to the European Commission, and gave the HSC/E considerable opportunity to influence European regulations.

In the 1970s, John Rimington was posted to Brussels to help negotiate health and safety policy. He described Britain's influence over European health and safety legislation after it acceded to the EC in 1973:

As it happens, when I was in Brussels, one of the things that crossed my desk was the very first health and safety regulation that Europe ever attempted ..., the Safety Signs regulations. I must say I didn't know much about safety [at the time] ..., I thought the

⁸⁹ Wright-Reid, McKee, and MacLehose, "Closing the Gap," 181; Eberlie, "New Health and Safety Legislation of the European Community" p. 89; Rimington, "Valedictory Summary," 13.

⁹⁰ Wilson, *The Politics of Safety and Health*, 146–7; HSC, "HSC/88/66," April 1988, 1, TNA EF7/2483.

whole thing was ... ridiculous as a matter of fact. It all resolved into arguments about whether there should be a sign of a running man, 'cause it was doctrine in the UK at that time that for fire precautions you should never run, you must always walk.... Now it wasn't until later that Europe began to take a really big interest in [health and safety]. It all began with the Asbestos Regulations, and the control of hazardous installations. Now at the beginning HSE ran the European show. No doubt about that. The Asbestos Regulations, the Seveso directive, those things were very much influenced by HSE. Why? We had the expertise to do it.⁹¹

As Rimington explained, several European directives during HSC/E's inaugural period were closely based on established British legislation. In particular, the Seveso directive on major hazards and the asbestos directives closely reflected British expertise and experience.⁹²

The European political dynamic of the 1970s and early 1980s benefitted the HSC/E in another crucial way. It gave them considerable freedom to impart their regulatory ideals across the continent. For example, before 1987, Britain was successful in basing many European controls on the test of reasonable practicability: that is, that cost should be taken into account alongside risk when deliberating control measures. This defining principle of British health and safety regulation went unchallenged until changes in the European Commission's voting system in 1986 sidelined British interests (see Chapter 5).⁹³ This relative success in influencing European

⁹¹ Rimington, Interview, pt. 3.

⁹² HSC, *Report 1983-1984*, 3, 8.

⁹³ HSC, "MISC/144/89. Annex 1. The European Community. Recent Developments in Health and Safety: Their Implications," November 1989, TNA EF7/2948.

policy meant that between 1974 and 1984, the impact of the European policy agenda on Britain was ameliorated.⁹⁴

This is not to say, however, that the impact of Europe on British health and safety policy was somehow insignificant before 1984. European obligations placed a considerable strain on HSC/E's resources. In particular, following the Action Programme on Safety and Health at Work in June 1978, the number of directives requiring UK implementation increased significantly. During negotiations, the HSC pressed Europe to prioritise and reduce the sheer number of directives. It believed 'the workload to be expected from the directives alone would overstretch the resources not only of the Executive but also of industry.'⁹⁵ Certainly, the negotiation of European directives took up ever more of HSC/E's time and effort between 1974 and 1984. As a result of European policy developments, British proposals that originated months or even years earlier were frequently delayed or modified.⁹⁶ This slowed British policymaking, although in several cases (such as major hazards) the HSC decided to proceed with interim legislation. By 1984, the HSC's chair, John Cullen, argued that 'sole responsibility for British health and safety legislation no longer rests with ministers, advised by myself and my colleagues. In order to ensure that standards are maintained and improved, we have taken a very active part in negotiating ... European Community directives so that the finished instruments will be broadly acceptable to all concerned: workers and their employers, and manufacturers and users of equipment.'⁹⁷

⁹⁴ Ibid.

⁹⁵ HSC, *Report 1977-78*, 7.

⁹⁶ House of Commons, "Employ. Cttee. Wed 9 June 1982," 5.

⁹⁷ HSC, *Report 1983-1984*, 3.

Throughout the entire period under review in this thesis, the HSC/E's aim was to ensure that European proposals were 'no less stringent than those ... in Great Britain.'⁹⁸ At first glance, such a statement could imply that British officials had an interest in bringing other member states up to speed with Britain, and promoting workers' health and safety across Europe. However, just as the Treaty of Rome embodied concerns about economic harmonisation, Britain's European negotiating strategy was underpinned by anxieties about economic competitiveness. Significant trade distortions could occur if British standards (for example, of work equipment) were stronger than those of Britain's competitors, encouraging capital to move to states with more relaxed or non-existent health and safety standards. As Britain's machinations in defence of reasonable practicability demonstrated in the late 1980s (see Chapter 5), considerations of cost, trouble and competitiveness were central to Britain's international as well as domestic health and safety agenda.

4.6. Constraining the Framework

4.6.1. Counting the Costs of Health and Safety Regulation

The issue of cost became even more central to British health and safety policy when the country's economic fortunes declined in the mid 1970s. As explained in Chapters 2 and 3, a relatively simple economic argument underpinned the reform of British health and safety regulation in 1974. This was that the number of working days lost as a result of occupational accidents and disease would decrease if companies paid as much attention

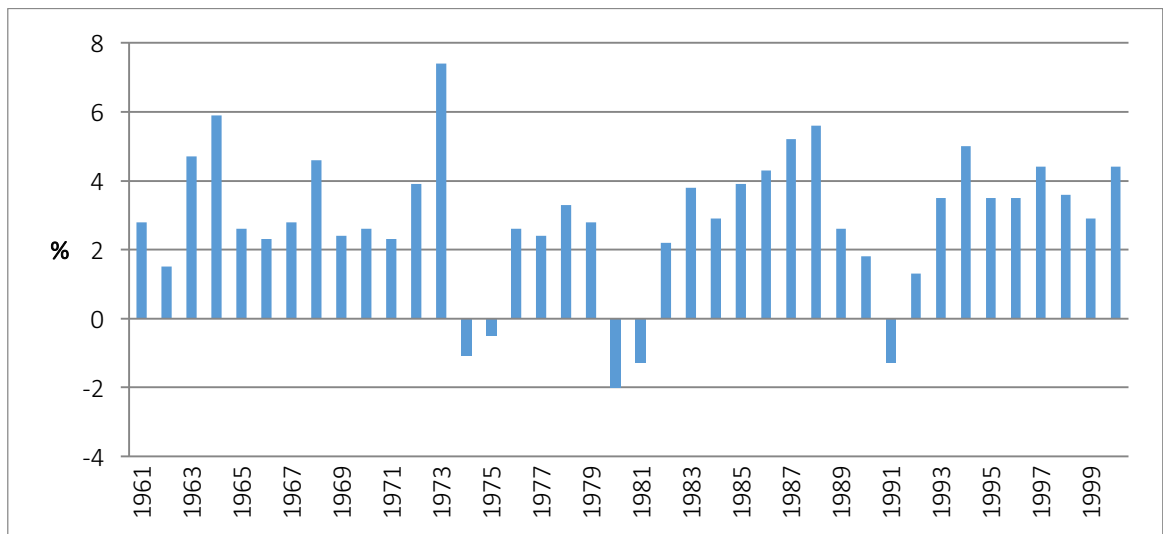
⁹⁸ HSC, *Report 1974-76*, 4, 35.

to health and safety as their bottom line. In 1972, workplace injury and illness was estimated to cost the economy some £200 million.⁹⁹ At a time when politicians believed that Britain was lagging behind its international rivals, such figures carried significant weight, especially when the comparable level of working days lost to industrial action was much lower.

However, at the time these figures were advanced, the British economy was still growing, albeit slowly (Figure 13). In such a climate, the capital expenditure needed to reform regulation, implement new health and safety controls, and reap efficiency savings was more easily justified from a political perspective. Financial constraints and economic recession in the late 1970s and early 1980s upset this balance, showing how despite the reformist zeal of the early 1970s, health and safety declined in political priority at a time when the public purse was under pressure.

⁹⁹ Robens, *Safety and Health at Work*, 1.

Figure 15. Real annual GDP growth in the UK, 1961–2000.¹⁰⁰



As Simpson wrote in 1980, ‘the balance sheet of health and safety cannot easily be quantified.’¹⁰¹ What he meant is that the direct impact of regulation on rates of occupational accidents and disease could not be disentangled from confounding factors such as the changing structure of employment, industrial development, economic performance or levels of reporting.¹⁰² The ‘benefits’ of health and safety regulation, in terms of accident reduction or health promotion, are not easily calculable. However, the ‘costs’ of regulation, such as new physical controls, are easily represented in pounds and pence. Indirect costs and benefits to wider society are also tricky to establish.¹⁰³ This conceptual imbalance in the economics of health and safety was (and remains)

¹⁰⁰ “Long-Term Profile of Gross Domestic Product (GDP) in the UK,” August 23, 2013. <http://www.ons.gov.uk/ons/rel/elmr/explaining-economic-statistics/long-term-profile-of-gdp-in-the-uk/sty-long-term-profile-of-gdp.html>.

¹⁰¹ HSC, *Report 1979-80*, 1.

¹⁰² See Davies and Jones, *Trends and Context to Rates of Workplace Injury*.

¹⁰³ Hutter, “The Attractions of Risk-Based Regulation,” 8.

highly significant, for as pressures on the economy mounted and the costs of health and safety regulations to industry became clearer, their supposed benefits became more elusive. Nevertheless, between 1975 and 1982 the number of fatal accidents in British workplaces fell by almost 30 per cent, suggesting that the HSWA was beginning to have some, if ambiguous impact.¹⁰⁴

Despite this improvement, economic and political developments threatened to undermine progress in reducing workplace accidents since 1974. The lingering effects of the 1973 oil crisis, recession and the conditions attached to the 1976 IMF loan bit hard into public expenditure. By 1978, Locke recognised how

[T]here are those who consider that in a time of economic difficulty we can afford little improvement in health and safety at work. Of course the cost is one of the factors to be taken into account when considering what is reasonably practicable. But those who depict health and safety legislation as an obstacle to industrial profitability and national prosperity overlook the costs imposed by accidents.¹⁰⁵

This sentiment was repeated by the TUC in its evidence to the Employment Committee in 1982.¹⁰⁶ Indeed, by 1976 some 16 million working days a year were still

¹⁰⁴ HSC, *Report 1982-83*, iii. Due to differences in reporting requirements it is difficult to gauge a similar trend in non-fatal accidents. Under the Notification of Accidents and Dangerous Occurrences Regulations from 1980, the HSE was able to determine trends in non-fatal accidents across industry in more comparable terms. This revealed a more modest decline of 7% in reported major injuries to employees between 1981 and 1983, although these figures are subject to greater year-on-year variation (HSC/E Annual Reports). See Appendix III for a consistent time series focusing on the period 1986–2012.

¹⁰⁵ HSC, *Report 1977–78*, 14.

¹⁰⁶ House of Commons, “Employ. Cttee. Wed 16 June 1982,” 36.

being lost through workplace accidents and disease. As the chair of the National Oil Corporation pointed out, this represented ‘a loss in today’s terms of some £1,800 million a year — not much less than the nation’s current earnings from North Sea Oil.’¹⁰⁷ Even so, the HSC/E was not immune from the wider economic pressure on government and employers to find efficiency savings. This pressure encouraged the HSC/E, and from 1980 compelled them, to justify their proposals in economic terms.

Cost was already an implicit consideration in British health and safety policy. The SFAIRP qualification in the HSWA implied that employers could weigh cost against risk when determining control measures. Moreover, cost was debated extensively on the HSC’s advisory committees. In coming to a judgment about a particular course of action — regulations, codes of practice, guidance or other instruments — employers, trade unions and other bodies had extensive opportunity to discuss cost and other practical consequences of the proposed control. Nevertheless, in 1981 the Employment Secretary, Norman Tebbit, demanded that HSC/E conduct formal cost-benefit analyses of all new regulatory proposals.¹⁰⁸ This had been a major recommendation of Sir Leo Pliatzky’s report on non-departmental public bodies in 1980. It also formed part of the HSE’s contribution to the scrutiny of waste in government, supervised by Sir Derek Rayner.¹⁰⁹

As a form of economic appraisal, cost-benefit analysis (CBA) was by no means a new phenomenon. In the context of the environment and social welfare, it had long

¹⁰⁷ HSC, *Report 1977–78*, 14.

¹⁰⁸ Wilson, *The Politics of Safety and Health*, 112.

¹⁰⁹ HSC, *Report 1979–80*, 1; HSC, *Report 1978–79* (London: HMSO, 1980), 1; *Report on Non-Departmental Public Bodies*, Cmnd. 7797, 1980; *Efficiency in the Civil Service*, Cmnd. 8293, 1981.

been used by governments to evaluate the private costs and social benefits of infrastructure projects. The US Treasury Secretary, Albert Gallatin, recommended its theoretical use in water projects as early as 1808, while the nineteenth-century French economist and civil engineer, Jules Dupuit, is credited with devising one of the major foundations of CBA (and modern economics generally), the concept of diminishing marginal utility. By the 1960s, CBA was being used to evaluate other 'public goods', such as air quality and human health, and ensure that public funds were being used efficiently. Since the 1970s, CBA had been a formal requirement of all US environmental regulations.¹¹⁰

In Britain, the application of CBA in public policy was more recent. Since the 1960s it was applied in transport policy to evaluate schemes such as the M1 motorway.¹¹¹ However, in terms of health and safety regulations, one of the major factors behind the emergence of CBA was the election victory of the Conservative Party in May 1979.

The Conservatives' election victory had immediate, profound and lasting consequences for the British system of health and safety regulation. The re-energised Conservative party entered government with a broad 'neoliberal' agenda, promising to reduce the size of the state, curb the power of trade unions (following the bitter 'winter of discontent' of 1978/79), and implement market-based measures to boost the

¹¹⁰ Nick Hanley and Clive L. Spash, *Cost-Benefit Analysis and the Environment* (Cheltenham, UK and Northampton, MA, USA: Edward Elgar, 1993) pp. 4-8; OECD, *Cost-Benefit Analysis and the Environment: Recent Developments. Executive Summary* (OECD, 2006), 16.

¹¹¹ Hanley and Spash, *Cost-Benefit Analysis and the Environment*, 7.

economy.¹¹² The Pliatzky report on non-departmental public bodies, referred to above, highlighted the ‘considerable extra costs for industry’ imposed by the HSWA, in particular the costs associated with the expansion of health and safety legislation. The report argued that local authorities ‘allocated resources for activities which do not demonstrably bring commensurate benefits’, and suggested that, considering the lengthy process of joint consultation inherent in HSC/E policymaking, ‘the case is strengthened for more explicit attention to the assessment of costs in relation to benefits at earlier stages in the policymaking process as well as the stage of final approval.’¹¹³

The early eighties recession further threatened to disrupt progress in promoting health and safety following the HSWA. As Beck and Woolfson argue, it played into the hands of Conservative ideology, creating ‘a definite imperative to limit the cost impact of health and safety legislation on business.’¹¹⁴ HSE officials reported that employers were not only less willing to make improvements to the working environment, but that workers were also less willing to demand them.¹¹⁵

Unemployment reached 3 million by January 1982, suggesting that, in an uncertain financial climate, some workers were willing to prioritise job security over health and safety.¹¹⁶ On retiring from HSC in 1983, Simpson warned how ‘the stimuli of new health and safety legislation, new duties, realignment of responsibilities, new advisory

¹¹² Kessler and Bayliss, *Contemporary British Industrial Relations*, 1.

¹¹³ *Report on Non-Departmental Public Bodies*, 44–5.

¹¹⁴ Beck and Woolfson, “The Regulation of Health and Safety in Britain,” 43.

¹¹⁵ HSC, *Report 1982-83*, iii.

¹¹⁶ “1982: UK Unemployment Tops Three Million.”

http://news.bbc.co.uk/onthisday/hi/dates/stories/january/26/newsid_2506000/2506335.stm.

committees and new enforcement penalties and measures will not endure in some of our workplaces. Already, in the recent recession, there are signs that many good intentions are melting like snowflakes in the warm chimney of competitive and financial pressures.¹¹⁷

Only a decade after the HSWA, therefore, the CSHW's optimistic economic message threatened to fade. It was being drowned out by contemporary economic anxieties and the immediate financial demands faced by employers and workers. The CBI, while praising the HSWA generally, argued to the Employment Committee that 'the HSC must recognise that industry's capacity to produce wealth, provide employment and compete effectively in overseas markets are priorities just as vital as the maintenance of good health and safety standards.'¹¹⁸ In response to such arguments, Simpson stressed how it was more important than ever that employers and workers did not take 'unnecessary risks', and that they worked together to maintain safety improvements.¹¹⁹

4.6.2. Reducing the Inspectorate

Government policy and economic recession not only threatened to turn back the clock on Britain's accident record, but attack and weaken the HSC/E. The TUC, for their part, argued to the Employment Committee that progress in reducing accident rates was jeopardised 'directly and indirectly as a result of Government policy'.¹²⁰ The

¹¹⁷ HSC, *Report 1982-85*, iii.

¹¹⁸ House of Commons, "Employ. Cttee. Wed 9 June 1982," 2.

¹¹⁹ *Ibid.*, 9–12; HSC, *Report 1982-85*, iv.

¹²⁰ House of Commons, "Employ. Cttee. Wed 16 June 1982," 41, 55.

HSC/E's capacity to protect newly covered workers, for instance, was impaired by the government's decision in December 1979 to reduce the HSC/E's staff-related budget by six per cent, as part of wider cuts in the civil service as a whole. This was followed in 1981 by a further demand for an eight per cent cut.¹²¹ The TUC made it plain that 'the total amount of money saved by cuts will be trifling and more than outweighed by the cost of accidents and ill health resulting from failure to enforce and develop health and safety legislation.'¹²² The HSC warned the Employment Secretary that cuts on this scale 'could not be achieved without a reduction in our programmes directly concerned with improved health and safety both for workers and the general public.'¹²³ They demanded that the Employment Secretary specify where cuts could be made, but this fell on deaf ears.¹²⁴

By any account, these cuts were damaging, although HSE attempted to cushion the blow through natural wastage and redundancies in administrative staff.¹²⁵ Rimington first joined HSE in November 1981, as Director of Safety Policy. He recalled the devastating effects of cuts on HSE's morale and resources:

[T]he way it was done was nonsense, really, as it always is when you get these peremptory orders.... What happened was that HSE had to lose 25 per cent of its staff, whether it needed them or not....

¹²¹ Ibid., 36.

¹²² Ibid.

¹²³ HSC, *Report 1979-80*, 3.

¹²⁴ James Prior, "Letter to William Simpson (HSC)," May 30, 1980, TNA EF7/765.

¹²⁵ HSC, *Report 1979-80*, 15.

All inspectors' recruitment had to be immediately suspended, and remain suspended for five years. What that does to an organisation is nobody's business. First of all, people in the organisation felt, well, what's the future here? If they've got a chance they'll get out.... It's the best ones, of course, that go. The second and really major thing is that you get a ... huge gap in expertise. You know, you've recruited no-one for five years ..., you have got rid of all your training courses, all your expertise.... You've also totally unbalanced the force.... What do you do? You've got no choice....¹²⁶

Figure 14(a–b) and Figure 15 show the effect of cuts on HSC/E's finances and manpower, correcting for inflation.¹²⁷ They reveal how, despite increases in responsibility, HSC/E's income effectively flat-lined, and even fell below 1975 levels by 1984. Adjusting for inflation, the effect of financial cuts is clearly discernible. Between 1980 and 1985, the number of HSE inspectors fell by over 12 per cent, only recovering by 1992. This severely impacted the HSE's ability to proactively respond to existing and emerging risks. Locke was unequivocal: 'I much fear that our work could become increasingly reactive—dealing only with those things which have already visibly gone wrong. I would regard that as a most dangerous tendency.'¹²⁸ This, of course, struck at the very heart of the HSWA: to avoid a reactive approach to health and safety regulation, and keep abreast of changes in technology and industry.

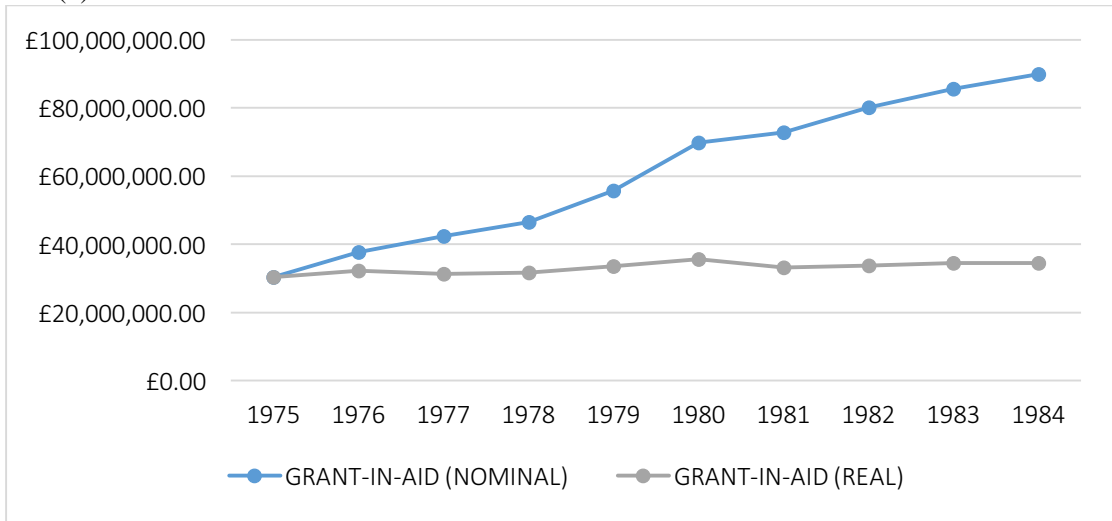
¹²⁶ Rimington, Interview, pt. 2.

¹²⁷ The real figures shown are adjusted to 1975 levels, using composite price indices published by the ONS.

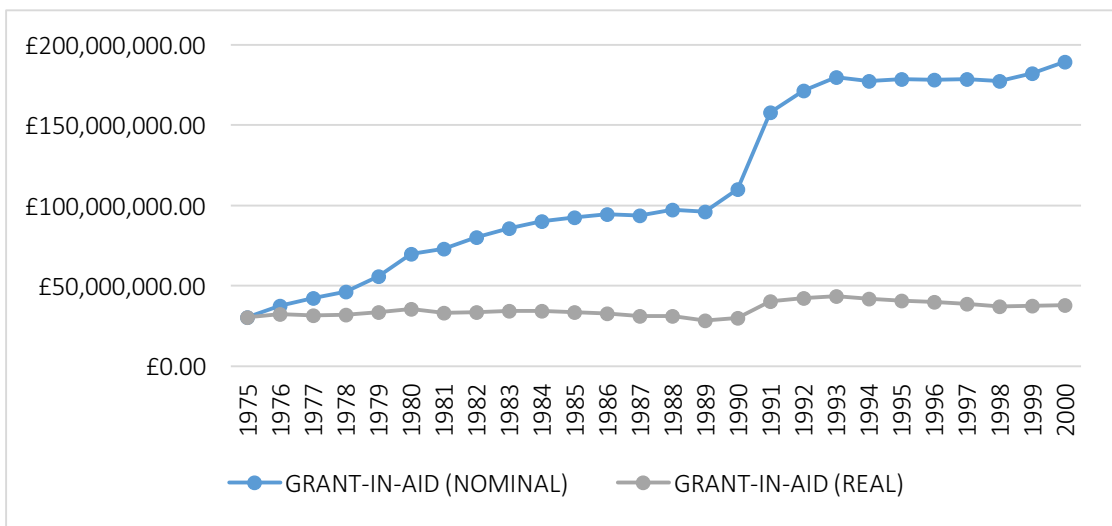
¹²⁸ HSC, *Report 1979-80*, 15.

Figure 14. HSC/E grant-in-aid, nominal and real (adjusting for inflation).¹²⁹

(a) 1975–1984

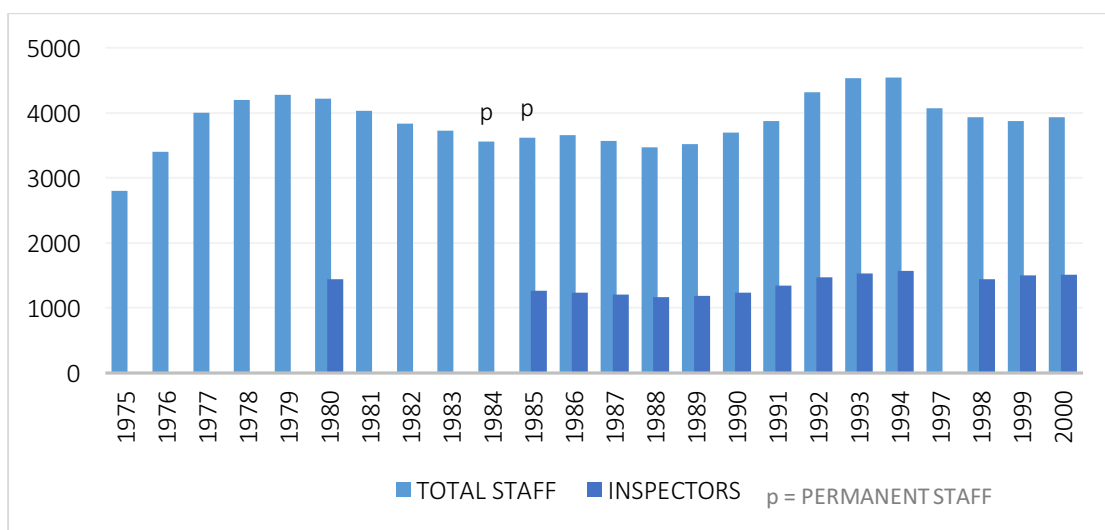


(b) 1975–2000



¹²⁹ HSC/E Annual Reports and Accounts, ONS.

Figure 15. HSC/E staffing levels, 1975–2000.¹⁵⁰



The effects of financial cuts on HSC/E were insidious. Since recruitment was frozen and older inspectors continued to retire, valuable expertise and experience evaporated from HSE.¹⁵¹ In 1982, Simpson suggested that in order to fulfil its various statutory obligations, 400 additional inspectors were needed.¹⁵² The attrition of HSE's staff was also reflected in the declining number of prosecutions brought by HSE inspectors. In 1977, inspectors carried out approximately 1,600 prosecutions. By 1984, inspectors carried out just 1,269, a decline of over 20 per cent.¹⁵³ Moreover, the average duration between routine workplace inspections increased, and even fell below 1974 levels. In the early 1960s, the average duration between visits to factories was once every four years. By the early 1980s, this had increased to between six and seven

¹⁵⁰ HSC/E Annual Reports.

¹⁵¹ House of Commons, "Employ. Cttee. Wed 16 June 1982," 36.

¹⁵² House of Commons, "Employ. Cttee. Wed 23 June 1982. Appendix, Tues 6 July 1982," 92.

¹⁵³ HSC, *Report 1977–78*, 22; HSC, *Report 1985–86* (London: HMSO, 1986), 28.

years, and many smaller workplaces were exempt from inspection altogether, since they were not deemed to present 'special hazards'.¹³⁴ As Rimington recalled, 'small firms saw very little of us ... probably.... The idea that you should prioritise your approach to small firms would be rubbish, is rubbish. You haven't a hope of seeing anything like ten per cent of them.'¹³⁵

Although the HSC/E recognised the particular health and safety problems confronted by small firms in the 1970s and early 1980s, for various reasons, they were not HSC/E's primary focus.¹³⁶ HSE's targeted inspection system meant that many smaller workplaces were overlooked, since workers in larger premises were thought to be at higher risk. Many small firms were offices, shops and other premises in the local authority sphere of responsibility, and were not inspected by HSE. Since many service-sector premises were low risk, accidents were infrequent events, and thus did not trigger investigations. Furthermore, the CBI, standing for big business, was directly represented on HSC. Thus, the interests of big business were more directly reflected in HSC/E policies and priorities.

HSE enforcement was affected by other government policies in the early 1980s. Reactive visits, those launched in response to accidents or investigations, were impacted by the government's decision to abolish industrial injuries benefit in 1983. Under the Notification of Accidents and Dangerous Occurrences Regulations 1980 (NADOR), the industrial injuries benefit scheme had provided a valuable input to

¹³⁴ House of Commons, "Employ. Cttee. Wed 16 June 1982," 36; House of Commons, "Employ. Cttee. Wed 23 June 1982. Appendix, Tues 6 July 1982," 92; HSC, *Report 1979-80*, 2.

¹³⁵ Rimington, Interview, pt. 2.

¹³⁶ Eves, Interview.

HSE statistics, helping to correct for under-reporting by drawing on benefit claims to the Department of Health and Social Security. Its abolition in favour of sickness benefit in 1983 hollowed out HSE's information base, forcing the reappraisal of HSE's inspection priorities.¹³⁷ The short-lived NADOR regulations were quickly replaced by the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1985 (RIDDOR). These improved HSE's intelligence on accidents, and ill-health in particular: RIDDOR introduced a new system for reporting occupational diseases.¹³⁸

4.7. Developing the Framework

In this final section of Chapter 4, I discuss developments in three important areas of HSC/E policy that had significant ramifications for British health and safety regulation: major and nuclear hazards, asbestos, and other toxic substances.

4.7.1. *Major and nuclear hazards*

HSE was concerned about major hazards from its earliest days. While regulators had been acutely aware of the dangers of chemical plants and other large hazardous installations since the 1960s, the Flixborough Disaster in June 1974 was a powerful reminder of the problems associated with the storage of flammable and explosive substances, and their use on an ever-increasing scale. Although industrial development had contributed to the long-term decline of workplace accidents in Britain, replacing hazardous manual occupations with ostensibly 'safer', automated ones, the Flixborough

¹³⁷ HSC, *Report 1982-83*, 13; HSC, *Report 1983-1984*, 25.

¹³⁸ HSC, *Report 1985-86*, 14.

Disaster illuminated the sinister flip-side of such development. This was elucidated by Ulrich Beck in his seminal thesis, *Risk Society*, first published in 1986: as older risks came under control, science and technology unveiled new risks to workers, the public and wider environment that affected them in more insidious, uncertain and irreversible ways.¹³⁹ As a DE memorandum explained in 1974, ‘these new industries have a potential for disaster and multiple deaths not previously encountered, not only amongst [sic] those who are employed in them, but in the area which surrounds the plants.’¹⁴⁰

The Flixborough Disaster promoted a flurry of regulatory activity. Shortly after the explosion, Michael Foot announced a public inquiry into the causes of the disaster, as well as the establishment of a new unit to compile and evaluate information on major hazards. Furthermore, an expert advisory committee was established to examine major hazards in Britain, and advise the HSC on possible courses of action.¹⁴¹ The Advisory Committee on Major Hazards (ACMH) was first appointed on 18 October 1974, a little over a fortnight after the establishment of HSC. It was chaired, fittingly, by Bryan Harvey, the former Chief Inspector of Factories who in the late 1960s had made repeated and prescient warnings of the dangers of large chemical plants.

The ACMH’s first report in May 1976 highlighted how demand for technological efficiency since the Second World War had driven the development of ever larger plants, and the clustering of related industrial processes in particular locales. This had increased the numbers of people at risk from industrial accidents, and reduced the

¹³⁹ Beck, *Risk Society*.

¹⁴⁰ HSC, “Committee of Experts on Major Hazards: Composition,” 1.

¹⁴¹ Ibid; HC Deb 27 June 1974 vol. 875 cols. 1237–8; HSC, *Advisory Committee on Major Hazards. First Report* (London: HMSO, 1976).

margin error for failure: ‘Because of their present-day size and throughput there are now many plants throughout the world where a critical first mistake can result in disaster.’¹⁴²

One area at particular risk, as Chapter 3 described, was the community of Canvey Island in Essex. Since 1970, fears had grown there about proposals to build a new oil refinery, despite the already cramped conditions in terms of several oil, gas and chemical facilities in close proximity to each other. From March 1976, HSE was closely involved in the assessment of risks on the island. They were joined by members of the Safety and Reliability Directorate of the UK Atomic Energy Authority (UKAEA), which the HSE jointly managed under a 1976 agreement.¹⁴³ The local MP, Sir Bernard Braine, was an outspoken critic of the proposed development, highlighting how it endangered up to a quarter of a million people in the South East of England.¹⁴⁴

With a research background in the dispersal of explosive gas clouds, HSE’s former Chief Scientist, Jim McQuaid, was closely involved in the Canvey Island survey. He recalled how Braine was ‘a thorn in HSE’s side for quite a while, asking questions in the house all the time.’¹⁴⁵ The publicity and political scrutiny attracted by Braine’s campaign placed considerable pressure on HSE to explain their work on the island and describe their approach to control, a demand that developed more generally in the 1980s and 1990s in response to concerns about nuclear, major and toxic hazards (see Chapter 6).

¹⁴² HSC. *ACMH: First Report*, 9.

¹⁴³ HSC, *Report 1976-77*, 18.

¹⁴⁴ House of Commons, “Employ. Cttee. Wed 23 June 1982. Appx., Tues 6 July 1982,” 107–108.

¹⁴⁵ McQuaid, Interview, pt. 2.

A major innovation in this period was the use of risk quantification as an aid to regulatory policymaking. As McQuaid argued, ‘Canvey Island was the first time, away from the space programme, and from nuclear installations ... that attempts had been made to ascribe a probability to a particular accident scenario—you know, the failure of a storage tank ... how often is it going to fail, and why would it fail...’¹⁴⁶ Before this time, McQuaid asserted, ‘the word “risk” hardly featured in the [official] language. It was all about the hazard. Hazardous area in a mine, hazardous area in oil refineries, and so on’.¹⁴⁷ With the exception of the Nuclear Installations Inspectorate, the pre-1974 inspectorates conducted ‘relatively little sophisticated work ... on the quantitative assessment of accident probability’—the kind of work that might have anticipated disasters such as Flixborough.¹⁴⁸ Regulators assumed that a well-designed, constructed and managed installation had a zero probability of failure. With disasters such as Flixborough, however, regulators began to question this assumption. Regulators turned their attention to the quantitative evaluation of consequences, a core component of the regulatory approach to risk assessment.¹⁴⁹

Perhaps unsurprisingly in the wake of incidents such as Flixborough, ACMH noted that society’s response to industrial and technological development had changed. While industrial development was still widely considered to be Britain’s ticket to prosperity, certain quarters of the population had started to ‘dispute the wisdom of continued technological expansion.’¹⁵⁰ Such questioning was by no means new; as

¹⁴⁶ McQuaid, Interview.

¹⁴⁷ Ibid.

¹⁴⁸ HSC, *Report 1974-76*, 29.

¹⁴⁹ McQuaid, Interview, pt. 2.

¹⁵⁰ HSC, *ACMH: First Report*, 9.

argued previously, regulators had acknowledged increasing political and public concern about risks since the early 1960s.

A major problem identified by ACMH, repeated in other areas of British health and safety policy at this time, was the lack of comprehensive and reliable information on risks to guide policymaking. Disturbingly, there was no requirement in the 1970s for operators of large chemical plants to notify regulators about their activities. Consequently, as McQuaid argued, regulators ‘didn’t really know what was going on behind the factory fence. You would have an almost anonymous chemical installation and nobody knew what possible things might happen to people around about, and how dangerous it was and how safe it was.’¹⁵¹ A central recommendation of ACMH’s first report was thus a statutory scheme for the notification of major hazard sites, a proposal enacted in the Notification of Installations Handling Hazardous Substances Regulations 1982 (NIHHS).¹⁵² Under the regulations, occupiers of installations handling or storing certain dangerous substances (such as acrylonitrile) above a specific threshold were required to supply HSE with basic information about their activities. In line with the HSWA’s self-regulatory ethos, the ACMH also recommended that companies conduct a ‘hazard survey’, indicating the systems they had put in place to remove or mitigate hazards. HSE experts would scrutinise these surveys, and if necessary could demand a more thorough ‘hazard assessment’.¹⁵³

While it took the Flixborough Disaster to initiate concerted political action on major hazards in Britain, it was an industrial disaster in the town of Seveso, 13 miles

¹⁵¹ McQuaid, Interview, pt. 2.

¹⁵² HSC, *ACMH: First Report*, 14; SI 1982/1357.

¹⁵³ *Ibid.*, 15.

north of Milan, that triggered corresponding political action on the European level. On 10 July 1976, a bursting disc on a chemical reactor operated by the Icmesa chemical company ruptured, leading to the release of a potent dioxin. Demonstrating the delocalised character of many modern health and safety risks, a cloud of this chemical drifted offsite, affecting local communities and the wider environment. While no fatalities were reported, many people fell ill, including several pregnant women who were forced to undergo abortions.¹⁵⁴ A European Directive on the Major Accident Hazards of Certain Industrial Activities, commonly known as the Seveso Directive, was subsequently drafted aiming to prevent and limit the impact of such catastrophes in the future.¹⁵⁵ The directive required manufacturers to ensure the safety of their operations, and, if they used or stored a defined dangerous substance above a certain quantity, notify the relevant ‘competent authority’, providing technical details of the substance in question and their procedures in relation to handling, storage and fire (in Britain, the ‘competent authority’ was HSE). Additionally, manufacturers were required to assist local authorities in preparing off-site emergency plans, and provide information to local people potentially affected by their activities.¹⁵⁶

The Seveso Directive shared many similarities with Britain’s NIHHS regulations, and the British experience of major hazards helped shape European developments. ACMH’s expertise suggested that the regulation of major hazards relied on the notification of dangerous operations and substances to regulators. Once relevant

¹⁵⁴ “Icmesa Chemical Company, Seveso, Italy. 10th July 1976.” Accessed September 4, 2015. <http://www.hse.gov.uk/comah/sragtech/caseseveso76.htm>.

¹⁵⁵ EC Directive 82/501/EEC, 24 June 1982.

¹⁵⁶ Ibid.; HSC, *Report 1981-82*, 5.

data was obtained, only then could regulatory attention turn to control.¹⁵⁷ The Control of Industrial Major Accident Hazard Regulations (CIMAH), implementing the Seveso Directive in Britain, were made in December 1984.¹⁵⁸ Alongside the NIHHS regulations, CIMAH established a comprehensive regulatory regime for hazardous operations, one where regulatory authorities were aware of sites that had the potential for disaster, and could take pre-emptive measures.

The demand for operators of hazardous installations to conduct hazard surveys and assessments was central to the development of a risk management approach to major hazards. Unlike other areas of risk, the potential for catastrophe in hazardous installations meant that operators needed to ensure the safety of their installations, and demonstrate legal compliance, before regulators allowed their hazardous operation to proceed—what is known as a permissioning regime. The requirement to construct a ‘safety case’ placed the primary responsibility for controlling risk on the operator, as per the self-regulatory principle. However, as an adverse side effect, the permissioning regime placed considerable resource burden on the regulator, since it also had responsibility for assessing and approving safety cases. The implication of major hazard control for local land-use planning, for instance, meant that even before the NIHHS regulations were made, referrals by local planning authorities for HSE advice and assistance increased by almost fifty per cent between 1977 and 1979.¹⁵⁹

The contemporary approach to major hazards in Britain owed much to work on nuclear energy. As with other risks, regulators acknowledged deepening public

¹⁵⁷ McQuaid, Interview, pt. 2.

¹⁵⁸ SI 1984/1902.

¹⁵⁹ HSC, *Report 1978-79*, 23.

concern about nuclear power in the 1970s and 1980s. Although the extent of such public concern is difficult to assess, a succession of nuclear incidents in the 1970s and 1980s raised the political profile of nuclear safety in Britain: a leak of contaminated water at Windscale, Cumbria in 1976 (the site of Britain's first nuclear reactor); the partial nuclear meltdown at Three Mile Island, USA in 1979; and a leak of radioactive waste at the Sellafield nuclear reprocessing facility in 1983, which contaminated nearby beaches. In 1986, the Chernobyl disaster in Ukraine stimulated global concern about the transnational effects of radioactive gas clouds. Arguably, radiation was the delocalised risk par excellence.¹⁶⁰

Nuclear power was a particularly urgent regulatory concern in Britain owing to the government's decision in 1979 to expand Britain's nuclear power programme. Partly because of this decision, and partly because of the recognised consequences of a nuclear incident, more and more resources were injected into nuclear safety in the late 1970s and early 1980s. In fact, the Nuclear Installations Inspectorate bucked the overall downward trend in HSE staffing: while total HSE staff fell by 3 per cent in 1982/3, staff working on nuclear and hazardous installations increased.¹⁶¹ Moreover, a large proportion — perhaps one sixth — of HSE's extra-mural research expenditure was devoted to nuclear safety.¹⁶² Much of this effort concerned the evaluation of nuclear reactor designs: in 1982, the Advisory Committee on the Safety of Nuclear Installations (ACSNI) published *Some Aspects of Safety in Pressurised Water Reactors*, in

¹⁶⁰ HSC, *Report 1979-80*, 9, 20; HSC, *Report 1983-1984*, 11; Rimington and McQuaid, "A Systems-Based Approach to Health and Safety Regulation," 5–7.

¹⁶¹ HSC, *Report 1979-80*, 2, 9, 20; HSC, *Report 1982-83*, 26.

¹⁶² HSC, *Report 1978-79*, 13.

advance of the public inquiry into the proposal to build a second reactor, Sizewell B, in Suffolk.¹⁶³ This inquiry, chaired by Sir Frank Layfield QC, had far-reaching consequences for British health and safety policy: in response to Layfield's recommendations, the HSE produced a sophisticated treatment of its risk management philosophy (see Chapter 6).

Regulators believed there were fundamental similarities between nuclear safety and the safety of other large hazardous installations, such as oil refineries. Most obviously, major and nuclear hazards presented complex causation chains, and demonstrated large-scale, dramatic consequences in the event of an incident.¹⁶⁴ These perceived similarities informed HSE's decision in 1976 to bring the UKAEA Safety and Reliability Directorate under joint HSE/UKAEA management. By combining resources in such a way, the Safety and Reliability Directorate's expertise in risk analysis could be applied across the wider major hazards field. As the 1976/77 HSC/E report explained, this arrangement 'improved capacity for the complex assessment of potential hazards arising from changes in technology': the kind of proactive, joined-up approach to regulation the CSHW had recommended in 1972.¹⁶⁵

4.7.2. *Asbestos*

Asbestos, a highly versatile natural mineral fibre used in the production of everything from insulation to brake pads, was by no means a new health risk in 1970s Britain,

¹⁶³ HSC, *Report 1982-83*, 9; ACSNI, *Some Aspects of Safety in Pressurised Water Reactors* (London: HSE, 1982).

¹⁶⁴ HSC, *Report 1978-79*, 23.

¹⁶⁵ HSC, *Report 1976-77*, 10; Robens, *Safety and Health at Work*, 107–9.

although members of the public waking up to its dangers for the first time could be forgiven for thinking it had only just attracted medical, political and regulatory attention. The first fatal case of asbestosis, a chronic fibrosis of the lungs resulting from exposure to asbestos dust, was originally diagnosed in 1899 by a physician at Charing Cross Hospital. In the 1920s, asbestos was identified as an occupational hazard, and in 1931, the British government extended controls over asbestos dust.¹⁶⁶ The first quantitative exposure limits for airborne concentrations of asbestos dust were established in 1969.

By the mid 1970s, however, the asbestos controversy was beginning to assume a new, more insidious dimension. Doubts emerged among regulators about the adequacy of existing standards to protect employees against cancer, while concern also developed about members of the public who could be exposed to asbestos outside the work gates.¹⁶⁷ Global production of asbestos had accelerated since the 1930s, increasing 40 per cent in the period 1968–73 alone. By 1975, an estimated 15,000 British workers were thought to be employed in factories subject to asbestos regulation.¹⁶⁸ Over the 1970s and 1980s, the British media widely publicised the dangers of asbestos. Television exposés, such as the Yorkshire Television documentary *Alice: A Fight for Life* (1982), not only graphically depicted the effects of asbestos exposure on individuals and their families, but revealed how asbestos was all-pervasive

¹⁶⁶ Tweedale and Jeremy, “Compensating the Workers: Industrial Injury and Compensation in the British Asbestos Industry, 1930s-60s,” 103.

¹⁶⁷ See HSC, “HSC/91. Health Risks from Asbestos. Note by Director of Hazardous Substances Group,” November 1975, 1–2, TNA EF7/153; *Third Report of the Parliamentary Commissioner for Administration. Session 1975-76*, HC 259, 1976, 752.

¹⁶⁸ HSC, “Health Risks from Asbestos,” 1.

in modern society—in our homes, schools, hospitals and workplaces. This generated a public scare that threatened to discredit the authorities responsible for asbestos regulation.¹⁶⁹

One government report in particular stirred controversy. In 1976, Alan Marre, the Parliamentary Commissioner for Administration, published a critical report into the Factory Inspectorate's record of inspection at Acre Mill, an asbestos factory in Hebden Bridge, West Yorkshire.¹⁷⁰ His investigation, launched in response to allegations of maladministration, concluded that the Inspectorate had taken an unduly soft approach to enforcement at the factory, and placed insufficient pressure on its management.¹⁷¹ Marre demonstrated that while the Inspectorate had known for some time that dust control in the factory was inadequate, and had even used the factory as a training facility for inspectors, the factory's owners, Cape Asbestos, were never prosecuted in thirty years prior to the factory's closure. This was despite an appreciable increase in the asbestosis rate over the same period. While Marre did not uphold the specific allegation that the Factory Inspectorate had been 'overfriendly' with Acre Mill's managers, the report was a damning criticism of the Inspectorate's conciliatory approach to enforcement. Indeed, on hearing of the Mill's closure in 1970, the District Inspector felt fit to write to the firm, 'I am very sorry to hear that you are

¹⁶⁹ Tweedale and Hansen, *Magic Mineral to Killer Dust*, vii–viii; Alfredo Menéndez-Navarro, "Alice-A Fight for Life (1982) and the Public Perception of the Occupational Risks of Asbestos," *Journal of Medicine and Movies* 3, no. 2 (2007).

¹⁷⁰ *5rd Rep. Parl. Cmm. Admn.*, 189–211.

¹⁷¹ *Ibid.*, 209.

closing and I should like to thank you, on behalf of my colleagues, for all the co-operation we have had from you over the years.¹⁷²

It was within this critical context that in May 1976, the HSC appointed an Advisory Committee on Asbestos (ACA), led by HSC's chair, Bill Simpson. Considering the expanded scope of health and safety legislation under the HSWA, ACA was briefed with examining the risks asbestos posed to workers and the public, and considering whether any new measures were needed.¹⁷³ ACA's first report, published in July 1978, proposed new controls over work involving asbestos in sprayed coatings and acoustic and thermal insulation. These included prohibiting new work involving these applications, the licensing of contractors, and the notification of work to the HSE.¹⁷⁴ Its final report, published in October 1979, responded to concerns about the wider public health impact of asbestos by recommending several measures to control asbestos inside and outside the workplace. Stringent new control measures for 'white' and 'brown' asbestos were adopted, as well as a prohibition on the import and use of 'blue' asbestos.¹⁷⁵

However, in a sign of how European developments increasingly dictated British health and safety policy, the development of British asbestos regulations was delayed owing to work on two directives: a directive on worker protection, and a directive on the marketing and use of asbestos and asbestos products.¹⁷⁶ Negotiations over these

¹⁷² Ibid., 203–4, 206.

¹⁷³ House of Commons, "The Employment Committee. Session 1982-83. The Work of the Health and Safety Commission and Executive: Asbestos. Minutes of Evidence," HC 87-iii, (January 19, 1983), 127.

¹⁷⁴ Ibid., 128.

¹⁷⁵ Ibid., 151.

¹⁷⁶ Ibid. Directives 83/477/EEC and 83/478/EEC.

directives, eventually agreed in September 1983, proceeded extremely slowly owing to disagreements between member states over exposure limits and the scope of the proposed controls.¹⁷⁷ The need to coordinate the ACA with European developments meant that it was not until 1983 that new licensing regulations were eventually made. However, as with major hazards, the pre-existence of a dedicated body of expertise in Britain meant that HSE entered European negotiations with a strong hand. Consequently, as Cullen described, the European directive on the protection of workers from asbestos ‘reflected British experience and practice.’¹⁷⁸ In 1985, the licensing regulations were followed by regulations prohibiting the use of asbestos in spraying and insulation, and the marketing, import and use of ‘blue’ and ‘brown’ asbestos.¹⁷⁹ However, it was not until 1987 that the European directives and ACA’s recommendations were fully implemented in Britain, in the Control of Asbestos at Work Regulations.¹⁸⁰

4.7.3. Toxic substances

Besides nuclear radiation, asbestos was perhaps the archetype of the ‘new’, modern health risk, exerting its delocalised effects far beyond the workplace. However, other significant developments between 1974 and 1984 helped extend regulatory control over toxic substances. In August 1981, the Control of Lead at Work Regulations 1980 (CLAW) and its accompanying code of practice came into effect, applying quantitative

¹⁷⁷ Wilson, *The Politics of Safety and Health*, 146–7; HSC, “HSC/88/66,” 1.

¹⁷⁸ HSC, *Report 1983-1984*, 3.

¹⁷⁹ Asbestos (Prohibition) Regulations, SI 1985/910.

¹⁸⁰ SI 1987/2115.

control limits for lead across the whole of British industry.¹⁸¹ A novel requirement in these regulations was for employers to conduct ‘assessments’ of the ‘nature and degree’ their employees were exposed to lead. These assessments would be revised, and steps taken to control the risk, as appropriate.¹⁸² While the HSWA had incorporated an implicit requirement for employers to assess risks, CLAW was the first time that such an explicit demand had been placed on employers outside the nuclear and major hazards field to undertake assessments as a way of maintaining and improving standards.¹⁸³ In embryonic form, CLAW thus embodied the risk management approach to regulation that HSC/E expanded, promoted and codified in the late 1980s and 1990s.

In February 1977, an Advisory Committee on Toxic Substances (ACTS) was established to advise the HSC on the risks to workers and the general public associated with the manufacture and use of toxic substances. One of its early tasks, in addition to work on specific substances, such as lead, was the preparation of proposals for a statutory notification scheme for toxic substances. As with hazardous installations, the rationale behind notification was to provide regulators with data so they could anticipate risk: in this case, advance warning about chemicals that could produce adverse health effects in workers and the general population.¹⁸⁴

¹⁸¹ SI 1980/1248; HSC, *Report 1981-82*, 13.

¹⁸² Control of Lead at Work Regulations 1980, no. 4.

¹⁸³ HSC, *Report 1978-79*, 2.

¹⁸⁴ See HSC, “Proposed Notification Scheme for the Notification of New Chemicals,” October 1974, TNA EF7/7; HSC, *Report 1979-80*, 4; Robens, *Safety and Health at Work*, 106.

Once again, however, European developments interfered with the development of domestic proposals. A major directive in September 1979, on the classification, packaging and labelling of dangerous substances, required European manufacturers and importers to submit, at least 45 days before a dangerous substance was marketed, a notification to regulators. This notification included technical data allowing regulators to evaluate the risks posed by the substance, as well as a declaration of any known adverse effects in its intended application.¹⁸⁵ The directive's requirements relating to the testing and notification of new chemicals came into force in September 1981. In relation to this, the European Commission began the process of compiling a database, known as the European Inventory of Existing Commercial Chemical Substances (EIECCS), which listed chemicals marketed in the EC between 1971 and 1981. EIECCS acted as a baseline against which 'new' chemicals marketed in the EC could be identified, allowing regulators, for the first time, to get a handle on the proliferation of toxic chemical substances.¹⁸⁶ The Notification of New Substances Regulations, implementing the directive in Britain, were laid before Parliament in 1982.¹⁸⁷

4.8. Conclusion

The inaugural decade of the HSC/E resulted in many positive changes for the British system of health and safety regulation. Whether it stemmed from concern or genuine interest, HSC/E officials reported that workers and members of the public were

¹⁸⁵ Directive 79/831/EEC, Article 6, Annex VII; HSC, *Report 1979-80*, 4.

¹⁸⁶ HSC, *Report 1981-82*, 13.

¹⁸⁷ SI 1982/1496

increasingly aware and vocal about health and safety issues. Health and safety became a much more prominent topic in the national media, illuminated by television documentaries such as *Alice: A Fight for Life*. Political concern developed about the wider public health and environmental consequences of occupational hazards such as asbestos. The regulatory framework introduced by the HSWA enabled a more coordinated and concerted response to hazards in comparison to the fragmented and piecemeal arrangements of the old Factories Act system.¹⁸⁸

As demonstrated by their evidence to the House of Commons Employment Committee, both the TUC and CBI believed that the HSWA had led to improvements in health and safety. In particular, arrangements for consultation and participation in decision-making had been enhanced at all levels of regulation. The consolidation of policy, enforcement and research resources under the HSC/E had also transformed the regulatory response to workplace hazards. Whereas before 1974, these resources were compartmentalised and had little to offer beyond their immediate area of focus, the amalgamation of resources under the HSC/E offered a more sophisticated approach, drawing upon the combined expertise of numerous professional groups and specialisms. The Safety and Reliability Directorate's input in the risk analysis of major hazards at Canvey Island was just one example of the new integrated approach in operation. Crucially, health and safety policymaking and enforcement was now divorced, on the whole, from government departments with a sponsoring role for particular industries, such as nuclear energy. Health and safety, in a sense, had come into its own, crystallising as a singular domain of regulatory and professional activity.

¹⁸⁸ HSC, *Report 1983-1984*, 3.

The HSWA generated a new regulatory and industrial impetus against occupational accidents and illness: particularly the former, although the need to confront occupational health risks was increasingly recognised. Consultation and coordination, both weak before 1974, were considerably strengthened over the decade. They were improved through statutory means, such as the SRSC regulations, as well as through administrative means, such as advisory committees. The political consensus forged through these arrangements, especially on the HSC itself, created a sense of growing commitment to health and safety, demonstrated by the rising number of safety representatives and committees in firms.¹⁸⁹ The British Workplace Industrial Relations Survey estimates that the proportion of British workplaces (of 25 or more employees) with worker safety representatives but no committee increased from 21 per cent in 1980 to 41 per cent in 1984, although subsequent developments painted a more nuanced picture, with the proportion declining to 24 per cent by 1990.¹⁹⁰ Regardless, in this inaugural period of the new regulatory system, health and safety became an object of everyday management in many workplaces, as the CSHW had intended. Encouraged by the SRSC regulations, many trade unions began to take a more active role in health and safety, and employed professional safety officers.¹⁹¹

While controversy was generally avoided, consensus resulted in a remarkable degree of public and political acceptability for health and safety regulation, certainly in

¹⁸⁹ HSC, *Report 1982-83*, 4.

¹⁹⁰ Neil Millward, Alex Bryson, and John Forth, *All Change at Work?: British Employment Relations 1980-98, Portrayed by the Workplace Industrial Relations Survey Series* (London: Routledge, 2000), 117.

¹⁹¹ Jacques, Interview.

comparison to other countries, such as the USA.¹⁹² Evidence from former CBI and TUC commissioners suggest that relations on the Commission were invariably cordial, even relaxed. As one former TUC Commissioner remarked, ‘that’s the job, isn’t it? You’ve got to be diplomatic.... I mean you can’t be on this thing for so long and start knocking lumps off everybody at every meeting.’¹⁹³ It is telling that in 1982, as political and economic scrutiny of health and safety regulation grew, the TUC was accused by the Employment Committee of mounting a better defence of the CBI’s attitude towards health and safety than the CBI could muster itself.¹⁹⁴ Consensus appeared to be paying off: the number of fatal and non-fatal accidents fell over the decade.

Yet, economic recession and financial constraint revealed just how fragile this consensus was. Once again, health and safety began to be neglected in some quarters of industry, and HSC/E could not meet all the demands on their time and energies — a situation exacerbated by the EC’s growing influence over British health and safety policy. Cuts in HSC/E’s grant-in-aid were cushioned by redundancies in clerical and support staff; however, HSE’s capacity to respond to risks, both existing and emerging, was weakened. It was not until the 1990s, with even more responsibilities to shoulder, that HSC/E’s finances and staffing began to recover.

These constraints illuminated the fair weather that accompanied reform in the early 1970s. The self-reliant health and safety ‘culture’ endorsed by the CSHW, far from being engrained, was still precarious. The reduction in workplace accidents in the 1970s and early 1980s is not just attributable to better attitudes on the part of

¹⁹² HSC, *Report 1982-83*, iii–iv; Wilson, *The Politics of Safety and Health*.

¹⁹³ Jacques, Interview.

¹⁹⁴ House of Commons, “Employ. Cttee. Wed 16 June 1982,” 57.

employers and employees, but the fortuitous consequences of industrial change. As manufacturing declined, workers transferred to less hazardous occupations in the service sector. Nevertheless, progress in reducing accidents was sustained in part because of measures to increase participation in health and safety decision-making. Consensus conferred resiliency to health and safety regulation and allowed it to weather choppy political and economic waters.

In evaluating this period, one cannot ignore the professional and other difficulties that prevented HSE's operational integration. While externally, health and safety emerged as a unified domain of regulatory activity, internally, HSE was beset with tribalism and suspicion. Locke's attempts to appoint a single Chief Inspector were soundly defeated in the early 1980s. It was not until the 1990s that the various organisations amalgamated under HSE began to look and behave like a single organisation.

In terms of regulation, however, the HSWA permitted a new, more integrated approach to industrial hazards. By 1984, a comprehensive regulatory regime for major hazards had been introduced, and one for toxic substances (COSHH) was underway. New regulations had been introduced, such as NADOR, which applied health and safety legislation across the entire scope of British industry for the first time. Meanwhile, many of the piecemeal regulations that littered the pre-1974 statute book began to be swept away. In this regard, action on the legislative components of the 'Robens philosophy' proceeded apace.

However, perhaps the most significant development lay under the surface. The CLAW regulations, HSE's approach to major hazards, and the rise of CBA signalled the growing importance of risk management as an explicit regulatory technique and

philosophy. Crucially, both risk assessment and CBA were more vigorous, formalised ways of making decisions and judgements about risk that were already performed under health and safety legislation. As we have seen, the HSWA implicitly required employers to assess risks when coming to a decision about what was ‘reasonably practicable’ to do in particular circumstances. Further, the HSC’s consultation procedures implicitly took into account cost when making decisions about particular control instruments — regulations, codes of practice or guidance.

Chapters 5 and 6 develop this theme further, demonstrating how, after 1984, formal risk assessments became a central part of the regulatory control of occupational hazards in Britain. Risk assessments moved from being the concern of nuclear power plants and large industrial operations to the concern of every employer, regardless of their size or intrinsic hazard of their operations.

5. Expanding the System, 1984–1992

5.1. Introduction

Chapter 5 argues that, between 1984 and 1992, risk crystallised in Britain as an explicit and formalised means for employers to evaluate and control occupational hazards: risk management. As Chapter 4 described, the 1980 CLAW regulations were significant in that they made explicit, for the very first time, the employer's duty to conduct assessments of work which could expose employees to hazards, be it physical injury from a machine, or exposure to a harmful substance. Previously, such a duty had only been implied in the HSWA, embodied in the SFAIRP qualification, and the requirement for employers to produce a written safety policy.

Between 1984 and 1992, however, risk assessments became an overt requirement for employers under a host of new regulations, including the Control of Asbestos at Work Regulations 1987, the Electricity at Work Regulations 1989, and the Noise at Work Regulations 1989. Most notably, the Control of Substances Hazardous to Health Regulations 1988 (COSHH) extended a formalised risk management process across the entire occupational health field, requiring employers to conduct 'suitable and sufficient' assessments as the basis for control decisions.¹ By 1991, Rimington could state with some conviction that 'on risk assessment, significant progress has been made in consolidating HSE's leading position among the world's regulators.'²

¹ HSC and HSE, *Annual Report 1987/88* (London: HMSO, 1988), 3.

² HSC, *Annual Report 1990/91* (London: HMSO, 1991), xii.

HSE's 'leading position', however, was somewhat tempered by the increasing dominance of the EC over British health and safety policy. Chapter 5 analyses why, by the early 1990s, the engine of health and safety policy had firmly switched from London to Brussels. Since 1957, occupational health and safety legislation had been subject to unanimous decision-making in the Council of Ministers, meaning that member states including Britain had considerable leeway to shape the direction of European law. Following the Single European Act in 1986, however, health and safety at work became subject to qualified majority voting (QMV). No longer able to exercise a veto over proposals emanating from the European Commission, Britain's capacity to influence the direction of European health and safety legislation was severely weakened.

The new dynamic of European politics was brought home during the frantic negotiations over the Framework Directive on Safety and Health, adopted in June 1989: the single largest package of European health and safety legislation to date. Demonstrating how considerations of time and cost were central to the British regulatory approach, officials' plea that new controls should be based on risk assessment was inadvertently transformed into the absolute requirement for employers to conduct and revise *written* risk assessments.³ Consequently, the new 'six-pack' of regulations that came into force in Britain in 1993, covering such matters as display screens and manual handling, contained the requirement for employers to conduct written risk assessments, even though many of these laws were not considered a

³ "Council Directive of 12 June 1989 on the Introduction of Measures to Encourage Improvements in the Safety and Health of Workers at Work (89/391/EEC)" June 29, 1989, OJ L 183; Rimington, "Valedictory Summary," 14.

domestic priority. What was originally, for most areas of health and safety risk, a largely informal, mental device to evaluate and control hazards was now transformed into a formalised procedure and physical object.

In other respects, however, the crystallisation of HSC/E's risk management approach enhanced their reputation and power, and expanded the scope of the British regulatory system. In response to several major disasters in the 1980s and 1990s, the HSC/E assumed responsibility for several new areas of policy and enforcement, including mains gas supply, genetically modified organisms, railway passenger safety, and offshore oil and gas. As a result, the HSC/E acquired a remit that was unparalleled among health and safety regulators worldwide, and a virtual monopoly over the regulation of risks arising from industrial activity. HSC/E's influence extended from the smallest of offices to the largest of oil rigs, and over the entire spectrum of hazards, from manual handling to nuclear radiation. As Cullen wrote in 1988, 'safety and health is a dimension of all work activity, entering into the way every industrial process is carried out and every business is organised.'⁴

It is in this expansion of HSC/E's policymaking responsibility that Chapter 5 illuminates a central paradox. While functionally, the HSC/E's field was the largest it had ever been, financially and in terms of political rhetoric, British health and safety regulation came under concerted pressure. HSC/E's acquisition of new functions was counteracted by continuing demands from government to increase efficiency, a demand that gained added momentum under John Major's Conservative government (1992–1997). Whereas previously, health and safety had been identified as a problem

⁴ HSC and HSE, *Annual Report 1987/88*, 3.

of big government in general, and the HSE shared cuts which were directed across the civil service as a whole, by the mid 1980s health and safety legislation was specifically implicated as an area of legislation which imposed excessive ‘red tape’ on business. Consequently, the HSC/E were subjected to sustained political and financial scrutiny. As Rimington mused, ‘for a time HSC/E appeared the principal inhabitants of death row.’⁵

The origins of this scrutiny and anti-regulatory sentiment in the British government were related to both the emergence of a free-market political ideology in the British Conservative Party—neoliberalism—and a connected series of changes in public administration, referred to by Hood as the ‘new public management’ (NPM).⁶ NPM emphasised the need, among other things, for governments to employ private-sector standards of performance monitoring and financial control. Accordingly, risk gained centrality as a supposedly objective lens through which important policy decisions could be made concerning the costs and benefits of regulation—CBA being a tangible outcome of this development. Chapter 6 elaborates this theme, showing how, between 1992 and 2001, HSC/E systematised its risk-based approach as a way of legitimising its activity, and opening up its decision-making to public and political scrutiny.

⁵ Rimington, “Valedictory Summary,” 14.

⁶ Christopher Hood, “A Public Management for All Seasons?,” *Public Administration* 69, no. 1 (1991): 3–19.

5.2. Overview

As in previous chapters, Chapter 5 emphasises the importance of wider social and economic trends in shaping the political environment in which British health and safety regulation developed between 1984 and 1992. Section 5.3 highlights how deindustrialisation and industrial fragmentation challenged many of the assumptions of the post-1974 (HSWA) regulatory framework, and forced the HSC/E to adjust their priorities. In particular, small firms became a central political issue, while privatisation generated questions about how safety could be secured in the fragmented organisational structures of former nationalised industries.

Sections 5.4 and 5.5 expand on Chapter 4's focus on deregulation, showing how British health and safety policy was influenced by the emergence of 'new public management' (NPM). Emphasising the virtues of private-sector styles of governance, the politics of NPM exposed British health and safety regulation to considerable financial and political scrutiny.

At the same time that HSC/E were encouraged to become more transparent and accountable, their field of responsibility expanded massively over the late 1980s and 1990s. This apparent contradiction in the British government's attitude towards health and safety is the subject of sections 5.6 and 5.7. These sections demonstrate how, by the 1990s, a considerable proportion of HSC/E's work was devoted to public protection, as opposed to workers' health and safety – an extraordinary transformation in the object of British health and safety regulation. While the HSWA embodied concerns about public protection, HSC/E's bias towards workers' health and safety meant that their public responsibilities were not fully accepted in the 1970s. However, a succession of major disasters over the 1980s, such as the fire at Bradford City FC in

May 1985, reaffirmed the need for HSC/E to protect the public. By the 1990s, a major proportion of HSE's resources was devoted to public health and safety issues.

Section 5.8 considers another pivotal transformation in the British regulatory approach to health and safety in the late 1980s: the emergence of an explicit demand for employers to undertake risk assessments. While the 1980 CLAW regulations were the first to directly require employers to assess risk, risk assessments became an explicit requirement of many new regulations in the 1980s and early 1990s, most notably the 1988 COSHH regulations.

The final section highlights why by 1992, the European Commission rather than the HSC had become the dominant driver of British health and safety regulation. The Framework Directive on Safety and Health, agreed in June 1989, was designed to create an integrated framework of European health and safety legislation in much the same way as the HSWA in Britain, albeit on a much grander scale. The Framework Directive's 'daughter' laws on matters such as manual handling and workstations (the so-called 'six-pack' of regulations coming into force by 1993) introduced many new requirements into British law which are now part of the established 'fabric' of health and safety: for instance, employers' obligation to provide eye tests for habitual users of computer screens. They also clarified aspects of British law which were previously ambiguous, such as the requirement for employers to undertake risk assessments. Over the course of European negotiations, this was amplified into the requirement for employers to undertake formal *written* assessments of work which could expose employees and other persons to risk. The European Framework Directive, therefore, established many of the current contours of the British system of health and safety

regulation. However, in so doing, it also created the conditions for significant controversy.

5.3. Health and Safety in the 1980s: Industrial Change, Risk and Regulation

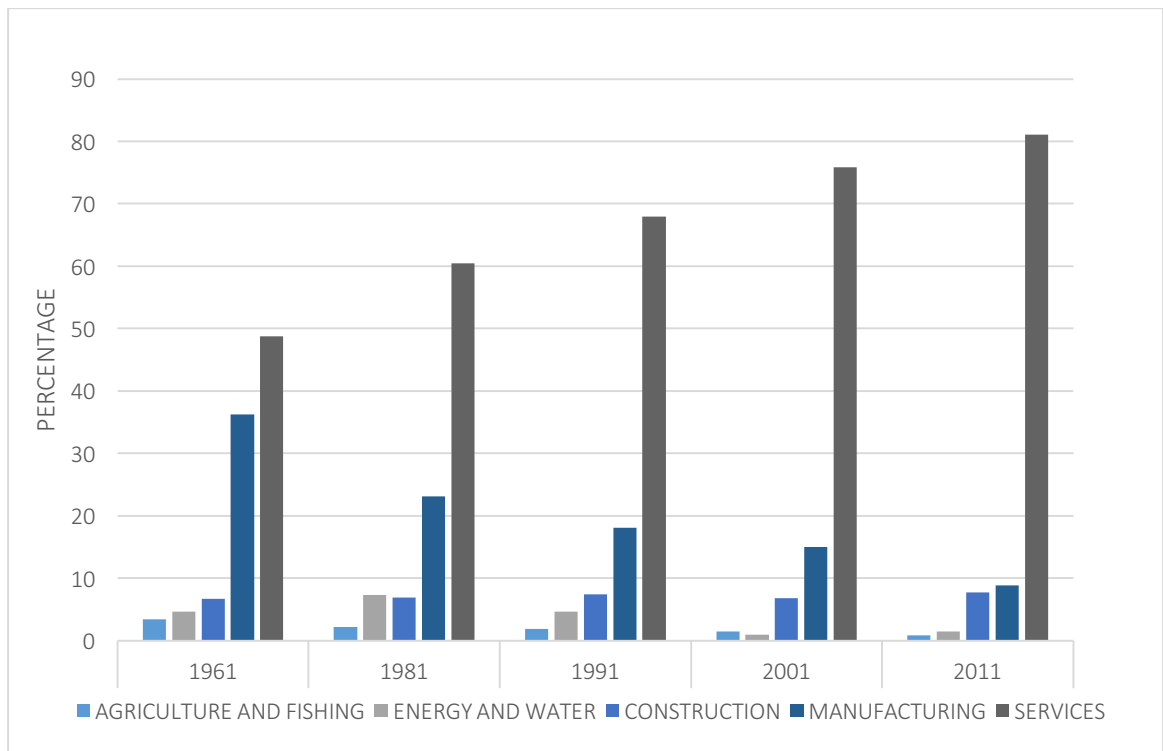
The changing structure of employment had profound effects on British health and safety policy between 1984 and 1992. While policymakers had recognised many of these trends long before HSC/E's establishment (for example, the decline in manufacturing), these changes accelerated over the 1980s, requiring the HSC/E to adjust their regulatory priorities. Significant changes occurred in both the composition of the British workforce and the relative size of industrial sectors, calling into question many of the underlying assumptions of the post-1974 regulatory model. These were based on early-seventies vision of British industry, which was still dominated by large industrial firms.⁷

In manufacturing, HSE's historic stronghold, employment declined by over 20 per cent between 1980 and 1990 alone.⁸ This continued a much longer trend: in 1954, 8.2 million workers, 35 per cent of Britain's entire workforce, was employed in manufacturing. By 1986, this had declined to just 5.5 million, or 22 per cent. In contrast, employment in business and other services rose from 2.1 million (9 per cent) to 4.9 million (20 per cent) over the same period (Figure 16).

⁷ See Walters and James, *Robens Revisited*, 31.

⁸ *Ibid.*, 9–12.

Figure 16. Employment by industrial sector, 1961–2011.⁹



Self-employment also figured more prominently in late-1980s health and safety policy, having risen from 7.3 per cent of all employment in 1979, to 11.2 per cent in 1984. Meanwhile, the number of small firms also rose significantly, a product of both industrial fragmentation (the splitting-up of large businesses into several smaller ones) and new start-ups. By 1993, 44 per cent of British workers were employed in businesses with fewer than 50 employees.¹⁰ Sub-contracting, temporary, part-time and flexible work also increased (especially in construction), posing problems for how HSC/E directed its policies, and how safety was organised in firms.¹¹ The principal

⁹ ONS. Data for 1971 is omitted due to the inconsistent categorisation of industry in the 1971 census.

¹⁰ Walters and James, *Robens Revisited*, 9–10.

¹¹ HSC and HSE, *Annual Report 1986/87* (London: HMSO, 1987), HSC Report, 3.

driver of such developments was deindustrialisation, but economic recession in the mid 1980s exacerbated the collapse of primary and secondary industry, encouraging the transfer of labour to the service sector. Government policy, such as the promotion of a flexible, deregulated labour market, further promoted small firms and self-employment.¹²

These structural changes in employment posed significant challenges for HSC/E. As Cullen wrote in 1984, 'the continuing decline in primary manufacturing industry with the accompanying increase of the number of small firms, often in high technology fields, has become increasingly pronounced in recent years. The replacement of individual large units by a multiplicity of separate ones poses obvious difficulties for our inspection policies.'¹³

One of the more pronounced difficulties accompanying industrial change was the question of HSC/E's continuing relationship with local authorities. Local authorities had assumed important new enforcement functions after 1974, and deindustrialisation promoted the movement of workers to premises in their field of responsibility. This was problematic in terms of policy dissemination, the regulation of non-industrial risks, and HSC's supervision of local authority enforcement. While HSE's Local Authority Unit attempted to interpret HSE standards for local authority use, this was a complicated and sensitive issue, considering that risks in the service sector were generally much lower than in industry, and often poorly grasped by the public. Allegations of over-regulation or over-enforcement could arise if HSC/E set standards

¹² Walters and James, *Robens Revisited*, 10.

¹³ HSC, *Report 1983-1984*, 3.

that were too voluminous or detailed.¹⁴ At the same time, HSE's resources were stretched by the large number of service-sector premises it had taken on after 1975, outside its historical area of expertise. This included responsibility for such places as public swimming pools, for which HSC published new guidance in 1988.¹⁵ Following negotiations, local authorities assumed additional responsibility for places of worship, entertainment, leisure and sport facilities in April 1990.¹⁶

A second major difficulty for HSC/E was promoting health and safety in many of the smaller firms that were now beginning to receive political and regulatory attention. As Chapter 4 explained, in the 1970s small firms were low on HSC/E's priorities, and were often overlooked in inspection. As the Labour MP Michael Meacher argued in 1987, 'firms employing fewer than 25 persons are virtually left to their own devices, without any visits at all, even though small firms are notoriously recognised to be far more accident-prone.'¹⁷ However, by the mid 1980s, industrial change and the deregulatory agenda had highlighted the need for small firms to be given greater recognition. Their size and more informal organisation meant that many were poorly equipped to manage safety, and had a more limited understanding of legal requirements. Their knowledge of occupational health was frequently poor or non-existent, while many were unable to bring in specialist expertise or establish occupational health services because of their cost. At the same time, their scattered geographical nature meant that small firms were much harder than larger companies

¹⁴ Rimington, Interview, pt. 1.

¹⁵ HSC and HSE, *Annual Report 1987/88*, 15.

¹⁶ HSC, *Annual Report 1990-91*, 8, 25; The Health and Safety (Enforcing Authority) Regulations 1989, SI 1989/1903.

¹⁷ HC Deb 2 December 1987 vol. 123 col. 997.

for HSC/E to reach in publicity efforts, especially for regulatory agencies which were more in tune with the workings of big business.¹⁸

This is not to say that risks in small firms were insignificant. A 1991 study showed that workers in small manufacturing companies (under 50 employees) were 20 per cent more likely to suffer accidents than workers in medium-sized firms, and 40 per cent more likely than workers in very large firms.¹⁹ What the deregulatory agenda overlooked was that in contrast to larger firms, many small firms preferred the older, prescriptive style of regulation under the Factories Act to the HSWA's goal-based approach. This is because they did not have the time or resources to determine how to comply with the law.²⁰ As Meacher explained, 'small firms do not consider health and safety inspections a burden. They do not want deregulation. They want more help, not less—after all, it is given free—to learn how to prevent and tackle uncontrolled hazards, accidents and health damage to their work force.'²¹

By the mid 1980s, HSC/E had thus begun to recognise their responsibility to small firms. HSC's third chair, the businessman Frank Davies, took a particular interest in smaller workplaces, holding a regular series of breakfast meetings with business leaders to familiarise himself with their priorities.²² Measures such as the establishment of a small firms working group in 1986, and a concentration on smaller firms during the European Year of Safety, Hygiene and Health Protection at Work

¹⁸ HSC and HSE, *Annual Report 1986/87*, 3, 11; HSC, *Report 1985-86*, 4, 14; HSC, *Annual Report 1988/89* (London: HMSO, 1990), 4.

¹⁹ HSC, *Annual Report 1991/92* (London: HMSO, 1992), 5.

²⁰ HSE, *Reducing Risks, Protecting People*, para. 34.

²¹ HC Deb 2 December 1987 vol. 123 col. 1002.

²² Eves, Interview, pt. 3.

(1992–3), also helped address this imbalance. By 1988, HSE produced its first guidance booklet tailored to small firms, *Essentials of Health and Safety at Work*.²³

Industrial fragmentation was not confined to the private sector. In the public sector, the British government privatised several nationalised industries between 1984 and 1991, including British Gas and British Rail. This directly impacted health and safety regulation, since not only did the HSC/E assume regulatory responsibility for these industries, but new regulatory regimes were established which encompassed dozens of private operators in place of former state monopolies. Privatisation was central to the emergence of the ‘regulatory state’, since in place of a direct role in providing public services, such as an integrated rail network, the state (including the HSC/E) began to assume a more indirect, regulatory role.²⁴

These industrial changes were also reflected in the risks HSC/E and the European Commission confronted in the 1980s and 1990s. The growing importance of office work, for example, was reflected in 1992 regulations on workstations and display screens, incorporating ergonomic principles to combat musculoskeletal and eye complaints. As acute occupational accidents and diseases declined, the economic consequences of long-term occupational ill health became more visible. By the late 1980s, British health and safety policy had widened to encompass issues which had previously been occluded: alcoholism, smoking, stress and violence at work, even the impact of HIV/AIDS on nurses and other healthcare professionals.²⁵ Some of the

²³ HSC and HSE, *Annual Report 1986/87* HSC Report, 4, 10, 14. HSC, *Report 1985-86*, 3; HSC, *Annual Report 1988-89*, viii.

²⁴ Hutter, “The Attractions of Risk-Based Regulation,” 3.

²⁵ HSC and HSE, *Annual Report 1987/88*, 36.

factors underpinning this movement in the regulatory gaze, such as improved statistical knowledge, are considered in Chapter 6.

5.4. Neoliberalism and Deregulation: 'Lifting the Burden' of Health and Safety, 1984–1994

Throughout this thesis, I have shown how the development of the British system of health and safety regulation has been intimately linked to wider trends in British politics, economics and industrial relations. In particular, in Chapter 4 I highlighted the emergence of a deregulatory political rhetoric in the British government after the Conservative election victory in May 1979. As I explained, the Conservatives entered government with a pro-business agenda, seeking to reduce perceived government waste. While cuts to the HSC/E were certainly severe, the HSC/E shared cuts which were directed across government as a whole.

However, as the deregulatory agenda gathered pace over the 1980s, health and safety was specifically implicated as an area of legislation which imposed unnecessary 'burdens' on business, particularly the smaller firms the government was attempting to encourage. The 1985 white paper *Lifting the Burden* highlighted how 'regulations have grown over the years to a stage where many of them are too heavy a drain on our national resources.... The tide of legislation has risen inexorably over the years in all countries of the western world.'²⁶ Consciously inspired by the efforts of President Reagan in the USA, health and safety was placed alongside the environment, planning,

²⁶ *Lifting the Burden*, Cmnd 9571, 1985, 2.

tax and social security as areas where excessive legislation and administrative demands could be removed. Although it asserted that ‘the Government ... have no intention of downgrading health and safety standards’, it identified a number of priorities, including the need to increase inspectors’ training in relation to small firms, designate a member of the HSC to act as small firms representative, and increase the threshold for employers to produce a written safety policy from five to twenty employees.²⁷

A follow-up white paper, *Building Businesses Not Barriers* in 1986 similarly identified health and safety as part of an insidious problem of ‘red tape’. Even though a government consultation had shown that ‘relatively few of the smaller employers ... found the cost of compliance with health and safety regulations to be a significant burden’, the document reiterated the need for HSC/E to engage with small firms and remove redundant legal provisions.²⁸ The results of the government’s own consultation highlight that the issue of ‘red tape’ and ‘over-regulation’ was by no means universal, and that small firms, far from being simple to understand, were actually rather complex. Like the trade unions, small firms did not speak with one coherent ‘voice’. As Meacher’s comments above indicated, many small firms preferred the old-style, detailed regulations under the Factories Act. From the perspective of the Conservative Party, regulation was a barrier to market entry and an inhibitor of competition.²⁹ For many small firms, the exact opposite was the case: the new-style, goal-based regulations under the HSWA were more costly, conceptually and financially, since they placed the onus for determining how to control risk on the employer. Statements

²⁷ Ibid., 22–3.

²⁸ *Building Businesses ... Not Barriers*, Cmnd. 9794, 1986, 37.

²⁹ Ibid., 1–4 HC Deb 13 June 1986 vol. 99 cols. 665-731.

such as Meacher's directly challenged the neoliberal orthodoxy that by removing regulations, economic growth would be secured and employers freed to pursue their own ends.

This ideological shift towards deregulation was embodied in the British government. In 1986, the Enterprise and Deregulation Unit was established in the DE to act as a 'central task force' for deregulation in government. In other departments, Deregulation Units were formed to carry out compliance cost assessments (CCAs), evaluations of the costs to businesses resulting from existing and proposed regulations. The EDU, renamed the Deregulation Unit in 1987 and transferred to the DTI, was supported by an advisory panel of businessmen with links to small firms, known as the Deregulation Task Force.³⁰

The Conservatives' deregulatory agenda received new impetus against the backdrop of the Maastricht Treaty and an influx of new European legislation in the late 1980s and early 1990s. European health and safety legislation represented a direct challenge to deregulatory ideology, since the British government considered it to be overly prescriptive and thus antithetical to the British regulatory approach. Despite Britain's opt-out of the 'social chapter' of the Maastricht Treaty, the British government was unable to prevent the transposition of European directives into UK law.³¹ With Europe directly in its sight, the Conservatives' 1992 manifesto argued 'a proper balance needs to be struck between essential protection for the public, and

³⁰ *Building Businesses ... Not Barriers*, 4; <http://www.policy.manchester.ac.uk/resources/regulation/balance/deregulation1948-2006>, last accessed 30 June 2015; Andrea Renda, *Impact Assessment in the EU: The State of the Art and the Art of the State* (Brussels: Centre for European Policy Studies, 2006).

³¹ Beck and Woolfson, "The Regulation of Health and Safety in Britain," 46.

over-zealous and intrusive controls aimed at the elimination of all conceivable risk. It is wrong that new regulations, designed to deal with isolated problems, should interfere with the private arrangements of citizens or with reasonable commercial practices that have earned broad public acceptance.³² The government pledged that ‘outmoded and burdensome’ regulations would be removed, that the compliance costs of new regulations more closely assessed, and that greater priority would be given to the work of the DTI’s Deregulation Unit.³³

The deregulatory drive did not only exist at the level of political rhetoric. In 1994, the Conservatives gave it a statutory basis in the Deregulation and Contracting Out Act. This Act gave ministers almost absolutist power to remove or reduce legal provisions deemed ‘to impose ... a burden affecting any person in the carrying on of any trade, business or profession.’ Section 37 of the Act specifically highlighted health and safety, giving ministers almost free rein to revoke regulations while providing little in the way of oversight to avoid ‘downgrading’ the law. One of the few checks in place, ironically, was European law, which obliged the UK to maintain minimum standards of worker protection.³⁴

³² <http://www.conservativemanifesto.com/1992/1992-conservative-manifesto.shtml>, last accessed 1 July 2015.

³³ Ibid.

³⁴ Kevin Williams, “Deregulating Occupational Health and Safety: Deregulation and Contracting Out Act 1994, Section 37,” *Industrial Law Journal* 24 (1995); Beck and Woolfson, “The Regulation of Health and Safety in Britain,” 43.

5.5. Regulating the Regulator: NPM and the Scrutiny of Health and Safety Regulation

At first glance, an apparent paradox lay at the heart of British health and safety regulation between 1984 and 1992. On the one hand, the escalation of the Conservatives' deregulatory agenda resulted in ever more forensic scrutiny of HSC/E's activity, and calls to reduce the burden of health and safety regulations on business. On the other hand, the scope of British health and safety regulation increased dramatically over the same period. By 1992, the HSC/E's regulatory 'empire' stretched across almost every British workplace, and across the entire range of occupational hazards. These ranged from everyday slips, trips and falls in shops and offices, to the explosion risks of large chemical installations and the radiation hazards of nuclear power plants.

These trends were not, however, coincidental. As the state hived off more of its direct responsibilities as policymaker and service provider, and assumed a more indirect, supervisory role, continuous scrutiny and audit were one of the key ways in which the state continued to exercise control over arm's-length regulatory bodies such as HSE.³⁵ The politics of NPM espoused the virtues of private-sector management styles in government, and urged public-sector organisations to employ stricter methods of performance monitoring and financial control.³⁶

³⁵ See Michael Power, *The Audit Society: Rituals of Verification* (Oxford: Oxford University Press, 1997).

³⁶ Hood, "A Public Management for All Seasons?," 4–5; Hutter, "The Attractions of Risk-Based Regulation," 2.

There had always been an element of government oversight of HSC/E's work. Due to its broad remit, HSC/E was answerable to several Secretaries of State (principally the Employment Secretary), to whom it gave advice on particular aspects of health and safety policy. To receive funding, the HSC had to submit formal plans of work which were scrutinised by government. Ad hoc questions also arose in Parliament which the HSC/E had to respond to. In these and other respects, HSC/E were never entirely independent; though they had day-to-day autonomy over their operations, the government was able to exert significant influence.³⁷

From the mid 1980s, however, the level and pressure of such oversight intensified. Political scrutiny extended to National Audit Office (NAO) reviews of HSC/E's operation and administration, Public Accounts Committee questioning of their financial management, and Employment Committee enquiries into their workings. Several government probes occurred in 1985/6 alone, the beginnings of what Rimington referred to as a political 'firestorm'.³⁸ The HSE, like other public-sector bodies, was encouraged to develop more sophisticated methods of financial and operational planning, and justify its activities in cost-benefit terms.³⁹ By 1987, the HSE had developed a 'zerobase' system whereby it could measure its 'activities' and 'outputs' in a functional sense, despite the inherent difficulties associated with this in the health and safety context: as discussed previously, not all outputs, such as hazards

³⁷ Hawkins, *Law as Last Resort*, 159–61; Prosser, *The Regulatory Enterprise: Government, Regulation and Legitimacy*, 92.

³⁸ HSC, *Report 1985-86*, 25; NAO, *Report by the Comptroller and Auditor General. Health and Safety Commission and Executive: Operations and Administration*, HC 404, 1985; Interview, John Rimington, 15 April 2014.

³⁹ Hutter, "The Attractions of Risk-Based Regulation," 2.

or accidents prevented, were amenable to quantification. As Rimington argued to the government in 1991, 'the difficulty is that no ready means exists of taxonomising hazards, e.g. overcoming the conceptual difficulty of comparing (1) remote risks; (2) day to day serious injury; (3) non-serious but economically expensive hazards; and attributing "value" on a common scale to each type.⁴⁰

The pressure of responding to political reviews was personally intense for HSC/E officials. As Rimington recalled,

It nearly killed me. I mean one of them was ... a so-called Fundamental Expenditure Review. Now that did affect all departments. It began with the question, should any department exist. And in the course of that I had to write I think eight major papers ... in something like twelve weeks. And one of the things I will always remember in HSE is that a huge burden falls on whoever has to run it, because it's this mixture of policy and technical things potentially affecting the whole of industry. And only the chaps near the top, the three members of the [statutory] Executive, see the whole effort.⁴¹

Despite such gargantuan efforts on the part of HSE officials, there was only so far the organisation could go to become more efficient, while at the same time assuming more and more responsibilities. By 1986, improvements in efficiency could no longer keep pace with inflationary pressures, leading to an acute financial crisis. As Chapter 4 explained, due the retirement of senior inspectors and a freeze on new recruitment

⁴⁰ John Rimington, "Management of the Health and Safety Commission and Executive" March 1991, para. 118–22; HSE, "Zerobase for HSE Functions. II. Functions," 1987, John Rimington, private collection.

⁴¹ Rimington, Interview, pt. 3.

following cuts in the early 1980s, the number of HSE inspectors declined significantly over the decade, from 1,444 in April 1980 to just 1,231 in April 1986.⁴²

The reduction in HSE's resources was bitterly resisted by the trade union movement, who elevated their 'anti-cuts' campaign. The TUC graphically brought home the consequences of cuts in a poster in December 1984. Covered with fake blood and the image of a disfigured hand, the poster read, 'the first cut was the health and safety inspector. The second was the operator's fingers.' The campaign implored trade union members to take action by bringing the cuts to the attention of their local trade union branch and workplace safety committee, writing to their MP, and forwarding letters to the local press.⁴³ The Parliamentary debate on health and safety in December 1987, tabled by Labour, directly linked a spate of recent disasters and decline in safety standards to the government's deregulatory agenda.⁴⁴

HSC/E's financial crisis gained a new political dimension after the DE refused to allocate extra funds for new responsibilities on pesticides, despite assurances to the contrary in Parliament.⁴⁵ A strongly worded letter was sent to the Secretary of State, but although ministers agreed to a slight increase in funding in subsequent years, Kenneth Clarke rejected HSC/E's annual plan of work in March 1987, on account of 'insufficient figured information as to the purposes for which extra money was required.'⁴⁶

⁴² HSC and HSE, *Annual Report 1986/87*, HSE Report, 2.

⁴³ TUC, "The First Cut Was the Health and Safety Inspector. The Second Was the Operator's Fingers," 1984, TUC MSS.292D/145.85/29(1).

⁴⁴ HC Deb 2 December 1987 vol. 1234 cols. 996–1038.

⁴⁵ Rimington, "Management of HSC and HSE," para. 111.

⁴⁶ *Ibid.*, para. 111; HSC and HSE, *Annual Report 1986/87*, HSC report, 3, HSE Report, 2-3.

On one level, as Rimington privately explained, much of the problem stemmed from the fact that HSC/E and central government officials lived in different technical worlds:

[T]here was insufficient mutual understanding between HSE's and the Department's [of Employment] financial advisers; nor was there any link between the relatively sophisticated planning and information systems already existing in HSE and the Department's own developing systems ... plans and bids had been made in HSE largely on the assumption that the same money as had been available last year would be available this, and the coat had been cut accordingly. So, though perhaps no Department had done more than HSE to explore its way into FMI [the Financial Management Initiative], no part of these efforts was visible to the Department or the Treasury.⁴⁷

On another level, however, the financial crisis reflected a certain political ambivalence towards HSC/E's work. This was demonstrated in 1986, when the government failed to defend the HSE against attempts by the DOE, with the support of the chemical industry, to bring IAPI back into its fold.⁴⁸ The extraction of IAPI undermined the integrated approach to health and safety regulation, and highlighted the continued fragility of health and safety's borders.⁴⁹

The effects of a simultaneous decline in resources and increase in responsibility were insidious, as Meacher explained in 1987:

⁴⁷ Rimington, "Management of HSC and HSE," para. 113.

⁴⁸ Ibid., para. 114.

⁴⁹ Ibid., para. 18; HSC and HSE, *Annual Report 1986/87*, HSE Report, 3.

By back-door deregulation through continuous cuts in their own inspectorate, by shifting some of the responsibility to local authorities and insurance companies and by allowing more and more employers to self-regulate without health and safety inspections, the Government are signalling to industry that safety standards are being downgraded and that profitability now overrides health and safety. I am not saying that the Government are unconcerned about safety. I am saying that they are far too concerned about profits and their privatisation goals to let their concern about safety stand in their way. The same message is transmitted by the infrequent inspections, rare prosecutions and derisory penalties.⁵⁰

5.6. From Worker to Public Safety

Despite the loss of IAPI in 1987, most of the movement of regulatory responsibility between 1984 and 1992 was firmly in HSC/E's direction. In February 1984, HSE assumed responsibility for the safety of mains gas supply, previously exercised by the Department of Energy. This notionally extended HSE's remit even to gas safety in the home, since HSE was empowered, under the 1972 Gas Act, to make regulations concerning the installation and maintenance of gas fittings.⁵¹ In 1986, following the Food and Environment Protection Act, responsibility for enforcing pesticides regulations was transferred to HSE from MAFF.⁵² In 1990, after the Clapham rail crash, major new responsibilities for railway safety were allocated to HSE, with the

⁵⁰ HC Deb 2 December 1987, vol. 1234 col. 1001.

⁵¹ The Gas Safety (Installation and Use) Regulations were eventually passed in 1998. HSC, *Report 1985-1984*, 8.

⁵² HSC, *Report 1985-86*, 9.

transfer of HM Railways Inspectorate from the Department of Transport.⁵³ Then, in 1992, the Offshore Safety Act enshrined the transfer of policymaking and enforcement responsibility for offshore installations from the Department of Energy to the HSE, following the catastrophic loss of life in the 1988 Piper Alpha disaster. In other areas, too, HSC/E's remit expanded over the 1980s and 1990s: responsibility for advising ministers on the occupational hazards of genetically modified organisms (1983), and conducting research on the safety of existing nuclear systems, following the government's decision to expand Britain's nuclear power programme.⁵⁴

One of the significant features of this inflation of responsibility was the externalisation of health and safety regulation beyond a narrow concern with workers and the workplace: the health and safety of the general public, as opposed to employees, became a far more prominent feature of HSC/E's work. Before 1974, the public was largely given indirect protection under health and safety legislation. The government's rationale was that if health and safety legislation sufficiently protected workers, the public were protected by default. However, disasters such as Aberfan and Flixborough demonstrated that this was not the case: industrial activity could have catastrophic and unanticipated consequences beyond the workplace. Following the Robens Report, section 3 of the HSWA recognised the need for health and safety legislation to address public safety. As Eves described, the extension of health and safety legislation under section 3 had many unforeseen consequences for officials:

⁵³ This arrangement continued until 2006, when the Railway Inspectorate moved to the new Office of Rail Regulation.

⁵⁴ HSC, *Annual Report 1992/93* (Sudbury: HSE Books, 1993), x.

Section 3 of the Act was really new territory because it had this public safety issue.... We had all sorts of issues.... One of my staff even suggested that we ought to form an ecclesiastical national interest group because there were so many problems in churches.... It was all ridiculous....all these questions were coming up.⁵⁵

Nevertheless, the HSC accepted this responsibility begrudgingly. As Rimington explained, while the Robens Committee had recognised the problem of public safety in relation to industrial activity, the Commission as originally constituted by the HSWA effectively prioritised workers' safety. The Executive found it difficult to convince the Commission to take responsibility for such matters as nuclear safety and toxic materials, and hence the HSE had to largely deal with these problems without Commission support.⁵⁶

As Rimington's comments suggest, there was a constitutional bias against public health and safety in the HSC/E. On the one hand, the inspectorates were historically oriented to workers' health and safety, and were only concerned about the general public when industrial activity directly threatened them (as at Canvey Island). On the other hand, the interest groups represented on HSC were overwhelmingly more in tune with the thinking of workers and businesses. While local authority representatives had nominal responsibility for public safety, local authorities had assumed only limited enforcement responsibilities for offices, shops, residential and catering premises.⁵⁷ The public, therefore, did not feature heavily in HSC's inaugural programme of work.

⁵⁵ Eves, Interview, pt. 3.

⁵⁶ Rimington, Interview.

⁵⁷ That said, this was by far the largest sector of health and safety enforcement in terms of the number of people covered.

Over the 1980s and early 1990s, however, this situation changed. HSC/E's new responsibilities for areas such as railway safety reflected how, in tandem with wider shifts in employment, technology and society, the HSC/E increasingly considered the public to be a legitimate object of health and safety policy. By 1991, as much as 40 per cent of HSE's total work was devoted to issues of public, as opposed to worker protection.⁵⁸

This awakening of regulatory interest in public health and safety emerged from a complex social, political and epidemiological background. Public recognition about the wider health consequences of toxic substances, for example, was reflected in television documentaries such as *Alice: A Fight for Life*, the surge of public inquiries to HSE's telephone lines, parliamentary questions on public health and safety, and major political debates, such as the one in December 1987.⁵⁹ Administrative concerns also highlighted the need for HSE to focus more on public safety: the demarcation of enforcement responsibility between HSE and local authorities, and the need to ensure consistent enforcement standards, required HSE to publish guidance, such as the guidance on public swimming pools published in 1988. However, as before 1974 it was arguably a spate of major disasters in Britain and abroad that did most to reinforce the need to protect 'third persons' from occupational harms.

One disaster above all confirmed the relevance of section 3 of the HSWA, that employers had a duty to protect the health and safety of members of the public who could be endangered by their operations. On 11 May 1985, an accumulation of rubbish

⁵⁸ Rimington, "Management of HSC and HSE," para. 20.

⁵⁹ HSC and HSE, *Annual Report 1987/88*, 36; HC Deb 2 December 1987 vol. 123 cols. 996-1038.

beneath the wooden stands of Bradford City's football ground, Valley Parade, caught fire, resulting in the deaths of 56 people. Prior to the disaster, a HSE inspector had spotted the build up of litter beneath the stands, and in accordance with the memorandum of understanding between the HSE and fire authorities, warned the fire brigade about the potential risk.⁶⁰ However, this advice was not acted upon and the problem was left to grow.⁶¹

Following the disaster, HSE was sued by the victims' families for £35 million. While the families' case was dismissed, the disaster acted as a stark reminder of HSC/E's responsibility for public health and safety. As Rimington described, all of a sudden the 'Commission realised imaginatively that we did have duties to the public!'⁶² This responsibility assumed a new significance following a second stadium disaster, the devastating crush at Hillsborough in 1989, which killed 96 people.⁶³

5.7. Disasters and Risk Management

Major disasters in the 1980s not only refocused regulatory attention on the need to protect the general public, but also reinforced some of the more basic elements of the post-1974 regulatory system. The HSWA, for instance, had enshrined the need for employers to properly manage risk and create safe systems of work. Several disasters in the 1980s, however, exposed major organisational failings in firms both offshore and

⁶⁰ From 1974, fire authorities were responsible for the certification of premises against fire, rather than factory and other health and safety inspectors.

⁶¹ Eves, Interview, pt. 3.

⁶² Rimington, Interview.

⁶³ HSC and HSE, *Annual Report 1986/87*, HSC Report, 14-15; Rimington, "Management of HSC and HSE," para. 37; HSC and HSE, *Annual Report 1987/88*, 29.

onshore. While several of these disasters occurred in areas outside the HSC/E's direct field of responsibility, they acted to justify HSC/E's approach to risk management, as well as the separation of regulatory and enforcement functions from sponsorship roles within government. New responsibilities were added to HSC/E's portfolio as a direct consequence of their supposed independence from government as well as their recognised expertise in risk management.

The report by Anthony Hidden QC into the Clapham rail crash, for example, drew attention to the 'distressing lack of organisation and management' among those with responsibility for safety at British Rail.⁶⁴ Similarly, following the catastrophic explosion on the Piper Alpha oil platform in the North Sea which killed 167 workers, the Cullen Report highlighted 'the significant flaws in the quality of Occidental's management of safety which affected the circumstances of the events of the disaster.'⁶⁵

A third major set of disasters occurred not just outside HSC/E's field of responsibility, but outside Britain, and had a more indirect (though no less significant) impact on British health and safety policy. Major disasters such as Chernobyl and Bhopal, following soon after the Seveso disaster in 1984, exposed the transnational and delocalised dimensions of many new industrial hazards. They demonstrated that control of these hazards could not be secured by one state alone, but only through international negotiation and cooperation. As Cullen wrote in 1986, the Chernobyl disaster had 'immediate and long-lasting physical and psychological effects ... a timely

⁶⁴ Department of Transport, *Investigation into the Clapham Junction Railway Accident*, Cm 820, 1989, 117.

⁶⁵ Department of Energy, *The Public Inquiry into the Piper Alpha Disaster. The Hon Lord Cullen*, Cm 1310, 1990, 238.

reminder of the need for properly managed systems and an effective regulatory framework in the nuclear and major hazards field.⁶⁶ Following Chernobyl, the Cabinet decided to increase the size and pay of the Nuclear Installations Inspectorate, demonstrating once again how public and political pressure following major disasters can influence government policy.⁶⁷

Industrial disasters not only reinforced the need for health and safety legislation to protect the public, but also recognised the need for the public to be a key stakeholder in health and safety legislation. This was intimately bound with the rise of neoliberal governmentality, the movement towards greater accountability and transparency in government (as promoted by NPM), as well as ideas surrounding the ‘democratisation’ of science. These trends sought to empower citizens in terms of such considerations as ‘choice’, but also co-opted individuals into decision-making processes which had hitherto been carried out by government. Here, the public was not only acknowledged as a key recipient of health and safety policy, but an active participant in it. Individuals were increasingly construed as their own ‘risk manager’, able to make their own decisions on the basis of information supplied by ‘experts’.

This focus on individual responsibility and participation (broadly, the neoliberal notion of citizenship) was mirrored in wider public health policy. As the lifestyle component of diseases such as coronary heart disease became recognised by public health experts, public health messages by organisations such as the Health Education Authority focused more on what individuals could do to alleviate their condition (for

⁶⁶ HSC and HSE, *Annual Report 1986/87*, HSC Report, 3.

⁶⁷ Rimington, “Management of HSC and HSE,” para. 91.

example exercise and better nutrition). However, the flip-side of the neoliberal transference of power to the individual was the decentralisation of state control and deregulation. As Topçu argues in the context of Chernobyl, ‘public participation does not necessarily allow a democratization of science, but rather serves to increase the social acceptability of a controversial innovation ... or to shift towards a lesser commitment of the state in public health protection.’⁶⁸

5.8. Assessing Risk: COSHH and the New Risk Management

Over the 1980s the explicit assessment of risk became central to the management and control of risks in the British workplace. In the nuclear and major hazards field, the need for formal risk estimation and evaluation had long been recognised, owing to the potentially catastrophic effects of component and plant failure, and the need for operators to demonstrate the redundancy and reliability of systems.⁶⁹ Following the CLAW regulations in the 1980s, however, assessments became an explicit requirement of many new British health and safety regulations, including the Control of Asbestos at Work Regulations 1987, the Noise at Work Regulations 1989, and, most notably, the Control of Substances Hazardous to Health Regulations 1988 (COSHH). While by no means as rigorous as those demanded of nuclear and major hazard sites — there, risk assessment was predominantly quantitative in form, and probabilistic in character — the

⁶⁸ Sezin Topçu, “Chernobyl Empowerment? Exporting ‘Participatory Governance’ to Contaminated Territories,” in *Toxicants, Health and Regulation since 1945*, ed. Soraya Boudia and Nathalie Jas, Studies for the Society for the Social History of Medicine 9 (London: Pickering & Chatto, 2013), 135.

⁶⁹ HSC, “Risk Assessment in HSE. Note by the Director of Special Hazards Division,” March 1991, para. 16, TNA EF7/3408.

extension of risk assessment to areas of lower intrinsic hazard signified its utility as a way for employers to identify and tailor control measures.

More than any other set of regulations before 1992, COSHH expanded the scope of risk assessment, extending it over the entire occupational health field. Hailed by Cullen as ‘the most important legislative proposal in our 13 years’ existence’, COSHH advanced a single, complete set of controls over hazardous and toxic substances, replacing 356 regulations and several Acts which previously controlled these substances. Only asbestos, lead and ionising radiation continued to be regulated separately.⁷⁰ COSHH’s objective was to streamline British health and safety law, prepare the ground for future EC directives, and take into account changing scientific and medical knowledge of hazards.⁷¹ Underpinning the regulations was the requirement for employers to conduct, and revise where necessary, ‘suitable and sufficient’ assessments of work which potentially exposed employees to risk.⁷² Through risk assessment, employers could gauge the appropriate level of response to prevent or control toxic exposures, drawing upon a hierarchy of control options including changes to workplace design, health surveillance, and personal protective equipment. Signifying how British industrial hygiene had improved after 1974, employers had to meet exposure limits for several substances set by the HSE itself, as opposed to the American Conference of Governmental Hygienists.⁷³

⁷⁰ HSC and HSE, *Annual Report 1987/88*, HSC Report, 3, 8.

⁷¹ HSC, “Control of Substances Hazardous to Health. Note by the Director, Hazardous Substances Division. Annex 2,” March 1984, para. 9, TNA EF7/1430.

⁷² SI 1988/1657, regulation 6.

⁷³ HSC, “Control of Substances Hazardous to Health,” March 1984, para. 15–18.

COSHH took many years to negotiate — HSE originally released a consultation document in August 1984. Throughout the consultation, some employers expressed concern about the costs of complying with the regulations. In particular, the requirements to conduct formal risk assessments, monitor workers' health and keep health records were considered burdensome, with some employers believing that risk assessment required blanket atmospheric monitoring.⁷⁴ While this was a misunderstanding — other forms of information, including data provided by manufacturers and suppliers, could be used to determine control measures — confusion over the purpose of risk assessment persisted after 1989. A HSE survey in 1991 revealed that despite widespread awareness of COSHH, only a small fraction of employers had conducted risk assessments to the required standard. Further, many employers had 'incurred excessive costs ..., [t]he main reasons being the failure to distinguish between hazard and risk, the purchase of unnecessary computer data management systems or other equipment, or the use of expensive but inefficient consultants.'⁷⁵ Reflecting the concomitant growth of the health and safety or risk 'industry', this controversy over risk assessment foreshadowed debates that followed implementation of the European Framework Directive on Safety and Health in 1992/3. Then, employers expressed similar concerns about cost, over-implementation and the

⁷⁴ HSC, "Control of Substances Hazardous to Health. Note by the Director, Hazardous Substances Division. Annex 1," March 1984, para. 6, TNA EF7/1430; HSC, "Control of Substances Hazardous to Health. Note by the Director, Hazardous Substances Division. Annex 5," March 1984, para. 6–7, TNA EF7/1430; HSC, "Control of Substances Hazardous to Health. Note by the Director, Hazardous Substances Division," January 1988, 1, TNA EF7/2441.

⁷⁵ HSC, "Control of Substances Hazardous to Health Regulations (COSHH) First Year — Executive Summary," January 1991, paras. 2–3, TNA EF7/3251.

alleged tendency of consultants to exaggerate legal requirements, or perform tasks that could be easily done by the business itself.⁷⁶

5.9. Framing Health and Safety: The Influence of Europe on British Health and Safety Policy, 1986-1992

5.9.1. A SEA Change in British Health and Safety Policy

The role of Europe as the main driver of British health and safety regulation is a comparatively recent phenomenon. While European policy developments had a significant bearing on British regulations and standards since the UK joined the EC in 1973, following the passage of the Single European Act (SEA) in 1986, the European Commission began to supplant the HSC as the primary source of new initiatives. The implementation of the 'six-pack' regulations in 1993, covering matters such as manual handling, work equipment and display screens, signalled that the engine of British health and safety policy had firmly switched from London to Brussels: as one former CBI member of the HSC, R. F. Eberlie opined in 1990, 'the [European] Commission has seized legislative initiative from the mother of Parliaments.'⁷⁷

The European policy context became increasingly unfavourable to British national interests following the passage of SEA in 1986/7. Emerging out of the Milan Summit of June 1985, SEA was designed to prepare the EC for the completion of the internal market by December 1992, and facilitate the integration of the Community

⁷⁶ Hutter, "The Attractions of Risk-Based Regulation"; HSC, "COSHH First Year Executive Summary," para. 20, 29.

⁷⁷ Eberlie, "New Health and Safety Legislation of the European Community," 96.

into a closer financial and political Union. Specifically, the Act inserted a new article, 8A, into the Treaty of Rome, setting as a goal the introduction of an internal market comprising the 'free movement of goods, persons, services and capital'.⁷⁸

An important consequence of this measure, designed to accelerate this process, was the introduction of qualified majority voting (QMV) for several policy areas in the European Council, including occupational health, safety and welfare.⁷⁹ While health and safety had hitherto been an implicit aim of the Treaty of Rome, advanced in relation to wider social and economic policy, SEA gave it an explicit legislative basis for the first time. New article 118A demanded that 'Member States shall pay particular attention to encouraging improvements, especially in the working environment, as regards the health and safety of workers and shall set as their objective the harmonisation of condition [sic] in this area, while maintaining improvements made.'⁸⁰

Consequently, health and safety policy received an explicit focus and sense of direction in the European Commission.⁸¹ Paragraph 2 of the new article provided for directives to advance minimum health and safety requirements, while avoiding placing unnecessary burdens on small and medium-sized firms.⁸²

SEA had important ramifications for British health and safety policy. Firstly, it greatly increased HSC/E's workload in relation to the negotiation of European

⁷⁸ Alisdair Blair, *The European Union since 1945*, 2nd ed. (Harlow: Pearson Education Limited, 2010), 69; Eberlie, "New Health and Safety Legislation of the European Community," 85–6.

⁷⁹ Wright-Reid, McKee, and MacLehose, "Closing the Gap," 181; Eberlie, "New Health and Safety Legislation of the European Community," 85.

⁸⁰ Single European Act, Article 118A.

⁸¹ Eberlie, "New Health and Safety Legislation of the European Community," 88; "HSC/88/66", April 1988, 5, TNA EF7/2483.

⁸² Single European Act, Article 118(2).

proposals, which soon became dominant over proposals initiated domestically. The ascendance of Europe is reflected in the fact that, between 1981 and 1990, the number of HSC/E projects initiated in response to international demands increased by 22 per cent.⁸⁵

Secondly, SEA increased the pace of new European proposals, reducing HSC/E's time and opportunity to influence proposals and undertake domestic consultations. QMV entailed the weighting of votes from member states relative to the size of their populations. By removing member states' ability to veto proposals, the power of the European Commission relative to member states was strengthened. Britain was therefore forced to consult more vigorously with its European counterparts. Further, SEA introduced a 'cooperation procedure' which boosted the European Parliament's influence over Council decision-making.⁸⁴ While intended to increase the Council's democratic accountability, the procedure exposed its decision-making to the prospect of frequent amendment. This complicated British policymaking still further, meaning that planning, consultation, and the preparation of new regulations took place against a faster moving political background.

Thirdly, SEA set in motion the single largest package of health and safety legislation hitherto developed by the EC. The Third Action Programme, announced in July 1987, was designed to facilitate the internal market by removing technical barriers to trade, and advance the internal market's social dimensions by introducing

⁸⁵ HSC, "MISC/144/89. Annex 5. HSC/E Resource Use on EC-Related Work," 1989, TNA EF7/2948.

⁸⁴ Eberlie, "New Health and Safety Legislation of the European Community," 86; "HSC/88/66," 3.

measures to promote workers' physical and mental health. The intention behind the Third Action Programme was to establish a comprehensive framework of European health and safety legislation, in much the same way as the HSWA established a comprehensive legislative framework in Britain. In the Third Action Programme, the European Commission announced its intention to prepare directives in relation to such matters as safety organisation, manual handling, work equipment and display screens: in total, some 40 proposals to be adopted by December 1992. The Third Action Programme marked a watershed not only in the profile and importance the EC attached to health and safety, but in the scope of European health and safety legislation to encompass general, as opposed to technical matters.⁸⁵

5.9.2. The Framework Directive on Safety and Health

The first, and arguably most significant of the new laws under the Third Action Programme was adopted in June 1989. The EC Framework Directive on Safety and Health (89/391/EEC) aimed to ensure that the health and safety legislation of EC member states rested upon a common legal foundation. Structurally, the Framework Directive bore more than a passing resemblance to the HSWA, passed some fifteen years earlier: the Framework Directive was heavily influenced by British ideas and practice. As in the HSWA, primary responsibility for securing safe and hygienic working conditions rested with the employer. Employees also had several legal obligations, such as making proper use of personal protective equipment. The

⁸⁵ Ibid., 90–1; HSC, “HSC/88/66,” 5; “Commission Communication on Its Programme Concerning Safety, Hygiene and Health at Work (October 1987),” February 1988, OJ C28/3.

Framework Directive was universal in scope, applying to all areas of work activity including commerce and leisure; as in the HSWA, all employees were covered with the exception of domestic servants.

Another similarity was that the Framework Directive mirrored the HSWA's pattern of law making. The Framework Directive itself expressed basic principles, such as the need for safety organisation, while 'daughter' directives advanced controls in relation to specific hazards, in much the same way as regulations and codes of practice under the HSWA. Perhaps most significantly, the Framework Directive adopted a risk-based approach to health and safety that had long been the model in Britain. Article 6(3)a specified 'the employer shall, taking into account the nature of the activities of the enterprise and/or establishment ... evaluate the risks to the safety and health of workers, *inter alia* in the choice of work equipment, the chemical substances or preparations used, and the fitting-out of workplaces.'⁸⁶ In the same way that the HSWA demanded that employers conduct risk assessments to identify the basis of control measures, the Framework Directive placed risk assessment at the heart of the European legislative approach.

There were, however, several critical differences between the Framework Directive and HSWA, and between European and British law more broadly. These differences had major implications for the way the Framework Directive and its 'daughter' directives were received and interpreted in Britain. Firstly, while the Framework Directive concentrated on worker protection, the HSWA went much further, extending protection to the self-employed and certain non-employed persons.

⁸⁶ Article 6(3)A.

Secondly, while the Framework Directive replicated most of the HSWA's general requirements, it contained certain novelties, such as the requirement for employers to appoint competent persons or services from outside the workplace, if such persons or services could not be sourced from within.⁸⁷ Thirdly, the Framework Directive was more detailed and prescriptive than its British counterpart. This stemmed from the its basis in the Napoleonic or Roman legal tradition, in which the law embodied general principles, phrased in absolute terms. In practice, it was the courts who interpreted these requirements flexibly, taking into account the circumstances of the employer. In contrast, flexibility was built in to the British regulatory system, embodied in the SFAIRP qualification. This implicitly allowed employers to consider cost, time or trouble (in tandem with risk) when implementing control measures. For the European Commission however, such considerations were anathema.⁸⁸ A regulatory risk that emerged in the Framework Directive, therefore, was that British courts would interpret the new European legislation absolutely, when in practice the same standards did not apply in Europe.

This affair demonstrated how considerations such as cost were central to the British regulatory approach. Except in the case of the most serious or potentially catastrophic hazards, the needs of employers and the needs of the economy were usually weighed against the benefits to individuals and society obtained through risk controls, whether informally (through negotiation) or formally (through CBA). For the

⁸⁷ Ibid., Article 7(3).

⁸⁸ HSC, "Recent Developments in Health and Safety: Their Implications," 5; HSC, "HSC/89/35. Health and Safety Commission: EC Framework Directive," February 1989, 1–2, TNA EF7/2708.

reasons described below, while HSC/E were successful in gaining recognition for the principle of reasonable practicability during their inaugural decade, this principle began to be openly questioned under the new European political dynamic of the late 1980s and early 1990s. The Framework Directive, therefore, not only represented an expansion of European power in the health and safety field—it represented an existential threat to the British regulatory tradition. As Rimington warned the HSC in February 1989, ‘the [European] Commission may ... feel that with majority voting they now have the whip hand, and that if a Federal Europe is to be achieved, the Anglo Saxon traditions of law must now begin to be firmly subordinated to the Continental tradition.’⁸⁹

5.9.3. A Brave New World: Risk Assessment and the European Framework Directive

The Framework Directive posed a threat to the British regulatory system on two inter-related fronts. The first was that it potentially imposed excessive costs on British industry, by requiring employers to implement costly control measures. The second, owing to differences between the European and British legal traditions, was that British regulations stemming from the Framework Directive would potentially need to exclude any reference to time, trouble or cost, undermining the SFAIRP principle. HSE policy documents reveal just how far the regulator was willing to go to maintain established British practice, and just how much an appreciation of cost, as well as safety, was central to its logic.

⁸⁹ HSC, “HSC/89/35. Health and Safety Commission: EC Framework Directive,” 2–3.

As HSC/E anticipated, QMV had significant implications for Britain's European negotiation strategy. Negotiations over the Framework Directive were frantic, occurring in an intense atmosphere of political pressure and lobbying from the Greek presidency, European Parliament and British industry.⁹⁰ These conditions left limited time for HSC/E to carry out domestic consultations, and in certain areas HSE's senior officials questioned the usefulness of the proposed directives, finding the PPE proposals, in particular, to be 'unsatisfactory ... confusing and incompetently drafted'.⁹¹ Throughout the negotiations, the primary objective of HSC/E, the British government and business was to ensure that the Framework Directive did not exceed British law or impose unnecessary burdens on industry. The spectre of a large package of prescriptive law raised concerns among business leaders that they would be forced to implement costly controls or modifications, and the CBI lobbied the British government to take a tough line. The Conservative Employment Minister, John Cope (1987–89), attempted to reassure employers, stating 'it is the firm aim of the British government to maintain the existing system of UK health and safety law.'⁹²

However, policy and other documents prepared by HSC/E reveal their private concern about the impact of European legislation. In a sombre note to HSC in 1991, Rimington noted how the proposals did not 'reflect any order or priority HSC would have chosen, either on the grounds of hazard or logic ... British industry is on the whole unprepared and unready for this flow of new legislation much of which will

⁹⁰ HSC, "MISC/127/88. HSC. Council of Ministers of Social Affairs 16 December 1988. Draft Framework Directive on Health and Safety at Work," December 1988, 1, TNA EF7/2672.

⁹¹ HSC, "HSC/88/66," 8.

⁹² John Cope, "Letter to R. H. Price (CBI)," April 10, 1989, TNA EF7/2873.

strike employers at least as awkward and unnecessary.’ He went on to argue, ‘cumulatively it is not clear that the overall likely benefits will justify the costs and in specific cases (for example, the Display Screen Equipment and PPE) they do not in our view either justify the costs or (in the case of DSE) reflect the risk position.’⁹⁵ Taking the DSE regulations as an example, cost-benefit analysis by HSE revealed that while the benefits were unquantifiable, the regulations would result in an additional annual cost to employers of some £40 million, primarily owing to the requirement to provide eye tests to habitual display screen users. The associated directive raised suspicions among some employers about moral hazard: that opticians would be encouraged to offer ‘over-elaborate tests and unsuitable spectacles’.⁹⁴ Such analyses added to the HSE’s impression that some European directives were misguided. In a stark reminder of how regulatory politics occasionally trumped worker protection, Rimington subsequently advised HSC ‘to find a way to distance itself where appropriate from EC measures which it would not itself have wanted to introduce.’⁹⁵ While the exact means by which this distancing could occur remained unspecified (whether via under-promotion, under-enforcement or under-financing), such comments add credibility to accusations by the GMB trade union, that HSE had deliberately set out to ‘undermine’ the Framework Directive.⁹⁶

⁹⁵ ‘HSC/91/125. HSC. Domestic Implications of the CEC’s Legislative Programme’, 1–2.

⁹⁴ HSC, “HSC/91/117. HSC. Work with Display Screen Equipment,” November 1991, 3–4, TNA EF7/3359.

⁹⁵ ‘Domestic Implications of the CEC’s Legislative Programme’, 10.

⁹⁶ See Catherine Milton, “Safety Body ‘Undermined’ EC Health Directive,” *Financial Times*, November 25, 1992.

HSE's machinations in defence of reasonable practicability further underline how cost was a primary concern for the regulator. QMV reduced the prospect of Britain integrating the SFAIRP principle in European law, and the principle found very little support in countries such as France, whose own legal tradition specifically excluded such considerations. From a Continental perspective, qualifications such as SFAIRP equated to a watering down of legislation, and the encouragement of 'social dumping', whereby capital flows to countries with more relaxed safety standards. It also reflected 'a genuine notion that "SFAIRP" excuses action where cost is significant.'⁹⁷

The European Commission made some effort to placate Britain and other countries concerned about cost. A force majeure clause permitted the exclusion or limitation of employers' responsibility in 'unforeseeable circumstances', but the British government felt this did not go far enough.⁹⁸ Privately, HSC warned the government that 'we are ... very much concerned that an approach which has secured so a high a level of joint commitment should be put at risk or superseded by one which for practical purpose could prove inadministrable [sic].'⁹⁹

As Britain became marginalised in Europe, HSC/E's tactics turned to shoring up the principle of reasonable practicability and defending Britain's standards in the event of legal challenge from the European Commission. A possible solution was sought in giving legal definition to SFAIRP in statute for the first time, while removing any

⁹⁷ HSC, "HSC/89/35. Health and Safety Commission: EC Framework Directive," 2; HSC, "Recent Developments in Health and Safety: Their Implications," 5–6.; 89/391/EEC, article 5(4).

⁹⁸ Cope, "Letter to R. H. Price (CBI)."

⁹⁹ HSC, "MISC/32/89. Draft Letter from HSC to Minister of State on Framework Directive," February 1982, 2, TNA EF7/2843.

explicit reference to contentious points such as cost.¹⁰⁰ HSC/E decided to implement the Framework Directive by means of regulations under the HSWA, an approach intended ostensibly to soften the impact of EC law, minimise burdens on industry and avoid legal challenge, as much as to encourage safety improvements.¹⁰¹ The subordinate regulations would be based on an explicit requirement for employers to assess risks, an approach closely in line with Framework Directive's ethos, and British regulations, such as COSHH.¹⁰² HSE's Director of Safety Policy argued to the effect that, by basing new regulations on risk assessment, two birds could be killed with one stone. First, risk assessments would defend the HSC/E against litigation, since in practice they exposed hazards to the test of reasonable practicability, while explicit reference to the principle in British law could be minimised or removed. By their very nature, risk assessments allowed control measures to be qualified, and operationalised the SFAIRP principle. Second, risk assessment would counter accusations by some employers that HSC/E was seeking to 'gold plate' EC law, by going further than was legally necessary in regards to such matters as the self-employed.¹⁰³ In effect, HSE used risk assessment as a political sleight-of-hand.

In the event, this scheme seriously backfired. Not only was the British government eventually referred to the European Court of Justice in 2005, but also some business leaders continued to accuse HSC/E of gold plating. Arguably, HSE's

¹⁰⁰ "HSC/89/35", 3.

¹⁰¹ HSC, "HSC/90/77. HSC. Implementation of the EC Framework Directive on Health and Safety at Work," May 1990, 3–6, TNA EF7/3045.

¹⁰² HSC, "HSC/90/77. HSC. Implementation of the EC Framework Directive on Health and Safety at Work."

¹⁰³ *Ibid.*, 3–9.

tactic made the situation even worse. During the negotiations, HSE's demand that new European legislation should be based on risk assessment morphed into the requirement for employers (of five or more employees) to *write such assessments down*. This stemmed from Article 9(1) of the Framework Directive, which required that employers 'be in possession of an assessment to the risks to safety and health at work'.¹⁰⁴ In other words, legal wrangling in Europe transformed what had previously been a common-sense device—a 'computation', in Lord Asquith's 1949 terms—into a physical object, the outcome of a formalised, bureaucratic process.¹⁰⁵ Every employer, regardless of size or the intrinsic hazard of their operations, now had to possess a formal written risk assessment.

This had never been HSE's intention. Outside the requirement for employers to provide a written statement of their health and safety policy, before 1990 HSE had promoted *written* risk assessments only for the most serious and technical risks—for example, the safety cases of major hazard sites. Indeed, HSE's Director of Safety Policy had argued 'we do not want to create some situation where hazards, however mundane or unlikely, have to become subject to some complicated process. A cursory examination—even a glance—often will indeed generally be quite sufficient.'¹⁰⁶

The requirement for employers to conduct written risk assessments generated a stir when it came to transposing the Framework Directive, as the Management of Health and Safety at Work Regulations 1992 (MHSW).¹⁰⁷ MHSW systematised much

¹⁰⁴ HSC, "HSC/90/77. Supplement on Risk Assessment," May 1990, 3, TNA EF7/3045.

¹⁰⁵ 'Edwards v National Board', 1949, 1 All ER 743 CA.

¹⁰⁶ HSC, "HSC/90/77. Supplement on Risk Assessment," 3.

¹⁰⁷ SI 1992/2051.

of the British approach to health and safety regulation, clarifying the general requirements of the HSWA, and placing risk assessment at the heart of employers' responsibility. While MHSW was supported in principle by the majority of respondents to HSC's consultative document, published in October 1991, 64 per cent of respondents made explicit reference to risk assessment, of which over a third, largely employers, opposed the universal recording of risk assessments. Written risk assessment was believed to be overly bureaucratic and prescriptive, and impose considerable costs.¹⁰⁸ Such a belief was evidently shared by certain HSE officials, for as Rimington wrote in 1995, 'I believe written risk assessment to be a useful discipline so long as it is strictly confined to important risks; but applied too widely it can easily become bureaucratic bindweed preventing small firms in particular from seeing and doing the obvious.'¹⁰⁹ These words were prescient, for as Chapter 6 demonstrates, HSC/E came under unprecedented political attack between 1992 and 2001, with the growing belief in and outside government that health and safety regulation had begun to get out of hand.

5.10. Conclusion

Chapter 5 has analysed the development of the British system of health and safety legislation between 1984 and 1992, arguing that during this time, HSC/E matured as regulatory bodies responsible for negotiating, directing and enforcing national health and safety policy. Over these years, the scope of HSC/E's influence increased

¹⁰⁸ HSC, "HSC/92/48. HSC. Implementation of the EC Framework Directive on Health and Safety at Work – Results of Consultation," 1992, 4–6, TNA EF7/3550.

¹⁰⁹ Rimington, "Valedictory Summary," 14.

significantly, expanding even to railway passenger safety and gas safety in the home. Public safety, as opposed to worker safety became a much more central part of HSC/E's work. Despite the loss of IAPI in 1987, HSE assumed a more singular, corporate identity.

While Europe became the dominant source of health and safety regulation by 1992, HSC/E acquired an unparalleled regulatory remit among health and safety agencies worldwide. Much of this expansion in their policy domain stemmed, implicitly or explicitly, from their perceived expertise in risk management: both the Cullen and Hidden reports stressed the failure of risk management offshore and on the railways, and criticised government for combining regulatory and sponsorship roles in particular departments. There was thus both conceptual and practical justification for allocating new responsibilities to HSC/E.

Chapter 5 has highlighted how risk crystallised in the late 1980s and early 1990s in the practice of risk assessment, a formalised device for employers and other duty holders to identify and control hazards. In the same way that the concept of risk emerged more generally in British health and safety regulation, this process relied upon officials elaborating or making explicit various assumptions or ideas that were already well-established. Section 2 of the HSWA, for example, specified that 'so far as is reasonably practicable', employers had a duty to secure the safety, health and welfare at work of their employees, as well as produce a written statement of their safety policy. The requirement for written risk assessment in the Framework Directive stemmed from HSC/E's insistence to preserve cost as a legitimate concern when evaluating the potential effectiveness of safety precautions: in other words, written risk assessment was merely an elaboration or distillation of pre-existing concepts.

Chapter 6 elaborates this theme. It argues that the development of a coherent risk-based regulatory philosophy in HSC/E, known as Tolerability of Risk (TOR), helped relate together the divergent standards and approaches used by HSE's component organisations. With this philosophy, the British system of health and safety regulation crystallised as truly integrated for the first time.

6. Legitimising the System, 1992–2001

6.1. Introduction

Focusing on several interlinked trends in British society, government, science and regulation, Chapter 6 analyses how and why HSC/E systematised their approach to risk management between 1992 and 2001. It argues that HSC/E's risk management approach solidified as a complex and multifaceted response to political and economic pressure, enabling the regulator to adapt to changing circumstances and legitimise its activities from multiple angles.

Exploring the consequences of this development in several areas of regulatory policy, including occupational health, Chapter 6 demonstrates that HSC/E's risk management approach evolved in response to, and in turn facilitated, the continuing transformation of the British state in its role as regulator. This changing role was captured in the growing use of the language of 'partnership' in HSC/E policy documents over the 1990s, reflecting the state's increasingly passive view of intervention in the working environment. Relating these changes to the longer-term developments discussed in this thesis (*inter alia*, the changing dimensions of risk), Chapter 6 highlights the distinct climate of the 1990s that allowed HSC/E to elaborate their risk-based approach.

In Chapter 6, I engage not only with issues of regulation and governance, but also the extensive literature on risk in the social and political sciences. In particular, I draw upon Beck's theory of the 'risk society' to explain the pervasive sense of uncertainty surrounding scientific knowledge and technological development (seen, for

example, in the BSE crisis in British agriculture).¹ I also examine how developments in the science of risk perception acted to open up risk assessment to social, political and ethical influences. By the 1990s, the British scientific community largely accepted that the science of risk assessment could only partially determine the public's perception of risks, and hence risk policy. The emergence of the public as a key stakeholder in health and safety policy was reflected in HSE's decision in the late 1980s to produce a detailed model of the principles informing its approach to risk. Known as Tolerability of Risk (TOR), this model was initially developed in relation to nuclear power. However, in the 1990s HSE generalised this model across the entire field of its activity, from railway passenger safety to factory accidents. The discussion document *Reducing Risks, Protecting People* (1999/2001), not only served as a device to bind the HSE's constituent parts and methodologies together, but also a multi-functional tool to defend the regulator from political attack. Reflecting both the new era of uncertainty (the 'risk society') and the neoliberal assault on overregulation and red tape (the 'regulatory crisis'), *Reducing Risks, Protecting People* exposed HSC/E's risk-based approach as an iterative process of dialogue, discussion, consultation and compromise. In so doing, it highlighted how risks were not objective 'facts', but social, political and cultural constructs.

The constructed nature of risks, and their changing dimensions over time, partly explain why by the end of the 1990s, a troublesome paradox had developed in British health and safety regulation. While in one sense, Britain was 'safer' than it had ever been (in 2001, the rate of fatal injury per 100,000 workers was less than half that in

¹ Beck, *Risk Society*.

1974, and the rate of non-fatal injury had fallen by almost a third since 1986/87), the right-wing British media began to widely criticise health and safety as part of a problem of over-regulation and red tape.² As workplace accidents declined, regulators were forced to confront risks that were more invisible and complex (such as carcinogens), uncertain (such as the millennium bug), or attributable less directly to problems in the work environment (such as occupational stress or heart disease). Thus, regulators had a comparably greater challenge in persuading employers, workers or the public of the benefits of control, and scepticism emerged about the health and safety project in general. Rimington captured this problem succinctly: ‘HSE often finds itself between a rock and a hard place, with criticism from some quarters of “over-zealous” behaviour by inspectors, and from others a lack of “zeal”, e.g. in pursuing individuals for health and safety offences.’³ Chapter 6 thus concludes with an analysis of the ‘health and safety gone mad’ rhetoric in British regulatory discourse. As the twentieth century drew to a close, the foundations for the current public and political malcontent with ‘elf and safety’ had been firmly laid.

² See “HSE Statistics: Historical Picture”, and Appendices II and III. Similar long-term changes in the incidence of occupational diseases since 1974 are difficult to assess, since, historically, reporting has largely been confined to only a few recognised diseases under the industrial injuries disablement benefit scheme. The evidence from the available data is less clear-cut than that on accidents: while deaths from silicosis fell by over a half between 1974 and 2001, deaths from mesothelioma increased by 154%. See Appendix IV.

³ HSC, *Annual Report 1992-93*, xiv.

6.2. Overview

Chapter 6 argues that HSC/E's need to explain its regulatory approach stemmed from four main interrelated imperatives.

First, in section 6.3, I show how the British government's renewed deregulatory agenda placed pressure on regulators (including HSC/E) to justify their approaches to risk. In December 1992, HSE was asked to review the legislation under its control, with the aim of removing outdated or burdensome regulations. At the same time, it was required to consider whether any of its activities could be contracted-out to private organisations. While the HSE concluded that privatisation of enforcement was inadvisable, by the end of the 1990s the seeds had been sown for a more market-based system of regulation, seen for example in the extension of fees for enforcement interventions under new regulations in 2012.⁴

Second, in section 6.4, I highlight the influence of wider changes in governance and public administration. At the same time that government implored departments and agencies to become more open and accountable, the emergence of the public as a key stakeholder in health and safety policy, and the demand for participation in decision-making, established a wider social context that supported transparency in health and safety regulation. This was premised on a subtle reconfiguration of statutory responsibility for health and safety, which further circumscribed the regulatory role of the state. Under the rhetoric of 'partnership', statutory intervention was perceived to be possible only with the active support of 'stakeholder' groups (for example,

⁴ The Health and Safety (Fees) Regulations 2012, SI 2012/1652; Tombs and Whyte, "A Deadly Consensus."

employers). The state was thus envisaged as an equal partner in the fight against workplace accidents and disease, rather than a powerful force for shaping behaviour.

Third, in section 6.5, I analyse developments in the theoretical understanding of risk and the factors influencing risk perception. As scientific understanding of risk advanced in the 1980s, a pressing regulatory need emerged to show how policymaking took into account scientific uncertainty and subjective criteria. Risk communication therefore developed as an important role of the state, posited as an alternative to further regulation or enforcement.

Fourthly, in section 6.6, I argue that HSE's need to explain its decision-making approach stemmed from an internal, administrative need to relate together principles and approaches used across the organisation. I show how the HSE generalised a model initially developed in relation to nuclear power as a basis for risk management decisions across industry. The 2001 discussion document *Reducing Risk, Protecting People* explained in detail HSE's policymaking process, and showed how risk assessment and subjective criteria influenced its decision-making.

The sub-field of occupational health has been one of the most actively studied areas of health and safety policy by historians. Although historians have focused on the period before 1960, a common argument in recent years is that as risk management became established in British regulatory practice after 1974, and ideas of a preventive 'national industrial health service' in parallel to the NHS faded away, occupational health declined in importance and political priority.⁵ Hence, historians have used their

⁵ e.g. Long, *The Rise and Fall of the Healthy Factory*; Johnston and McIvor, "Whatever Happened to the Occupational Health Service?"

empirical studies of earlier periods to make points about occupational health *after* 1974, which may not be entirely justified. Chapter 6 thus includes an important case study of the British regulatory approach to occupational health under the HSWA. Over the 1990s, I argue, occupational health became linked to the wider public health agenda. This imbued occupational health with newfound importance, but also enmeshed occupational health within wider deregulatory concerns.

Chapter 6 concludes with an analysis of one of the major paradoxes that constituted the so-called ‘regulatory crisis’ faced by regulators in the 1980s/1990s.⁶ While the increasingly complex nature of industrial hazards meant that regulators including HSC/E were looked upon as sources of expert knowledge and guidance on risk, regulators believed that their authority was being eroded by public mistrust in science and regulation. Sensing how health and safety regulation was the object of growing scepticism in Britain, towards the end of the 1990s Tony Blair’s Labour government (1997–2007) looked to ways to ‘reboot’ the health and safety system and make it fit for the twenty-first century. In so doing, however, they further entrenched the logic of risk management in British regulatory discourse, enshrining assumptions which are now difficult, if not impossible to overturn.

6.3. The Politics of Health and Safety in the 1990s: From Deregulation to Better Regulation

One of the primary motivations behind HSC/E’s need to deconstruct their policymaking in the 1990s was the renewed deregulatory drive in the British

⁶ Hutter, “The Attractions of Risk-Based Regulation,” 1.

government. In an economic and political climate where excess regulation was considered undesirable, placing unnecessary 'burdens on business', the development of a comprehensive risk management framework provided a useful tool for HSC/E to legitimise their activities on multiple fronts: in the eyes of the Treasury that funded them, the government that audited their operations, trade unions, employers and other groups affected by their decisions. Risk management helped justify contentious decisions, and thus convince different interests that HSC/E was taking sound decisions, taking into account such factors as best practice, cost-effectiveness, public opinion, scientific evidence and uncertainty.

As we have seen, the Conservatives' deregulatory agenda was renewed after 1992. In its 1992 election manifesto, the Conservatives pledged to remove 'outmoded and burdensome' regulations, and give further priority to the work of its central deregulation task force.⁷ Despite some efforts by HSC/E to rationalise health and safety legislation since 1974, however (most of which had been achieved through the making of new general regulations such as COSHH and MHSW), 28 statutes and 367 sets of regulations still remained on the statute book by the early 1990s. In response to political concerns about overregulation and European legislation, in December 1992 the Employment Minister, Michael Forsyth, asked HSC/E to review the entire body of health and safety legislation under its administration. HSC/E responded in February 1993 with a comprehensive review of regulations, eventually completed in May 1994.

⁷ "1992 Conservative Party Manifesto," accessed July 29, 2015, <http://www.conservativemanifesto.com/1992/1992-conservative-manifesto.shtml>.

The review identified several areas of concern. Evoking the original findings of the Robens Report, the review highlighted that many employers found the law to be ‘too voluminous, complicated and fragmented.’⁸ In particular, EU directives had introduced widespread confusion about employers’ legal responsibilities, especially in regard to risk assessment. This had resulted in ‘a substantial misdirection of effort by some firms’, such as investment in expensive computer equipment.⁹ The HSC/E’s review suggested that 17 sets of regulations could be immediately revoked while maintaining improvements in workplace standards, another 38 after further consultation.¹⁰

In general, however, the review found widespread support for the HSWA’s goal-based principles. In a letter to the Environment Secretary, John Gummer (to whom responsibility for occupational health and safety was transferred in 1995 following the merger of the DE and Department for Education), the HSC expressed bewilderment at the government’s agenda:

[I]ndustry is not now demanding early change to the structure of the six pack. Rather, we are being urged to deliver a period of calm, without further upheavals....

It is not our function to advise you on deregulation but we are puzzled by the differences between our own soundings and what we understand to be the representations of the

⁸ HSC, “HSC Review of Regulation. Draft Final Report,” 1994, 1, TNA EF7/4116.

⁹ Ibid., 2. In April 1993, a separate survey by the Institute of Directors (IOD) argued that misunderstanding about risk assessment had encouraged some employers to employ “expensive consultants or institute bureaucratic procedures.” See HSC, “HSC Review of Regulation. Draft Final Report”, Annex 5, 1.

¹⁰ HSC, *Annual Report 1993/94*, xiv; Williams, “Deregulating Occupational Health and Safety,” 136.

Deregulation Task Force to the effect that there is a pressing need for a radical revision of the law.¹¹

Seemingly, the government's agenda was dictated more from an ideological position about the costs of regulation, than from a practical standpoint about the wider merits of health and safety. Despite this, the HSC/E were aware of the government's agenda, and looked for ways to derive political advantage. The civil servant Jenny Bacon joined HSE as Deputy Director-General in 1992, just as the review of regulation was getting underway. She argued that the review was not a wholly negative experience for the HSE, as a narrow focus on deregulation might suggest. While it did lead to a reduction in health and safety regulation, it also presented the HSE with an unprecedented opportunity to remove deadwood from the British statute book, and explain its decision-making principles:

Michael Forsyth said, I want a review of regulations, and I want to get rid of as many regulations as possible.... I'm afraid I saw this as a golden opportunity having relatively recently come back and found that the cleaning out of the Augean stables which had been part of the original sort of Robens remit, if you like, had not happened, that there had been new regulation but there just hadn't been time for anybody to sit back and look across the piece and get rid of all the old stuff....

I said ... let's make it a review of regulation, how we do the job, and not just regulations, and I think Michael Forsyth was extremely suspicious, he thought that I was trying to pull the

¹¹ HSC, "Double-Banking: Revised Draft Letter to the Secretary of State for the Environment," February 1996, 2, TNA EF7/4699.

wool over his eyes, and I suppose in one way I was, except I was being completely upfront and honest! Anyway he bought it....

All the policy divisions got stuck into reviewing their areas of regulation, and I think were absolutely amazed to find just how much crap there was around the place actually. So in some ways it turned out into a really quite good process with a far greater understanding about what was really necessary and what worked and what didn't and what we could get rid of.¹²

Thus, while first and foremost a deregulatory exercise, the review provided HSC/E with a substantial opportunity to emphasise the benefits of their work to government. It also generated a political will for HSC to tackle its rationalisation remit: overall, this had been neglected since 1974, with the exception of older, detailed regulations removed as a result of new general regulations, such as COSHH. In response to the review, the HSC/E began to codify and explain many of their processes. For instance, the HSE published its decision-making principles in relation to enforcement and the issuing of guidance. This was a resource-intensive process, which perhaps explains why the HSC/E was so slow to begin this work after the HSWA. As Bacon explained, 'when you're under sentence, or near sentence of death, there are some things that you will give up doing in order to save your life.' For example, the greater use of administrative staff instead of inspectors in policy work enabled the HSE to divert resources into the review exercise.¹³

¹² Bacon, Interview, pt. 1.

¹³ Ibid.

The review of regulation was not the only aspect of HSC/E's work where the influence of the government's neoliberal agenda was acutely felt. Part 2 of the Deregulation and Contracting Out Act 1994 was significant because it gave ministers powers to market-test and contract-out various government services. This signified the continuing transformation of the state, from a more direct provider of services to a more indirect regulator or supervisor: the so-called 'regulatory state'.¹⁴

Of course, the Conservatives' wider agenda to privatise public services or expose them to the workings of the market were felt elsewhere in the 1990s. In 1990, following the white paper *Working for Patients*, an internal market was established in the NHS, opening up health provision to competition.¹⁵ By 1994, the government had moved to privatise the railways, with huge implications for the rail infrastructure and passenger safety: the fragmentation of responsibility for safety between the train operators and organisation responsible for infrastructure, Railtrack, was one of the contributing factors to the Ladbroke Grove rail crash in October 1999.¹⁶

The HSE was not immune from this exhortation to open up government services to competition. Despite questions around whether health and safety counted as a 'service', in July 1992 the HSE was asked to review its operations (other than policymaking) to determine whether it was possible to contract-out or charge for them.¹⁷ HSE's report, published in November 1992, drew attention to some significant

¹⁴ See e.g. Moran, *British Regulatory State*.

¹⁵ *Working for Patients*, CM 555 (London: HMSO, 1989).

¹⁶ See Lord Cullen, *The Ladbroke Grove Rail Inquiry. Part 2 Report* (Sudbury: HSE Books, 2001); Bill Callaghan, *A Farewell to Trains* (HSC, 2006).

¹⁷ Although the HSE always charged for some of its activities (viz., publications), the extension of charging was controversial in the 1990s and remains so today (see below).

disadvantages, including fragmentation of the regulatory system, breakdowns in communication, damage to HSE's discretionary approach, and erosion of public trust in HSE's (notional) regulatory independence. Of paramount concern, antithetical to the government's wider agenda, was that political transparency in the HSE would decrease: 'We consider that it could represent a real point of difficulty for privatised or contracted bodies called upon to explain, or face difficult investigation of the actions of their servants, connected as some of those inevitably would be, with questions as their operational priorities, use of resources, or general conduct and quality of operations.'¹⁸

While the privatisation or market-testing of HSE's enforcement work was therefore out of the question, potential opportunities for market-testing were found elsewhere. In particular, market-testing was found to be feasible among HSE's research, scientific and certification work. As with the inspectorates, scientific and certification services for health and safety were highly fragmented before 1974, with numerous laboratories and research establishments existing in different parts of the country. After the HSE was established in 1975, these functions were brought under one division, the Research and Laboratory Services Division (RLSD). Consequently, in 1995 the RLSD was reconstituted as an in-house agency of HSE, the Health and Safety Laboratory (HSL), based in Buxton, Derbyshire. While the HSL remained functionally part of the HSE, it had its own director and assumed a more business-like

¹⁸ John Rimington, David Cain, and Anne Wheatcroft, "HSE. Market Testing of HSE's Regulatory Functions. Feasibility Study," October 1992, 103; HSC, *Annual Report 1992-93*, xiii.

role, contracting its services both to HSE and external 'customers' in industry and government.¹⁹

The establishment of HSL was consistent with the government's 'Next Steps Initiative', designed to improve government efficiency by hiving off particular government functions as executive agencies.²⁰ While HSL had a degree of financial and operational autonomy from HSE, the 'Next Steps Initiative' conflicted with the wider demand to make government more open and accountable: effectively, the HSL was a quango of a quango. At the same time that the Conservatives' pressured to reduce the size of the state, the HSL represented the further expansion of government under the public 'radar', and the empowerment of an unelected bureaucracy. By 1997, as many of 75 per cent of all British civil servants worked out of executive agencies, rather than traditional government departments.²¹

Institutional change was perhaps the most drastic and visible outcome of the politics of new public management (NPM)—the movement to make government more efficient and entrepreneurial. However, NPM influenced HSC/E policymaking in subtler ways. Over the 1990s, the government placed renewed pressure on HSC/E to demonstrate that risks were being controlled without placing excessive burdens on industry. Utility-based measures to evaluate the economic impact of new regulations, namely, cost-benefit analyses and compliance cost assessments, have been a part of the

¹⁹ See Buchanan, *Health and Safety Laboratory. A Pictorial History*.

²⁰ NAO, "The Next Steps Initiative. Report by the Comptroller and Auditor General," June 6, 1989.

²¹ D. Parker, *The Official History of Privatisation. Volume II. Popular Capitalism, 1987–1997* (Abingdon: Routledge, 1992), 26.

British regulatory landscape since at least the early 1980s, as we have seen.²² They were a fundamental component of the government's deregulatory agenda. Yet, Labour's victory in the 1997 general election did little to halt this agenda. Despite a switch in political emphasis—the language of 'deregulation' was substituted by one of 'better regulation', and the Deregulation Task Force was reconstituted as the Better Regulation Task Force, operating out of the Cabinet Office—much of the underlying focus on regulatory burdens remained the same.²³ Regulatory impact assessments, introduced in 1998, went much further than CBAs and CCAs in evaluating the economic impact of regulations on wider society. However, they continued to prioritise utility-based criteria in determining the benefits of regulatory measures.²⁴ Further, the five principles of 'good regulation' set down by the Better Regulation Task Force in 1997—proportionality, accountability, consistency, transparency and targeting—propagated many of the concerns of the previous Conservative administration.²⁵

Labour's election victory, therefore, acted to cement rather than challenge contemporary neoliberal ideology regarding regulation and the role of the state. While Labour sought to carve out a new centre-left consensus incorporating beliefs both in social justice and the free market (the so-called 'third way'), the belief that health and safety regulations could produce burdens on business was enshrined in British

²² See J. Froud and A. Ogus, "'Rational' Social Regulation and Compliance Cost Assessment," *Public Administration* 74 (1996): 221–37.

²³ Robert Baldwin, "Better Regulation in Troubled Times," *Health Economics Policy and Law* 1, no. 3 (2006): 203; Tombs and Whyte, "A Deadly Consensus," 5.

²⁴ NAO, *Better Regulation: Making Good Use of Regulatory Impact Assessments. Report by the Comptroller and Auditor General*, HC 329, 2001, 1–3; Tombs and Whyte, "A Deadly Consensus," 5.

²⁵ Better Regulation Task Force, *Principles of Good Regulation* (London: TSO, 2003), 1.

regulatory discourse.²⁶ Social expectations about the control of risks, HSE explained in 2001, were ‘complemented in a free market economy by an underlying presumption that industry should be able to take advantage of new technologies, unfettered by undue State intervention.’²⁷ The British system of health and safety regulation was thus further exposed to market-based pressures and imperatives: in recent years, this has been demonstrated by the extension of charging (fees for intervention) for various enforcement and other activities.²⁸ The elaboration of a comprehensive risk management system provided a practical tool to meet these demands.

6.4. Opening Up the Decision-Making Process: The Public in Health and Safety

Pressure on regulators including the HSC/E to explain their decision-making came from outside the government as well as within. Accompanying calls for greater deregulation in the 1980s and 1990s were demands by citizen’s groups, such as the Campaign for Freedom of Information, for greater transparency and accountability in government, right of access to government data, citizen/consumer choice, and participation in policymaking. As described in Chapter 5, major disasters in Britain and abroad reflected the need for the general public to be recognised as a key stakeholder in health and safety policy.

²⁶ See Anthony Giddens, *The Third Way: The Renewal of Social Democracy* (Cambridge: Polity Press, 1999).

²⁷ HSE, *Reducing Risks, Protecting People*, 7.

²⁸ TUC, “Toxic, Corrosive and Hazardous.”

In the late 1980s and early 1990s, several initiatives commenced on this front. The growing recognition of the importance of public opinion was reflected, among other things, in the government's decision to appoint a ninth Commissioner to the HSC in March 1990, representing the 'public interest'. Implicitly acknowledging that local authorities were ineffective public representatives, Dame Rachel Waterhouse, the former chair of the Consumer's Association, was appointed to fill this position. In 1988, the Environment and Safety Information Act opened up health and safety data to public scrutiny by establishing a public register of enforcement notices served under the HSWA. Further, the Citizen's Charter, launched in 1991, instituted a series of measures to improve 'choice, quality, value and accountability' in public services.²⁹ These included the publication of league tables in schools and the NHS, and the commitment to privatise state monopolies such as British Rail. The use of published performance targets was also encouraged, a device that became more commonplace over the 1990s as a means for the public to hold government to account.³⁰

Between 1992 and 2001, these developments gained added momentum. The 1993 white paper *Open Government* built on the Citizen's Charter by proposing new means to increase public access to government information.³¹ Reflecting how government was becoming more and more preoccupied with risk (see below), many of its proposals related to health and safety: not just health and safety at work, but wider environmental and public safety issues. A prime consideration behind the proposals was not only the public appetite for health and safety information HSE officials had

²⁹ *The Citizen's Charter. Raising the Standard*, Cm 1599, 1991, 2.

³⁰ *Ibid.*, 5.

³¹ Chancellor of the Duchy of Lancaster, *Open Government* (Cm 2290, 1993).

recognised in previous decades, but critically, to improve public-sector standards without imposing additional regulatory burdens on business.³² In this way, *Open Government* supported the renewed deregulatory agenda, by positioning public access to information as an *alternative* to regulation. Voluntary organisations such as the Campaign for Freedom of Information in turn reinforced this position, by pressuring for greater public access to government information and political accountability. By placing additional responsibilities, implicitly, on those whom regulation was directed, such measures supported the British state's metamorphosis into a more indirect risk assessor, communicator and supporter of self-regulation.

The use of one particular term in HSC/E policy documents is indicative of this wider transformation. The language of 'partnership' reflected the idea that the HSC/E or state alone could not improve health and safety. Instead, for progress to be made, the public and stakeholder organisations ('partners') had to be actively engaged in the policymaking process. Effectively, the rhetoric of partnership diminished HSC/E's power and scope for action, placing them more equally alongside employers, trade unions and other organisations in tackling workplace accidents and disease. At the extreme, partnership provided a recipe for what one critic of British health and safety regulation, Greenberg, has termed the British government's 'disengagement' with health and safety.³³ As the campaign group, London Hazards Centre described to MPs in 1999:

³² Ibid., 49–50.; HC Deb 15 July 1993 vol. 228 col. 1114.

³³ Morris Greenberg, "The Last Senior Medical Inspector of Factories and His Place in the History of Occupational Health," *American Journal of Industrial Medicine* 49, no. 1 (January 2006): 54–59.

The current philosophy of partnership is acted out by many employers as an abusive partnership that kills, maims and diseases workers throughout the UK. The cost of industrial disease and serious injuries at work is not only borne by the victim.... [T]he cost to the nation's economy, simply in terms of welfare benefits and the burdens placed on the NHS, is estimated to be £16 billion plus each year. It amounts to a subsidy to industry for their mismanagement and outright exploitation of workers.³⁴

Intriguingly, the CSHW never used the term 'partner' in their 1972 report. While they advocated an adjustment in the state's role for health and safety, emphasising the need for greater self-regulation on the part of workers and industry, the Committee's language of tripartism and interest groups reflected the state's greater field of action at this time: the state was still envisaged as an important contributor towards accident/disease prevention efforts. Although the term 'stakeholder' to some extent implied partnership—as Bacon suggested, in dealing with stakeholders one is forging a partnership—'partnership' began to be used much more frequently following Labour's election victory in 1997.³⁵

³⁴ "Environment, Transport and Regional Affairs Select Committee. Memorandum by the London Hazards Centre. HSE 15.," 1999.

³⁵ Bacon, Interview.

6.5. Accommodating Uncertainty: Risk Perception and Communication

While political developments within and outside government encouraged regulators to make themselves more accountable and transparent, structural transformations in wider society and in the dimensions of risk also illuminated the mediated nature of risk decisions: in other words, how risks were not objective ‘facts’, but social, political and cultural constructs. In this context, HSC/E systematised its risk management approach as a way to show how regulatory decisions took into account scientific evidence, uncertainty and subjective political and social values.

In the late 1980s the sociologist Ulrich Beck theorised that a major rupture had occurred in western industrialised societies. Society had become less concerned about the risks of nature, or what Beck termed ‘the classical industrial society’, and instead had become more concerned with the risks of modernity itself—with science and technology. Accompanying this new phase of modernity, the risk society, was a plethora of new risks connected to scientific development, such as genetic manipulation and nuclear radiation. According to Beck, the risks of the risk society are often delocalised, invisible (except under scientific observation) and insidious, altering the environment in irreversible ways and affecting future generations. These risks are characterised by widespread scientific uncertainty, resulting in a pervasive, chronic anxiety.³⁶

As I have argued previously, Beck’s fundamental idea that we have entered a new phase of modernity is open to significant historical debate. That said, there is

³⁶ Beck, *Risk Society*.

substantial evidence to support the argument that many of the risks workers and regulators confronted in the late twentieth century differed in quite basic respects from those faced by workers and regulators in earlier decades. They were often invisible, eluding direct sensory perception; delocalised, threatening communities and ecosystems outside the workplace; often, they only became apparent after a substantial period of time had elapsed and harm had already been inflicted (for example, mesothelioma). In Britain, health and safety officials from the late 1960s onwards, such as Bryan Harvey, were acutely aware of these developments and their health and safety implications, not least, the need for a proactive regulatory approach. Since at least the 1980s, regulators have also been conscious of these changes in terms of what Giddens has described as ‘a new moral climate of politics, one marked by a push-and-pull between accusations of scaremongering on the one hand and of cover-ups on the other.’³⁷ For example, in some cases (such as European legislation), the HSE was accused of ‘gold plating’, going further than was legally necessary and exposing British businesses to needless costs and bureaucracy. In other cases, however (such as asbestos), HSE and its predecessors were accused of not doing enough to avert a serious risk. From the regulatory point of view, these changes resulted in public and political scrutiny, or the ‘rock and a hard place’ Rimington described.³⁸ More generally, they generated a ‘crisis of responsibility’ where ‘responsibility [could] neither be easily attributed or assumed.’³⁹ Since many of the ‘new’ risks engaging regulatory attention had uncertain causes, and could not be unequivocally attributed to deficiencies in the

³⁷ Giddens, “Risk and Responsibility,” 5.

³⁸ HSC, *Annual Report 1992-93*, xiv.

³⁹ Giddens, “Risk and Responsibility,” 8.

work environment (for example occupational stress), attributing responsibility and agreeing upon controls was fraught with technical and political difficulty.

These difficulties were compounded by the fact that, as scientific uncertainty around risks deepened, the primacy of the expert in guiding regulatory policy was opened to question from alternative public and media discourses. The paradoxical result, according to the American political scientist Aaron Wildavsky in 1979, was a society that was in some respects safer and healthier than ever before, but also more anxious and hesitant about technological development:

Will you and I be able to breathe amidst the noxious fumes of industrial pollution? Will we be able to eat with poisonous substances entering our orifices? How can we sleep knowing that the light of the life-giving sun may be converted into death rays that burn our bodies to a crisp? How do we know that our mother's milk does not contain radiation or our meats putrefaction or our water cancer-causing chemicals?...

How extraordinary! The richest, longest-lived, best-protected, most resourceful civilization, with the highest degree of insight into its own technology, is on its way to becoming the most frightened.⁴⁰

This anxiety not only eroded public trust in science and regulation, but also threatened to disrupt technological and economic development, encouraging an overzealous, 'zero risk' approach to health and safety. From Wildavsky's perspective, scientific uncertainty empowered government and the regulatory bureaucracy, fuelling the

⁴⁰ Aaron Wildavsky, "No Risk Is the Highest Risk of All," *American Scientist* 67, no. 1 (1979): 32; Also quoted in Paul Slovic, "Perception of Risk," *Science* 236 (April 1987): 280.

growth of health and safety as a discipline and regulatory field. Uncertainty promoted a risk-averse society, where individuals and governments were more and more obsessed with controlling risks that were invisible or unclear. Since the early 1990s, the 'precautionary principle' has encouraged the idea that absence of scientific evidence cannot be used an excuse for government inaction on risk.⁴¹

Analysing this paradox, scientific understanding developed in the 1980s and 1990s of the social, cultural and psychological factors underpinning the public's perception of risks. For example, the pioneering work of the anthropologist Mary Douglas (together with Wildavsky) revealed the culturally determined nature of risks, how risk perceptions emerge from the classificatory systems used by societies (for example, notions of good versus bad, dirty versus clean) and normative values associated with them. Douglas and Wildavsky's research highlighted that risks perceptions are not only influenced by culture, but in turn structure societies by establishing cultural boundaries (taboos) and moral frameworks of responsibility and blame. As Giddens has noted, questions of risk are always connected to questions of responsibility.⁴²

Elsewhere, developments in psychology highlighted the subtle biases that skew people's perception of risks. Psychometric analyses showed that public awareness of risks can be biased by media coverage. For instance, risks that score 'low' in objective

⁴¹ Wildavsky, "No Risk Is the Highest Risk of All"; Giddens, "Risk and Responsibility."

⁴² Mary Douglas and Aaron Wildavsky, *Risk and Culture: An Essay on the Selection of Technological and Environmental Dangers* (Berkeley and Los Angeles, CA and London, England: University of California Press, 1983); Mary Douglas, *Risk and Blame: Essays in Cultural Theory* (London: Routledge, 1992); Arnould, *Risk*, 38–46; Giddens, "Risk and Responsibility," 7.

terms (for example, a nuclear meltdown) can be heightened due to a pervasive ‘dread factor’ (Figure 17). The psychologist Paul Slovic described this phenomenon in 1987:

[L]aboratory research on basic perceptions and cognitions has shown that difficulties in understanding probabilistic processes, biased media coverage, misleading personal experiences, and the anxieties generated by life’s gambles cause uncertainty to be denied, risks to be misjudged (sometimes overestimated and sometimes underestimated), and judgements of fact to be held with unwarranted confidence. Experts’ judgements appear to be prone to many of the same biases as those of the general public, particularly when experts are forced to go beyond the limits of available data and rely on intuition.⁴⁵

⁴⁵ Slovic, “Perception of Risk,” 281.

Figure 17. Ranking of risks by different groups.⁴⁴

Activity or technology	League of Women Voters	College students	Active club members	Experts
Nuclear power	1	1	8	20
Motor vehicles	2	5	3	1
Handguns	3	2	1	4
Smoking	4	3	4	2
Motorcycles	5	6	2	6
Alcoholic beverages	6	7	5	3
General (private) aviation	7	15	11	12
Police work	8	8	7	17
Pesticides	9	4	15	8
Surgery	10	11	9	5
Fire fighting	11	10	6	18
Large construction	12	14	13	13
Hunting	13	18	10	23
Spray cans	14	13	23	26
Mountain climbing	15	22	12	29
Bicycles	16	24	14	15
Commercial aviation	17	16	18	16
Electric power (non-nuclear)	18	19	19	9
Swimming	19	30	17	10
Contraceptives	20	9	22	11
Skiing	21	25	16	30
X-rays	22	17	24	7
High school and college football	23	26	21	27
Railroads	24	23	29	19
Food preservatives	25	12	28	14
Food coloring	26	20	30	21
Power mowers	27	28	25	28
Prescription antibiotics	28	21	26	24
Home appliances	29	27	27	22
Vaccinations	30	29	29	25

⁴⁴ Ibid.

The implication, Slovic added, was ‘those who promote and regulate health and safety need to understand the ways in which people think about and respond to risk.’⁴⁵

By the mid 1980s, the scientific community in western industrialised countries (as represented by institutions such as the Royal Society) increasingly accepted that risk perceptions could be shaped by social and psychological factors, although they did not necessarily acknowledge the more radical arguments of academics such as Douglas that risk was a complete social and cultural construct: ‘risk’ still had an objective reality, amenable to computation and evaluation, and science still had its privileged part to play in elucidating it. The challenge posed by the social sciences to risk management was that if major policy decisions (for example on nuclear power) were to be accepted, public policy needed to acknowledge these ‘subjective’ social and political criteria. In response to this problem, in 1978 the Royal Society set up a study group on risk in order to explore the interfaces between risk assessment, risk perception and risk management. The study group’s report, published in 1983, argued that the public were not passive recipients of scientific knowledge, but an active force in determining the construction of risk:

It is imprudent though common, to attribute the differences between risk perceptions and statistical estimates of risk wholly to ignorance or errors on the part of the public. The converse is a public mistrust of ‘experts’ which is not without justifying evidence....

At the administrative level, there is a need to acknowledge the validity of public perceptions, while at the same time purveying the fullest information on objective risk

⁴⁵ Ibid., 280. Note that the presented categories of risk are in themselves constructed for scientific purposes.

estimates, not least because these data form a major component of the public's perceptions. The spirit in which 'education' on hazards is presented will partially determine its acceptance.... If it is not to invoke charges of 'manipulation' or 'restriction of freedom', it must be based on co-orientation from public consultation at the governmental level to negotiation at the level of the industrial plant.⁴⁶

By the mid 1980s, therefore, public policy experts accepted that while 'objective' scientific evidence was a vital input to policy decisions, it was not the only one. Equally important was the way regulators communicated information about risks to the public, and incorporated their 'subjective' beliefs into policy. The Royal Society made a similar distinction between 'objective' and 'subjective' risk in a 1992 report.⁴⁷

A 1998 policy document related this changing attitude to the systematisation of HSC/E's risk management philosophy. *Risk Communication: A Guide to Regulatory Practice* provided British regulators with practical advice and tools to improve the way they communicated information about risk to stakeholders (especially the public) and integrated this communication into their decision-making.⁴⁸ The document was prepared by the Inter-Departmental Liaison Group on Risk Assessment (ILGRA), an informal network of government officials established by HSE in 1991 to discuss the

⁴⁶ Royal Society, *Risk Assessment. Report of a Royal Society Study Group* (London: Royal Society, 1983), 14–15.

⁴⁷ Royal Society, *Risk: Analysis, Perception and Management* (London: Royal Society, 1992). See also Deborah Lupton, *Risk* (London: Routledge, 1999), 20.

⁴⁸ ILGRA, *Risk Communication: A Guide to Regulatory Practice* (London: ILGRA, 1998).

issue of risk and find ways to promote coherent approaches across government.⁴⁹

While there were many good examples of risk communication across government, ILGRA noted, too often these were seen as a one-way flow of information from an expert to lay audience, as opposed to a two-way, iterative process. Some government departments also viewed risk communication as an obligatory 'bolt-on' to regulation, instead of something that was an inherent part of the regulatory process.⁵⁰ Taking its cue from the Better Regulation Task Force, ILGRA argued that good regulation allowed 'people to make or participate in their own decisions about risks', and reflected 'people's views and preferences in decisions about risks which affect them'.⁵¹ In contexts where government agreed that individuals should make their own decisions, risk communication could be visualised as the 'principal instrument for putting policy into practice. Communication is an alternative to regulation. It can defuse the emotions of minority pressure groups, and eliminate the need for excessive legislation.'⁵² In circumstances where regulation was considered necessary, on the other hand, good risk communication allowed stakeholders to take an active role in decision-making, and translate their views and preferences into policy and practice: for instance, in determining the levels of risk individuals or groups may tolerate (see below).⁵³

The demand for public participation challenged the place of science in risk management. According to ILGRA, 'research has shown that much of the

⁴⁹ J. McQuaid, "Developing an Integrated Approach to Risk: The ILGRA Network," in *New Modes of Governance: Developing an Integrated Policy Approach to Science, Technology, Risk and the Environment*, ed. C. Lyall and J. Tait (Aldershot: Ashgate, 2005).

⁵⁰ ILGRA, *Risk Communication*, Foreword.

⁵¹ *Ibid.*, 2.

⁵² *Ibid.*, 7.

⁵³ *Ibid.*

Government's communication about risk reflects the scientific, objective aspects that underpin risk regulation. If these are carried through into public communication, they can easily appear to have taken little account of people's values and preferences.⁵⁴ Indeed, only a year before *Risk Communication* was published, the Professor of the Public Understanding of Science at Imperial College London, John Durant, had described the privileging of science in risk assessment as 'a morale-sapping, confidence-sapping process tailor-made to lead to a decline in public confidence in the whole system.'⁵⁵

The perception by regulators of a growing mistrust in science—and corresponding pressure on them to open up their decision-making—must be seen in the context of the BSE (bovine spongiform encephalopathy) crisis in British agriculture. Although BSE had been detected in British cattle since the 1980s, for over a decade the government had reassured the public that there was little or no risk of people developing the neurological disorder Creutzfeldt-Jakob Disease (CJD) from consuming beef, despite considerable uncertainty in the scientific evidence. In March 1996, however, the Health Secretary Stephen Dorrell announced that ten people had died from a suspected new variant of CJD, and he could not eliminate a link with BSE beef.⁵⁶ The resulting health scare, fed in part by the media (which assumed a prominent role as risk assessor and communicator), led to plummeting beef sales in Britain and

⁵⁴ Ibid., 8.

⁵⁵ A. Irwin, "Risk-Assessment System 'Relies Too Much on Science,'" *The Daily Telegraph*, December 4, 1997.

⁵⁶ Amanda Whitfield, "Mad Cows or Crazy Communications?," in *Mad Cows and Mother's Milk: The Perils of Poor Risk Communication*, ed. W. Leiss and D. Powell, 2nd ed. (Quebec: McGill-Queen's University Press, 2004), 3–25.

Europe, and a lengthy ban on British beef exports. It is estimated to have cost the EU some \$5 billion (US) in subsidies for farmers.⁵⁷ Crucially, the crisis not only resulted in significant financial losses, but media and political scrutiny of the British food safety regulator, MAFF. Questions emerged about the weight to be attached to scientific evidence in risk assessment, and faith in science in general. Other ‘scares’ over the late 1980s and 1990s, such as the salmonella scare, and the alleged link between the MMR vaccine and autism, also served to cast doubt on the competence of regulatory agencies and prevailing scientific wisdom.

The great task for HSE then, as health and safety regulator, was to show how these competing priorities and ideas were taken into account in its policymaking, in a way that was transparent, scientifically vigorous, and broadly acceptable to all. In the late 1980s, a model for regulatory decision-making in the nuclear field, known as Tolerability of Risk (TOR), was posited as a solution to these problems. By the end of the 1990s, HSE began to examine how these principles could apply across the entire scope of its work.

⁵⁷ Ibid., 3–4.

6.6. The Systematisation of Risk

6.6.1. *Tolerating Risk: Explaining HSE's Approach to Nuclear Risk*

Risk management crystallised in the 1990s, therefore, not only as a comprehensive way for employers to control occupational and environmental hazards, but a coherent framework for regulatory decision-making in the HSC/E.

As described previously, while not explicitly referred to as such, 'risk assessment' had long been used by HSE and its predecessors as a tool to guide regulatory and enforcement action.⁵⁸ In the late 1960s, for instance, factory inspectors had used accident statistics to identify workplaces which required greater attention, moving away from routine, cyclical inspection. In the inspectorates, different kinds of risk assessment were used depending on the type and seriousness of the hazard under scrutiny. They varied from informal, qualitative assessments of the likelihood of a particular hazard being realised (for example machinery accidents) to in-depth, formal computations of the probability of failure in complex systems, such as nuclear power plants. In an epidemiological sense, risk assessment was used to determine the probability that individuals were exposed to particular harmful substances, as well as evaluate the overall success or failure of regulatory efforts.⁵⁹

Compounding these technical and methodological differences in risk assessment were different legal benchmarks against which control was judged. The HSWA, as described previously, used the concept of 'so far as is reasonably practicable'

⁵⁸ HSC, "Risk Assessment in HSE", Annex 1, para. 2-4.

⁵⁹ *Ibid.*, *passim*.

(SFAIRP). However, subordinate legislation sometimes had different standards: for instance, nuclear legislation used the qualification ‘as low as reasonably practicable’ (ALARP), while air pollution legislation advanced a technological standard, ‘best practicable means’.⁶⁰

HSE’s establishment in 1975 brought inspectors and policymakers directly into contact with the different approaches to risk used by their colleagues. These differences in approach and regulatory culture exacerbated the tensions between HSE’s various ‘tribes’, and inhibited the development of a more corporate organisation. As Rimington argued, the language and lexicon of risk had yet to crystallise in this inaugural period: ‘What they were all interested in was risk. But there wasn’t a language to express it in at that time. Everyone was doing risk and risk management, but the necessary language and techniques hadn’t been developed.’⁶¹ While this view represents, in part, a post-hoc rationalisation of HSE’s attempts to systematise its decision-making, it is certainly the case that the common denominator of these approaches was the attempt by officials to evaluate the likelihood and consequences of a particular event (be it a machinery accident, infection, gaseous discharge or nuclear meltdown), and direct regulatory action accordingly. The salient question that emerged was how these varied ideas and tools could be related together.

It was a public inquiry into the Central Electricity Generating Board’s (CEGB) proposal to build a new nuclear reactor at Sizewell in Suffolk in the mid 1980s that first begged the question. Conducted over 340 days, at the time, the Sizewell B inquiry

⁶⁰ Rimington, “Valedictory Summary,” 17.

⁶¹ Rimington, Interview, pt. 1.

was Britain's longest-running and most expensive public inquiry. At the hearing, Sir Frank Layfield QC, a distinguished planning lawyer, heard long and technical arguments about the level of risk from reactor designs, including the proposed pressurised water reactor. However, these did not fully capture or recognise public concerns.⁶² In response to the growing recognition that the public was a key stakeholder in British health and safety policy (and public policy in general), Layfield recommended that HSE 'formulate and publish guidance on the tolerable levels of individual and social risk to workers and the public from nuclear power stations, recognising the limitations of present risk assessment techniques.'⁶³ Layfield was concerned both by the lack of consideration for wider public health and safety in CEGB's risk assessment, and the fact that the public had little say over what constituted a 'tolerable' level of risk: this was left to 'experts' in the CEGB and Nuclear Installations Inspectorate. As Layfield explained, 'the opinion of the public should underlie the evaluation of risk; there is at present insufficient public information to allow understanding of the basis for the regulation of nuclear safety.'⁶⁴

Layfield's use of the word 'tolerable' was evocative. Firstly, it implied there was a level of risk which the public was somehow willing to live with — the risk need not be reduced to zero. Secondly, it accepted that social or political criteria were important

⁶² See HC Deb 12 March 1987 vol. 112 cols. 475-90; Lionel Read, "Sir Frank Layfield," *The Guardian*, February 8, 2000, <http://www.theguardian.com/news/2000/feb/08/guardianobituaries>.

⁶³ HSC, "Risk Assessment in HSE," para. 20; HSE, "The Tolerability of Risks from Nuclear Power Stations" (London: HMSO, 1992), para. 2.

⁶⁴ HSC, "Risk Assessment in HSE," para. 19-20; HSE, "Tolerability," 1.

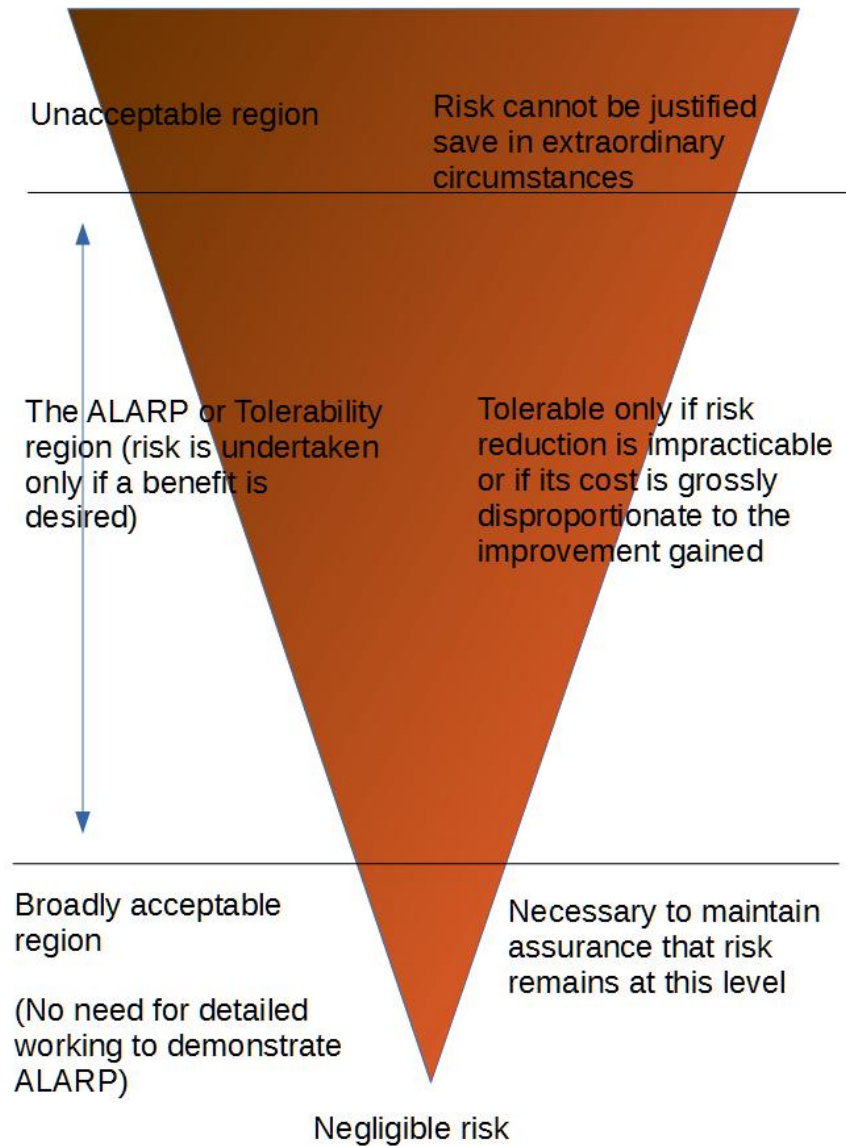
inputs in the evaluation of risk. Layfield's statement was an admission, if only implicit, that risk management was also a political exercise, not merely a scientific one.

HSE's risk-based approach to regulation crystallised as an administrative response to this demand. In response to Layfield's request, in February 1988 HSE published a detailed document, *The Tolerability of Risks from Nuclear Power Stations (TOR)*, which outlined its decision-making process and doctrine of risk management in relation to nuclear power. Relating the various standards and approaches to risk assessment used across HSE, TOR advanced the idea that the public were prepared to live with or 'tolerate' a risk that conferred a particular benefit, only in the knowledge that the risk was being properly controlled and reduced as far as possible. Tolerability was distinct from 'acceptability', which suggested that risks could be taken without any form of control; it was also distinct from other conceptualisations of risk, prevalent in other countries, which suggested that the aim of regulation was to eliminate risk altogether.⁶⁵ Represented diagrammatically, the TOR framework could be visualised as an inverted triangle (Figure 18).

In the 'unacceptable region' at top of the TOR triangle, the area of greatest individual risk and societal concern, a risk was automatically prohibited (except in

⁶⁵ HSE, "Tolerability," para. 20; Rimington, "Valedictory Summary," 17.

Figure 18. The Tolerability of Risk framework.⁶⁶



⁶⁶ HSE, "Tolerability", 8.

exceptional circumstances) unless it could be reduced to a level that was deemed to be 'tolerable' or 'broadly acceptable'. That is, the costs of the risk were seen to be 'grossly disproportionate' to the benefits obtained, in the legal language of *Edwards v. National Coal Board*. At the bottom of the triangle, the 'broadly acceptable' region, risks were generally regarded by the wider population as trivial, and no further action was required by employers and other duty holders, unless it was 'reasonably practicable' to do so (that is., the risks outweighed the costs, as specified by SFAIRP). At the centre of the triangle, the 'tolerable' region, people tolerated risks only in the knowledge that they derived certain benefits, and the risks were being properly controlled. After controls were put in place, the residual risks had to be kept as low as reasonably practicable (ALARP).

While risk assessment was used to inform regulatory decision-making, it was social and political judgement, as negotiated via HSC's advisory committees, which ultimately determined where a particular risk sat on this spectrum. Of course, as HSE realised, this was a dynamic process that was likely to change along with public attitudes and scientific knowledge. For instance, a particular chemical substance could move from being 'broadly acceptable' to 'unacceptable' as scientific knowledge of its toxic effects evolved (historically, this was the trajectory taken by asbestos). The location of a particular risk on the TOR diagram, therefore, did not represent a 'final' decision on risk: it was simply a heuristic which was used to guide policymaking.

TOR's great innovation was that it seamlessly brought together, for the first time, the seemingly divergent legal standards and principles used by HSE's inspectorates. As Rimington explained, 'everything we did could be related to the concept that risk is

tolerable.⁶⁷ In practice, there was very little difference between the concepts of ALARP in nuclear safety or SFAIRP in the HSWA, except that ALARP was usually expressed in quantitative terms, while SFAIRP was most often qualitative.⁶⁸ In both cases the same principle applied, namely that risk should be reduced as far as possible, at least to the point where the cost of risk reduction became ‘grossly disproportionate’ to the risk itself.⁶⁹

TOR established a ‘lingua franca’ which helped bind the constituent parts of HSE together, acting as a catalyst for a more integrated, corporate culture.⁷⁰ Further, by incorporating public and political opinion in the evaluation of risk, TOR acknowledged that political and emotional, as well as technical considerations helped delineate the boundary between what was ‘broadly acceptable’ and what was ‘unacceptable’. Most significantly, TOR enshrined an age-old British principle in risk evaluation: namely, that financial cost was an integral factor in all such judgements.

6.6.2. Generalising Risk: Reducing Risk, Protecting People

In the 1990s, HSE began to consider how the TOR framework could apply to entire range of risks under its jurisdiction. The result of this process was the discussion document *Reducing Risk, Protecting People* (R2P2), first published in May 1999. R2P2 was the most comprehensive and detailed rendition of HSE’s regulatory philosophy to

⁶⁷ Rimington, Interview, pt. 3.

⁶⁸ Rimington, Interview.

⁶⁹ HSE, “Tolerability,” 7–10.

⁷⁰ Rimington, Interview. In organisational terms, this was achieved by April 1990 with the establishment of a Field Operations Division, bringing the factory, agriculture, and mines and quarries inspectorate under common management.

date. Aiming to show how risk assessment and risk management informed its policymaking, it combined in a single, comprehensive framework the various approaches to risk taken in different areas of its regulatory activity, from nuclear risk to railway passenger safety. Designed to be read by stakeholders with an interest how HSE went about its work, not as an employers' guide to risk assessment, R2P2 attempted to make transparent the social, political, economic, scientific and technical factors that informed its decision-making. Following controversies such as the BSE scandal and Ladbroke Grove rail crash, it was also intended to reassure the public that the regulator was adopting sound decisions.⁷¹

Behind HSE's evolving approach were many of the long-term trends I have discussed in this thesis. There was growing scientific understanding of the way people perceive risk, and appreciation that policymakers need to (and in fact do) take into account subjective values when assessing and managing risk. There was the increasingly complex and global nature of risk regulation. Further, there were the widespread changes in industry and employment that had dissolved many of the certainties of regulation in the early twentieth century, not least, the nature of safety controls. Most significant of all were the complex changes in wider society, analysed by Ulrich Beck.⁷²

In R2P2, HSE broke down its decision-making into six key stages (Figure 19). An important proviso, as HSE explained, was that these stages were not necessarily

⁷¹ HSE, *Reducing Risks, Protecting People*, 5.

⁷² Beck, *Risk Society*.

taken independently. Intelligence-gathering and consultation, for example, occurred throughout all stages, so the process was best described as iterative.

Figure 19. Decision-making in the HSE.⁷⁵

STAGE 1	Deciding whether the issue is primarily one for HSC/E
STAGE 2	Defining and characterising the issue
STAGE 3	Examining the options available for addressing the issue, and their merits
STAGE 4	Adopting a particular course of action
STAGE 5	Implementing the decisions
STAGE 6	Evaluating the effectiveness of the actions and reviewing decisions on implementation

In brief, after an issue came to HSC/E's attention and was determined to be primarily one of health and safety (stage 1), the issue was defined and characterised (stage 2). Qualitative and/or quantitative risk assessment was used to ascertain the nature and scale of the risk, and the level of regulatory response. The particular type of assessment used depended on the attributes of the hazard and whether it was amenable to definition in numerical or statistical terms. Scientific and technical intelligence was gathered through internal and external research (for example epidemiological studies), and through HSC's advisory committees. HSE then evaluated the levels of individual and societal risk deriving from the hazard.

⁷⁵ HSE, *Reducing Risks, Protecting People*.

A significant innovation in R2P2, as I have already suggested, was the decision to show how social, political and economic factors (that is, public perception of risk) were taken into account in HSE's decision-making. During risk assessment, such considerations could be taken into account by attaching different weightings and preferences to the scientific data, for example, by focusing more on the consequences of the risk as opposed to its likelihood (this was especially the case for newer hazards or those with potentially catastrophic consequences). Scientific uncertainty could also be accommodated by reference to the precautionary principle. In stage 3, possible options for managing the risk were identified, drawing on the whole toolkit of actions available to HSE, from the publication of guidance, to the making of new regulations or codes of practice. To evaluate their relative merits, CBA was employed to weigh up costs and benefits in monetary terms. It was in stage 4, when a particular course of action was chosen, where the criteria used for reaching decisions outlined in the TOR framework had significant impact.

The TOR framework was generalisable across all areas of HSE's activity not only because it united the various legal standards and approaches used by HSE inspectors, but because it related equity, utility and technology-based criteria for the management of risks. According to HSE, the equity-based criterion stemmed from 'the premise that all individuals have unconditional rights to certain levels of protection. This leads to standards, applicable to all, held to be usually acceptable in normal life, or which refer to some other premise held to establish an expectation of protection.'⁷⁴ The utility-based criterion, by contrast, 'compares in monetary terms the relevant benefits

⁷⁴ HSE, *Reducing Risks, Protecting People*, 41; Prosser, *The Regulatory Enterprise*, 102.

(e.g. statistical lives saved, life-years extended) obtained by the adoption of a particular risk prevention measure with the net cost of introducing it, and requires that a particular balance be struck between the two.⁷⁵ The technology criterion ‘essentially reflects the idea that satisfactory level of risk prevention is attained when “state of the art” control measures (technological, managerial, organisational) are employed to control risks whatever the circumstances.’⁷⁶ Effectively, the top of the TOR triangle (the unacceptable region) was dominated by concerns about equity, while the centre of the triangle (the tolerability region) was dominated by concerns about utility, balancing costs against benefits. Technology-based criteria were found throughout the TOR framework.

TOR’s power as a framework for regulatory decision-making, therefore, stemmed from its strength as an ‘integrative template’: not just its ability to unify what were hitherto disparate and incompatible criteria for managing risks, but its generalisability across the whole spectrum of HSE’s activity, and across wider risk regulation in general.⁷⁷ By relating equity, utility and technological criteria for decision-making in a single conceptual model, the HSE could legitimise its activities on multiple fronts, by demonstrating how its policies took into account such considerations as proportionality and consistency. Moreover, HSE could simultaneously claim, at least in theory, to be promoting health and safety, *and* reducing regulatory burdens. HSE could show how it was not standing in the way of economic development in two ways: first, that its aim was not to eliminate risk

⁷⁵ HSE, *Reducing Risks, Protecting People*, 41.

⁷⁶ Ibid.

⁷⁷ Hutter, “The Attractions of Risk-Based Regulation,” 12.

altogether (except in the most serious circumstances), but merely to reduce it to a level that was ‘tolerable’ or ‘broadly acceptable’; second, that utility-based judgment (that is, CBA) formed an integral part of its decision-making. In HSE’s view, therefore, worker safety and business profit were not mutually exclusive.⁷⁸

In practice, of course, this was not always the case. The erosion of HSE’s enforcement capacity due to government cuts, and the low level of fines levied for health and safety offences gave some credence to criticisms (for example, from the London Hazards Centre) that HSE’s ‘partnership’ approach was distinctly one way.⁷⁹ Nevertheless, by representing the basics of its decision-making in a single diagram, HSE had invented a way to justify its activity against accusations from all sides, and thus prise itself from the ‘rock and hard place’ it had fallen into.⁸⁰ First and foremost, TOR was a safety control against reputational risk, criticism and budgetary attack.

Another benefit to TOR was that it was seemingly compatible with the regulatory approach first outlined by the CSHW. In a way, R2P2 was merely a restatement of existing principles and ideas. However, in presenting them straightforwardly, and relating them with developments since 1974—most notably the emergence of risk assessment—HSE synthesised a coherent vision of its regulatory philosophy. As with risk assessment, the ideas present within R2P2 were not a

⁷⁸ Nichols and Walters, *Safety or Profit? International Studies in Governance, Change and the Work Environment*.

⁷⁹ Between 1994/95 and 1996/97 there was a 44 per cent reduction in the number of enforcement notices served on employers, and a 16 per cent decline in the number of immediate prohibition notices. In 1995/96, the average fine for health and safety offences prosecuted by the HSE was just £2,572. See “Environment, Transport and Regional Affairs Select Committee. Memorandum by the Royal Society for the Prevention of Accidents. HSE 03,” 1999.

⁸⁰ HSC, *Annual Report 1992-95*, xiv.

complete innovation, but an ex post facto abstraction, borne out of political necessity. Yet, R2P2 cemented risk-based ideas in British health and safety regulation, and firmly established risk assessment as the *sine qua non* of hazard control.

As Hutter has explained, however, the systematisation of the HSE's regulatory philosophy may have disadvantaged HSE in the long run. With transparency also came the potential for further political conflict:

The systematisation of approaches to occupational health and safety led to a greater readiness to challenge regulatory demands and the tools of systematisation have emerged as tools of adversarial relations. The systematic approach to health and safety has proved to be double-edged. On the one hand it forces a much more serious and sustained focus on health and safety through such things as audits and performance indicators. But on the other hand it also leads to resistance to accept some regulatory demands.⁸¹

An assumption underlying R2P2 was that, somehow, by opening up HSE's decision-making to wider public and political scrutiny, popular misconceptions (for example, the role of risk assessment) would be laid to rest, and affected groups would be more likely to accept its proposals as valid. This was patently false, for as I explain below, as the 1990s and early 2000s wore on, HSE came under unprecedented political assault.

⁸¹ Hutter, "The Attractions of Risk-Based Regulation," 10–11.

6.7. The Workplace and Public Health

6.7.1. *Occupational Health in Britain*

Occupational health serves as an intriguing case study of HSE's risk management approach. As we have seen, a common criticism of British health and safety regulation, voiced by interest groups, politicians and academics at various times before and after 1974, is that it has paid insufficient attention to the health risks arising from work, and occupational health generally.⁸² Instead, regulators have tended to concentrate on safety issues, since physical injuries are in general more unambiguously connected to deficiencies in management or the work environment, and are therefore simpler and more economic to control. While occupational health was included within the HSWA, and the Employment Medical Advisory Service (EMAS) became part of the HSE in 1975, critics have argued that the HSWA's risk-based approach reduced the prospects for occupational health.⁸³

Certainly, HSE's ability to offer occupational health advice to industry and government was severely constrained by budgetary cuts and the collapse of EMAS' field organisation in the 1990s. As part of the movement to contract-out government services, a 1994 Prior Options Review by HSE's Director of Medical Services, Tim Carter, recommended that 20 per cent of EMAS' role could be handed to external organisations. Reflecting the wider transformation in the British state, the role of

⁸² This observation continues to be made by Parliamentary committees, including the Work and Pensions Committee in 2004 and 2008. See Prosser, *The Regulatory Enterprise*, 97.

⁸³ See, e.g. "Reactions to Robens."

EMAS underwent a significant adjustment, from directly advising employers, to giving information to employers on where to find advice—a movement from direct service provision, to risk communication.⁸⁴ The number of full-time Employment Medical Advisers decreased from over 30 in 1974, to just 10 in 2004. Overall, the number of professional EMAS staff halved between 1990 and 1998. As Greenberg argues, this was ‘ostensibly ... an exercise in efficiency but essentially a practical consequence of the ideology of deregulation and disengagement.’⁸⁵ Yet, it did take a personal toll on those in charge: as Carter recalled ‘roughly half the staff went that I was looking after ... , I spent two really quite unhappy years taking things to pieces....’⁸⁶

Against this picture of deregulation and decline, it is tempting to resign British occupational health to history. However, the reconceptualisation of occupational health within the ambit of risk and deregulation also offered intriguing new possibilities for the field as the twentieth century drew to a close. Firstly, the risk management framework advanced by COSHH enabled a more systematic response to health hazards while greatly simplifying the law. Secondly, under the dominant paradigm of deregulation, there was pressure on regulators to express more forcibly the economic consequences of work-related ill health. As a result, during the 1990s the British workplace became identified not only as a site for the promotion of workers’ health, but also public health.

⁸⁴ HSC, “EMAS and the Medical and Nursing Element of HSE’s Work,” September 1997, TNA EF7/4787.

⁸⁵ Ibid., Annex C; Greenberg, “The Last Senior Medical Inspector of Factories,” 4.

⁸⁶ Carter, Interview, pt. 1.

6.7.2. *The Conservatives and Occupational Health: The Health of the Nation*

The Conservatives developed their public health policy for England in the white paper *The Health of the Nation*, published in 1992.⁸⁷ Following the major NHS reforms in 1990, *Health of the Nation* was significant because it ‘represented the first explicit attempt by government to provide a strategic approach to improving the overall health of the population.’⁸⁸ Demonstrating some of the wider influences on public policy discussed above, including the use of performance targets, *Health of the Nation* identified accidents as a key area for action by government, the NHS, external organisations and agencies.⁸⁹ Central to its approach was the idea of ‘active partnership’ or ‘healthy alliances’ between groups and individuals to secure health improvements, an idea that was consistent with health and safety policy and the neoliberal view there were fundamental limits to state intervention.⁹⁰

It is illuminating why accidents were chosen as a specific area for intervention. Accidents, alongside other key areas such as HIV/AIDS, represented areas where there were the ‘greatest need and greatest scope for making cost-effective improvements in the overall health of the country.’⁹¹ Accordingly, it was noted ‘accidents are an important cause of injury, disability and death, particularly in young and elderly people, and can very often be avoided.’⁹² Accidents constituted ‘the most common cause of death in people under 30 years.... Many are preventable by

⁸⁷ *The Health of the Nation. A Strategy for Health in England*, Cm 1986, 1992.

⁸⁸ Department of Health, *The Health of the Nation – A Policy Assessed. Executive Summary*. (London: TSO, 1998), 1.

⁸⁹ *Health of the Nation*, 3–4.

⁹⁰ *Ibid.*, 5, ch. 3.

⁹¹ *Ibid.*, 15.

⁹² *Ibid.*, 17.

information and education, and through measures like improved planning and design of the environment, education [and] better management in the workplace.⁹³ The government's aim was to use information and education to promote public health, rather than placing unnecessary regulatory burdens on individuals and businesses.⁹⁴ Once again, risk communication was posited as an alternative to regulation and the direct provision of services.

Health of the Nation's focus went beyond health and safety at work to include wider issues of public health and safety not regulated by HSC/E, such as consumer safety, domestic and road accidents. However, by identifying the workplace as a site where important improvements could be made, and highlighting employers as a major 'partner' in this effort, occupational health became subordinated to the wider public health agenda.

6.7.3. *Good Health is Good Business*

The government's success in reducing workplace accidents rested in part on convincing employers of the positive economic case for health and safety. This endeavour gathered place over the 1990s, as the risk management approach to health and safety regulation solidified. While inspectors and other officials had made various efforts over the twentieth century to persuade employers of the economic benefits of health and safety, such as reduction in sickness and lost time, these efforts were often

⁹³ Ibid., 102.

⁹⁴ Ibid., 106.

hampered by the paucity of statistical information, particularly on occupational illness. Financial estimates of the costs to employers and the nation were thus unclear.

As HSE's knowledge base improved over the 1990s, however, the prevalence and costs of work-related injury and ill-health could be more precisely assessed. A major turning point came in 1990, when the HSE included a trailer in the Labour Force Survey to evaluate self-reported ill-health among a sample of Britain's entire workforce.⁹⁵ The survey revealed that 2 million people were suffering from illnesses they believed were caused or made worse by work, and that an estimated 29 million working days were being lost as a result of occupational injury and ill-health. This compared to the 23 million lost working days reported by the CSHW in 1972, which drew upon more limited returns from the Department of Health and Social Security.⁹⁶

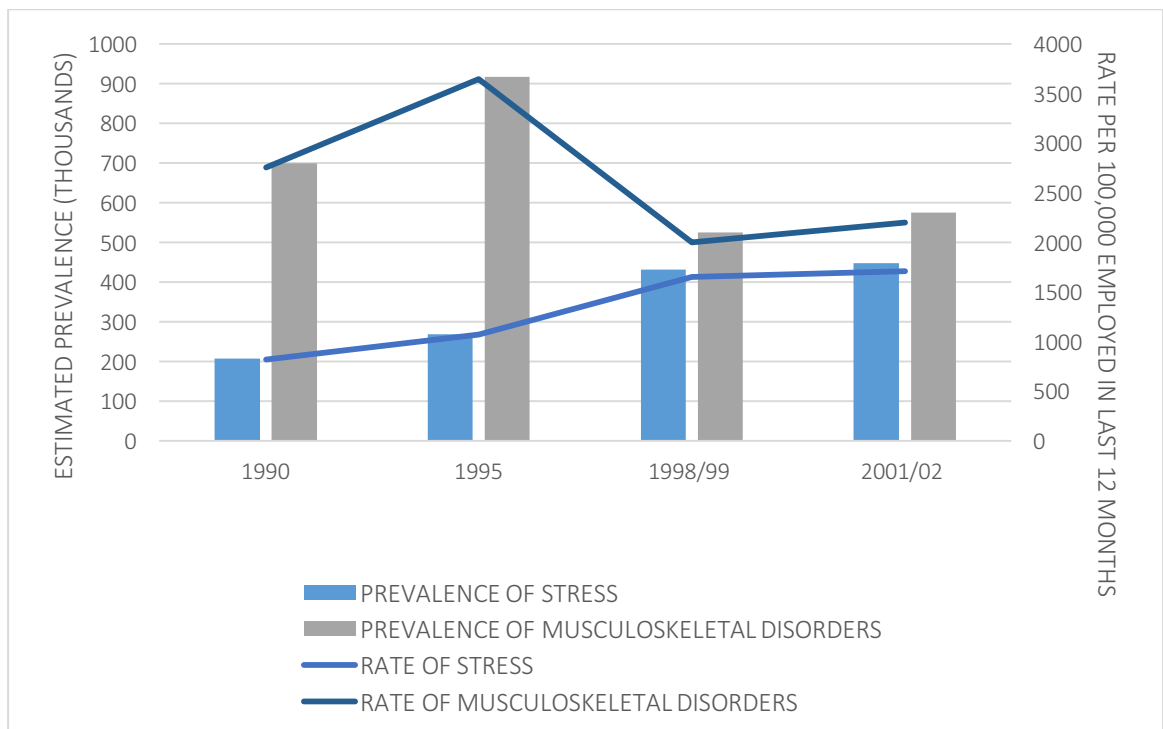
Subsequent surveys, which were periodical until 2003/04, showed a growing prevalence of work-related ill-health. The prevalence rate of stress increased by 30 per cent between 1990 and 1995, while the prevalence rate of musculoskeletal disorders increased by 32 per cent. While this trend later declined, these surveys drew HSE's attention to the wider problems of occupational ill-health in the early 1990s, stress and musculoskeletal disorders in particular (Figure 20).⁹⁷

⁹⁵ "Health Risks: Programmes for Action," 1993, 3–4, TNA EF7/3922.

⁹⁶ HSC, *Annual Report 1990-91*, x; Robens, *Safety and Health at Work*, 1.

⁹⁷ <http://www.hse.gov.uk/statistics/lfs/swit3w12.xlsx>. Accessed February 11, 2016.

Figure 20. Prevalence and rate of occupational stress and musculoskeletal disorders in England and Wales, 1990–2001/02.⁹⁸



To a large extent, limitations in the methodological design of these surveys prevent the drawing of firm conclusions about trends in occupational ill-health. Firstly, they draw upon individuals' subjective accounts of conditions, rather than expert diagnosis. Secondly, differences in the way data are aggregated mean that the surveys are not strictly comparable. Thus, the rise in prevalence of stress and musculoskeletal disorders between 1990 and 1995 might indicate methodological changes rather than any underlying differences in the extent of these conditions. Thirdly, analysts have highlighted the influence of social and cultural factors in shaping the public's perception of stress, as well as structural changes in the British workplace. For

⁹⁸ <http://www.hse.gov.uk/statistics/history>. Accessed February 5, 2016. Figures for stress in 1990 include cases of hypertension, heart disease and strokes, 1998/99 onwards include heart disease/attack and related conditions.

example, it has allegedly become more socially acceptable to talk about stress, so workers are more likely to report it. Industry fragmentation, labour market flexibility and increases in personal workloads are all seen to have contributed to an increase in worker stress since the 1990s.⁹⁹ For these reasons, it is problematic to relate self-reported occupational illness in the early 1990s to failures of HSE policy, though trade union campaigners have attributed problems such as stress to wider governmental failures (such as the promotion of labour market flexibility and long working hours) and bad management practice.¹⁰⁰

Regardless of what caused this increase, whether it was real, or a statistical artefact, the compilation and publication of this data reoriented political attention to the consequences of occupational ill-health. So, while stress had been an early concern of the HSC—its Medical Advisory Committee had discussed work-related stress in 1979/80—by the 1990s stress and other occupational illnesses had become considerable regulatory challenges.¹⁰¹ It is pertinent to note that considering the complex aetiology of occupational stress—it cannot be linked directly to the presence of physical hazards in the work environment—it was not amenable to regulation or enforcement as a *health and safety* issue in the same way as, for example, risks resulting from manual handling. Nevertheless, the HSE approached stress as a risk management issue, amenable to assessment and hence informed action on the part of employers. In 2004 they

⁹⁹ Andrew Smith et al., *The Scale of Occupational Stress. The Bristol Stress and Health at Work Study*, Contract Research Report 265/2000 (Sudbury: HSE Books, 2000); Ricardo Blaug, Amy Kenyon, and Rohit Lekhi, *Stress at Work* (London: The Work Foundation, 2007).

¹⁰⁰ See, e.g. “Get A Life! Don’t Be Worked Into the Ground. Hazards Factsheet 78,” *Hazards*, 2002, <http://www.hazards.org/haz78/getalife.pdf>.

¹⁰¹ HSC, *Report 1979-80*, 10.

published management standards highlighting the risk-factors of occupational stress, including workers' ability to control their work.¹⁰²

Following these surveys in the early 1990s, studies by HSE economists drew political attention to the huge costs of health and safety failures. Updating an earlier study in 1994, a 1999 study by Gordon and Risley argued that the total cost to British employers of health and safety failures amounted to £3.5–7.5 billion per year, or 4–8 per cent of their gross profits. To the wider British economy, HSE estimated a cost of £2.9–4.2 billion, or 0.6–1.2 per cent of GDP.¹⁰³

The HSC/E's renewed focus on occupational health came from another prominent source: the law. In the late 1980s and 1990s, the proliferation of UK and European laws related to the management of health risks, not least COSHH and the MHSW regulations, encouraged HSC/E to reappraise their occupational health strategy. In 1993, HSE commissioned a series of reviews on the ten most prominent occupational health risks, resulting in 90 per cent of all causes of occupational ill-health: chemical and biological agents, noise and vibration, ionising and non-ionising radiation, sick building syndrome, stress, manual handling, and upper limb disorders. The reviews suggested that HSE should pay more attention to how employers managed health risks, and evaluate the impact of its activities.¹⁰⁴ By making the positive economic case for health and safety, the HSE could influence employers as well as lay further claim to political authority and legitimacy.

¹⁰² See e.g. HSE, *Good Health Is Good Business. Employers' Guide. Phase 4*. (Sudbury: HSE Books, 1999), 3.

¹⁰³ HSE, *The Cost to Britain of Workplace Accidents and Work-Related Ill Health in 1995/96* (Sudbury: HSE Books, 1999).

¹⁰⁴ HSC, *Annual Report 1992-93*, 12; HSC, *Annual Report 1993/94*, 34.

It was against this complex background that HSE launched its largest promotional campaign to date, *Good Health is Good Business*, in May 1995. As its name suggests, the campaign was designed to increase employers' (especially small firms') awareness of occupational health, and sponsor a risk-based approach to control, by focusing on the positive financial and business case (for example, reductions in accidents and lost time, lower insurance premiums, increased profit and company reputation). A five-year strategy, *Good Health is Good Business* employed a multimedia approach, based on advertising, films, seminars, conferences and field activities.¹⁰⁵ The campaign was conducted in three main phases, each concentrating on a particular class of health risk. Phase 1 focused on noise, musculoskeletal and respiratory disorders; phase 2 focused on occupational dermatitis and cancer (including asbestos-related cancer); and phase 3 on hand-arm vibration and solvents. A supplementary fourth phase was used to further convince employers of the need for action.¹⁰⁶ An evaluation of the campaign in 2000 found some evidence to suggest that it was successful, including a statistically significant difference in the perception of risk management between firms that were 'aware' of the campaign and those that were 'unaware'. However, problems relating to selection bias prevented the drawing of firm conclusions.¹⁰⁷

¹⁰⁵ M. Wright et al., *Evaluation of the Good Health Is Good Business Campaign*, Contract Research Report 272/2000 (Sudbury: HSE Books, 2000), 1–2.

¹⁰⁶ HSE, *Good Health Is Good Business. Employers' Guide. Phase 4*. (Sudbury: HSE Books, 1999), Foreword.

¹⁰⁷ Wright et al., *Evaluation of the Good Health Is Good Business Campaign*.

6.7.4. *New Labour and Occupational Health: Our Healthier Nation and Securing Health Together*

Following Labour's election victory in 1997, occupational health once again became linked to the wider public health agenda. Labour's public health policy, *Our Healthier Nation* (1998), also identified the workplace as an important site for improving the health of the general population, alongside locations such as neighbourhoods and schools.¹⁰⁸ Accident prevention was once again chosen as an objective, with a target to decrease the overall accident rate by a fifth by 2010.¹⁰⁹

The differences in approach between *The Health of the Nation* and *Our Healthier Nation* help illuminate the wider governmental trends that impacted health and safety under the 'third way' ideology of New Labour. As in *Health of the Nation*, regulation or legislation was not the goal of Labour's policy, and indeed was to be avoided unless strictly necessary:

Where old threats to health continue or new threats arise we will not hesitate to legislate or regulate if this is judged to be necessary. But we will seek to engage the active support of the people affected rather than resort to coercion or unwarranted intrusion.... Regulation and legislation should be the exception — not the rule — a step taken only where voluntary action will not sufficiently protect the public's health.¹¹⁰

¹⁰⁸ Another important step in Labour's public health policy was the establishment of the post of Minister of Public Health, first occupied by Tessa Jowell.

¹⁰⁹ *Our Healthier Nation* defined the accident in a much wider sense than HSE, in accordance with its wider public health aims. It defined accidents as 'those which involve a hospital visit or consultation with a family doctor.' Department of Health, *Our Healthier Nation. A Contract for Health*, Cm. 3852, 1998, 68.

¹¹⁰ *Ibid.*, 35.

Here, in its public health policy and elsewhere, 'New Labour' co-opted the language of the political right to forge a new social democratic consensus. Prevailing ideas about 'burdens on business' remained intact beneath the political rhetoric of 'better regulation'.¹¹¹ The widespread use of the language of partnership in *Our Healthier Nation* circumscribed the role of the government in public health and emphasised the importance of individual responsibility. As the Deputy Prime Minister, John Prescott explained in 1999:

We ... need to make sure that our approach to regulation continues to be appropriate for the changing world of work as we enter the next millennium, but without simply adding new and unnecessary regulatory burdens to business, especially small and medium-sized enterprises. Our aim must be to reduce the rate of workplace accidents and ill-health still further, crucially by working with all stakeholders to demonstrate that a healthy, well protected workforce is not only right, but is good for business and good for society.¹¹²

The political reconfigurations that accompanied 'New Labour' nevertheless had significant ramifications for health and safety. In *Our Healthier Nation*, Labour laid out its new political philosophy by way of a 'national contract for better health'. This envisaged an important, continuing role for the state in public health, albeit one which sought to avoid the 'two extremes [of] individual victim blaming on the one hand and

¹¹¹ See Beck and Woolfson, "The Regulation of Health and Safety in Britain," 35–49.

¹¹² HC Deb 30 March 1999 vol. 328 col. 586W.

nanny state social engineering on the other.¹¹³ Accordingly, while the state's role was seen to be 'national coordination and leadership' and the development of informed, evidence-based policy, individuals were urged to take greater responsibility for their health, and adopt healthy lifestyles. Tackling health inequalities was one of the major differences setting apart Labour's public health policy from that of the Conservatives, despite health inequalities having surfaced in government policy as early as the 1980 Black Report.¹¹⁴

Most importantly, while individual responsibility was seen to be vital, Labour accepted that it could not be promoted without supportive frameworks, such as community-based initiatives. For the public to make better, healthier choices, they needed to be better informed. Risk assessment and communication were thus further engrained in British public policy as the government's main responsibilities: 'It is the job of the Government to identify risks to health, to assess them, and, where appropriate, either take action to reduce those risks or ensure that people who might be affected are aware of them.'¹¹⁵

On a practical level, too, *Our Healthier Nation* had significant implications for health and safety policy. As part of the HSE's contribution to *Our Healthier Nation*, the 'Healthy Workplace Initiative', launched in 1999, concentrated on the areas of health risk most expensive to employers and society, such as back pain. HSE also embarked on a comprehensive review of its own occupational health activity. In *Securing Health*

¹¹³ Department of Health, *Our Healthier Nation*, 28–30.

¹¹⁴ Department of Health and Social Security, *Inequalities in Health. Report of a Research Group* (London: HMSO, 1980).

¹¹⁵ Department of Health, *Our Healthier Nation*, 34.

Together (2000), HSE launched a ten-year strategic programme, drawing upon an explicit partnership approach bringing together government, local authorities, trade unions, employers and health professionals.¹¹⁶ *Securing Health Together* is notable because it represented, for the first time, HSC/E's explicit adoption of targets to improve occupational health.¹¹⁷ As HSE explained, 'the working environment is an ideal setting to promote the health of workers and the public alike.'¹¹⁸ Five main programmes were initiated to achieve these targets, relating to 'compliance', 'continuous improvement', 'knowledge', 'skills' and 'support mechanisms'.¹¹⁹ Both the *Good Health is Good Business* campaign and Healthy Workplace Initiative were seen to contribute to these programmes.

6.7.5. *Occupational Health: Decline, Resurgence or Reconfiguration?*

As my analysis has suggested, it is overly simplistic to suggest either that occupational health completely withered away over the 1990s (as per Long or Greenberg), or that it greatly increased in importance and political priority (as per the HSE). Rather, with the changing role of the British state and the cementation of risk management, the role of occupational health was reconfigured. As British industry fragmented, the direct

¹¹⁶ HSC and HSE, *Securing Health Together. A Long-Term Occupational Health Strategy for England, Scotland and Wales* (Sudbury: HSE Books, 2000).

¹¹⁷ These targets included a 20 per cent reduction in the incidence of work-related ill-health by 2010, a 20 per cent reduction in ill-health to members of the public affected by work activity, and a 30 per cent reduction in the number of work days lost to work-related ill-health. The targets set in *Securing Health Together* were themselves part of the wider targets for health and safety regulation set by the *Revitalising Health and Safety* strategy (see below).

¹¹⁸ HSC and HSE, *Securing Health Together*, v.

¹¹⁹ *Ibid.*, 1–2.

provision of occupational health services declined. The HSE's own capacity to provide occupational health services to industry also disintegrated with the downsizing of EMAS. However, at the same time, HSE's commitment to the assessment, communication and management of health risks deepened, as evidenced by the *Good Health is Good Business* campaign and the various public health strategies in the 1990s.

This commitment to occupational health *management*, as opposed to occupational health *promotion* in the more 'holistic' manner referred to by Long, stemmed from three main imperatives: the subordination of occupational health to the wider public health agenda; growing political concern about the costs of occupational ill-health; and the recognised need for regulators to capitalise on the legislative developments of the 1980s and early 1990s (in particular, European legislation). These imperatives, in turn, were interwoven with wider governmental trends that entrenched risk management, notably the cementation of the 'burdens on business' rhetoric. As we have seen, the rise of 'New Labour' did nothing to halt this trend.

Risk management offered an approach to regulation that was politically attractive, ostensibly transparent, and cost-effective both to employers and government. Just as TOR acted as a universal defence of HSE's decision-making, risk management offered the HSE a universal escape clause for occupational health. Through risk management, HSE could claim to be doing more and more about occupational health (for example by identifying and communicating risks) at the same time that its direct involvement became less and less (for example through field-based expertise). Hence the attraction for a regulator under unprecedented scrutiny and financial constraint.

The debates around occupational health reflected a wider anxiety about health and safety regulation as the twentieth century ended. A gulf had seemingly opened, that while British health and safety regulation was seemingly ‘successful’ (in 1999, the rate of fatal workplace accidents was 72 per cent lower than in 1974, deaths from silicosis had almost halved, and the rate of non-fatal injury among employees had declined by 22 per cent since 1986), public confusion and antipathy towards it was growing.¹²⁰ It is this antipathy the chapter now examines, highlighting how, by the end of the 1990s, an insidious ‘health and safety gone mad’ rhetoric had become embedded in British media discourse. In response, HSE and the Labour government attempted to ‘relaunch the health and safety agenda’ and recapture some of the original spirit of the Robens philosophy.¹²¹ Ostensibly, this had been lost in the quarter of a century since the HSWA, despite its core ideas having become engrained in the regulatory framework.

6.8. Return to Robens?

6.8.1. *‘Gone Mad’: Media Origins and Representation of Health and Safety, 1992–2015*

In this final section of Chapter 6, I analyse the contradictions that accompanied public and political scepticism around British health and safety regulation in the 1990s, and

¹²⁰ See Appendices II–IV. Mesothelioma clearly stands in stark contrast to these trends.

¹²¹ DETR, *Revitalising Health and Safety. Strategy Statement* (London: DETR, 2000), 8.

their impact on HSC/E policy. As highlighted above, the rapid transposition of a swathe of European health and safety law into UK legislation through the ‘six-pack’ in 1992/93 was accompanied by growing public scepticism of health and safety regulation and political scrutiny of the HSC/E. The obligation to produce written risk assessments was questioned by some small businesses and their representatives, some of whom demanded a return to the prescriptive style of regulation under the Factories Act. Confusion also developed about how the European directives and the requirement for written risk assessment fitted in with each other and the UK legislative framework. As regulator, HSE was accused by some sectors of the business community, such as the IOD, of ‘gold plating’ European legislation by going further than was legally necessary.¹²² The scale and speed of these changes not only encouraged HSC/E to petition the European Commission for a slowdown in its legislative programme, but also to explain their decision-making more closely to duty-holders. Besides R2P2, this was demonstrated in several other HSE publications in the 1990s and early 2000s. For example, in 1995 HSE published a detailed explanation of its enforcement policy. Further, the January 1994 leaflet *Five Steps to Risk Assessment* explained the risk assessment process to employers in clear, accessible prose (Figure 21). HSE distributed almost 3.3 million copies between 1994 and 2004.¹²³

¹²² As Bacon argued, ‘there were a number of occasions when we gold-plated. It’s one of the reasons why on the whole health and safety legislation in this country was seen as being the leader others ought to follow.... [T]hose that were in the know recognised that the gold plating might actually have a gold payback.’ Bacon, Interview, pt. 1.

¹²³ Institute of Employment Studies, *An Evaluation of the Five Steps to Risk Assessment*, Research Report 476 (Sudbury: HSE Books, 2006), vii.

Figure 21. Five steps to risk assessment.¹²⁴

STEP 1	Look for the hazard
STEP 2	Decide who might be harmed and how
STEP 3	Evaluate the risks and decide whether the existing precautions are adequate or whether more should be done
STEP 4	Record your findings
STEP 5	Review your assessment and revise it if necessary

Despite these measures, the right-wing Eurosceptic press identified health and safety as part of a wider problem of bureaucracy and red tape. In a 1993 article, the *Daily Mail* argued how ‘there are health regulations, safety regulations, fire regulations, food regulations, government regulations [sic], European regulations, council regulations. And in every corner of the country there are officials to see that these regulations are obeyed. Or else.’¹²⁵ The article blamed overregulation not on Europe or even local authorities, but on ‘Her Majesty’s Government, the politicians at Westminster and civil servants in Whitehall, who between them ... act to an extent which burdens every business in Britain.’ The article went on to invite readers to send in their own examples of ‘bureaucracy gone mad’.¹²⁶

The *Daily Mail* had evidently struck a nerve, for over the following years it published a slew of stories on red tape and overregulation, its campaign fuelled in part

¹²⁴ HSE, *Five Steps to Risk Assessment*, Sudbury: HSE Books, 1999.

¹²⁵ M. Toner, “Basil Fawlty Takes on the Bureaucrats,” *Daily Mail*, February 27, 1993.

¹²⁶ Ibid.

by a steady stream of letters from the public. A 1995 article by the journalist Christopher Booker and the food hygienist-cum-political analyst Richard North drew attention to contradictions and inconsistencies in health and safety regulation on a dairy farm.¹²⁷ Booker's and North's campaign to encourage the government to 'tackle the tide of bureaucracy drowning so many small businesses' allegedly received over 20,000 letters between 1992 and 1995, prompting the Deputy Prime Minister, Michael Heseltine, to respond, 'nobody in their right mind would simply sweep regulations affecting health, safety and the environment into the dustbin of history.'¹²⁸

It was not until the early 2000s that health and safety specifically began to be latched on as perhaps the single greatest area of overregulation and unnecessary bureaucracy in Britain. Conflating statutory law with civil litigation, the *Daily Mail* began to publish a regular series of articles on Britain's 'health and safety culture', transforming what was in effect HSC/E's ultimate goal into the nub of a national joke. This included a widely reprinted story in 2002 that alleged schools had banned pupils playing conkers owing to health and safety guidelines.¹²⁹ Later in the decade, investigative journalists took up the mantle in television documentaries, as demonstrated by Channel 4's *Cutting Edge: The Fun Police* and BBC Panorama's *May Contain Nuts* in 2009.¹³⁰ By the 2010s, health and safety had become a staple, if increasingly tired subject for stand-up comedians. Ben Elton's sitcom *The Wright Way*,

¹²⁷ Christopher Booker and Richard North, "Seal of Disapproval for Milking the Regulations," *Daily Mail*, May 8, 1995.

¹²⁸ Christopher Booker, "'No One in Their Right Mind Would Sweep All Rules into the Dustbin'," *Daily Mail*, September 25, 1995.

¹²⁹ Chris Brooke, "Cubs Need Their Parents' Consent to Play Conkers," *Daily Mail*, October 3, 2002.

¹³⁰ Almond, "The Dangers of Hanging Baskets."

about a pedantic Environmental Health Officer, was axed after just one series in 2013, with *The Telegraph* referring to it as ‘political correctness gone mad’.¹³¹ The public and media discourse surrounding health and safety became so damaging to HSE that in 2012 it set up a Myth Busters Challenge Panel, headed by its chair, Judith Hackitt, to ‘provid[e] a mechanism for anyone ... who receives advice or its told that a decision has been taken in the name of health and safety that they believe to be disproportionate or inaccurate, to challenge that advice.’¹³² The panel subsequently published its top ten myths about health and safety, to show that many of the supposed decisions made on health and safety grounds did not in fact have a basis in legislation. These included the conkers myth, trapeze artists being told to wear hard hats, and the banning of hanging baskets to prevent people hitting their heads.¹³³

In the early 1990s, however, such overt criticism had yet to mature: health and safety was identified, as already described, as part of a wider problem of overregulation and red tape. Nevertheless, this rhetoric did have an impact on the way health and safety was regulated, as demonstrated by HSE publications such as *Five Steps to Risk Assessment* which aimed, similarly, to demystify health and safety and make regulation more accessible. However, unlike the judgments of the Myth Busters Challenge Panel in the 2010s, in the 1990s the HSE intended these publications to be consumed by

¹³¹ M. Deacon, “Ben Elton’s New Sitcom Is ‘Political Correctness Gone Bad,’” *The Telegraph*, April 26, 2013, Online edition, <http://www.telegraph.co.uk/culture/tvandradio/10016120/Ben-Eltons-new-sitcom-is-political-correctness-gone-bad.html>.

¹³² “Terms of Reference - Myth Busters Challenge Panel,” accessed July 30, 2015, <http://www.hse.gov.uk/myth/myth-busting/terms-of-reference.htm>.

¹³³ “Top 10 Worst Health and Safety Myths,” accessed July 30, 2015, <http://www.hse.gov.uk/myth/top10myths.htm>.

safety officers and duty holders, rather than the general public. While the public's role as a key stakeholder in British health and safety policy was recognised in the 1990s, at this stage the HSE mainly attempted to correct misunderstandings and misinterpretations among those with direct legal responsibilities.

6.8.2. Revitalising Health and Safety

It was amidst such public and media criticism of health and safety that the Labour government, under the Deputy Prime Minister, John Prescott, attempted to 'inject new impetus and relaunch the health and safety agenda.'¹³⁴ The 'Revitalising Health and Safety Initiative', launched in March 1999, acknowledged the HSWA's importance in lowering rates of fatal injury at work. However, echoing the moral and economic sentiments of Robens, 25 years on there were still too many deaths at work: 'Each death or serious injury in the workplace is a tragedy; a tragedy that causes devastation for workers, their families and loved ones; a tragedy which, perhaps could have been avoided in the first place.... We estimate that the total cost to society of health and safety failures could be as high as £18 billion every year. We can and should do something about this.' The time was ripe, the government argued, for 'new energy and a new strategic direction.'¹³⁵

Revitalising stemmed in part from the Labour government's belief that the European and UK legal framework for health and safety was now complete: 'sown up', in the words of HSE's former Director-General, Jenny Bacon.¹³⁶ It also stemmed from

¹³⁴ DETR, *Revitalising Health and Safety*, 8.

¹³⁵ *Ibid.*, 4, 17, emphases omitted.

¹³⁶ Bacon, Interview, pt. 2.

a fundamental conviction in the underlying principles of the HSWA. With the making of new general regulations such as COSHH and MHSW, it was assumed, there was less need to make new health and safety regulations than in the past—only update the general regulations, as scientific knowledge developed. Moreover, as risk management became established in British regulatory practice, the onus for controlling risk was now placed on the employer. The government’s priority now, revealingly, was ‘to convert legal standards into real changes in culture and behaviour in the workplace.’¹³⁷ As *Revitalising* described, the focus of regulatory efforts should be on ‘ideas capable of adding value to the current system without threatening its overall balance.... [W]hile appropriate enforcement and deterrence is crucial, this must not be at the expense of promoting voluntary compliance and models of excellence.’¹³⁸ The defining principle of the post-1974 regulatory framework, self-regulation, was thus sacrosanct.

As in 1972, it was believed that the legislative and regulatory framework had contributed to a decline in fatal accidents. However, once again—as in the 1960s—the government perceived this decline to be plateauing.¹³⁹ As the CBI argued to the Select Committee on the Environment, Transport and Regional Affairs in 1999, ‘in the light of the introduction of the framework directive and supplementary directives and the development over the last ten years of an extensive body of health and safety regulation, HSE should now shift its focus from policy to greater promotion and enforcement activities in order to improve standards.’¹⁴⁰

¹³⁷ DETR, *Revitalising Health and Safety*, 17.

¹³⁸ *Ibid.*, 8.

¹³⁹ *Ibid.*, p.17.

¹⁴⁰ “Environment, Transport and Regional Affairs Select Committee. Memorandum by the CBI. HSE 17,” 1999.

Within this self-imposed rhetorical confine, the scope for government intervention was much diminished. As in the Robens Report, the focus of *Revitalising* was the promotion of better attitudes, as opposed to regulation. To placate critics of this approach, including the TUC, Labour emphasised its pumping of financial resources into HSE, its increases in ‘regulatory contacts’ and prosecutions. However, health and safety could *only* be improved if the government actively engaged with stakeholders (particularly small firms) and developed its partnership approach: ‘Good regulation is about decent standards and protection for everyone, not bureaucracy and red tape.’¹⁴¹

As Tombs and Whyte have argued, *Revitalising* represented ‘a significant shift closer to a market-based system of regulation’.¹⁴² The development of a ‘Ready Reckoner’ under *Revitalising*’s action plan, for instance, drew upon insurance data to convince employers of the positive financial case for health and safety management.¹⁴³ Further, the strategy considered the use of direct financial incentives, such as grants, to encourage investment in safety by small firms.¹⁴⁴ *Revitalising*’s emphasis on guidance, education and legislative simplification also represented the incorporation of market-based approaches in British health and safety regulation, a phenomenon also evidenced in the contracting-out of HSE’s work.

As in *Securing Health Together*, *Revitalising* adopted ambitious targets to drive improvements in health and safety. Four targets were adopted: to reduce the number

¹⁴¹ DETR, *Revitalising Health and Safety*, 17.

¹⁴² Tombs and Whyte, “A Deadly Consensus,” 6.

¹⁴³ DETR, *Revitalising Health and Safety*, 20.

¹⁴⁴ *Ibid.*, 32.

of working days lost per 100,000 workers from work-related injury and ill-health by 30 per cent by 2010; to reduce the incidence rate of fatal and major injury accidents by 10 per cent by 2010; to reduce the incidence rate of cases of work-related ill-health by 20 per cent by 2010; and to achieve half the improvement under each target by 2004¹⁴⁵. Underpinning these targets was a ten-point strategy emphasising ‘the importance of *promoting better working environments* to deliver a more *competitive economy*, *motivating employers* to improve their health and safety performance, and *simplifying over-complicated regulations*.’¹⁴⁶

Bacon was rather cynical about the motives behind *Revitalising*, describing it as ‘an unnecessary, unhelpful piece of work.’¹⁴⁷ She argued that the strategy represented a rhetorical gesture on the part of Labour, an attempt to make a mark on an important issue (on the symbolically significant occasion of the HSWA’s 25th anniversary), rather than a genuine drive to tackle workplace accidents and disease. While Labour had expressed little interest in health and safety before 2000, and although the government had already conducted several reviews of HSC/E in the 1990s, Prescott announced another review of health and safety. According to Bacon, on hearing this ‘some of us just sort of went down on the table.’¹⁴⁸ The use of performance targets constrained HSE’s work and provided an inflexible tool for promoting health and safety. In any case, statistics could be easily altered, fiddled or buried: although a 2009 progress report showed that HSE was ‘on track’ to meet the target concerning fatal and major

¹⁴⁵ Ibid., 8.

¹⁴⁶ Ibid., 9, italics in original.

¹⁴⁷ Bacon, Interview, pt. 2.

¹⁴⁸ Bacon, Interview.

injury, HSE was trailing behind its target to reduce the incidence of work-related ill-health.¹⁴⁹ As Bacon concluded, 'I think it's fair to say that health and safety was remarkably low down [Labour's] agenda. Remarkably so. It [was] much higher up the Tories': for all the Tories might have been attacking and questioning, they paid far more attention to health and safety and what was going on and what should go on than Labour did.'¹⁵⁰

6.8.3. Reinventing Robens?

It is tempting to interpret *Revitalising* simply as a reaffirmation or elaboration of the Robens philosophy of health and safety regulation, some 25 years after the passage of the HSWA. As I have argued extensively in this thesis, the core components of HSE's risk management approach were embodied in the Robens Report, HSWA, and the pre-1974 inspectorates. It took the social, political and economic conditions of the 1980s and 1990s to make these ideas explicit, and relate them together in a systematic way. As Tombs and Whyte have shown, there was a certain symmetry between the Robens philosophy and the neoliberal approach to regulation that emerged in the 1980s: an emphasis on self-regulation, voluntary compliance, and the use of prescriptive regulations and punitive enforcement as weapons of last resort.¹⁵¹ However, this interpretation downplays the changing social, political, economic and industrial environment of the intervening years. The Robens Report was written in a very

¹⁴⁹ HSE, "Achieving the Revitalising Health and Safety Targets. Statistical Progress Report," 2009.

¹⁵⁰ Bacon, Interview, pt. 2.

¹⁵¹ Tombs and Whyte, "A Deadly Consensus," 1.

different social context. An analysis of *Revitalising* in comparison with the 1972 Robens Report illuminates what—if anything—had fundamentally changed in the 25 years since the HSWA. For four main reasons, I argue, *Revitalising* did not embody the same reformist spirit of the CSHW.

Firstly, *Revitalising* reflected a work environment that had changed greatly since the 1970s and which obscured many of the CSHW's basic principles. For example, as industry fragmented and the government began to contract-out services, it was often difficult to define who had primary responsibility for managing health and safety, thus the widespread emphasis on guidance and education.

Secondly, the emphasis on 'partnership' went much further than the CSHW, who primarily concentrated on a tripartite relationship between employers, employees and the state. Although 'partnership' can be seen as an elaboration of the Committee's basic idea that special interests need to be incorporated into policymaking, the language of partnership further relegated the role of the state. Under the partnership mentality, statutory intervention was thought to be ineffective *without* the wider support of partner organisations. The CSHW, on the other hand, merely aimed for an adjustment in the relative weight of statutory and voluntary effort.

Thirdly, the CSHW took the *pragmatic* view that the weight of prescriptive legislation should be reduced, because the existing body of prescriptive legislation was beginning to suffer from diminishing returns. *Revitalising*, on the other hand, stemmed from an *ideological* standpoint, that regulations produced 'burdens on business'.

Finally, while the Robens Report was written at a time when the trade unions were at their strongest, *Revitalising* was produced at a time when their power had dramatically declined. The deunionisation of the workforce and fragmentation of

industry meant that a much wider range of interests had to be accommodated in the policymaking process. The consultation framework was now much more diffuse, and power less centralised among the main representative organisations: the TUC and CBI could no longer claim to definitely speak for all British workers or employers. These changes also had ramifications for HSE's enforcement policy, since it was now even more difficult, under limited resources, for inspectors to directly intervene in most workplaces. Risk and market-based approaches to health and safety regulation colonised this vacuum, as the state intervened less and less directly in the work environment.

In summary, *Revitalising* was no reinvention of Robens. Through risk, the British state created a mechanism that allowed it to abrogate its former duties for protecting workers' health, and assume a more indirect regulatory role.

6.9. Conclusion

As discussed previously, the HSC/E was by no means unique among British regulators in systematising its risk-based approach to regulation in the 1990s and early 2000s. The Financial Services Authority, established in 2001, was another regulatory body that outlined a risk-based approach, albeit in a very different field.¹⁵² ILGRA's work demonstrates how the commitment to develop thinking on risk was government-wide,

¹⁵² Hutter, "The Attractions of Risk-Based Regulation," 5.

and coherent with the principles for proportionality, accountability, consistency, transparency and targeting in regulation.¹⁵³

On the other hand, the HSE was the most prominent and earliest example in Britain of a regulator that adopted an explicit risk management approach, and this merits closer attention.¹⁵⁴ Publications such as R2P2 cemented HSE's leadership in risk management, and capitalised on over 25 years of technical expertise in controlling workplace hazards (or well over a century, if one includes HSE's predecessors). HSE's leadership was demonstrated on ILGRA, which HSE chaired and provided an opportunity for it to promulgate its regulatory philosophy across government. One reason why an explicitly risk-based approach developed relatively early in HSE compared to other regulators was because the nub of it—the idea of securing a balance between the control of hazard and time, trouble and expense—was built in to its legislative mandate and enforcement style. Utility-based concerns, this thesis has shown, have long been dominant among the HSE's (and its predecessors') preoccupations, arguably dating back to the earliest statutory interventions in the working environment. It took the political and economic pressures of the last two decades of the twentieth century, however, to fully elaborate the criteria that influenced HSE's decisions.

In regard to the notion of 'balance', the elaboration of HSE's risk-based approach helped the regulator survive the successive deregulatory drives that swept British

¹⁵³ ILGRA's report *Use of Risk Assessment Within Government Departments* (Sudbury: HSE Books, 1996), is a useful overview of how risk was used elsewhere in Whitehall in the 1990s.

¹⁵⁴ Hutter, "The Attractions of Risk-Based Regulation," 6.

government in the 1980s and 1990s. Risk provided a handy multi-functional device that allowed HSE to legitimise its activities from multiple fronts. Through risk, the HSE could claim to be fully protecting workers and operating at optimum efficiency, at the same time that pressure on its resources mounted. In this thesis, I have shown how HSC/E's field of responsibility expanded enormously over the last third of the twentieth century. However, in 2000, HSE has just 63 additional inspectors in post compared to 1980. Its overall staffing (including administrative staff) had fallen by almost 300.¹⁵⁵ Questions, of course, emerged about the true nature of this 'balance': the focus on partnership, according to the London Hazards Centre, facilitated the exploitation of workers by negligent employers.¹⁵⁶ Nevertheless, HSE's fundamental existence as health and safety watchdog was secured.

Paradoxically, however, the elaboration of risk management also served to entrench the deregulatory agenda and further facilitate the withdrawal of the state from direct intervention in the work environment. By the 1990s, the British state had adopted a more indirect, supervisory role, one in which risk identification and communication took the place of legislation and enforcement. This issue once again brings us back to Robens: supposedly, the basic idea behind the post-1974 (HSWA) system was to facilitate self-regulation and thus moderate the role of the state. From Robens' perspective, a more compact and efficient, even non-existent regulator was a basic response to health and safety becoming integrated as a fundamental part of business: logically, deregulation was an outcome of the system's success. However, an

¹⁵⁵ HSC/E Annual Reports and Accounts, 1980–2000.

¹⁵⁶ "Environment, Transport and Regional Affairs Select Committee. Memorandum by the London Hazards Centre. HSE 15."

analysis of the period 1992–2001 reveals that the state’s changing role was more down to ideology than any practical success of ‘self-regulation’.

As the Labour government recognised in 1999, ‘the full potential of Robens’ vision ... is yet to be realised.’¹⁵⁷ The £18 billion cost to society of health and safety failures, the continuing high rate of occupational fatalities, the plateauing decline in the number of workplace injuries: these demonstrated the *failure* of self-regulation, despite notable improvements since 1974. Considering these statistics, arguably more should have been done to fund the HSE, increase the number of inspectors, proactive workplace visits, levels of fines imposed in the courts, and so on. The reason why this did not occur (or occurred only to a limited degree) was because of the entrenchment of neoliberal ideas surrounding regulation and the role of the state. The risk-based approach to regulation supported the assumption that regulation (and over-enforcement) produced burdens on business. Thus, the risk-based approach to regulation was less a response to the occupational risks confronted by workers, than an institutional response to the political, economic and reputational risks confronted by HSC/E.

¹⁵⁷ DETR, *Revitalising Health and Safety*, 18.

7. Conclusion: Health and Safety in the British Regulatory State

7.1. Risk and the Regulatory State

This thesis has addressed a complex and important historical question: how and why did the British system of health and safety regulation develop between 1961 and 2001? In recent years, health and safety has assumed an increasingly prominent position in our work and public lives. However, the field has also attracted unprecedented public and political scrutiny, with news stories alleging that health and safety has gone too far, and recent government policy identifying health and safety as part of a culture of overregulation, bureaucracy and red tape.¹ In order to examine the place health and safety has come to occupy in our lives, I have argued, it is necessary to understand the system of laws and standards that has structured efforts to prevent accidents and ill-health. It is also necessary to understand the state's evolving approach to health and safety: the pressures on the regulatory bodies, both within and outside the British government, that negotiated, administered and enforced health and safety policy. This thesis has drawn upon a diverse range of sources to achieve these objectives. Tapping in to a rich vein of archival evidence, published sources as well as oral history interviews, I have shown that the British system of health and safety regulation was dominated by two interrelated trends.

¹ e.g. Young of Graffham, *Common Sense, Common Safety*.

Firstly, the British state's role in regulating health and safety underwent a profound transformation between 1961 and 2001. While voluntarist principles had long informed British health and safety regulation, in the last third of the twentieth century, the British state found both the legislative and philosophical means to progressively distance itself from direct intervention in the workplace.² The HSWA 1974, most significantly, wedded a voluntarist regulatory ethos with a goal-based legal framework, placing the onus for securing safe and hygienic working conditions on employers and workers themselves. The HSC/E were established as regulatory agencies outside the day-to-day control of central government, with the representative HSC assuming policymaking functions previously carried out by government departments. From the 1980s, deregulatory pressures encouraged the further pruning and simplification of legislation, while financial pressure and government oversight encouraged greater operational efficiency and political transparency in HSC/E. The British state adopted a more supervisory guise, providing mechanisms and tools (such as risk assessment) by which risk could be managed, and responsibility shifted onto those with direct control of the workplace. The state's role changed, not diminished: as older approaches fell out favour (for example prescriptive, command-and-control legislation), other approaches were adopted or emphasised (such as risk communication). A new regulatory state emerged, exerting its influence over our lives more indirectly.

² Carson, "The Conventionalization of Early Factory Crime"; Bartrip, *The Home Office and the Dangerous Trades*, 38–42; Moran, *British Regulatory State*, 61–62.

Secondly, the concept of risk itself underwent a major transformation in British regulatory discourse. As my thesis has shown, risk did not feature significantly in British health and safety regulation before the 1970s, either conceptually or literally. Instead, British health and safety regulation was oriented to the elimination or control of *hazards*: anything which had the potential to cause harm to people, regardless of their likelihood or severity. In order to promote a more self-regulatory approach to health and safety, however, the HSWA incorporated risk-based ideas, such as that employers should implicitly assess risks when drawing up safety policies. From the 1970s, HSC/E gradually honed and elaborated this risk-based approach, making explicit ideas and principles which were previously implicit or unstated in regulatory discourse (such as the demand for risk assessment). In more recent years, HSC/E systematised their risk-based approach as a way of explaining their decision-making and securing the support of government and stakeholders. In the regulatory state, risk was an important way for the HSC/E to legitimise their activity, and demonstrate they had taken informed and cost-effective decisions.

To further deconstruct and unpack these trends, my concluding analysis cuts across the chronological timeframes of my previous chapters. In explaining the development of the British state's role in health and safety regulation, I make use of four labels, 'command and control,' 'self-regulation,' 'deregulation' and 'risk management', which help define particular phases in the statutory transition. These phases were not discrete, but rather overlapped with and built on each other, which is why they cannot be precisely dated. However, they provide a snapshot of the state's role at particular moments in time, and hence must be seen by the reader as heuristics which help make sense of historical developments.

7.2. The Shifting State

7.2.1. *Command and Control*

In Chapters 1 and 2, I explored the development of the British system of health and safety regulation under a very different legal and conceptual framework to the one that emerged after 1974—a framework I referred to as the Factories Act model of regulation. I examined the reasons why, by 1970, British government officials, trade unionists and others with an interest in health and safety had begun to question the effectiveness of this model, which had evolved piecemeal since the early nineteenth century. By 1961, I argued, the British system of health and safety regulation had developed into a vast and fragmented mass of law. Four separate Acts governed workers' health and safety, while other statutes extended control over particular hazards and industrial processes. In effect, there was not one 'system' of health and safety regulation, but several; before 1963, up to 16 million British workers fell through the gaps of statutory coverage.³

At this time, the British government regulated health and safety directly. Responsibility for health and safety regulation fell to particular government departments, such as the MOL, which administrated the statutes extending statutory protection against occupational accidents and disease (such as the Factories Act). Existing legislation tended to be highly prescriptive, and focused on particular hazards.

³ See HC Deb 15 November 1962 vol. 667 col. 589; MOL, *Annual Report of HM Chief Inspector of Factories 1962*, 9; Robens, *Safety and Health at Work*, 10; HSC, *Report 1974-76*, 2.

That is, the law advanced detailed requirements for a wide range of working conditions, and gave employers little flexibility in how they chose to comply (this is known as command and control legislation). The concept of risk did not figure prominently in either health and safety legislation or rhetoric. While the British government and Factory Inspectorate attempted to encourage voluntary effort and responsibility on the part of employers and workers (what they termed 'safety consciousness'), legislation was highly specific, directly telling employers and workers what they needed to do.

By the mid 1960s, however, a unique combination of circumstances converged that raised suspicions among officials that the existing regulatory approach was beginning to falter. The industrial accident trend, in particular, cast doubt on the effectiveness of prescriptive legislation. New risks were emerging, particularly in the occupational health field, which required new approaches and ways of thinking on the part of regulators and industry (such as environmental monitoring). Industrial disasters, notably Aberfan (1966) and Flixborough (1974), demonstrated the increasingly delocalised character of occupational risks, those captured by Ulrich Beck in *Risk Society*: risks could now extend far beyond the work gates, causing catastrophic and irreversible harm to the wider public and environment.⁴ In turn, these risks and disasters exposed the reactive and piecemeal character of existing legislation, not only suggesting that a more proactive approach to risk was needed, but bringing into relief the need for health and safety legislation to protect the public, not only workers.

⁴ Beck, *Risk Society*.

Economic and political developments were particularly important in the 1960s and early 1970s not only in focusing regulatory attention on aspects of workplace safety organisation, such as safety committees, but creating an environment conducive to statutory intervention and regulatory reform. For example, concerns about Britain's industrial competitiveness and the growing problem of strikes encouraged the state to intervene more directly in the workplace. In the late 1960s and early 1970s, the so-called 'post-war consensus' in British politics began to come under pressure, with both the 1964–70 Labour and 1970–74 Conservative governments experimenting with interventionist industrial relations policies.⁵

It was in this complex context that the Employment and Productivity Secretary, Barbara Castle, appointed the CSHW to review the operation of the existing system. The CSHW's important role has been extensively discussed before, but never to the extent or detail as this thesis, which has drawn extensively upon archive material.⁶ The Committee argued, in a nutshell, that the existing regulatory system no longer served the interests of workers and employers. Vast, piecemeal and overly prescriptive, existing law generated widespread confusion, and promoted inertia on the part of employers and workers.⁷ The Committee's solution was a radical overhaul of the British state's approach to health and safety. Voluntary effort, or 'self-regulation', was considered to be the most effective means of preventing occupational accidents and disease in the first instance. The existing state apparatus—both legislative and administrative—should be reconfigured to promote voluntary effort on the part of

⁵ Kessler and Bayliss, *Contemporary British Industrial Relations*, 16–7.

⁶ e.g. Beck and Woolfson, "The Regulation of Health and Safety in Britain."

⁷ Robens, *Safety and Health at Work*, 1.

employers and workers. Among the Committee's many recommendations was a single, comprehensive Act applying to all employees and 'third persons' at risk from work activity, as well as the establishment of a National Authority for Safety and Health (NASHW), to act as an institutional focus for health and safety. With a few significant changes, most notably the separation of the NASHW into a distinct Commission and Executive, the CSHW's proposals were enacted in the HSWA, passed in July 1974.

7.2.2. Self-Regulation

The HSC/E had many distinctive features which reflected the British state's changing relationship with health and safety regulation in the 1970s. Reflecting the contemporary zeal for corporatism, the HSC was composed of TUC, CBI and local authority members, who took the lead from government departments in developing new regulations, standards and codes of practice. As with other bodies established around this time, such as the Manpower Services Commission, the HSC/E were established as quangos outside central government; this was to ensure the notional independence of health and safety policy from political interference. Through the HSC/E, the British government divested itself of direct responsibility for health and safety regulation, which it had maintained since the early nineteenth century.

Authority was instead devolved to interest groups, who through negotiation and debate could settle health and safety policy on the basis of consensus. While HSE officials remained civil servants, health and safety policy was effectively removed from the direct control of politicians and government ministers. This was not necessarily detrimental: as my thesis showed, it avoided conflicts of interest associated with the entanglement of regulatory and sponsorship functions in particular government

departments. This came into sharp relief in the 1980s and 1990s following disasters such as Piper Alpha and the Clapham rail crash.

The HSWA, too, embodied a new vision of statutory effort. The role of the state was recast as providing a supportive framework to promote self-regulation. By presenting legal requirements in goal-based terms, the onus for determining how to comply with the law was placed on employers. Voluntary standards and codes of practice were prioritised over regulations as ways of improving health and safety standards. Advice and guidance were also used to encourage voluntary effort, and create a self-reliant health and safety culture. While factory inspectors had long considered prosecution a tool of last resort, new administrative sanctions such as improvement and prohibition notices were used to encourage employers to make changes to their workplace and systems.

Perhaps the most successful development in the 1970s was the extension of joint consultation throughout the regulatory system. The 1977 SRSC regulations gave trade unions an unprecedented platform to influence health and safety policy, while the creation of a representative advisory committee structure in HSC allowed a diverse range of interests to have a say in the making of new regulations or codes of practice.⁸ This consultative structure put the CSHW's principle of self-regulation into practice, ensuring that it was not the British government, but those with an actual stake in health and safety that took the lead in developing policy.

What is perhaps surprising is the extent to which HSC policymaking continued to be defined by persuasion and compromise, even when health and safety regulation

⁸ Jacques, Interview.

came under considerable political scrutiny in the 1980s and 1990s. Health and safety policy was rarely an area of great controversy in HSC, and my interviewees emphasised the cordial and professional nature of relations on the Commission. While, in no small measure, my interviewees may have wished to present an idealised picture of HSC policymaking, this observation is consistent with those made by researchers elsewhere, such as Wilson.⁹ The decision by HSC's first chair, Bill Simpson, to make policy decisions by consensus was pivotal: it meant that, outside arguments about resources (particularly in relation to enforcement), health and safety regulation had broad political support, enabling HSC/E to weather the political and economic storms of the 1980s and 1990s. This broad political support is demonstrated by defences of the HSC/E in Parliamentary reviews and probes.¹⁰ The role of HSE in establishing political conditions suitable for consensus cannot be overstated: the HSE played a crucial role drafting and redrafting policy documents until political agreement was found.

This interpretation of consensus is more optimistic than that of other researchers, such as Tombs, who have argued that it exposed British health and safety regulation to 'degradation'.¹¹ But Tombs' argument primarily concerns enforcement, which was dictated by government policy through the resources made available to HSC/E. Quite simply, HSC/E had little choice but to comply with cuts, and made clear their disapproval in public and private writings. Without a solid background of political

⁹ Wilson, *The Politics of Safety and Health*.

¹⁰ e.g. HSC, "HSC Review of Regulation. Draft Final Report," 4, and Annex 5. "Environment, Transport and Regional Affairs Select Committee. Memorandum by the CBI. HSE 17."

¹¹ Tombs and Whyte, "A Deadly Consensus."

support, gained through consensual decision-making, it likely that HSC/E would have suffered even more during the 'regulatory crisis' of the 1980s and 1990s, since interest groups would have been more vocal in their criticism of the British regulatory system.

7.2.3. *Deregulation*

Although the HSWA removed health and safety regulation from the everyday control of politicians and government ministers, this is not to argue that health and safety regulation was no longer political, or subject to the whim of ministers. Indeed, my thesis has shown that health and safety regulation continued to be greatly influenced by the British government after 1974. By the mid 1980s, the prevailing rhetoric of *self-regulation* was beginning to give way to a more overt rhetoric of *deregulation*, one which continues to inform British health and safety policy.

In particular, the emergence of a neoliberal, free-market agenda under the Conservatives from 1979 had lasting implications for British health and safety regulation. The HSWA had greatly streamlined health and safety legislation, advancing a single comprehensive Act in place of nine main groups of statutes and 500 regulations that littered the statute book before 1974.¹² However, despite this major exercise in rationalisation, by the mid 1980s the government specifically identified health and safety as part of a problem of overregulation and red tape, imposing unnecessary burdens on business.¹³ By the 1980s, health and safety had become an explicit policy aim of the EC through measures such as the Single European Act. The

¹² Robens, *Safety and Health at Work*, 6–7.

¹³ *Lifting the Burden*.

growing influence of the EC over British health and safety regulation posed a particular challenge to officials in respect to regulation, since not only was the UK obliged to transpose directives that had little domestic support, but European directives stemmed from a very different legal tradition, where the law was viewed in more instrumental terms. The influx of European law meant that despite attempts by HSC/E to further consolidate and rationalise domestic legislation, most notably in the 1988 COSHH regulations, there was a growing perception in government and among certain business leaders (such as the IOD) that many health and safety regulations were at best costly, and at worst, unnecessary.

The deregulatory agenda had diverse effects on HSC/E policy. On an administrative level, it resulted in demands to evaluate the benefits of new regulations in risk terms (i.e., CBA), and a renewed emphasis on deregulation and legal simplification (as demonstrated by the 1990s review of regulations). It also resulted in growing political scrutiny of HSC/E activity, and the need for officials to carefully account for their operations and finances. In the 1990s, the HSC/E was further exposed to market-based imperatives, such as the need to contract-out various functions (such as its research and laboratory services). The politics of NPM, emerging by the 1980s, extolled private-sector styles of corporate governance, and encouraged public bodies such as HSC/E to apply stricter methods of auditing and financial control.¹⁴ (Power has referred to this emphasis on auditing as the ‘audit explosion’.¹⁵)

¹⁴ Hood, “A Public Management for All Seasons?,” 4–5; Hutter, “The Attractions of Risk-Based Regulation,” 2.

¹⁵ Power, *The Audit Society: Rituals of Verification*.

On a philosophical level, the impact of neoliberal ideology was perhaps more insidious. Despite protests from trade unions, beliefs about the burdensome nature of health and safety regulations continued to inform the government's approach to health and safety under New Labour.¹⁶ The politics of partnership, emerging by the 1990s, saw health and safety regulation as being unworkable without the wider support of industry, trade unionists and other stakeholders.¹⁷ While this was, in a sense, merely an elaboration of the HSWA's corporatist ideals, partnership reflected the state's diminished field of action, and increasingly passive view of intervention in the work environment.

7.2.4. Risk Management

By the 1990s, I have argued, a widespread demand emerged both within and outside government for regulatory agencies including HSC/E to explain their decision-making approach. Demands by the government and citizen's groups for political accountability and participation in the policymaking process reinforced a growing recognition among the scientific community that formal, scientific assessments of risk could only partially determine policy, and hence health and safety controls. Scientific studies in the field of risk perception showed that people's perceptions of risk were shaped by subjective values, such as how 'dreaded' a particular risk was (for example, cancer or nuclear radiation). Hence, policymakers came under increasing pressure to show how their

¹⁶ Beck and Woolfson, "The Regulation of Health and Safety in Britain"; Tombs and Whyte, "A Deadly Consensus."

¹⁷ See, e.g. DETR, *Revitalising Health and Safety*.

risk decisions took into account social, political, economic and ethical criteria, as well as scientific uncertainty.

By the 1990s, regulators' confidence in the policymaking process appears to have been severely shaken. The BSE crisis in British agriculture and food safety had resulted in sharp media criticism of another regulator, MAFF, and HSC/E itself over the years had acknowledged a growing, if vague, public interest in health and safety and environmental issues, such as nuclear power (this 'interest', as I have previously argued, cannot be separated from genuine concern). In this less deferential political environment, where the control of risks such as nuclear power was subject to growing uncertainty, and regulatory authority open to question, the HSC/E came under increasing pressure to come clean with its policymaking principles.

In response to these pressures, the HSC/E produced a definitive statement of its risk management principles, TOR.¹⁸ While TOR was originally developed in relation to nuclear power, by the early 2000s TOR was applied across the entire range of risks under HSC/E's jurisdiction, as demonstrated in HSE's discussion document, *Reducing Risks, Protecting People* (R2P2).¹⁹ TOR and R2P2 reflected how, as the twentieth century drew to a close, the state was assuming the role of risk manager and communicator, evaluating risks which were communicated to the public and stakeholders as a basis for decisions on risk control (this was also demonstrated by the work of ILGRA, and HSC/E's approach to occupational health in the *Good Health is*

¹⁸ HSE, "Tolerability."

¹⁹ HSE, *Reducing Risks, Protecting People*.

Good Business campaign).²⁰ They also reflected how, in increasingly uncertain times, the state had to shield itself from institutional risks (for example, damage to reputation) emerging out, and as a result of the policymaking process.²¹ Under the risk management paradigm, risks did not just emerge from *outside* the regulatory system, in terms of new occupational or environmental risks, but from *within* the regulatory system, as a consequence of regulation itself. The HSC/E have thus not only been concerned with risk management, but ‘the risks of risk management’.²²

7.3. Elaborating Risk: The Evolution of Risk in British Health and Safety Policy

The story of risk is inseparable from that of the British state, since in recent decades, health and safety regulation — and many other fields of regulation — have become specifically couched in terms of risk. As Hutter has described, ‘in many respects risk has become a new lens through which to view the world.... Regulation is no exception’.²³ In order to understand how and why the British system of health and safety regulation developed between 1961 and 2001, it is thus essential to understand

²⁰ ILGRA, *Use of Risk Assessment Within Government Departments*; ILGRA, *Risk Communication*.

²¹ Power, *The Risk Management of Everything*.

²² Henry Rothstein, Michael Huber, and George Gaskell, “A Theory of Risk Colonization: The Spiralling Regulatory Logics of Societal and Institutional Risk,” *Economy and Society* 35, no. 1 (2006): 92, emphasis omitted.

²³ Hutter, “The Attractions of Risk-Based Regulation,” 1; Rothstein, Huber, and Gaskell, “A Theory of Risk Colonization.”

where these ideas came from, and how they came to proliferate in health and safety regulation.

My thesis has shown that before 1974, and to a certain extent after, the concept of risk did not figure prominently in British health and safety regulation, either literally (in legislative terms) or conceptually. Both HSE's former Director-General and Chief Scientist argued that 'risk' did not feature in the official language; while the various pre-1974 inspectorates and research establishments were ostensibly concerned with risk, it was not generally thought of as such, and certainly not as an 'organising concept' or idea that united their work.²⁴ Instead, ideas about 'hazard' tended to dominate, in the sense of controlling things that harmed workers and other persons, regardless of their likelihood or severity.

At the same time, however, technical and scientific improvements in the late 1960s and 1970s were integral to the development of risk-based thinking. For example, improvements in industrial hygiene allowed toxic exposures to be precisely quantified, while the Factory Inspectorate began to draw upon accident statistics as a way of targeting their inspection activity. In the 1970s, experience with nuclear power and major hazards (especially after the Flixborough explosion of 1974) encouraged regulators to calculate the probability of accidental events.

The HSWA 1974 implicitly placed risk at the heart of British health and safety regulation. As the Court of Appeal ruled in 1993, the term 'risk' in the HSWA effectively carried the meaning of 'hazard', since it implied that employers should

²⁴ Rothstein, Huber, and Gaskell, "A Theory of Risk Colonization," 2; McQuaid, Interview; Rimington, Interview.

address anything in the workplace that had the potential to cause danger, not just things that were likely and/or severe (that is, based on probabilistic thinking).²⁵ However, reading between the lines of the Act, risk was deeply embedded elsewhere. For example, in requiring employers to produce written statements of their safety policy, the HSWA implicitly demanded that employers consider the particular risks of their workplace, and make arrangements accordingly. Moreover, SFAIRP principle, used throughout the general duties of the Act, implied that employers could balance time, trouble or expense against risk when deliberating means of control. In other words, SFAIRP embodied an implicit concept of risk assessment. This thesis has shown that the SFAIRP principle has been a fiercely defended cornerstone of British health and safety regulation since 1974, allowing officials to claim that health and safety regulation was proportionate to the risk, no more, no less.

By the late 1970s, therefore, the concept of risk was deeply engrained within British regulatory thought. However, these principles remained to be explicated, codified and operationalised. A major innovation in 1980 was the demand in the CLAW regulations for employers to conduct 'assessments' of the degree to which their employees were exposed to lead. While this was merely an elaboration of the implicit demand for employers to evaluate risks in the HSWA, risk assessments became an established part of British regularity practice by the late 1980s, appearing in a host of regulations, most notably COSHH.

Europe played a fundamental role in turning what was at heart, a mental device to evaluate and control risk, into something far more bureaucratic and controversial.

²⁵ HSE, *Reducing Risks, Protecting People*, 15.

During negotiations over the European Framework Directive, HSE's demand that control should be based on risk assessment was unwittingly transformed into the demand for risk assessments to be written down. Hence, what was previously, for most employers, an informal tool to inform control decisions (a 'computation', in the Court of Appeal's 1949 terms), became a physical object and the outcome of a formal, bureaucratic process. Every employer, regardless of the size or intrinsic hazard of their operations, had to be in ownership of a formal written risk assessment.

This story shows that HSC/E's risk-based approach to regulation evolved through a gradual process of post-hoc abstraction and elaboration. Responding to contemporary political and economic demands, officials progressively made explicit ideas and principles that already existed in British regulatory thought—for instance, the idea that cost was a valid concern when deliberating control measures, and there were fundamental limits to safety. In the same vein, HSE's statement of its risk management principles, TOR, relied on officials such as Rimington making explicit the relationship between the different areas of HSE's activity, the divergent legal standards of its constituent inspectorates, and the criteria that informed its decisions. Risk not only acted as a lingua franca that enabled HSE to come together as a more corporate organisation, but a conceptual glue that permitted a more systematic and coherent approach to regulation.

In a major way, however, this stemmed from political opportunism and wishful thinking just as much from any essential or definitive relationship between these underlying ideas and approaches. While it took no great leap of the imagination to see the similarities between legal standards such as ALARP, ALARA and SFAIRP, it was the political and economic demands of the 1980s and 1990s that encouraged officials to

explain their decision-making and the principles on which it rested. The need to make health and safety regulation comprehensible to the wider public, and justify regulatory decisions, became acute in a political context where members of the public demanded greater access to the policymaking process, and where excess or ill-thought-out regulation was perceived as undesirable or burdensome. The need to find common regulatory ground was also particularly pressing in an administrative context where certain inspectorates were vying to separate from HSE (the IAPI, of course, succeeded). Risk was thus a powerful way to reconcile these various demands.

My argument about the evolution of risk shows that despite the progressive, forward-looking aims of the HSWA, on an administrative level there was still an element of officials making things up as they went along after 1974. In place of ad hoc legislation to meet contemporary demands (as in prescriptive, pre-1974 legislation), there was ex post facto rationalisation and abstraction of pre-existing principles to meet pressing regulatory needs. The major difference between the Factories Act model of regulation, and the HSWA, was that the HSWA was a flexible legal instrument that could accommodate both structural changes in the law (for example European directives), and major philosophical changes in regulation. In this respect, the rationale behind the HSWA was sound. The enabling character of the Act meant that detailed changes could be made to the substance of the law without altering its general principles. This, in combination with the overall success of the consensual approach to policymaking, is a fundamental reason why the HSWA remains the core of British health and safety legislation in the twenty-first century.

7.4. ‘Vast, Diverse and Complex’: The British System of Health and Safety Regulation, 1961–2001

This thesis has shown that the development of the British system of health and safety regulation between 1961 and 2001 must be seen in terms of a much longer evolutionary process dating back to the nineteenth century. While social, political and economic conditions between 1961 and 2001 were pivotal in shaping the system of regulation we recognise today, many of the system’s dominant ideas and concepts were forged early in the history of British statutory intervention in working conditions—for example, the persuasive, conciliatory approach to enforcement. Thus, my thesis complements rather than replaces existing historical work, showing how the history of British health and safety regulation has been marked by great continuity, not only change.

More generally, my thesis has shown that the British system of health and safety regulation after 1961 developed in response to a myriad of social, political and economic pressures. Economic pressures created political conditions conducive to regulatory reform (for example, the government drive to increase productivity in the 1960s and 1970s), as well as conditions conducive to deregulation and financial cuts. The economic recession of the mid 1980s, in particular, dispelled much of the optimistic economic message that had accompanied the 1972 Robens Report, and supported the Conservatives’ deregulatory drives to reduce the perceived burdens of health and safety regulation on business.²⁶ The deregulatory paradigm was a logical prerequisite of HSC/E’s risk management approach, and it continues to inform British health and safety regulation to this day—evidenced by, for example, recent

²⁶ Beck and Woolfson, “The Regulation of Health and Safety in Britain”, 43.

government reviews which have sought to further streamline and reduce the legal framework.²⁷

Unsurprisingly, the British system of health and safety regulation has also been heavily shaped by the evolving dimensions of British industry, employment, and the risks resulting from these structural changes. While political concern developed in the 1960s and 1970s around large hazardous installations, such as chemical plants, the wider decline of manufacturing and the movement of workers to the service sector raised the regulatory profile of chronic and non-industrial health risks. A broad epidemiological transition has occurred: as fatal accidents and acute occupational disease declined, regulators began to confront risks that were more chronic, invisible and insidious. Conditions such as occupational stress or heart disease were less immediately attributable to deficiencies in the work environment, having a strong lifestyle component. Hence, there was a logic to subsuming occupational health within a wider public health agenda in the 1990s.

Administrative concerns have also been central to the evolving shape and structure of the regulatory system. The delocalisation of occupational risk in the 1960s and 1970s suggested that health and safety regulation needed to encompass the health and safety of the public, as well as the control of toxic substances which had damaging environmental effects. Major disasters such as Aberfan demonstrated the anomalies and inconsistencies that accompanied a piecemeal and fragmented system. However, it was ultimately fierce political debate and negotiation in Whitehall that allowed health and safety regulation to expand beyond its 'occupational' confines, why a large

²⁷ See, e.g. Löfstedt, *Reclaiming Health and Safety for All*.

proportion of HSE's total work in 1991 was devoted to issues of public, as opposed to workers' health and safety.²⁸ Health and safety's expanded scope depended less on the expansion of risk, than on ministers' fear of loss of prestige and power, and their willingness to devolve their policymaking functions to a new quasi-independent authority.

Another major contributory factor to the development of the British system of health and safety regulation, albeit one which is more difficult to evaluate, is public recognition of hazards, faith in science and regulation, and their desire to have a stake in the policymaking process. This thesis has *not* set out to assess the public's changing views towards health and safety regulation itself. However, officials since the 1960s have alluded to a growing public 'appetite' for information on hazards, as well as accompanying scrutiny of regulation and regulators—seen, for example, in criticisms of MAFF during the 1990s BSE crisis. The extent to which the public was genuinely interested in health and safety, or anxious about risks, is difficult to separate. So too is public interest in risk, from the scrutiny and interest of the British media. HSC/E accounts suggest a growing, but vague public concern about risk over the last third of the twentieth century, seen for instance in the rising number of public calls to HSE telephone lines.²⁹ However, such evidence is little more than anecdotal, and further academic research is required to analyse these developments.

That said, by the 1990s HSE was acutely aware of the magnifying effect of media discourse—how it could amplify the public's recognition of risks that had

²⁸ Rimington, "Management of HSC and HSE," para. 20.

²⁹ HSC and HSE, *Annual Report 1987/88*, 36.

previously received little attention.³⁰ In a sense, whether or not the public was genuinely concerned about risks, or whether their confidence in science or regulation was shaken, is irrelevant. In either case, it was the regulatory *perception* of public concern or scrutiny that was central to the development of the British system of health and safety regulation in the 1980s and 1990s, for example, in HSE explaining their decision-making approach. This thesis has shown that HSE's attempts to explain their approach in risk-based terms stemmed from a concern to limit reputational and institutional risks emerging in and out of the policymaking process. This was deeply embedded within wider governmental concerns to make public policy more accountable, proportionate and transparent.

This thesis has deliberately avoided the contentious question of whether British health and safety regulation has been 'successful'. In the absence of comprehensive statistical data, such a question is difficult to answer definitively, and in any case necessitates political judgement about the 'correct' scope of health and safety regulation. International comparisons offer us little recourse, since countries differ in respect to the recording and reporting of occupational accidents and disease. Enforcement and regulatory systems also differ markedly to Britain, with some European countries, such as Germany and the Netherlands, preferring a more prescriptive regulatory style.³¹

³⁰ See Tom Horlick-Jones, and Graham Murdock, *Social Amplification of Risk: The Media and the Public*, Contract Research Report 329/2001 (Sudbury: HSE Books, 2001),

v.

³¹ HSE, *Workplace Health and Safety in Europe* (London: HMSO, 1991); British Occupational Hygiene Society, "BOHS response to the Löfstedt review." <http://www.bohs.org>. Accessed March 1, 2016, 7–8.

Nevertheless, according to standardised data released by Eurostat, since 1998 Britain/the UK has consistently out-performed the EU average in relation to rates of fatal workplace injuries. Workers in Britain also take less time off due to work-related ill-health than workers in other large European economies including France and Spain.³² Part of this favourable performance could be attributed to Britain's long history and expertise in risk management: the results of a 2014 European survey showed that 92 per cent of UK establishments regularly carried out risk assessments, compared to 77 per cent on average across the EU, and just 37 per cent in Luxembourg.³³

As my concluding analysis suggests, the history of the British system of health and safety regulation since 1961 is both fascinating and immensely complex. A host of social, political and economic conditions have shaped and structured it: some short-term and dramatic (such as industrial disasters), others long-term and insidious (such as the impact of neoliberal deregulatory rhetoric). However, the changing role of the British state, and the changing conceptualisation of risk in British regulatory discourse, bring these conditions into sharp relief. They show how these conditions were interconnected, both conceptually and in practice. Critically, these trends provide an empirical framework for showing how they influenced evolving regulatory thought. By examining policy documents and other material from the HSC/E and British government, we can deconstruct these conditions and show how they influenced

³² <http://www.hse.gov.uk/statistics/european/index.htm>. Accessed February 17, 2016.

³³ <https://osha.europa.eu/en/surveys-and-statistics-osh/esener>. Accessed February 17, 2016.

regulatory policy. This way, we can begin to appreciate the contentious, but pivotal role health and safety regulation has come to play in our everyday lives.

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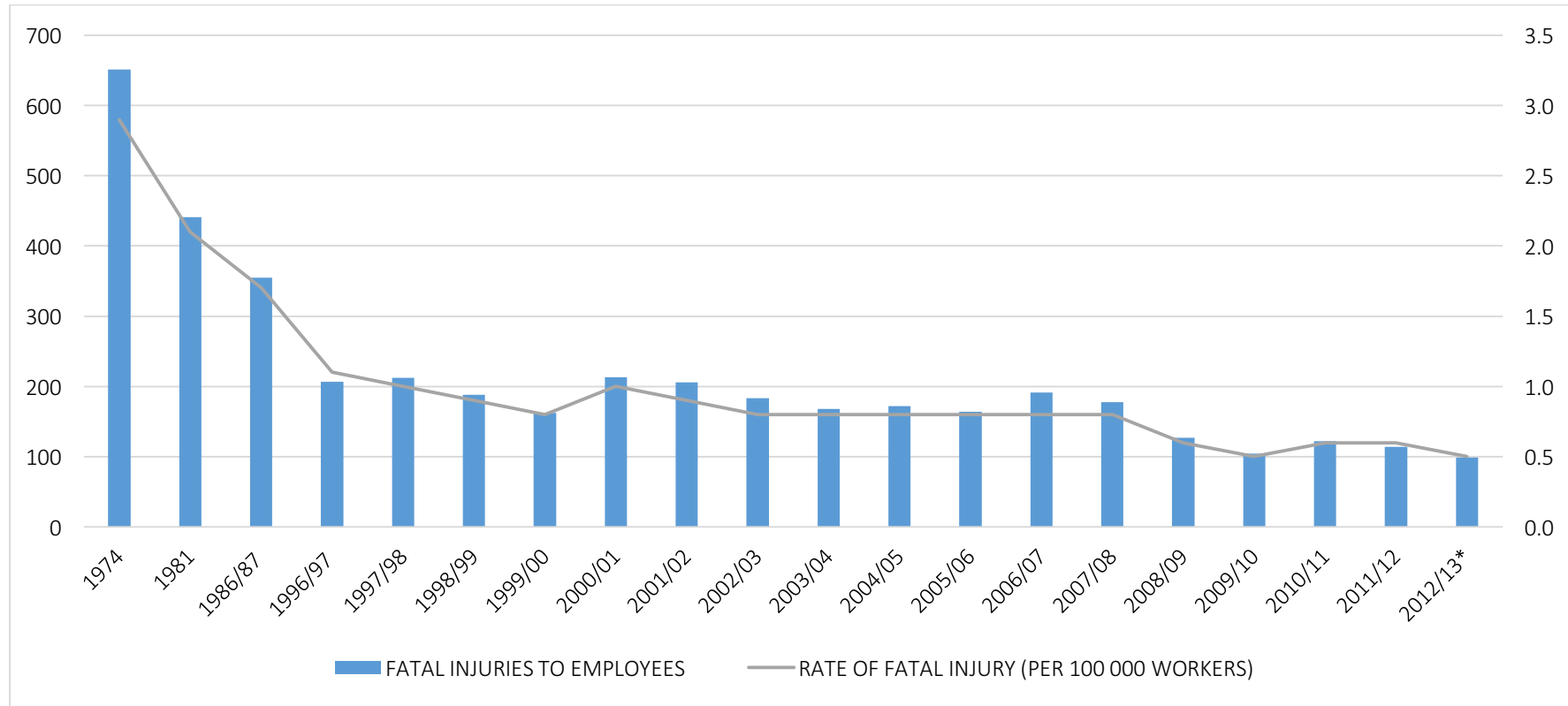
Appendices

I. Key regulations, 1974–2015

Regulation	Abbreviation	SI Reference
Safety Representatives and Safety Committees Regulations 1977	SRSC	1977/500
The Health and Safety (Enforcing Authority) Regulations 1977		1977/746
Notification of Accidents and Dangerous Occurrences Regulations 1980	NADOR	1980/637
Control of Lead at Work Regulations 1980	CLAW	1980/1248
Notification of Installations Handling Hazardous Substances Regulations 1992	NIHHS	1982/1357
Notification of New Substances Regulations 1982	NNS	1982/1496
Asbestos (Licensing) Regulations 1983		1983/1649
Control of Industrial Major Accident Hazard Regulations 1984	CIMAH	1984/1902
Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1985	RIDDOR	1985
The Control of Pesticides Regulations 1986		1986/1510
Control of Asbestos at Work Regulations 1987	CAW	1987/2115
Control of Substances Hazardous to Health Regulations 1988	COSHH	1988/1657
Noise at Work Regulations 1989	NAW	1989
The Health and Safety (Enforcing Authority) Regulations 1989		1989/1903
Management of Health and Safety at Work Regulations 1992*	MHSWR	1992/2051
The Health and Safety (Display Screen Equipment) Regulations 1992*		1992/2792
The Manual Handling Operations Regulations 1992*		1992/2793
The Provision and Use of Work Equipment Regulations 1992*	PUWER	1992/2932
The Personal Protective Equipment at Work Regulations 1992*	PPEW	1992/2966

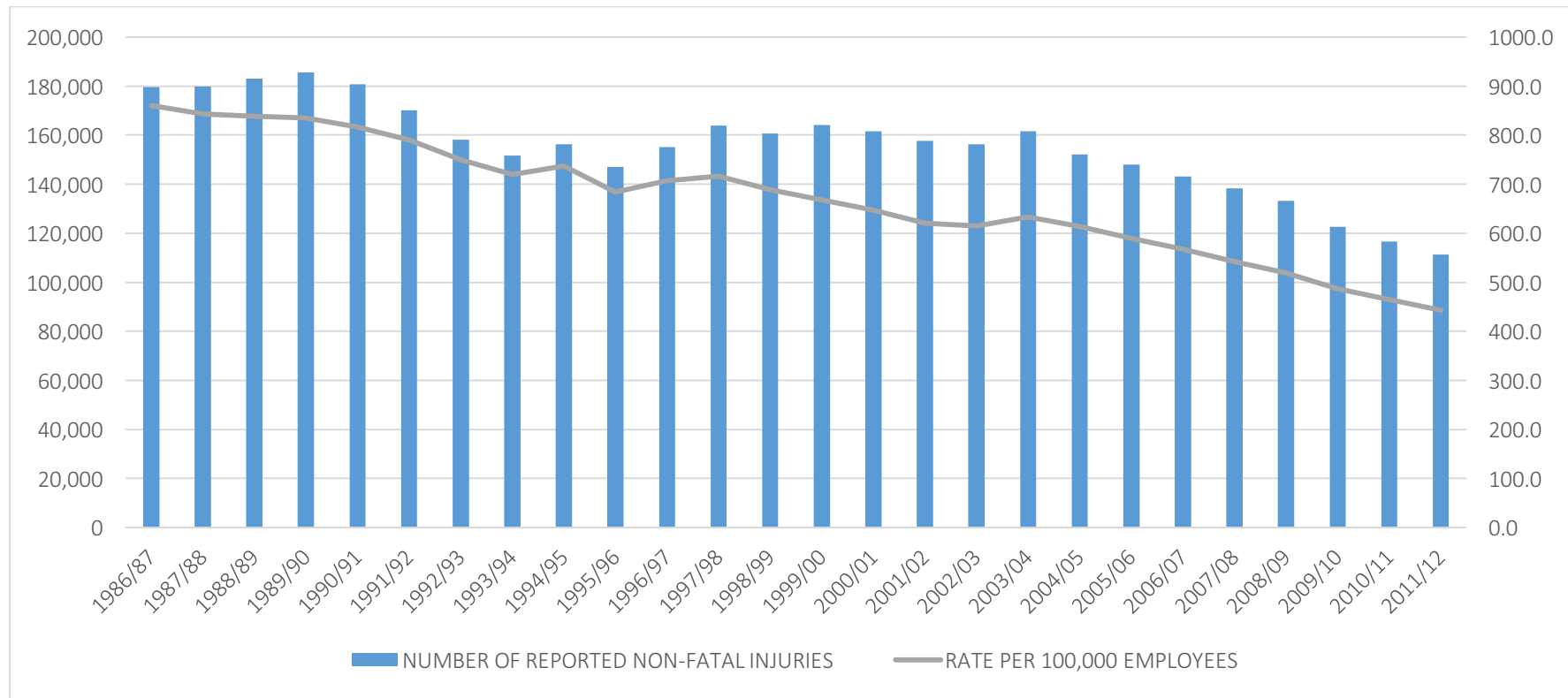
The Workplace (Health, Safety and Welfare) Regulations 1992*	WHSW	1992/3004
Gas Safety (Installation and Use) Regulations 1998		1998/2451
The Health and Safety (Fees) Regulations 2012		2012/1652

II. Incidence and rate of fatal workplace accidents in Great Britain, 1974–2011



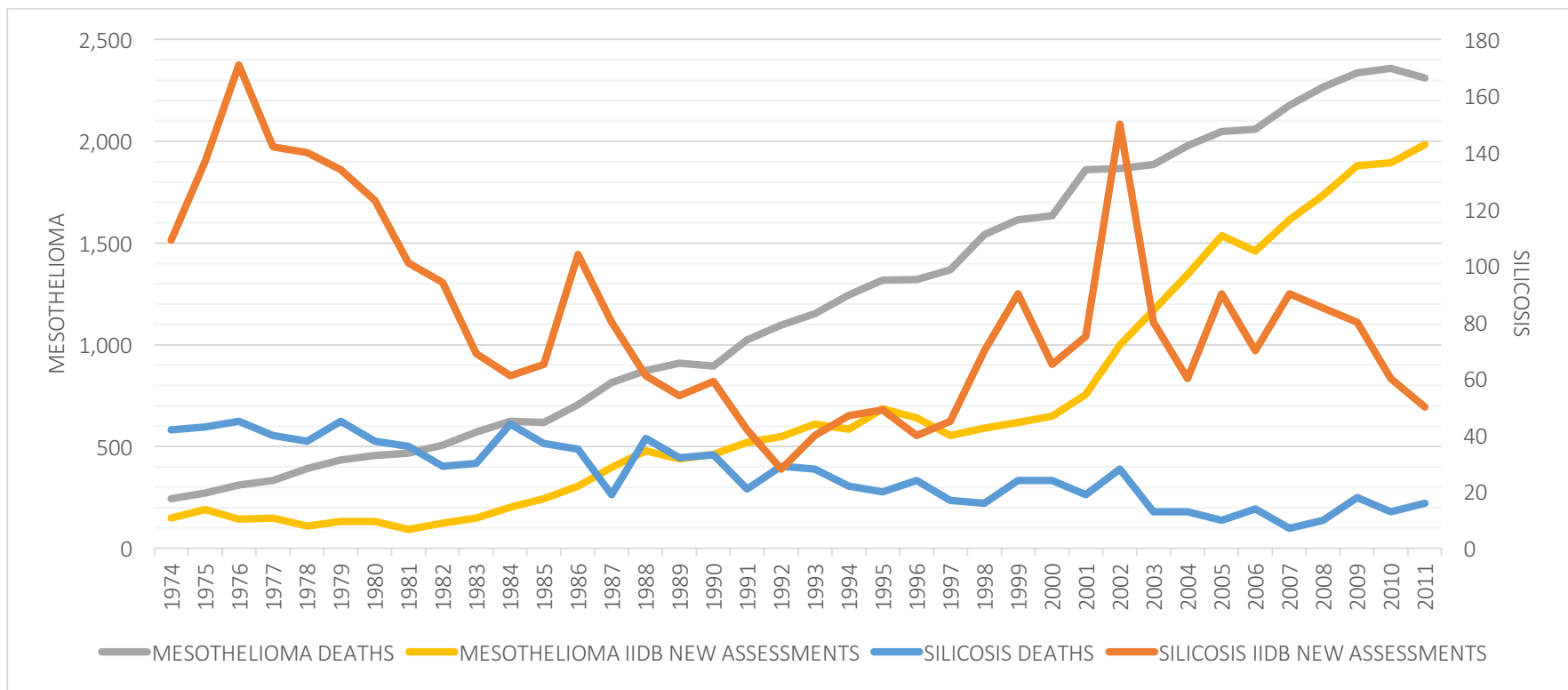
Source: “HSE Statistics: Historical Picture.” Accessed August 6, 2015. <http://www.hse.gov.uk/statistics/history/>. *Denotes provisional figure.

III. Reported non-fatal injuries to employees in Great Britain, 1986/87–2011/12



Source: “HSE Statistics: Historical Picture.” Accessed February 4, 2016. <http://www.hse.gov.uk/statistics/history/>. Data derived from the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).

IV. Annual mortality from mesothelioma and silicosis in Great Britain, and cases assessed for Industrial Injuries Disablement Benefit, 1974-2011



Source: "HSE Statistics: Historical Picture." Accessed January 25, 2016. <http://www.hse.gov.uk/statistics/history/>. Data derived from Office of National Statistics and Department for Work and Pensions.

V. Key provisions of the Health and Safety at Work etc. Act 1974

Section	Provisions
2	<p>All employers have the duty to ensure, so far as is reasonably practicable, the health, safety and welfare at work of their employees. These duties extend to:</p> <ul style="list-style-type: none"> • Plant and systems of work • Use, handling, storage and transport of articles and substances • Provision of information, instruction, training and supervision • Place of work including means of access and egress • Working environment including adequate arrangements and facilities for welfare • The preparation and revision of a written safety policy including details of the arrangements in force for carrying it out • Duty to consult with safety representatives and safety committees
3	<p>Every employer and self-employed person has the duty of conducting their undertaking in such a way as to ensure, so far as is reasonably practicable, the health and safety of persons other than their employees who may be affected thereby (e.g. members of public, contractors, visitors, customers, pupils).</p>
4	<p>Persons in control of premises (e.g. landlords, owners) have the duty to ensure, so far as is reasonably practicable, that the premises, its means of access and egress, and any plant or substance in use (or provided for use) there, is safe and without risks to health.</p>
6	<p>Any person who designs, manufacturers, imports or supplies any article for use at work has the duty:</p> <ul style="list-style-type: none"> • To ensure, so far as is reasonably practicable, that the article is designed and constructed to be safe and without risks to health • To carry out any necessary testing or examination • To make available adequate information about the use of the article and the conditions necessary to ensure that its use is safe and without risks to health
7	<p>All employees have the duty of taking reasonable care for the health and safety of themselves and other persons who may be affected by their work.</p>

	They have the duty of co-operating with persons, including their employer, who have duties or requirements under the relevant statutory provisions.
10	This section establishes the Health and Safety Commission and Health and Safety Executive, and details their composition.
11	<p>This section lists the general duties of the Commission and Executive. Briefly, the general function of the Commission is to do such things as necessary to further the Act. These include:</p> <ul style="list-style-type: none"> • Assisting and encouraging persons in their duties • Making arrangements and encouraging research, training and the provision of information • Providing an information and advisory service • Submitting proposals for regulations to Government Ministers <p>The general function of the Executive is to exercise such functions as directed by the Commission. However, the Commission cannot direct the Executive in the enforcement of any of the relevant statutory provisions in a particular case.</p>

Source: Health and Safety at Work etc. Act 1974. Ch. 37, 1974.

VI. Example consent form

The purpose of this form is to allow the use of your interview for research purposes. Please ask the investigator if you have any questions, and fill in the form according to your wishes.

NAME:

.....

DATE(S) OF INTERVIEW(S):

.....

I have read the information sheet concerning this study and I understand what will happen if I take part in it. My questions concerning this study have been answered by the investigator.

I agree to take part in this study and understand that I may withdraw from it at any time without giving a reason.

I hereby assign copyright of my contribution for research purposes to Christopher Sirrs.

A. Audio recording. Please tick **one** only:

– I permit the interview(s) to be audio recorded for research purposes, and understand that I may request a copy of the recording(s) to be sent to me following the interview.

– I do not wish the interview(s) to be recorded.

B. Publication. Please tick **one** only:

– I permit the use of my name with quotations from the interview

– I wish to be consulted before the publication of named quotations

– I wish for quotations to be used anonymously and in such a way that I cannot be identified

– I do not wish to be quoted at all, even anonymously

C. Public archiving. Please tick **one** only:

– I permit this interview, including associated notes, transcripts and/or any recording(s) made subject to the conditions in **section A** above, to be made available in a public archive: years from today's date
Or on the following date:.....

– I do not wish for this interview to be made available in a public archive

SIGNED:
DATE: