

Fighting Fires

Creating the British Fire Service, 1800–1978



Shane Ewen



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James Braidwood (1800–61). Superintendent of Edinburgh Fire Engine Establishment (1824–32), Superintendent of London Fire Engine Establishment (1833–61).
Courtesy of Lothian and Borders Fire and Rescue Service

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Introduction

In his foreword to Geoffrey Vaughan Blackstone's *A History of the British Fire Service*, published in 1957, Herbert Morrison, the former Home Secretary (1940–5), conceded his surprise that the fire service was so late in having its history recorded:

So now the fire fighters have their written history. They should not have been without it for so long. The police had their history books, so did education, and local government, and the Civil Service, and the defence services, and others. Now the fire fighters have theirs. And about time too.¹

Morrison urged that Blackstone's book should be read 'by all ranks of the Fire Service, by fire insurance staffs . . . , by chairmen and members of local authority fire brigade committees and civil defence committees, by the Home Office people concerned and by good citizens generally'.² These were the groups who had created the British fire service over the preceding 200 years. With its publication, the fire service would be cemented into the history of British local government.

Blackstone's study, at 250,000 words in length, is magisterial in its breadth of focus and the weight of evidence drawn from the local archives of fire brigades across the country. From the Roman *Vigiles* of the first century, through the destructive fires of the English Civil War, to the formation of the first organized fire brigades in the aftermath of London's destruction in 1666, and their piecemeal municipalization during the nineteenth and twentieth centuries, Blackstone adroitly weaves the reader through a tumultuous history of 2000 years of fires, firefighting and fire services. In the process, he shows how

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the firefighter's labour has been constantly redefined by the changing environment around him:

For thousands of years man has fought a battle to control this dangerous servant. As his skill and the weapons at his disposal increased, so did the potential of the enemy. Bigger buildings, congested cities and hazardous industrial processes and materials have increased a thousandfold the risks involved, and fire as a weapon of war has now reached the awful climax of the heat flash of nuclear-fission weapons.³

As has also been shown by Stephen J. Pyne and Robin Pearson, industrialization and urbanization did not automatically design out fire during the nineteenth century, despite subjecting it to more stringent safety controls and punitive insurance rates of premium. City dwellers encountered fire in the factory, the mill, the foundry and the hearth, but it was part of an exploitative relationship.⁴

Fire's revenge on man's exploitation, so often the product of human carelessness, was 'vengeful', and involved 'spreading ruin and disaster along its pathway and occasioning discomfort and misery to rich and poor'.⁵ As one Victorian engineer put it:

The palace and the hovel, the prince and the peasant, the old and the young, are equally open to its destructive influence, and it becomes the bounden duty of all to do their best to prevent its doing mischief, and confine its powers within those bounds in which it is found to act most beneficially for man.⁶

This meant that it was increasingly left to paid firefighters, organized in a unified firefighting body under single officer command, to combat this 'blood-thirsty' tyrant.⁷ Firefighting thus became a public service during the nineteenth century. It was public in the sense that the delivery of effective firefighting services affected everyone, and was both environmental, in being provided for the protection of a locality, and personal because its delivery was inevitably 'rendered to the inhabitants of a locality as individuals', whether rich or poor.⁸ In practice, this meant making firefighting dependent on public funds (in the form of local taxation and, in some instances, service charging) and the legal structures and conventions of public administrative bodies.

The fire service was arguably the last long-standing public service to receive historical attention. This 'silent service', as it has been described

by Neil Wallington, a former firefighter in the London Fire Brigade, was comprised of a series of 'working practices [that] were not projected at all to the outside world' before the first national firefighter's strike of 1977.⁹ Moreover, the service's collective history has been largely absent from social histories of local government, despite the intimate connections between its professionalization and other local services. For example, reforms to firefighter's working conditions, including their rate of pay, pensionable entitlements and working hours, closely paralleled those in the police service, despite Jonathan Powner's suggestion that 'the fire service and the police service... developed a century apart.'¹⁰ Many municipal governments combined the two services during the nineteenth century, employing police constables as retained firefighters under the control of one or two full-time firefighters. This was the experience in, among other towns, Liverpool, Cardiff, Leeds, Hull and Newcastle-upon-Tyne until 1941, when the 'police fire brigades', as they were known, were abolished. Improvements to the constable's conditions of service were automatically passed onto those who doubled up as firefighters. Similarly, by the turn of the twentieth century, the larger independent brigades like Birmingham, Edinburgh and Manchester were modelled on the police's conditions of service, particularly its incentive culture of providing incremental pay rises for long service, as well as a full pensionable allowance to those employees who qualified by length of service.¹¹

The historiography on the growth of the British police service is, however, well developed. The reasons for this are, as David Taylor has noted, because the history of modern policing and 'the evolution of a policed society' are of 'fundamental importance to an understanding of the society in which we live'.¹² Whether one views the establishment of 'the new police' during the second third of the nineteenth century as a response to escalating public fears about the nature of crime and public disorder within urban-industrial Britain, or as part of a centralizing state's social control agenda to 'civilize' the dangerous classes living in the crowded city slums, remains a contentious matter.¹³ What is evident is that Clive Emsley has shown how the emergence of a modern police service, that is 'the bureaucratic and hierarchical bodies employed by the state to maintain order and to prevent and detect crime', has paralleled the growth of the modern British state, as well as the rise of a professional society based on vertical career hierarchies rather than horizontal class segregation, since at least the 1830s.¹⁴

Although the central administration of policing and other welfare services pre-dates the nineteenth century, it was during the era of what

Edward Higgs has called 'the classic Liberal State', between the 1830s and 1880s, that state information gathering began to be used 'to implement direct control of individuals' and facilitate the smooth running of a largely benevolent state system through the inspection of public services. It was during the mid-nineteenth century that 'a gradual shift' occurred in the relationship between central and local government, in which the central government began to take an 'interventionist' approach towards the administration and delivery of local services, particularly those that affected the broadly defined problems of public order and public health.¹⁵ We see this interventionist approach most clearly in policing where, after 1856, the provision of an 'efficient' police force was made obligatory on all counties and boroughs, and was certified following an annual inspection by one of the three H.M. Inspectors of Constabulary. Like other local services, 'efficiency' was, in practice, broadly defined with the stick of inspection lubricated by the award of an annual grant from the exchequer to refund one-quarter of a police force's annual expenditure on wages and uniforms.¹⁶

Notwithstanding this 'creeping centralization', policing remained a local responsibility with powers over the appointment and control of police constables resting with local government well into the twentieth century. In the boroughs of England and Wales, police administration was vested in elected watch committees statutorily established under the 1835 Municipal Corporations Act, many of which continued to wield considerable powers until their abolition under the 1964 Police Act.¹⁷ Historians of local government now agree that the administration of public services has not evolved in a linear progressive trajectory, and that there were no universally agreed solutions to urban problems. Recent studies have challenged the conventional functionalist approach by refuting the inevitability of municipalization, which is taken to refer to the municipal ownership and control over the delivery and administration of local services.¹⁸ In its place they identify a more complex confluence of social, cultural and political factors, including the diverse range of structural and financial powers enjoyed by local authorities in different policy networks; the interplay of the public, private and voluntary sectors in delivering services; and the capacity of municipal employees to steer political deals.¹⁹ Municipalization occurred incrementally and varied from place to place and between different services. In the case of street lighting, for example, Chris Otter has recently shown how different technologies of illumination, including oil, gas and electricity, coexisted, and the decision to adopt electricity was not guaranteed even in 1914.²⁰ Similar cases have been made for the

establishment of municipal waste incinerators, cemeteries and public conveniences.²¹

Histories of local government have examined the changing relationship between central and local governments since the early nineteenth century, itself a popular subject among political scientists since the work of the founders of British public administration in the early twentieth century: Harold Laski, William Robson, and Sydney and Beatrice Webb.²² In the most recent survey of the literature, J. A. Chandler contends that the British system of local government has evolved from the Victorian 'dual polity', under which local authorities enjoyed considerable discretion within nationally prescribed minimum standards, into 'a framework in which central government or its agents may comment on the most minute detail of local government service delivery'.²³ Richard Trainor has suggested that this alleged decline in the quality and execution of local government masks a deeper crisis in western-style governance.²⁴ John Davis, Simon Szreter, Jerry White and Tristram Hunt have also recently mapped the fluctuating trends in local government's powers and prestige during the nineteenth and twentieth centuries. Szreter's study, for the History & Policy Web site, is particularly intriguing for making the case for a revitalized local government under a New Labour government, drawing parallels between the alleged 'golden age' of municipal government during the final quarter of the nineteenth century, when municipal authorities enjoyed considerable powers in their management of the urban environment, and the nadir facing elected councils today. By re-equipping municipal authorities with the powers to raise funds to deal with problems locally identified, and devolving public services back to the local level, Szreter anticipates a renewal in citizen engagement with local government.²⁵

Instead, New Labour prefers to compel municipal authorities to enter into partnerships with other public, private and voluntary organizations. Tony Blair called this 'joined-up' government, while political scientists have coined the term 'governance' to recognize the multiple agents and multi-level agencies involved in the delivery of public services in the context of an evolving welfare state and a globalized economy.²⁶ It is not a new approach; public-private partnerships are discernible in the work of the early nineteenth-century police and improvement commissioners, while municipal authorities and voluntary organizations have historically worked together to deliver health and welfare services.²⁷ An edited collection of essays has analyzed this phenomena using the concept of 'urban governance', which refers to 'the organisation and legitimisation of [social and political] authority'.²⁸

For the purpose of this study, I use the term 'municipal government' as a catchword for elected urban local authorities, which, over the duration of the nineteenth and twentieth centuries, have been known as town councils, police and improvement commissioners, municipal corporations, county boroughs, and metropolitan and unitary authorities: 'municipal government' neatly encapsulates the continuities in powers and resources that these authorities exercised, while retaining flexibility to, chameleon-like, modify their appearance to fit the changing political environment faced by urban local government.²⁹

In addition to these histories of municipal government, the cultural turn in history has triggered a proliferation of research during the past two decades into the contested meanings of urban political power. Simon Gunn, for example, has examined the germination of a civic culture between the 1870s and 1914, as expressed through the public funerals of urban elites like Joseph Chamberlain, the Liberal Mayor of Birmingham and father of the 'civic gospel'. Gunn shows that civic processions were integral in cementing middle-class control over local government at the same time that the middle classes were moving further away from their cities.³⁰ Studies of the administrative rhythms and routines of municipal governments have similarly illustrated how they acted as a bulwark against the creeping centralization of policy-making, particularly during the twentieth century.³¹

Historians of masculinity have also studied the homosocial working environments prevalent within Victorian municipal government. The occupational cultures of public services like policing and firefighting helped frame municipal government as a quintessentially masculine preserve during the nineteenth and early twentieth centuries, although, as Patricia Hollis has shown, women made significant inroads onto school and poor law boards during the final third of the nineteenth century and, from 1907, onto town councils as elected councillors.³² That firefighters were commonly described as 'firemen' for the majority of their service's history, and have collectively resisted the adoption of the gender-neutral title, is reflective of the ingrained (and exclusionary) cultural traditions that constitute the fire service.³³ Historically, men fought fires precisely because the service was founded on the assumption that only men, and at that a certain type of male, had the physical strength and character to perform firefighting labour. The ubiquitous reference to firefighters as firemen by city politicians, the general public and firemen themselves was important for establishing and maintaining the parameters to the service's organization. It is therefore proper to use the titles fireman/firemen in their historical context, and to frame this

book within these social and cultural histories of municipal government and public services.

The British Fire Service

The academic literature on the British fire service is largely undeveloped. Terry Segars and Victor Bailey have both written labour histories of fire-fighting, focusing predominantly on the mobilization of firemen's trade unionism during the twentieth century. Jonathan Powner's thesis on provincial firefighting covers a sweeping period from 1666 to 1941, but effectively challenges the assumption that the British fire service evolved from organizational practices and technological innovations pioneered in London.³⁴ Numerous studies of fire insurance have touched upon the early impetuses to municipalize firefighting, but the creation of the fire service has been of secondary concern to the role that the industry played in financing the Industrial Revolution.³⁵ The sociological literature has, in recent years, tended to focus on the exclusionary working cultures within the service. Dave Baigent, in particular, has examined the methods used by newly appointed firefighters to fit into the structures and traditions of what remains an overwhelmingly white, working-class and male occupation despite the government's commitment to a more culturally diverse service. Other studies have focused on the problems faced by sexual minorities to become accepted within what remains a quintessentially heterosexual watch.³⁶

The fire service has not been neglected by its firefighters. Local brigades have their own historians, usually serving or retired firefighters who, through an intrinsic interest in the evolution of their own working practices, have written detailed brigade histories. Some of these histories were published during the 1970s as centenary celebrations, the 1870s being a formative decade in the municipalization of fire services. They were equally written as epitaphs to their brigades, since they tended to be published either during or after local government reorganization during the early 1970s.³⁷ Such histories follow a similar life-course from the early nineteenth century until the 1970s, narrating the birth, growth, maturity and death of their local brigade. Each brigade is celebrated as having enjoyed a virtuous history, facing its own localized fire regime, under the control of charismatic chief officers, and staffed by brave *firemen* willing to sacrifice their lives to safeguard their communities against fire. Through linear narrative devices, each brigade suffered its own local catastrophe, following which it underwent substantial reorganization under the leadership of a strong-willed chief able

to convince his local government employers, who are predominantly presented as the obstacle to efficiency and innovation, to invest capital into an organized corps of firemen armed with up-to-date equipment.³⁸

This book follows a similar chronological structure to these local brigade histories. It begins at the turn of the nineteenth century and traces the piecemeal establishment and growth of the British fire service as an urban phenomenon over almost 200 years, ending with the first national strike in 1977–8. The early impetuses to municipalize a service that was conventionally deemed to be the responsibility of the fire insurance industry exhibit the tensions that existed in the decision to render firefighting a public duty incumbent on local government. Firefighting became a function of local government in an *ad hoc* manner and had its pioneering authorities, as well as its laggards.

The main focus of this book is on the professionalization of urban firefighting as a uniformed, organized and disciplined service, publicly funded and locally delivered. Professionalism, as has been shown by Harold Perkin, T. R. Gourvish and Penelope Corfield, among others, refers to the evolution of an organizational ethos founded upon labour specialization, expertise and meritocracy, rather than ownership of property. The growth in modern 'industrial professions', such as accountancy, surveying and engineering, and local government services like policing and firefighting was largely a response to the intensification of urbanization during the nineteenth century. Gourvish argues that this process concentrated demand for professional services and created opportunities for specialists within local government, particularly during the second half of the century. Professionalism was influenced by a combination of internal and external factors, including industrial growth, urbanization, the creation of service associations to promote the standardization of professional training and the dissemination of esoteric knowledge, and the emergence of a professional society based on expertise and meritocracy. The 'professional ideal' demanded the creation and maintenance of urban networks to transmit knowledge and expertise between these modern professions, the majority of which were based or met in towns and cities.³⁹

As a slow-burning process, the professionalization of any public service such as firefighting follows a broadly chronological narrative, although the chapters necessarily overlap because the fire service did not evolve in a linear trajectory. Reforms to the organization and administration of fire brigades, as well as the technologies and practices of firefighting, occurred in a pragmatic fashion, ordinarily in response to problems encountered in extinguishing fires. Indeed, fires were not

unique events that can be examined in isolation of each other, or without recourse to the political response. Lawrence Vale and Tim Campanella have recently shown how fires, along with other disasters, tested the political resilience of municipal government, but equally the organizational and technological capacity of fire brigades and firemen to control them.⁴⁰

The book begins by examining the impulses to establish municipal fire brigades at the turn of the nineteenth century. In Chapter 1, the relationship between the fire insurance companies and the nascent municipal authorities is assessed to determine the key supply and demand influences on the municipalization of firefighting. Chapter 2 continues this theme through a detailed case study of the 'great fire' of Edinburgh in 1824, the significance of which lies in the effect it had on the creation of a paid fire service. Chapter 3 traces the process of identifying and categorizing the municipal fire service between the 1830s and 1880s. The relationship between water supplies, labour and firefighting technology was integral in shaping local attitudes towards establishing and extending a municipal presence in order to control fire. Debates about the appropriate methods of extinguishing fires filtered into the appointment and training of paid firemen in a similar manner to North American municipal brigades.⁴¹ In Chapter 4, the competing interpretations of the fireman's skills are examined to show how the public perception of firefighting as an honourable and heroic calling did not necessarily tally with the working reality of the paid fireman. Senior firemen disagreed about the appropriate skills and experience (described by Perkin as 'human capital'⁴²) required to become an effective fireman, which exemplified the contested nature of the British fire service during the final quarter of the nineteenth century.

Chapters 5 and 6 examine the transformation of the fire service from a disparate collection of fire brigades into a cohesive profession at the turn of the twentieth century. This process was driven by the chief fire officers in control of the independent fire brigades, and again mirrored trends evident in North America.⁴³ Professional associations were formed, annual reports published and a nascent trades press circulated news about organizational and technological innovations. This professional fire service had, by the outbreak of the Second World War, become part of the fabric of British local government.⁴⁴ However, as Chapter 7 shows, the experience of the Blitz resulted in the establishment of the National Fire Service in mid-1941, which forged new working patterns and opened the service out to new ideas and social experiences. With de-nationalization in 1947, the fire service returned to local authority

control, yet firemen's self-value had irrevocably changed. Chapter 8 continues this by tracing the growing hostility between post-war firemen and their employers. Focusing predominantly on the campaigns of the Fire Brigades Union, the chapter shows how firemen redefined their profession as a civilian service out of kilter with many of its pre-war working conditions and traditions. This culminated in 1977 with the first national strike, which is interpreted here as the moment when the fire service was recognized as a fractured service staffed by workers who felt alienated from the wider trade union movement, but also from their roots as obedient servants of local government.

1

Governing Fire Protection: The Origins of Municipal Fire Brigades, c.1800–38

During the first four decades of the nineteenth century, municipal governments began to manage the transition into an urban industrial society. They did so by organizing and administering a variety of services, ranging from street cleaning and scavenging to lighting and watching, which were increasingly recognized as public because their effective delivery affected everyone and they were seen as integral to the improvement of the urban environment. Improvement necessitated establishing order and guaranteeing prosperity within rapidly growing towns that lacked the basic infrastructural amenities or administrative structures necessary to be deemed well-governed. From adequate street lighting to regularly swept and paved streets to public fire-engines and paid firemen, nascent municipal governments, the majority of which were concentrated in the North-west of England and in the Scottish Central Lowlands, attempted to keep pace with the intensity of urbanization by strengthening their administrative structures and powers.¹

Municipal governments were not alone in trying to improve the administration of industrial towns, but worked in tandem, and sometimes in competition, with private companies and voluntary bodies to deliver services. Organizationally, this involved the formation of local bodies, usually through local or private legislation, which were described by Sydney and Beatrice Webb as ‘statutory bodies for special purposes’. Some of these were publicly funded and managed by municipal authorities to tackle specific social or environmental problems, such as the provision and maintenance of oil lamps for street lighting, while others were private enterprises founded to profit from the provision of local services, notably the supply of water for domestic, commercial and municipal consumption. Others still comprised a mixture of institutional interests, which envisaged financial and logistical

benefits in what would be described today as public–private partnerships. In a tangible sense, this saw the formation of joint-stock water and gas companies, turnpike trusts, street cleaning and scavenging teams, town guards and fire brigades, which were described contemporaneously as ‘fire-engine establishments’. However formed, the structures, powers and composition of these bodies often involved both public and private interests.²

Although, individually, these statutory bodies lacked the financial resources and technical knowledge necessary to control environmental problems such as fire, their combined efforts helped to establish the intensely local and fragmentary tradition of municipalization. Mutability in service delivery was the product of the varied scale and pace of municipal intervention, as well as the differing attitudes towards the supply of services within local markets. It was during the first four decades of the nineteenth century that the differentiated urban polity was enshrined in everyday practice. The first section of this chapter examines the set of ideas and interests through which industrial towns were governed in relation to fire protection. The second section then traces how the relations between the key public and private authorities interested in organizing firefighting worked in practice, focusing on Glasgow and Manchester, the ‘shock cities’ of the industrial revolution.

Governing fire protection

Fire protection remained a classic melding of public and private responsibilities during the first four decades of the nineteenth century. First, it was the individual property-owner’s responsibility to use fireproof materials like brick, slate and stone to reduce the risk of fire breaking out. It was equally his responsibility to insure his premises against the risk of fire.³ He had to reckon with safeguarding both the family property and the well-being of those who were dependent on it, which might extend from his family to his workforce. To paraphrase Michel Foucault, the individual was obliged to undertake ‘practices of the self’ by governing himself, his household and his business.⁴ With the additional threat of a fire spreading to adjoining properties, of leaving workers redundant and even of tainting a town with a reputation for being fire-prone, these practices extended to the administrative bodies that governed the town.

The insurance industry, meanwhile, developed its own regulatory practices under which risks were underwritten, while providing a guarantee of organized protection in the event of fire. This involved scaling premiums ranging from common domestic insurances to hazardous

and doubly hazardous risks, which were differentiated according to the building materials used, the installation of internal fire-proof partitions and the combustibility of the stocks and materials stored within the property. Premiums also depended on the availability of fire-engines, manually drawn and pumped, and paid firemen. Even then, insurance companies relied on the co-operation of existing municipal governments to frame systematic building codes under which new buildings could be inspected and regulations enforced to compartmentalize and contain fire.⁵

Conterminously, municipal governments were increasingly deigned to be responsible for organizing their own civic authority by delivering services uniformly within their administrative boundaries. The dominant bodies were the boards of improvement and police commissioners, over 200 of which were statutorily established by 1831 during what John Prest has termed 'the lighting and watching period' of local government. With responsibility for managing their own affairs, these bodies adopted legally prescribed powers to improve the provision of policing, street lighting, paving and firefighting in industrializing towns.⁶ They were usually established by the growing middle classes – 'the respectable, settled, and stable urban middling sorts' according to David Eastwood – to rival or supplant existing local bodies from which they were excluded. These included the town council and court leet, which, being generally co-opted bodies with limited tax-raising powers, were derided for lacking the political or financial legitimacy necessary to deliver local services to a growing urban population.⁷

Although membership of the boards of commissioners was limited to a property qualification, they exhibited some transparency in their activities through their powers to assess local property-owners. This accumulation of powers, resources and checks invested the improvement and police commissioners with the social and political authority for organizing municipal government on more democratic and interventionist principles. In this fashion, they undertook responsibility for subjecting certain activities to collective organization and systematic regulation. Initially, firefighting was not one of these because responsibility for fire safety impinged upon the individual and the market. Entrenched interests and divided responsibilities generally rendered fire protection a secondary matter for most municipal authorities, which inevitably meant that negotiations over proposed reforms to fire services took place cautiously. When, for example, Glasgow Town Council failed to reach an agreement with the fire insurance companies with business in the town over 'the management of the Fire Engines' in 1806,

it concluded that 'no plan can have a better effect for the security of the Inhabitants, as also of the Insurance Offices themselves, than recurring to something similar to what has been practiced for some years past.' In the absence of consensus, the Town Council continued to maintain the fire-engines and pay the firemen hired to work it, while charging the costs of extinguishing fires to the companies.⁸

The *ad hoc* organization of firefighting indicates broader attitudes about the management and delivery of local services during the early nineteenth century. Because of its sporadic incidence, the task of extinguishing fire was rarely considered a full-time vocation, but was seen in entirely part-time or voluntary terms, a duty to be performed by all respectable men as part of their communal responsibility. For example, one fire in central Birmingham, in January 1805, was extinguished 'by the timely and friendly assistance of the neighbours'; an outbreak in the town's ordnance office later that year was tackled by the officers and firemen of the Birmingham Fire Office (BFO) and the Birmingham Volunteers.⁹ Organized firefighting was the product of the 'institutional fusion of private, public, and corporate initiatives', inasmuch as, when faced with a raging fire, contemporaries were 'less concerned with agency than with effectiveness'.¹⁰ It mattered more that the fire was extinguished than to who paid the firemen.

At the heart of debates about the administration of fire protection were the fire insurance companies, which underwrote improvements to firefighting and helped make industrial towns safer places in which to live and work. They offered incentives ranging from competitive rates of insurance to written guarantees to promptly settle losses. Companies also established networks of agents to co-ordinate business and sell beyond the place in which the head office was located. Advertisements stipulated that agents should be 'Persons of Respectability' because they were expected to handle all aspects of local business, from advertising in newspapers, to investigating and settling claims, and to representing the head office in negotiations with the municipal authorities. Local agents were the first point-of-contact between the insurers, their customers and the municipal authorities.¹¹

In addition to their local agency connections, insurance companies emphasized the 'value-added' benefits of insuring with them by establishing fire-engine establishments in towns where they were liable for significant risks. The first company establishments were formed in London during the first quarter of the eighteenth century, before spreading into the industrializing midlands and north during the second half of the century. Although most companies initially formed engine

establishments to protect their customers' property only, recognizable by a fire mark (comprising the company crest and a policy number) above the property's front door, newspaper reports indicate that, by the early nineteenth century, most companies extended protection to anyone able to pay for the service. In those towns where a metropolitan company enjoyed such dominant business, as with the Sun in Leeds and the Phoenix in Glasgow, they also donated fire-engines to the town, in 1806 and 1808, respectively.¹²

With the growth in co-insurance and re-insurance during the early nineteenth century, in which multi-occupancy risks like factories and warehouses were shared among underwriters, it proved increasingly difficult for establishments to solely protect their own risks anyway. For example, a destructive fire in a Liverpool paper warehouse in 1831, in which 13 insurers were interested, was combated by the engines of the Norwich Union Fire Insurance Society and the Imperial Fire Office. The expenses of the operation were distributed among the insurers. With estimated losses exceeding £35,000, *The Liverpool Mercury* reported that 'when divided amongst these different companies, [the loss] will not be severely felt by any.' Risk-spreading like this undoubtedly influenced efforts to share the burden of fire protection more equitably.¹³

Sensitive to the benefits that accrued from voluntarily shouldering a public duty, some provincial companies pledged to protect every property in their town against fire, or provided a guarantee to reimburse the municipal authorities with the costs of extinguishing fires in uninsured property. In 1831, for example, the BFO boasted, in a newspaper advertisement, that its 'expensive establishment of Fire-men and Engines...are always at the public call'. By committing itself to providing a *de facto* public service, the company asserted its indispensability to the town's protection, insisting that its 'valuable services, for upwards of twenty years, are well known and appreciated in the town and neighbourhood'. Insurers were also reminded of the protection they were guaranteed, with the following notice recorded on their premiums: 'Powerful Engines, of the most approved construction, together with a corps of experienced Firemen, are maintained at a considerable expense [*sic*] by this Company to add still further to the security of the Insured.'¹⁴ The advertising of fire services illustrated a flourish in 'provincial confidence' within late eighteenth- and early nineteenth-century industrializing towns, where the presence of fire-engines decorated with an insurer's crest and manned by firemen dressed in company colours helped solidify the fiercely independent identities engendered in industrial towns.¹⁵

The presence of fire-engine establishments also signalled the visible representation of urban authority as a working coalition of elite interests. Local services were generally not taken under sole municipal control because many municipal authorities lacked the resources or legitimacy to pursue expansionist policies, but also because the commercial and industrial elite saw that, like the supply of gas and water, an improved standard of fire safety served a tangible benefit to their businesses. Although profit was uppermost in the decision to invest in a private engine establishment, the external effect on property values from subjecting fire to collective control brought the insurance companies, as well as other firms, together. This explains why there were five operational mill engine establishments in Huddersfield during the 1820s, which provided protection for the entire town, and also why Stockport's cotton manufacturers collectively bought an engine for their town in 1821. In practice, urban administration involved a mixture of public and private interests.¹⁶

The administration of fire protection also straddled public and private interests because industrial towns exhibited strong inter-connections between their economic and political leadership. Several of Newcastle's glasshouse and foundry owners, who ran their own works' establishments, were share-holders in the Newcastle Fire Insurance Company, which also provided engines for the town's protection. In Birmingham, local elites such as Richard Cadbury, the draper, William Phipson, the metal dealer, and James Busby, the gun manufacturer, sat on the BFO's board during the 1830s and 1840s, while simultaneously serving as members of the improvement commission, which also had an engine. Towns like Newcastle and Birmingham pursued a joined-up approach towards firefighting because their political and economic institutions were dominated by the same commercial and manufacturing elites that palpably benefited from an improved standard of fire protection.¹⁷

This was the age where public and private politics co-habited. However, co-habitation did not automatically denote homogeneity in experience, since relationships between municipal authorities and insurance companies differed from place to place. In Birmingham and Newcastle, where the municipal interventionist spirit was slow to develop, the company engine establishments were revered as quasi-public institutions. In other towns, the municipalization of fire services was an early appendage to a growing accumulation of powers during the first four decades of the nineteenth century, and was a relatively inexpensive measure that brought tangible benefits both to property values and to the reputation of the newly established 'ratepayers' democracies'.¹⁸

Even then, municipalization took markedly different guises and could be divisive in its effect on urban political relationships. As we will see in the remainder of this chapter, the gestation of a municipal fire service in Glasgow and Manchester was dependent on a confluence of local conditions, rather than any overarching functional pattern.

The politics of conflict in Glasgow

Glasgow already had, by the turn of the nineteenth century, an unenviable reputation for uncontrollable fires. Conflagrations devastated the town in 1652 and 1677, consuming approximately one-third of its property. Its theatre was burned down in 1782, while a fire in 1793, caused by a group of rowdy drunks, destroyed the Tron Kirk. Regular experience of large fires inevitably brought sporadic efforts to cope with them, which included the abolition of thatch and timber as construction materials and the removal of hazardous trades like candle-making to the urban periphery. During the eighteenth century, responsibility for firefighting passed between the Town Guard (the rotating membership of which was the civic duty of every male inhabitant of the town) and a privately managed establishment formed by the town's sugar-boilers. By 1801, five engines, strategically located, were recorded in the town, which were under the care of an assorted combination of slaters, brewers and the Town Guard.¹⁹

Having first become Scotland's principal commercial port through its participation in the international trade of sugar and tobacco, before diversifying into linen manufacturing, Glasgow's commercial and industrial elites turned their attention to the administration of the town's activities at the turn of the nineteenth century. Rapid urbanization – its population almost doubling from approximately 42,000 in 1780 to 77,000 in 1801 – intensified middle-class interest in managing social and environmental problems. Fear of crime and public disorder triggered the municipal authorities into action: an organized body of police was formed in 1788 following a weavers' strike, which was formally constituted in 1800 when a local Police Act created a board of police commissioners responsible for managing the town.²⁰

Democratically elected on a £10 property-owning qualification, the Police Board assumed powers to assess and rate the town's inhabitants for the proper regulation of its environment. Irene Maver argues that the Act signalled the intention of Glasgow's middle classes to tackle some of the underlying environmental problems caused by rapid urbanization. They did so by circumnavigating the traditional constraints faced

by the self-elective Town Council, notably its limited revenue-raising capacity. Moreover, in conforming to the broad Scottish legal definition of 'policing', the Board could afford to assume a range of environmental services that included street cleaning, lighting and scavenging. Upon these it levied service charges, which, with remunerative expenditure, infected its members with a sound reputation for economical and efficient municipal government.²¹

The Town Council's limited tax-raising powers were exemplified in its ineffectual efforts to provide an improved system of firefighting. Financial responsibility for fire safety had, since 1653, fallen on the ratepayers, with every new burgess obliged to pay a fixed sum towards the provision of buckets and ladders. Initially under the Council's jurisdiction, in 1688 responsibility for collecting and distributing this 'bucket money' was transferred to the powerful Merchants' and Trades' Houses. As an additional revenue source for these two incorporations, the money was increasingly redirected to fund alternative activities, particularly by the Trades' House as poor relief. During the late 1780s, the Council deplored the misuse of the money; its proposals to re-appropriate it to fix the dilapidated engines were rejected.²²

Opposition to improvements in firefighting predominantly focused on its cost and institutional responsibility. Between 1803 and 1806, negotiations were conducted between Council officials and insurance agents to devise a co-ordinated scheme, but these collapsed when both parties failed to agree on financial responsibility. Agents representing the seven leading insurance companies in the town shrewdly manipulated the dispute over the 'bucket money' to deflect awkward questions about their contribution to the town's protection, opining that if the 'bucket money' was applied 'in the extinction of Fires within the City', they assured that 'their Constituents would contribute liberally towards procuring a complete set of Fire Engines and apparatus.'²³ Lacking sufficient financial resources, or the political authority, to unite these disparate interests, the Council implored the Police Board to intervene. This observable power shift to the burgeoning middle classes was significant because, although they remained small in number, the expansion of their political authority signalled the important contribution that they were making to the governance of the town.²⁴ In the absence of effective competition from the insurance companies, the Police Board easily assumed control over the town's protection from fire.

The transfer of responsibility was assisted by the incidence of fire and the failures to control it. During a 'most alarming fire' on the town's immediate border with the industrial suburb of Calton in January 1807,

the *ad hoc* efforts of the town's firemen, the police and a party from the Forfar militia struggled to extinguish the flames. In the absence of any concerted leadership, firemen competed for access to the limited water supplies and pumping equipment, which threatened surrounding buildings on either side of the boundary 'with utter destruction'. Since Calton was not part of Glasgow's municipal jurisdiction, the Town Council disputed its responsibility for paying for the engines and firemen, instead billing the local insurance company for the expense.²⁵

In the aftermath of this fire, the Police Board inserted a clause into its Police Bill in which it assumed responsibility for protecting the town against fire.²⁶ The decision was rooted in a wider politics of conflict, whereby the Town Council gradually ceded political authority to the more democratic Police Board, which saw the management of fire-engines as the natural expansion of its 'policing' powers. The transfer did not proceed as smoothly as anticipated. Critics rounded on the Police Board for neglecting its main duty for making the town safe from crime, and, according to a correspondent to *The Glasgow Herald*, for making individual carelessness a burden on the police rates:

Can there be anything more just than compelling the person whose house is on fire to pay the expenses incurred in extinguishing the fire? Besides his being bound by the expense, is he not bound in gratitude to the community for providing an establishment for the purpose of preventing or lessening his loss? ²⁷

By charging the whole expense to the police rates, the prudent insurer faced being saddled with an inequitable tax that would underwrite the property of those businessmen who, living outside Glasgow's assessable bounds, paid no contribution towards the safety of their businesses. Only with service charging would the Board discourage irresponsibility, redistribute the burden of fire safety and strengthen its control over the insurance market.

Moreover, firefighting was not an obvious public duty; rather, it was the natural preserve of the insurance companies. Newspaper correspondents, bolstered by public criticisms of the proposal from the incorporated trades and the Faculty of Advocates, argued that Glasgow should emulate London where 'the Fire Insurance Companies have Engines and Firemen in constant pay.' At the very least, those companies with business in the town should provide a written guarantee to the Board to pay the expenses of sending engines and firemen to suburban fires. Meanwhile, proposals to transfer the 'bucket money' to the

Board were again rejected by the Trades' House. Ingrained attitudes were clearly hard to alter.²⁸

Undeterred, the Board insisted that firefighting had become a public duty 'incumbent on every inhabitant. What is the fate of one man to-day, may be the fate of another to-morrow.'²⁹ Every ratepayer would pay for the service regardless of whether they already had insurance or not, although property-owners who lived outside of the police bounds paid more for the engines' attendance at fires in their suburban homes. To keep costs within strict limits, the Board formed a 'fire police', which was a part-time service provided by 40 constables who attended fires as a secondary concern to their ordinary policing duties, and received a fee on a sliding scale for their prompt response to an alarm. They were placed under the supervision of the Superintendent of Police, who was paid a fee for attending fires in addition to his salary. A part-time fire service would not, it was assumed, be a burden on the general police assessment.³⁰

The Board was mistaken in its assumption. It inherited six obsolete manually drawn fire-engines that needed fixing and testing every 6 weeks, while a superintendent of fire-engines, Basil Aitchison, was appointed in 1809. In addition, 40 fire-plugs were installed on the streets, at considerable cost, 'for the purpose of better supplying the Fire Engines with Water'. Despite its protests that 'in every City in the Kingdom except Glasgow the whole expense of extinguishing fires is defrayed by the Insurance Companies,' the local agents refused to contribute anything towards the annual expenditure. The Board's Committee on Fire Engines responded by recommending that 'nothing farther can be demanded from the Commissioners or farther sums laid out by them from the money of the Police under their charge.'³¹ Much like the Town Council, the Police Board experienced little influence over the other bodies interested in fire safety.

Problematic relations tempered Glasgow's administration of its fire service throughout the 1810s. Rising demand for its services forced the Board to seek guarantees from the insurance companies to pay the expenses of sending the engines to suburban fires. A local concern, the Glasgow Fire Insurance Company, provided a guarantee up to 1811 when it was sold to the Phoenix, which declined to renew it, and the guarantee was transferred to the Sun.³² By 1816, a growing workload meant that the position of superintendent of fire-engines was made full-time. A year later, the 'fire police', which then consisted of 48 constables, cost an annual average of around £300. In the absence of any contribution from the companies, the Board resorted to dismissing its entire force, before re-employing the men on lower wages.³³

Opportunity presented itself in a new Police Act, obtained in 1821. David Barrie contends that, although it was initially introduced to renew the expiring 1807 Act, this Act was shaped by prevailing social and political tensions in the city. Violent protests, influenced by the economic downturn following the Napoleonic Wars, culminated locally in an unsuccessful armed insurrection by hand-loom weavers. Forced to draft in a large number of volunteers to help the constables win what became known as the 'Radical War', the limitations of the Police Board's civic authority were heightened by this crisis; its finite resources were spread too thinly to effectively manage the disorderly nature of modern urban life. This brought the town's social and political elites together to extend the police's surveillance into workplaces and the local community. Practically, the number of resident police commissioners was doubled to 48. With the authority to act as constables, these commissioners enjoyed more stringent powers to apprehend offenders and regulate citizens' behaviour in their wards. Regular checks of public houses and brothels were encouraged.³⁴

Along with a harder style of policing came a tougher approach to fire-fighting, which embraced service charging. Proprietors and occupiers of property within the royalty became legally responsible for the firemen's wages, as well as other costs incurred 'by bringing to the spot Fire Engines, and a supply of Water', up to a maximum of £15. In addition, fines ranging from 5s to 10s were introduced for domestic chimney fires.³⁵ The Act signalled the Board's intentions to reallocate the costs of firefighting onto the individual and the insurance companies, which, it gambled, would guarantee to reimburse their customers for fear of losing custom in a fiercely competitive market. It worked because the Sun, which had withdrawn its guarantee earlier in the year, resumed it in August, 'guaranteeing the whole expense of sending the Engines to such fires as may happen in any of the suburbs of the city'.³⁶

Despite its short-term success, the 1820s and 1830s were riddled with infighting between the Police Board and the insurance companies over the distribution of firefighting costs. The Board's Committee on Fire-engines regularly criticized the companies' refusal to contribute to the 'fire police's' expenditure, and tried to convince them to accept liability for 50 per cent of the establishment's maintenance costs in addition to regular service fees. Following a large fire in an upholsterer's workshop in November 1825, *The Glasgow Herald* also levelled the blame for the engine establishment's inefficiency at the foot of the 30 companies with business in the town because 'not one of them will contribute a farthing to the engines.' Complaints from the firemen and water carriers that they were 'inadequately paid' only added to the pressure, and

members of the Committee proposed that 'the Establishment ought to throw up altogether the charge of the Fire Engines.'³⁷ A sub-committee was formed to confer with a committee of insurance agents to consider the feasibility of introducing an annual contribution, but, when it failed to produce an agreement, the insurance companies were portrayed as greedy opponents of 'improvement'.³⁸

By subjecting the funding of improvement to levels of service demand, the Police Board contributed to its own failures in Glasgow's municipal administration. Rather than uniting the disparate institutions responsible for protecting the town against fire, the Board's tactics ostracized the insurance companies from the public arena. Although they reluctantly conceded some liability for firefighting, their agents continued to insist that, since around one-third of the town's property remained uninsured, the sums charged by the Board were excessive. Indeed, between 1830 and 1837, 75 per cent of the engine establishment's gross expenditure (excluding rents), which exceeded £7300, was recovered from service charging.³⁹

Relations were at breaking-point when, in 1837, the Board's power to charge for expenses incurred at fires was repealed from a new Police Bill without its sanction.⁴⁰ The Board reacted angrily by halving its establishment and gave notice to disband it the following year. The companies responded by offering £400 per annum on the condition that the Board dropped service charging entirely. Dismissing this conciliatory offer, the Board stated that 'by far the greater part of the heritable property of the City belongs to persons residing out of it, and who therefore contribute nothing to the funds of the Police.' Instead, it demanded half the annual expenditure.⁴¹ Citing irreconcilable differences, in June 1838 the Board disbanded the establishment, despite an increased offer of £500 per annum. It took an interdict brought by the Town Council and the Magistrates, which were annoyed at having to take control of the engines, to force the Board to resume its statutory duty.⁴²

The instability of Glasgow's municipal administration was the product of obfuscation and a sense of inequity between discordant interests, which inevitably became acrimonious. Keen to exert its authority in its transition into a democratic system of municipal government, the Police Board demanded additional resources from the insurance companies since they palpably benefited from organized fire protection. Moreover, the dominance of the London and Edinburgh insurance companies meant that capital was being drained from the town in favour of its urban rivals. Intermittent attempts to establish a local insurance presence, as with the Glasgow Fire Insurance Society (1803–11) and the

West of Scotland Fire Insurance Company (1826–39), proved difficult to sustain in an established market. For example, between 1804 and 1811, the Glasgow Society's loss earning ratio was 66.7 per cent. Its subsequent sale to the Phoenix solidified the dominance of metropolitan interests over Glasgow's lucrative insurance market.⁴³

Glasgow's political infighting was an additional hindrance inasmuch as the existing powers to raise revenue through the 'bucket money' were insufficient. The 'bucket money' was also unsuitable for modern requirements, which depended on capital- and labour-intensive work. Finally, the constraints imposed on the Board's jurisdiction by ancient burghal boundaries meant that those mill-owners and warehousemen who benefited from organized fire protection were doing so for free since they generally resided outside the bounds and were not subject to local taxation. Indeed, the neighbouring suburbs of Calton, Anderston and Gorbals, despite being within Glasgow's parliamentary boundary from 1832, remained outside its assessable limits before their annexation in 1846. Only then did Glasgow get a truly effective 'fire police' that provided a uniform service across the town.

Consensus politics in Manchester

Elsewhere, competition in fire insurance and the recurring threat of industrial fires bred a co-operative approach to the organization of fire services. In contrast to Glasgow, Manchester exhibited strong inter-connections in its municipal administration between public and private bodies, which had a significant bearing on the decision to reform its fire-engine establishment in 1825. The key actors were the Board of the Manchester Police Commissioners, established under its own Police Act in 1792 to usurp the anachronistic Court Leet, which was a relic of the old manorial court system, and the Manchester Fire and Life Assurance Company (MFLAC). Founded in 1824, two-thirds of the MFLAC's original board consisted of textile merchants and manufacturers who mostly resided in the town. As the industrializing town's elite, they were naturally predisposed to establish a high standard of fire protection for their flammable cotton mills and warehouses.⁴⁴

Manchester's rapid growth as a manufacturing centre from the 1780s, specializing in the machine production of cotton, brought it a reputation for fire. Its early mills and factories were usually timber-framed buildings with wooden floors, and replete with combustible bales of cotton, which, when saturated with machine oil, were easily ignited by candles or oil lamps, normally with destructive consequences. Jennifer

Tann suggests that, with a few exceptions, it was not until the 1830s, when the self-acting mule and the power-loom became more productive, that manufacturers recognized the importance of protecting their capital through structural fire-proofing and comprehensive insurance. Until then, buildings and machinery were expendable assets, partly because buildings capable of being converted into cotton mills, at relatively low cost, were readily available across Lancashire.⁴⁵

In addition, the town had also emerged as a leading commercial distributor, with the eponymous Manchester warehouse, housing a plethora of combustible finished goods, dominating its skyline by 1820. Large single fire losses in the town's cotton mills and warehouses were frequent between the late 1780s and 1820s because of the lax building by-laws governing the construction of commercial and industrial buildings, the absence of regulations for the storage of inflammable goods in warehouses and, to a lesser extent, arson. William Axon's *Annals of Manchester*, published in 1886, records the destruction by fire of a power-loom factory in 1790 before it had even started operating. Other fires listed include, in 1801, a warehouse, two textile factories and a cotton mill, which caused a combined loss of approximately £65,000 in addition to the deaths of 23 workers. An additional seven factory fires are recorded for 1805.⁴⁶

Another problem rested with the management of the town's fire service. The Police Board inherited small manual engines from the Court Leet in 1792, which were manned by volunteers. The Sun and Royal Exchange also provided supplementary engines. From 1799, 22 retained firemen were recruited from within the ranks of the town's watchmen, and placed under the control of an 'Inspector of Engines and Conductor of Firemen'. Isaac Perrins, an engineer with no apparent firefighting experience, was appointed to the post for his experience in repairing the engines, which repeatedly broke down.⁴⁷ Technological difficulties increasingly undermined firefighting operations because the engines were too small to extinguish fires in the growing factories and warehouses. One such blaze in December 1800 destroyed a large block of warehouses in the town centre in less than an hour. Overpowered by the flames, the firemen were forced to abandon a block of buildings, while the 4th Dragoons and the Manchester Volunteers were drafted in to protect adjacent property. Perrins was killed in the commotion. His successor, Thomas Knight (1800–12), was also an engineer, and was paid only £20 annually. Working under stringent financial constraints, the Board prioritized the fixing of the engines over the training of firemen.⁴⁸

Growing discomfort about the standard of fire protection was illustrated by the decision of the Norwich Union and the Royal Exchange to establish their own engine establishments in the town, in 1814 and 1820, respectively. Heterogeneity in organization sometimes spilled over into uncoordinated action on the fire-ground. Lured by the offer of a financial reward, firemen from different companies actively competed to arrive first at a fire, and, while they tried to co-ordinate resources, the absence of single command and unified equipment undermined concerted action. The Police Board tried to amalgamate these competing bodies in mid-1821 by forming a fire-engine committee, which purchased improved engines, erected stations and framed a set of rules 'for the government' of the firemen when on duty. However, since funding came from a variety of sources, conflicting orders were unsurprising.⁴⁹

As an important provincial market, it is unsurprising that insurance companies showed an interest in the town's protection. The growing number of cotton mills – rising from 26 in 1802 to 66 in 1821 – posed a particular problem for established insurers, especially since persistent price under-cutting narrowed the margins on individual risks. Robin Pearson argues that some companies had withdrawn from insuring mills altogether by the mid-1820s. Amid suffocating competition from the established metropolitan companies, as well as high entry costs, provincial insurers were often obliged to take risks to gain a foothold in the market. In the case of the MFLAC, its directors underwrote risks totalling £9.9 million in its first year of business, including a large regional concentration of high-risk enterprises like mills, factories and warehouses. It also opened 92 agencies, mainly in the North-west of England, to establish a regional presence. By the early 1830s, the MFLAC had become the largest insurer in Manchester, earning average annual premiums of nearly £8000 from cotton mills alone between 1825 and 1832.⁵⁰

The MFLAC's 46 directors were also interested in municipal politics. Pearson contends that they were 'at the heart' of Manchester's decision-making apparatus between 1824 and 1829, with nine acting as boroughreeves, another nine as constables and 15 as police commissioners. Like their counterpart in Glasgow, the latter had accumulated significant powers by 1824, managing a day-and-night police, providing scavenging and street lighting services and running their own gas company. Membership of the Police Board was thus an attractive proposition to the MFLAC's directors, who were naturally interested in the extension of municipal powers to better control the town's fire regime.⁵¹

Alarmed by proposals to reduce the existing firefighting apparatus, the MFLAC approached the Police Board in July 1825 to open negotiations over 'organizing an efficient establishment for extinguishing fires'.⁵² The MFLAC's case was assisted by a series of large fires in the town and strong condemnation of the firefighting operations from *The Manchester Guardian*, which used such occasions as ammunition in its efforts to shape emerging conceptions of civic identity and influence the movement towards municipal reform. For example, following a fire in a power-loom factory, it reported the 'utter inefficiency of the means employed to extinguish it', in which firemen from different brigades worked unsupervised and obstructed each others' efforts. Losses totalled £8000, only half of which was insured, and 'several hundred persons' were made unemployed. Complaints about the misconduct of firemen led the newspaper to condemn the fire-engine establishment as 'the worst regulated and most inefficient fire police of any large town in the united kingdom'.⁵³ At another fire, one of the police engines sat idle because of 'want of hands', while one of the insurance brigades took 30 minutes to arrive, providing abundant evidence that Manchester needed a unified body of firemen under single command.⁵⁴

The Police Board recognized the case for reform, but disputed its practicability. Police funds were already £14,000 overdrawn because of the extension of the town hall and gasworks, and there was little scope to invest significant capital into the fire-engine establishment. The logical strategy, opined one Commissioner, would be 'to sell the fire-engines, and break up the establishment altogether, than to keep it up in its present inefficient state'. Others contended that 'the expense of extinguishing fires ought to devolve on the insurance offices'.⁵⁵ However, the Fire-Engine Committee's proposed reform was adopted, subject to negotiations with the MFLAC, which acted as a conduit between the Board and the other insurance companies in the town. By the beginning of May 1826, the *London Guardian*, *Atlas* and *Beacon* offices had agreed to annually subscribe £65 between them to the fire-engine establishment's maintenance, which was supplemented by £100 from the MFLAC. In return, the Board agreed to run the establishment 'in a liberal and efficient manner'.⁵⁶

It started by advertising for 'a clever, intelligent and active man' as superintendent of fire-engines at a respectable salary of £100 with a rent-free house. Captain Charles Anthony, a naval officer, was appointed to the post and charged with the responsibility of creating a disciplined corps of firemen. New regulations were duly framed to mould obedient firemen: any man 'being drunk, or refusing to obey the orders of

the Superintendent for the time being, or otherwise misbehaving' forfeited his allowances on the first offence, and was dismissed for a repeat offence. To counter-balance this strict disciplinary regime and attract a better calibre of recruit, incentives were offered. First, an improved scale of expenses was introduced for the rank-and-file firemen, ranging from 6d to 1s 6d an hour, in addition to an annual wage of 4 guineas and free uniform. Second, a new rank of captain was created, with responsibility for maintaining and exercising the engine and men under his command, and rewarded with a higher rate of pay. Eight men were appointed to the position from among the ranks. Re-organization was, therefore, founded on a consensus that, in order to control the town's fire regime, firemen needed to work together in a spirit of conciliation. Within a month of its re-organization, the Fire-Engine Committee reported that Anthony had put the engines 'into an efficient working condition'.⁵⁷

The consensual approach taken to Manchester's municipal administration undoubtedly eased the transition to improve the standard of the town's fire protection. Service charging for attending fires outside the town's limits was introduced without any noticeable opposition in 1827. In October 1828, control over the establishment passed to a Lamp, Scavenging, Fire-Engine and Main Sewer Committee, which approached its administration in a more holistic manner. The engines and hose-pipes were kept in a working condition, the firemen were regularly inspected and improvements were made incrementally under the scrutiny of the Accounts Committee. In 1830, the Manchester Gas and Police Act adopted Glasgow's scale of service charges without the divisive recriminations.⁵⁸ Manchester succeeded, where Glasgow failed, in pooling together local political and economic resources, which meant that municipalization was a pragmatic response to an identifiable problem that drew on the resources offered by local financial bodies. As integral actors in the incremental development of a uniform culture of firefighting, provincial insurance companies helped populations like Manchester's make the transition into a more regulated and responsible society, ostensibly by emphasizing the inter-dependence between local economic and political elites in delivering environmental services like firefighting.⁵⁹

Conclusion

In their efforts to control social and environmental problems during the first four decades of the nineteenth century, municipal governments had

to carefully manage finite resources. Mistakes were undoubtedly made, such as Glasgow Police Board's decision to levy inappropriate expenses for sending its engines and firemen to suburban fires. In Manchester, political agreement to re-organize fire protection only emerged following a series of large fires during which public and private brigades competed as much for urban authority as they did for control of limited water supplies. Such mistakes, though, provide evidence of action during a time when municipal government is conventionally depicted as inert and moribund. The growing number of large industrial fires was unprecedented and required intervention. However, until the municipal authorities learned how best to combat them, the deployment of engines and firemen remained unsystematic.

The case studies also indicate an emerging consensus in support of municipal organization. Assisted by a buoyant urban print culture, demands for a uniform and responsive system of organized firefighting were part of a wider clamour for political reform, which was strongly focused on the industrializing North-west of England and Scottish Central Lowlands. Contemporaries believed that uniformity in experience would cultivate the knowledge necessary to control fire, hence provincial newspapers increasingly reported local outbreaks, but also fires that occurred in other areas, providing an evolving model of effective firefighting that informed policy-making when establishing or reforming an engine establishment. As municipal governments became increasingly conscious of the importance of 'improvement', they studied each other, adopted techniques pioneered elsewhere and adapted them to fit local conditions.

By the mid-1830s, attitudes towards the administration of local government had become more rationalized. Municipal reform between 1833 and 1835, which formalized the existing structure of municipal government in Britain, statutorily invested municipal authorities with various powers for managing urban society. In so doing, reform opened municipal government up to a wider middle-class electorate, which meant that decisions had to be accounted for and resources carefully deployed. Responsibility inevitably brought demands for what E. P. Hennock identifies as an efficient and economical style of municipal government that balanced ratepayers' natural interests to keep rates within acceptable limits, while improving standards of service delivery.⁶⁰

Rationalization extended into fire protection. Those English and Welsh towns that adopted the 1835 Municipal Corporations Act were compelled to establish their own police force, under the jurisdiction

of an elected watch committee.⁶¹ By the end of the 1830s, municipal authorities in a number of industrial towns had brought firefighting under their direct authority, accepting it as a necessary corollary to the police's duty to maintain public order. Thus began an important tradition in the British fire service, which shaped official perceptions of the level of skill and professionalism involved in firemen's work for the ensuing century.

2

Constructing Modern Fire Brigades: The Edinburgh 'Great Fire' of 1824

Over a hundred years ago the British Fire Service was inaugurated in Edinburgh by the Commissioners of Police and the managers of the local fire insurance companies.¹

Fire insurance companies played a key role in exerting supply-side pressures over municipal governments to take responsibility for organized fire protection during the early nineteenth century. Many insurance companies provided the capital, firemen and fire-engines to protect industrializing towns from the continued threat of fire. In indemnifying their customers, insurance companies absorbed the growing costs of organized firefighting, although municipal governments in Glasgow and Manchester were beginning to undertake some responsibility for this. In some towns and cities, it was the incidence of fire, coupled with a growing public clamour for action, that triggered the municipalization of fire services. In Edinburgh, the decision, first, to found a municipal fire-engine establishment, independent of external control, before, second, re-organizing it on more efficient principles, was the direct result of a wave of large fires that plagued the Scottish capital throughout 1824. Culminating with the city's self-styled 'great fire' of November 1824, Edinburgh emerged from the ashes of this disaster committed to building a municipal fire brigade that, under the leadership of its 'Master of Engines', James Braidwood, acted as the model for municipal services in ensuing decades. It is this relationship between great fires and municipal reform that provides the focus of this chapter.

Historically, 'great fires' were necessary to trigger major organizational reforms to firefighting. A 'great fire' involved extensive property damage, loss of life and, most significantly, public outrage and recognition at the failures of the existing system of fire protection. It both demanded

and legitimized reform in a single sweep. As much a discursive construction as a quantifiable event, a 'great fire' can be traced qualitatively through print culture, inasmuch as it involved more than material loss. It thus differed from a 'major fire', defined by Jones, Porter and Turner in their study of English fire disasters between 1500 and 1900 as one which destroyed ten or more properties in a single outbreak.² Indeed, the greatest values of fire loss in the nineteenth century were increasingly confined to fires in single premises, especially warehouses and factories stocked with flammable raw materials and finished goods. Even when insured, businesses were also directly affected by disruption to their day-to-day trading activities, and employees to a loss of work with not inconsiderable effects on their families, compounded by the possibility that emotional and physical scars resulted from fire damage to private households.

A 'great fire' also challenged the resilience of a city and necessitated responsive disaster management and reconstruction. Scale is not everything; context is almost certainly more significant. The complete destruction of a city is not a pre-requisite. Indeed, historically most western cities have not burnt down in their entirety. This is especially so in British cities where the combination of fireproof building materials, increased lot size and improved firefighting services and water supplies have each contributed to an emergent 'fire gap' between the size of urban population and the number of major fires ravaging towns and cities during the nineteenth century.³ A 'great fire', as befitted the changing fire regimes of industrial cities, was as much a cultural disaster as it was a physical one. It became part of a city's identity, a memorial to its resilience and reconstructive prowess. Edinburgh's 'great fire', as we shall see, became a symbol of its modernization.

The 'Great Fire' of Edinburgh

The birth of the British fire service as a municipal responsibility took place around 10 o'clock at night, amid the swirling winds and biting cold of Edinburgh, on 15 November 1824. Beginning in a printer's workshop on the corner of the High Street and the Old Assembly Close, in the historic heart of the Old Town, what began as a routine fire in Edinburgh's central artery quickly became a raging conflagration which threatened the destruction of the city. Firemen from municipal, insurance and military corps arrived with their engines, but could find no water to attack the blaze. They were soon joined by the civic elite, who, local newspapers proudly claimed, 'engaged themselves actively'

in helping to evacuate the burning tenements. Large crowds flocked from miles around to watch the spectacle unfold. Unchallenged, flames 'spread resistlessly' along the High Street, infiltrating its closes and wynds, and consuming entire blocks of stone-built, but timber-lined, tenements. The fire 'burned fiercely the whole night, the old houses, full of dry wooden panelling, affording abundant food for the flames', and sending 'showers of burning flakes' swirling around the windswept streets.⁴

Having exhausted itself the following morning, a second fire, thought to have been caused by smouldering fire brands, took hold of the Tron Church, to the east of the first outbreak. The firemen, hungry, soaked and cold, clambered onto its roof and vainly combatted the blaze. They were assisted by reinforcements from the royal artillery at Leith Fort and the dragoons at Piershill Barracks. A witness to the spectacle, Henry Cockburn, the Lord Advocate, described the fire as a 'brilliant blaze', as the flames leaped around the fretwork of the lead-covered wooden steeple built in 1673. Within minutes the spire collapsed and fell 'with a tremendous crash', sending startled firemen and onlookers fleeing from the 'streams of molten lead' that poured forth.⁵

Later that evening, a third fire, entirely separate from the first two, broke out in an attractive tenement on Parliament Square, chiefly inhabited by lawyers. The surrounding closes were strewn with furniture and loose papers flung from open windows by panicked men.⁶ Soon afterwards, the entire eastern side of the square 'presented one huge burning tower, the beams crashing and falling inwards, and every opening and window pouring forth flame'.⁷ In the absence of any coherent firefighting effort, there was panic and confusion:

Judges, magistrates, officers of state, dragoons, librarians, people described as heads of bodies, were all mixed with the mob, all giving peremptory and inconsistent directions, and all, with angry and provoking folly, claiming paramount authority... Amidst this confusion, inefficiency, and squabble for dignity, the fire held on till next morning; by which time the whole private buildings in the Parliament Close, including the whole east side, and about half of the south side, were consumed.⁸

Although the Libraries of the Advocates and the Writers to the Signet, along with St Giles' Cathedral, were narrowly saved, the firemen, their 'dusky faces' encrusted with smoke, had been defeated by this 'stream of liquid fire'.⁹

After 3 days of hopeless combat, salvation arrived when heavy rainfall doused the flames. In all, ten people died, some in hospital from their injuries. These included two workmen, who were engaged in firefighting when they were crushed under the burning ruins of a tenement; two shoemakers and a painter, who were also involved in combating the flames; a chimney sweep employed in the cleaning-up process; and a child who, during the commotion, was run over by an engine. Many more were injured from severe burns, contusions, fractured and broken bones and, in the case of one policeman, dementia.¹⁰

The level of physical destruction was, for a modern British city, extensive, involving four blocks of tenements, between six and seven storeys, along the High Street; two wooden blocks by Conn's Close; four blocks of six to seven storeys in the Old Assembly Close; six smaller tenements in Borthwick's Close; four blocks of six storeys in the Old Fishmarket Close; and four double blocks, ranging from seven to eleven storeys, on Parliament Square. Insured losses totalled £200,000, exclusive of the incalculable uninsured losses incurred by the poorest classes. Newspapers dwelt on the condition of the city's poor, more than 400 of whom were 'driven from their houses, carrying in their hands some miserable remnant of their furniture, but without a penny to obtain food, or a house to shelter them'. Many were temporarily sheltered in barracks.¹¹

In a hastily arranged meeting following the fire, the Edinburgh Police Commissioners' Fire-Engine Committee concluded that the poor standards of firemanship and the inadequate provision of firefighting equipment contributed to the fire's destructive prowess:

...all who witnessed the calamity will be ready to bear testimony to the energy and zeal displayed by every authority – but a total want of organization and unity of action – the deficiency of Fire Engines – the almost unserviceable state of most of those that were brought forward – the bad condition of their apparatus and the insufficiency of manual assistance for a protracted Fire were truly lamentable.¹²

Organizational and technological failures combined to generate 'the greatest confusion' as well as 'the most unwarrantable assumption of authority' among the city's leading citizens. In a damning indictment of the existing system of improvised firefighting, the Commissioners deduced that 'much of this arose from there having never been a system in this City for the counteraction of so dreadful a calamity as Fire.'¹³ And so the autopsy began.

Accounting for Edinburgh's 'Great Fire'

The threat of large fires in overcrowded cities like Edinburgh's Old Town, with their congested spaces replete with timber-lined buildings, was an everyday one. T. C. Smout notes how the city, the product of centuries of growth, was 'tall, high-built, narrow and crowded', a perfectly confined space for fire to make hasty and destructive progress. This was further exacerbated by high rates of population growth, which saw Edinburgh's population more than double between 1801 and 1831, at an annual rate of around 2.5 per cent. The Old Town soaked up a large proportion of this increase, which piled additional pressure onto the existing building stock.¹⁴

To accommodate this expanding population, Edinburgh's landlords subdivided tenement flats into a multi-occupancy hotchpotch of residential, commercial, professional and industrial uses, separated by little more than timber joists, and lacking partition walls in the attics. Frederick Smith, the secretary to the Scottish Union Insurance Company, explained: 'Some of these flats are occupied as dwelling-houses, some as taverns, some as printers' workshops, others by pawnbrokers, or by persons carrying on businesses – some hazardous, others doubly hazardous.'¹⁵ Newly installed gas lighting in the district's printing offices – the November fire had originated in Kirkwood's copper-engraving printing works – to succeed the tallow candle, did little to reduce the risk of fire since many proprietors insisted on hanging paper to dry on lines nearby heated pipes and stoves.¹⁶ Comprised of a multiplicity of risks and built up and around each other over many decades, Edinburgh's Old Town properties were very much part of a fire-prone, rather than a fire-proof, city.

Fire was a great social leveller in the Old Town since its tenements were inhabited by rich and poor alike. Social division along the High Street was vertically, rather than horizontally, organized with the most respectable apartments generally found on the second and third floors, far enough from the polluted streets but safe enough for escape in the event of fire. Many of the tenements had been rebuilt in stone following earlier conflagrations, but the Old Town was acutely over-crowded.¹⁷

From the late 1780s, though, the building of James Craig's planned New Town across the Nor Loch and north of the Old Town was developing apace with both residential and commercial premises. Craig envisioned three parallel main streets (Princes Street, George Street and Queen Street) with squares at each end, lined with attractive stone-built terraced houses. Uniformity in spatial design advocated order as

much as aesthetic appeal, although the absence of controls in the feu-ing plan meant that the actual building itself was more unregulated than anticipated.¹⁸ However, development brought financial advantages since the rates of insurance were generally lower than in the Old Town. Hastening a flood of wealthy migrants from the business and professional classes around the turn of the nineteenth century, by the 1820s Edinburgh had become two towns, clearly demarcated by social segregation. Key civil institutions, including the New Assembly Rooms and the Theatre Royal, followed suit. Fire might have been a social leveller for most of the eighteenth century, but by 1824 the upper classes had reduced their risk by relocating.

Moreover, as witnessed in the November conflagration, the Old Town's water supplies were woefully inadequate. Through a combination of political inertia and technological immaturity in gravitational engineering, the city had endured dry seasons for many years. The oligarchic municipal authorities were frequently criticized for baulking at what were considered to be costly improvements. A private enterprise, the Edinburgh Water Company, was promoted in 1819 to tackle the city's limited supplies, which it initially did by tapping springs to the east of the Pentlands, a range of hills lying to the south of the city. A reservoir was completed in 1822 at a cost of £229,000, and provided 2.7 million gallons a day. However, demand from the residential and commercial quarters in the New Town had already outstripped supply, and the company struggled to raise the requisite capital to satisfactorily expand its service across Edinburgh.¹⁹

For the purposes of firefighting in the Old Town, constant supplies of high-pressure water were noticeably absent. Firemen often relied on local streams, such as the heavily polluted Water of Leith, and dirty rain-water as it ran down the gutters of the city's streets. There were only 44 fire-plugs attached to the water-mains across the city, which necessitated considerable expense and confusion in hiring onlookers to form water carrying lines during large fires. In the Cowgate, which ran parallel at a lower level to the High Street, there were no fire-plugs connected to the underground water pipes, and when fires occurred there firemen would open a fire-plug on the High Street above and catch the water as it flowed down the gutter. Where fire-plugs did exist, they were usually ill-fitted and either leaked or allowed dirty water to clog up the engine and burst the hose. The minutes of the Police Commissioners' Fire Brigade Committee shortly before the 'great fire' record that, in order to space out fire-plugs at 100 yards distance from each other in the principal streets would require about 240 more.²⁰ Defective water supplies and

insufficient numbers of fire-cocks together posed alarming problems of control to the nineteenth century city's fire safety. Edinburgh's growing reputation for large fires was not merely culturally constructed, but was a real risk, one that was increasingly evident in the condensed profit margins of the insurance companies.

The failures of municipal administration

Although fire was a frequent visitor, Edinburgh was extraordinarily fire-prone in 1824. The capital averaged at least one fire of note each month, which threatened not just lives and property, but the effective government of Edinburgh.²¹ The Town Council and the Commissioners of Police faced growing public demands to tackle the endemic problem of fire. One fire in June, which broke out in a spirit-shop, raged for more than 3 days and could not be brought under control before it had devastated the eastern side of Parliament Square, leaving 'a heap of blackened ruins'. These properties had been rebuilt by the time the November fire destroyed them again. In its report on the blaze, the *Edinburgh Evening Courant* criticized the municipal authorities for allowing the insurance, military and corporate engines to compete against each other.²²

At another fire in a brass foundry, the city's firemen were overwhelmed by the ferocious flames, which spread to a neighbouring printing works. The presence of the sheriff, the magistrates, the police and a body of soldiers from Edinburgh Castle only added to the confusion on the ground. The *Courant* reported that it took the arrival of the fire-engines from the neighbouring town of Leith before the fire was brought under control and order restored.²³ If it was one thing to expect help from the civil and military authorities during such emergencies, it was another for the capital city to rely on the expertise and resources of a small neighbouring town.

Indeed, the disasters of 1824 help to account for Edinburgh's claim to be the birthplace of modern firefighting. It was not the first to establish a paid fire brigade, but it was, as Blackstone has noted, 'the first municipality to attempt to deal seriously with the constantly recurring conflagration of the time'.²⁴ Since most of the fires were concentrated in the Old Town, they collectively raised the need for municipal intervention. For those who witnessed them, like Cockburn, or read about them in newspapers, fire was a contentious topic. While the details for providing organized fire protection needed scrutiny and debate, consensus existed among Edinburgh's municipal authorities, 'together with the Gentlemen connected with the different Fire Establishments', that they

had to resolve 'the very great inconvenience which has been felt from the want of management at Fires'.²⁵

It was after this series of fires, in August 1824, that Edinburgh's governing bodies formed a working committee to discuss strategies 'to obviate the waste of labour in future in the present management of fire-engines'.²⁶ Around the table sat a range of diverse interests. These included the Scottish Tory elite, who ran the self-perpetuating and pusillanimous town council, described by Cockburn as 'omnipotent, corrupt, [and] impenetrable' in its oligarchic rule. Heavily in debt after building the Leith Docks, the Council was governed by the burgesses, the merchant classes and representatives of 14 incorporated trades, many of whom reflected the city's ancient patronage structure. In his *Memorials*, Cockburn, a fierce advocate of municipal reform, derided the appointed councillors for their extravagance and concealment: 'Silent, powerful, submissive, mysterious, and irresponsible, they might have been sitting in Venice.'²⁷

Although this body was, along with the Magistrates (the Lord Provost and four Bailies), traditionally responsible for managing the majority of the city's public affairs, these were narrowly defined.²⁸ For example, while it conceded that it had an interest in an improved system of fire protection, it disputed that the task of maintaining a force of firemen and engines fell within its remit. For Cockburn, the Council's inertia was most peremptorily revealed during the 'great fire', when the firemen were left in a disorganized state while the Lord Provost, Solicitor General and Justice Clerk squabbled over who was in charge of operations. The fire perfectly symbolized the 'confusion, inefficiency, and squabble for dignity' that riddled the obsolescent Town Council and Magistracy.²⁹

Negotiations also involved the more interventionist Police Commissioners, established by a local Police Act in 1805, which divided the city and its suburbs into six wards. Vested with new powers over policing, street cleaning and lighting, the Police Board assumed responsibility for regulating the urban environment in a similar manner to its Glasgow counterpart. Although it remained a largely closed body, with its officers performing ex-officio or nominated roles, the Police Commissioners were popularly elected on a lower property franchise than in England, and had to reside within their wards. With an eye on openness and activism, the Commissioners levied a tax on rateable property, which they used to discharge their duties in watching, lighting and cleaning the city's streets. The Commissioners' Superintendent of Police, John Tait, also broadly accepted responsibility after 1805 'to

assist in extinguishing fires', although no rate was levied to provide fire-engines. In practice, the provision of fire-engines remained with the insurance companies, while the water companies retained responsibility for fire-plugs. Watchmen and police officers provided ancillary support by alerting the engine firemen, maintaining public order and watching over property salvaged from the fire.³⁰

Most significantly, the Commissioners, Magistrates and Councillors recognized that organized fire protection was of considerable interest to the insurance industry. Hence, the managing directors of six companies (the Edinburgh Friendly, Caledonian, Hercules, North British, Insurance Company of Scotland and Scottish Union) were also invited to participate in the negotiations, where they also represented the interests of the English companies, particularly the Sun and the Royal Exchange who both provided engines to protect their risks. The minutes of the Police Commissioners' Fire-Engine Committee, which was formed in August 1824 to negotiate a solution on behalf of its full Board, recorded the 'unanimous sentiment' among all parties to amalgamate the Town Council's and insurance companies' existing appliances and firemen, and place them under the sole management of the Commissioners:

...that an effective Establishment for the speedy extinguishing of Fires ought to be forthwith instituted, that the control and superintendence of such Establishment could be vested no where so properly as in this Board, and that the materials necessary for enabling you to form an opinion on the subject should be laid before you.³¹

Thirteen insurance companies offered to make annual subscriptions towards the establishment's annual expenditure, totalling £200. The Town Council offered an annual grant of £50. In addition, the Caledonian, Friendly and Sun donated their fire-engines to the Commissioners, in the expectation that such 'unity of management' would avoid the 'wrangling and quarrelling' among the firemen. In return, the Commissioners would be expected to maintain the engines 'in good order and condition', providing them with 'a proper complement of Firemen', and appointing '[a] Superintending power' to manage the firemen and 'direct the Engines' during operations.³²

The Fire-Engine Committee agreed to the terms offered, citing that '[t]he preservation of property against Fire can be vested no where so properly as in those who have the charge of Watching and Lighting'.³³ An estimated annual shortfall of £150 would therefore fall upon the Commissioners' funds:

It is the Inhabitants at large therefore within the whole of the Town as well as its suburbs on whom the burden ought to lie or in other words on the whole districts falling within the Police Act. And if that be the case it is in the Commissioners of Police that the direction ought to be vested.³⁴

To save on its costs as a public enterprise, the 52 firemen to be appointed were part-time, paid an annual retainer of 20s each and fees for attending fires. Four head engine men, with responsibility for maintaining one fire-engine each, were hired at £10 each annually. Even the post of superintendent was initially part-time, with an annual salary of £50. At its October meeting, the Fire-Engine Committee recommended the appointment of a 22-year-old building surveyor, James Braidwood, to the post, which the Board ratified 2 days later.³⁵

This example, in addition to the case of Manchester discussed in the previous chapter, illustrates how early nineteenth-century municipal government was less ossified than conventionally depicted.³⁶ Although the competing public and private bodies defended their vested interests, they also crafted a co-ordinated system of fire protection through their agreement to pool their resources for the common good. This provided the insurance companies with an assurance that their losses would be minimized, while simultaneously boosting the public image of the Town Council and Police Commissioners. Mutual dependence consequently imbued both public bodies with an improved reputation for collaboration and intervention.

In practice, as was invariably the case with regulation in an age of unprecedented urban growth, the authorities had not managed to create the necessary apparatus for effective fire control before the November fire occurred. As negotiations between the Police Commissioners and the insurance companies dragged into November, the Fire Brigade Committee warned of a growing sense of urgency because 'as the dark season is approaching...[this] increases the danger from Fire.' In her study of eighteenth- and early nineteenth-century English towns, Rosemary Sweet has noted that many of the problems facing municipal governments at this time were so difficult to manage because 'no one had the understanding or the experience at that stage for implementing an effective strategy.'³⁷ This was clearly the case with firefighting where technical knowledge of firefighting strategy was limited, but support for depending on a monopoly force, run by the Police Commissioners, albeit partially funded by the private sector, was gathering momentum. Richard Rodger, R. J. Morris and Graeme Morton have each shown how

this growing consensus for a joint relationship between the public and private sectors illustrates the responsiveness of Scottish municipal government. The decision to establish a uniform municipal fire brigade in Edinburgh was bolstered by the occurrence of a number of large fires in the city, as elsewhere, with the civic elite reacting to rapidly changing urban circumstances. Although the elite did not necessarily have the right solution to the problems faced from fire, it was willing to share the responsibility of finding it.³⁸

Narratives of Edinburgh's fire

By both quantitative and qualitative measures, Edinburgh's fire was 'great': its physical devastation, its human toll, its financial costs and its meaning for municipal government. The narrative of the fire was itself not unique to Edinburgh. Work on other European and North American cities, for example, reinforces the idea that much early fire-fighting lacked effective co-ordination of men and equipment between the municipal, military and private authorities.³⁹ Edinburgh's 'great fire' did not match all of these in terms of its physical devastation, yet it was as much an event of cultural significance for the origins of modern firefighting. It quickly assumed a meaning that went deeper than its physical toll, which helps explain its significance in triggering major reforms to the city's fire safety.

'Great fires' like that in Edinburgh stimulated competing narratives, much like other disasters such as the collapse of the Tay Bridge in 1879 and the sinking of the Titanic in 1912. These veered between anger, fear and pity, and were expressed through a variety of cultural modes, including the local press, sermons, artwork and local histories.⁴⁰ The proprietor of the *Courant*, David Ramsay, whose offices were razed to the ground during the blaze, described it as a 'Most Disastrous Fire' for both his business and the city. Angry that his premises had been destroyed, Ramsay lambasted the provision of organized fire protection within the city. The engines lacked 'any general system of management' and, while the firemen 'were zealous to do good', the absence of unified command 'was productive of much waste of time and labour'.⁴¹ The unsystematic nature of firefighting, which involved the hardy, but uncoordinated, efforts of the fire companies, the municipal authorities, the military and even spectators, was deemed unfit for a city like Edinburgh:

Surely a city as Edinburgh, where there is so much property invested in dwelling-houses, and where, more than all, the lives of so many

human beings are at stake – ought to be supplied with all the means which the most improved police can furnish, to give every attainable security to life and property, and to mitigate, as much as possible, the horrors which attend a fire in a great town, even in its least frightful aspects.⁴²

Since the *Courant* had a growing circulation within the capital and throughout Scotland's principal towns, Ramsay's condemnation of the condition of firefighting undoubtedly sent reverberations among the governing elite, who were singled out as being at fault for this disaster.

The fire soon became packaged as 'The Great Fire'. James Peddie, Minister of the United Secession Church, defined its greatness in terms of 'the extent of the devastation, ... the destruction of property it has occasioned', and also because it 'must live in the memory of the youngest of the inhabitants'. Peddie went further in identifying 'The hand of God' in punishing the sins of Edinburgh's promiscuous classes, before saving the city from utter destruction. God's intervention deigned the fire with greatness.⁴³

Yet it was not the promiscuous classes who suffered homelessness and tragedy. It was not moral outrage that was required, but sympathy and action. The *Courant* called upon its respectable readers to donate unwanted furniture and clothes to the sufferers. A voluntary committee of dignitaries, chaired by the Lord Provost, collected around £12,000 from public subscription to alleviate the suffering. Nearly £5000 was spent on replacing the furniture and belongings of the homeless families, and in awarding allowances to those left widowed and infirm by the firefighting operations.⁴⁴

Authors and artists flocked to record the physical and emotional scars left by the inferno, with the proceeds from sales going to the subscription fund. William Turner de Lond's oil and water-colour paintings were published as lithographic prints of 'the GREAT FIRE'. Albeit hastily painted, they clearly illustrate the transitory nature of the fire in Edinburgh's modernization, not least in the firemen's hopeless efforts to prevent the collapse of the Tron Church steeple. They were soon augmented by William Home Lizars's engravings of 'the late Dreadful Conflagrations in this City'. The presence of helpless and homeless individuals amid the physical ruins reinforced this narrative of human tragedy.⁴⁵

A number of insurance companies used the occasion to publicize their business, flooding newspapers with advertisements guaranteeing

prompt settlement of claims and offering competitive premiums on all common risks, with additional benefits:

The Directors of this Corporation request that all persons having property destroyed or damaged by the calamitous fire this morning, will lodge their claims at the office, that they may be immediately settled. The terms of the NORTH BRITISH are equally moderate as those of the principal Offices in the United Kingdom. Persons Insuring for seven years, whether upon annual or septennial policies, are entitled to participate in the profits equally with the Proprietors.⁴⁶

Some companies directly alluded to the fire in urging local householders to take out policies. The Royal Exchange, for example, commented that 'The frequency of alarming fires in Edinburgh ought to suggest to every person the necessity of Insuring their Property against this awful calamity.'⁴⁷

The fire occurred during a period of intense speculative growth within Scottish financial services. As the centre of this 'speculative mania', Edinburgh was dominated by a disproportionately large middle-class attracted to the city by the New Town's development. United by its interest in maintaining public safety as much as by ownership of property, Edinburgh's growing middle-class was a formative influence on the promotion of the Scottish Union Insurance Company, which was a concerted attempt to wrestle control of the fire insurance market away from England's metropolitan offices. As a city dominated by professionals, their own insurance company symbolized Edinburgh's transition towards a modern city marked by order and prosperity.⁴⁸

The Scottish Union was launched with a starting capital of £5 million just 1 week before the 'great fire'. It immediately eclipsed its local rivals by under-cutting its competitors by 25 per cent on common household risks. Managed by a board of directors dominated by local professionals (publishers, lawyers, professors and authors, including Sir Walter Scott), the Scottish Union was a financially powerful and distinguished market leader from the outset. Much like the architectural symmetry of the New Town, which stood as 'a powerful metaphor for social order and control', so too did the Scottish Union in its efforts to bring security against fire in the capital. For those seeking to profit from the speculative mania, fire insurance was a timely opportunity and adverts appealed to an expanding urban market across the Central Lowlands.⁴⁹

These accounts – anger, moral instruction, human tragedy and profit – were united by a universal commitment to reform by their authors. According to Kevin Rozario, urban fire narratives exhibit a shared conventionality centred on a ‘redemptive script’ of destruction followed by reconstruction. Major nineteenth-century North American fires such as those in Chicago (1871) and Boston (1872) were cathartic, the destruction acting as the turning point in a narrative of non-linear progress. Accounts of great fires evoked the sentimental emotions of pity and fear, while simultaneously inspiring a reformist spirit ‘that made material reconstruction viable’. At the heart of these accounts were the municipal authorities and the insurance companies, which were induced to fund organizational and technological reform. It was this collaboration that strengthened the hand of municipal government to make sense of a senseless calamity.⁵⁰

Edinburgh’s ‘great fire’ forced its property-owning bourgeoisie to reconsider the ways in which fire could be combatted. Rather than coping on an *ad hoc* basis with the enduring threat from fire, Edinburgh’s governing bodies recognized the need to act to reduce the risk. By marking the passing of the old political elite and the shift in spatial authority from the Old to the New Town, the fire was a symbol of Edinburgh’s modernization. The control of fire, alongside improvements to public sanitation and policing services, had begun to contribute to the ordering of urban society in a physical, economic and social sense.

Constructing a municipal fire service

James Braidwood, the ‘Master of Fire-engines’, was not blamed for the failures of the firefighting operations since the ‘great fire’ broke out before he could fix the insurance companies’ engines, and hire and train a sufficient body of firemen. Braidwood attended his first Committee meeting on 27 October, where he was instructed to report on the condition of the fire-engines and equipment and make recommendations on the location of engine houses, the number of men to be appointed for each engine, their allowances and the expense of supplying them with a canvas jacket, trousers and leather cap. He reported his findings a week later, and was empowered to arrange for the insurance companies to ‘immediately repair their engines’ and to hire four head engine-men (later renamed captains), eight pipe-men (later renamed pioneers) and 52 firemen.⁵¹ In the weeks preceding the conflagration, Braidwood’s log-book, in which he meticulously recorded every fire call attended by his

firemen, only lists two fires. The first, in a wright's shop, was tackled by locals who knocked down the walls before the firemen arrived with their engines to extinguish the few remaining embers; the second broke out in a shop where the door was kept shut until the engine was ready 'to play' water on the flames.⁵²

Structural and functional improvements to firefighting arrangements were intertwined with the recognition that Edinburgh had suffered a 'great fire'.⁵³ At its meeting on 19 November, Braidwood informed his employers that, with the exception of the Sun's fire-engine, 'there is not in Town an Engine in a state to be depended upon for any length of time – that in cases of necessity they may be considered as workable but they are in so bad a condition as not to be worth the expense of repairing.'⁵⁴ An order was immediately made to a London fire-engine manufacturer for three additional engines. Acting on Braidwood's recommendations, the Fire Brigade Committee also resolved to purchase 1800 feet of hose and four water carts capable of carrying up to 200 gallons of water each, one to be kept at each of the four stations. Braidwood was also asked to submit a detailed list of ancillary equipment for procurement. Labour power was also given greater credence in a reformed fire service; Braidwood was empowered to hire 12 additional firemen, four overseers (later renamed sergeants) and 12 chimney-sweeps to supplement the existing strength. To distinguish between the different ranks, it was agreed that the Master of Engines should wear a blue coat with 'a conspicuous Badge, white trousers and a Helmet', while 'all the Overseers, Pipemen and Ordinary Firemen be provided with Helmets, Blue Jackets and White Canvas trousers'.⁵⁵

Over the ensuing months, Braidwood drove through his modernizing reforms. He did this by institutionalizing four principles of effective firefighting, which he later disseminated nationally through the publication of his firefighting manual, *On the Construction of Fire-Engines and Apparatus, the Training of Firemen, and the Method of Proceeding in Cases of Fire*, in 1830. First, he established centralized control from his office on the High Street, before dividing the city into four districts, each with its own 'company' of firemen and engines, housed in a separate building.⁵⁶ Single officer control on the fire-ground would avoid the 'separate and jarring orders', which had undermined firefighting operations during the 'great fire': 'The men must be careful not to allow their attention to be distracted from their duty, by listening to directions from any persons except their own Officers.'⁵⁷ This mixture of centralized control and decentralized operations speeded up the response of the first call-out to fires, and demonstrated that Braidwood recognized from the outset the

importance of the early stages of a fire in subduing the flames before they raged out of control.

Second, a modernized brigade demanded standardized appliances and equipment which could be easily co-ordinated. Each company had the same manual fire-engine, made to order, and stocked with a uniform supply of hand-tools, including buckets, hatchets, wrenches, suction-pipes, hose, ropes, axes, chain-ladders, belts and jump-bags. Each fire-engine was built to be pumped by 24 hired hands, under the eye of the firemen, who themselves dragged it through the city streets to fires and manned the hose. According to Braidwood's calculations, these 6-inch barrel engines, if pumped at the rate of 24 strokes per minute, would throw 41 gallons of water in that time. This was sufficient for mastering most fires relatively quickly.⁵⁸

Third, Braidwood introduced new firefighting tactics. Rather than simply throwing water into the windows from the street, as was commonplace, he trained his men to enter the building in pairs to 'seek out' the source of the fire and attack it head on. As he opined in his manual, 'Fire is a formidable enemy, and must be grappled with hand to hand.'⁵⁹ Aside from saving considerable time and money in fighting fires, this simple rule would constantly refine the firemen's self-awareness because the men deemed that 'to hold the director [the hose] is considered the post of honour' when in the thick of the action. Any fireman entrusted with the task who withdrew in the face of choking smoke and sprawling flames 'would be completely disgraced' by his colleagues. In sharing many of the features of the chivalric code, not least the importance of protecting the weak, the firemen's code of honour, which Braidwood was keen to cement, was characterized by a strict devotion to duty and self-sacrifice on the fire-ground.⁶⁰

The fourth principle of an organized firefighting force saw the appointment of a disciplined body of firemen. Drilled weekly, usually early in the morning to keep them in a constant state of readiness, Braidwood's first corps of 64 men were wholly retained, if substantial in number, pursuing regular trades outside of firefighting work.⁶¹ For Braidwood, the best firemen were skilled tradesmen, locally recruited, whose malleable bodies had a heightened sensory awareness of fire, water and wind. Slaters, carpenters, masons, plumbers and blacksmiths were preferred, all of whom were acquainted with tough manual work under arduous conditions. They were 'more robust in body, and better able to endure the extremes of heat, cold, wet, and fatigue, to which firemen are so frequently exposed, than men engaged in more sedentary employments'. The introduction of gymnastic exercises in

late 1826 further honed their 'individual powers and usefulness'. Possessing physical strength, endurance and dexterity, as well as 'a handiness and readiness', superimposed an ideal of advanced physicality onto their bodies, and made this class of men ideal, and idealized, as firemen.⁶²

The importance of discipline was emphasized in the first regulations, drawn up in January 1826. 'Careless conduct, irregular attendance at exercise or disobedience of superior officers' was punishable either through loss of 1 day's pay or dismissal, 'as the Master may determine'. In practice, most cases of disorder resulted in dismissal because there was no shortage of applicants to fill vacancies. To encourage the firemen's prompt turn-out, rewards of 3s were granted to the company's firemen first to arrive at the scene of the fire.⁶³

Having been appointed 'Master of Engines', Braidwood crafted his own persona as 'Superintendent of Firemen and Fire-engines'. The Edinburgh Fire-engine Establishment, as it was known, demanded professionally trained firemen to maximize the productivity of the engines and to assuage public anxieties in the aftermath of the 'great fire'. Braidwood ushered in a new narrative of order and calm, under the assurance that 'the Superintendent', as he became known, would soon arrive with his men to fight the flames.⁶⁴ Within a year of his appointment, his salary had been doubled to £100.⁶⁵ With his reputation as a sculptor of dexterous and obedient firemen, in conjunction with his systematic approach to firefighting, Braidwood helped to restore faith in the processes and relations that dominated municipal politics. Hence, the scale of destruction was of secondary importance to its timing and the political context in which the disaster occurred. In addition, the timing of the November fire, coming before the ink was dry on the agreement to establish a uniform brigade, forced the hand of the city's administrators to deliver on their commitment to the formation of a reactive firefighting force. In acting, retrospectively, Edinburgh's administrative stability had, for the time being, been guaranteed.⁶⁶

It was through the construction and dissemination of the 'Edinburgh model' that Braidwood came to the attention of the London insurance companies. For one insurance agent, Braidwood had brought firefighting 'to a state of perfection never known in any city before'.⁶⁷ The number of reported calls more than doubled between 1825 and 1827 (from 48 to 113) and more than tripled between 1827 and 1831 (with 359 calls), due in large part to greater public faith in the fire brigade. Most of these were to deal with smoking chimneys or foul vents (which accounted for roughly three-quarters of the total number of alarms

recorded in 1831). Even when there were actual fires, his men contained most to the flat in which they originated and very few were wholly destructive.⁶⁸

Of greatest appeal to the London insurers was the fact that Braidwood had achieved his reputation under continuous financial pressure. In 1827, the establishment's strength was reduced to 50 firemen, while the Police Board and insurance companies squabbled over the costs of maintaining the brigade, which was costing an average of £800 per annum rather than the predicted £500 that the Commissioners had budgeted for. A proposal to reduce the strength to 40 was narrowly rejected the following year. The Board's repeated requests for additional annual subscriptions were consistently rejected, the companies insisting that the city's high rate of uninsured houses (by far the greatest source of the smoking chimneys) exempted them from liability. Veiled threats from the Commissioners to disband the brigade, unlike similar threats in Glasgow, had little impact.⁶⁹

By 1829 the number of insurance companies contributing annually to the brigade's maintenance had increased to 17, though they subscribed varying amounts. In all, they contributed £327, which was augmented by £80 from the Town Council. With rising staffing and maintenance costs, the Board faced shortfalls of up to £400.⁷⁰ Undeterred by the pettifogging squabbles, Braidwood continued to develop his model of economical and efficient firefighting.

On the Construction received various plaudits, including those of one reviewer who praised its 'unity of system'. The firemen were unmatched in terms of their 'physical vigour and moral intrepidity', which was testament to Braidwood's 'enthusiasm, in what we may call his profession'.⁷¹ Moreover, as the first reference manual for members of this nascent profession, *On the Construction* played a pivotal role in the future direction of organized firefighting:

It is the only book we are acquainted with that treats of the systematic training of firemen; and from the perspicuity of its detail, it must necessarily become the manual of all such institutions, and ought to find a place in every insurance office in the United Kingdom.⁷²

Not only did the book find its way onto the shelves of most insurance companies, police commissioners bought it for their staff in Belfast, Manchester and Carlisle, as did the Provost and Superintendent of Police in Dundee, the superintendents of fire-engines in Glasgow and Perth and other civic dignitaries in Paisley, Inverness and Newcastle.

Edinburgh's captains, sergeants, pioneers and no. 1 firemen were each supplied with a free copy of the book as part of their training.⁷³

After reading the handbook, authorities from Scottish towns like Greenock and Perth sent delegations to Edinburgh to learn first-hand from Braidwood's experience, before re-organizing their own brigades. In Dundee, where firefighting was the responsibility of the local insurance company, the Harbour Trustees, and various manufacturers, the local newspaper had pressured its Commissioners to form a municipal force since the late 1820s. Fire was a source of instability to the town's expansion during the 1820s, particularly to its steam-powered spinning mills, calenderers, foundries and warehouses. The publication of Braidwood's manual, which generated sales to 60 Dundee manufacturers, ushered in a broad consensus in support of reform among its civic elite. A municipal brigade was founded in 1835 on the 'Edinburgh model', with its 20 firemen attired in similar uniform, while the superintendent was sent to Edinburgh to train with its brigade. Dundee's city managers recognized that its image as a thriving industrial town would be strengthened if it was seen as a town that, like Edinburgh and Glasgow, had begun to master the threat of fire.⁷⁴

Braidwood's growing notoriety was evident south of the border as well, where insurance companies acted as go-betweens for the municipal authorities. Jenkin Jones, the Phoenix's secretary, visited Edinburgh shortly after the book's publication, whereupon he inspected the brigade and, on his return to London, extolled the virtues of the 'Edinburgh model' to the municipal authorities in Manchester, Liverpool and Leeds, where his office conducted significant business.⁷⁵ They went a stage further in London. Following a series of costly warehouse fires, the representatives of ten insurance companies agreed to form a 'general fire-engine establishment' on the 'Edinburgh model'. Stimulated into action by Braidwood's tome, the committee appointed to implement the necessary reforms targeted him to lead the new brigade. The challenge of superintending the largest professional firefighting force in the world, eased by a salary of £250 (raised to £400 in 1836), was irresistible for a man determined to develop this nascent service along more standardized and professionally prescribed lines. He agreed to move, departing for London in 1832.⁷⁶

Upon his appointment, Braidwood immediately set about restructuring London's system of fire defence. The capital was divided into five districts, three on the north side of the River Thames and two on the south side, each with its own engine station, sub-stations, uniformed firemen and officers. Standardized engines and appliances were bought,

Braidwood preferring the smaller engine used at Edinburgh than the larger models traditionally used in London, which tired the hired pumpers more quickly. The practice of attacking the fire at its source was implemented, particularly during the night-time fires that plagued London, which in turn led Braidwood to institute night watches.⁷⁷

One significant change from his 'Edinburgh model' saw Braidwood focus his recruitment on decommissioned sailors, based on their propensity for disciplined physical labour. With an annual average of 336 fires between 1829 and 1831, firefighting in London was a young man's occupation for its 63 full-time firemen and six supernumeraries, with age limits for new recruits set at 35 for foremen, 30 for engineers and 25 for firemen. Junior firemen had to be at least 5 feet 5 inches in height and able to read and write; in one early case, George Mitcham's application was rejected because he was 3 inches below the minimum requirement. Moreover, the attraction of a regular wage starting at 21s per week for junior firemen before rising incrementally to 24/6s for senior firemen meant that there was no shortage of applicants.⁷⁸

As in Edinburgh, Braidwood emphasized the importance of discipline, obedience and patience as the key virtues for London's firemen. New recruits were drilled daily, rather than weekly as in Edinburgh, and, following probation, two or three times a week, in order to create a disciplined corps more quickly. Braidwood was authorized to impose fines not exceeding one day's pay to engineers or firemen who lacked punctuality or neglected their work. In aggravated cases such as disobedience of orders, he could suspend the man before reporting him to the management committee. Roll was called twice a day. To emphasize the utility of their work, Braidwood also made the firemen wear long grey jackets with matching trousers, leather boots and black leather helmets, which were crested to break the impact of falling debris. Failure to wear full uniform on duty was punished with a fine.⁷⁹

Notwithstanding its idiosyncrasies, the London Fire Engine Establishment represented Braidwood's adaptation of his own 'Edinburgh model'. In his later handbook, *Fire Prevention and Fire Extinction*, a series of papers posthumously published in 1866, Braidwood duplicated much of the material from *On the Construction* in his discussion of London's fire protection. Important sections of the book were based entirely on his earlier findings. For example, his comments about the methods of firefighting only differed in his description of the equipment, the term 'director' having been replaced by 'branch'.⁸⁰ Besides these lexical revisions, Braidwood remained wedded to the methods developed in the aftermath of Edinburgh's 'great fire', which indicates the longevity of

the 'Edinburgh model'. Clearly, the relationship between an urban disaster and the reforms it triggered sometimes transcend the locality in which the disaster occurred. The tremors of Edinburgh's 'great fire' were felt long after the Old Town had been rebuilt, and were dispersed across urban Britain.

Conclusion

James Braidwood and Edinburgh played a formative role in the construction and diffusion of an ethos for organized firefighting. Where once the perceived inadequacies of firefighting had aroused deep-seated fears and anxieties, rooted in a mistrust of the motives of private organization, the fire service had begun to represent order and calm under a workable consensus between the municipal authorities and the fire insurance industry. Braidwood transformed the perceptions and realities of firefighting from coping with large fires to methodically controlling them. His detailed logbooks and regular reports to his Fire-Engine Committee represented the systematic recording, study and control of urban fires. As a turning point in its cathartic progress into the vanguard of organized fire protection, Edinburgh's 'great fire' was a watershed both in its local history and in the history of the British fire service.

For Braidwood, the inevitability of urban fires meant that, although they could not be prevented, they had to be controlled. This demanded the co-ordination of firemen, technology and water. The location of fire stations, appliances, firemen and water-mains had to be carefully mapped out to better allocate resources across cities. Individuals like Braidwood were responsible for assessing and acting upon identifiable risks. Regulation necessitated logistical and financial support from his employers, the Police Commissioners in Edinburgh and, later, the fire companies in London. How Braidwood would manage London's fire environment with dry fire-plugs remained to be tested, though.

3

Controlling Fire: The Politics of Water and Steam Technology, c.1833–80

In an early issue of his short-lived journal, *Household Words*, Charles Dickens recounted the spectacle of a night-time domestic fire in 'a squalid court' in London. Narrating the immediate response of the London Fire Engine Establishment (LFEE) to the frenzied cries of 'Fire!', Dickens emphasized the importance of speed and composure in mastering city fires. Mounting the manual fire-engines, the firemen, including their Superintendent, James Braidwood, were dragged by horses through London's teeming streets, 'all alive with excited people', first at a 'brisk trot', before becoming a 'canter' and, once they caught a glimpse of the 'bright red gleam' of flames in the distance, a 'gallop'.¹

Having arrived at the fire-ground, the engines' long pump-levers were seized by a 'rush of people', all of whom were 'mad to work' them in return for payment and refreshments. The water-plugs were drawn and connected by suction to the engines, filling their cisterns with water. While the hired hands pumped 'with a fury that seems perfectly frantic', two firemen entered the burning building each armed with a hose. Finding the heart of the flames, they calmly aimed their weapons 'so that the water strikes with the utmost force upon the fire'. The flames were soon extinguished. 'Drenched to the skin with cold water, and reeking at the same time with perspiration', the 'gallant firemen' returned to their quarters victorious.²

Dickens's account echoes a broader political culture, which recognized that, by the 1850s, firefighting had become a public duty incumbent on joining together firemen, water and technology in an integrated reactive force. Effective firefighting necessitated the establishment of an organized fire brigade, under single officer control, and staffed by a corps of disciplined and trained firemen who relied upon readily available high-pressure water to quickly extinguish fires. Investment in

the technologies of firefighting – from the fire-engines and horses to the fire-plugs attached to the water-mains and the firemen's hoses – integrated firemen's labour with the supplies of water they needed to master fire because control depended upon speed, mobility and organization. Effective firefighting had to be economical as well as efficient, which demanded uniform organization under municipal government. Unlike the private sector, municipal government had access to the rateable resources needed to create a coherent body for protecting life and property against fire. The decision to transfer responsibility for London's protection from the privately funded LFEE to the Metropolitan Board of Works in 1866 was indicative of the growing clamour for monopoly control.

Focusing on London, as well as the northern industrial towns, this chapter will show how municipal governments joined together firemen, water and technology between 1833, when the LFEE was constituted, and 1880. Growing support for organized firefighting as a cognitive and practical strategy gathered momentum between the 1830s and 1880, and was discernible in the written reports of parliamentary enquiries as well as the technology of the fire-plug and steam fire-engine. The study of local experiences of firefighting became a hallmark of royal commission and select committee proceedings in their pursuit of solutions to common problems. Recommendations were based on robust evidence provided by municipal officials, water engineers, insurance agents and senior firemen. This growing body of experts recognized the interdependence of particular problems, and proposed uniform solutions that would, they anticipated, be relatively inexpensive to implement for municipalities sensitive to ratepayers' anxieties about the rising costs of government.

The water problem

'The supply of water is the most vital part of any exertions towards extinguishing fire.' James Braidwood's comments, in a paper read to the Royal Society of Arts in 1856, may have been obvious, but they were clearly meant to be translated politically. Braidwood's statement was a criticism of the existing supply provisions of water in London. As 'a bastion of private enterprise' in water, London's profitable market was shared among eight joint-stock companies, which frequently colluded to block attempts to compel them to improve access to supplies. Most fire-plugs in the capital were attached to the domestic service pipes, which the water companies opened every day, but only briefly. To

have water available constantly would, they insisted, encourage waste. Although water was readily available in Dickens's narrative, it was often unavailable in reality.³

Low pressure was an additional irritation to London's firemen, seldom exceeding 120 feet, compared to 146 feet in Oldham, up to 160 feet in Preston and 180 feet in Leeds. To circumvent these problems, Braidwood perfected his strategy, illustrated by Dickens's account, of fighting fires inside the building. This strategy was prudent and economical because it minimized water wastage, maximized his men's productivity, and reduced damage to insured stock. To conserve his firemen's energy, he would employ up to 60 bystanders to work the levers on the engines, paying each man 1s for the first hour, and 6d for each succeeding hour, with refreshments. As he noted in his annual report to his employers in 1834, there were always 'ample numbers' of men willing to work the engines, which, with single management, led to 'fewer disputes' in the placing of engines and use of scarce water supplies.⁴

Alternative firefighting technologies were invented during the first half of the nineteenth century to assist brigades that encountered dry fire-plugs. Portable fire-engines, cisterns and hand pumps were kept constantly filled with water to deal with incipient fires, while portable extinguishers that worked through compressed-air promised, but rarely delivered, water-free control. Most controversial was the steam fire-engine, invented by John Braithwaite in 1829. This consisted of a vertical boiler fitted at the rear of an engine, which supplied steam to two horizontal cylinders, and, once heated up, was capable of throwing 150 gallons of water per minute to a distance of 90 feet. Steam technology worked off its own pressure, thus promising improved control despite requiring fewer hands to work it. Fire would be used to fight fire.⁵

Braidwood dismissed Braithwaite's engine on principles of economy and efficiency. First, it would be susceptible to breakage during the excitement of a fire and expensive to maintain. Second, he feared it might encourage firemen to remain outside the building, relying on the sheer volume of water to knock out the flames. An efficient fire brigade, for Braidwood, depended on 'the state of training and discipline of the firemen... however complete in its apparatus and equipments'. Steam engines could throw more water than engines manually pumped, but they were not accompanied by the 'coolness and promptitude, steadiness and activity, fearlessness and caution', that trained firemen were instilled with. It was in the 'terror and bustle' of a fire that 'organization and discipline triumph[ed]' over mechanical power. Technology

was not the solution to London's fire problem; trained and disciplined labour was.⁶

Prioritising discipline over technology did not help the LFEE control fire, however. Between 1833 and 1842, London suffered 5774 fires, 28 per cent of which caused 'considerable damage'. Another 5 per cent totally destroyed the burned property. In his annual report for 1842, Braidwood complained that, despite being called out to 213 more fires than the average over the previous 9 years, or one fire for every ten firemen, 'still there has been no increase in the number of firemen' since the establishment's inception. Braidwood refused to blame his firemen for London's growing rate of destructive fires, and preferred to identify a discernible link between fire destruction and the availability of water. In a list of 12 fires where the premises were 'totally destroyed', Braidwood cited four cases during which the water supplies were deficient. One of these involved the destruction of two 'immense warehouses' at Bermondsey, during which 'water sufficient to supply one engine on the land side could not be had'. The remaining fires ravaged timber buildings, buildings in which dangerous trades were carried on (these involved a carpenter, druggist, printer and wheel-wright), or buildings too far away from any of the 18 engine stations for a prompt response.⁷

The availability of water was frequently cited to explain the brigade's failures to control large fires. At the destruction of the Houses of Parliament in October 1834, for example, major delays were encountered because of the 'scanty' water supply. In his report, Braidwood criticized the 'indifferent supply of water which, though ample for any ordinary occasion, was inadequate for such an immense conflagration' in historic buildings without party-walls to separate the expansive timber-lined passages that rapidly funnelled the flames. Twelve engines and 64 firemen attended from the LFEE, but most stood idle and were unable to prevent the destruction of 'nearly the whole of the House of Lords & Commons & Part of the Contents Therein'.⁸

Four years later, on a bitterly cold January night, the fire-plugs were frozen solid and Braidwood's men struggled to procure water to prevent the destruction of the Royal Exchange. In his report of the fire, Braidwood contrasted his frustration at the 'scanty' supply of water with his praise for the firemen's discipline and fortitude:

The operations of the firemen were very much retarded by the inclemency of the weather, the water in the hose was repeatedly stopped by being frozen, and all the firemen had their wet clothes frozen upon them; notwithstanding these disadvantages I have never seen the men behave better.⁹

Firemen remained on duty for 8 days while the ruins smouldered. The Tower of London followed in 1841, the pathetic supply of buckets, hand pumps and engines being insufficient for the firemen to master the flames. Braidwood blamed the building's destruction on the scarcity of water, and was forced to resort to drawing reserves from the River Thames. *The Morning Chronicle* reported that the loss of the Tower's historic relics, which included 280,000 arms in all, was due to the 'indisputable fact of the scarcity of water'.¹⁰

Such calamities illustrated the defective nature of urban water supplies for extinguishing fires in London. Examples also existed in provincial towns, as typified during Edinburgh's 'great fire' in 1824. Contemporary newspapers were full of criticism of the availability of water in provincial towns. In its report of a fire in Edinburgh in 1836, *The Scotsman* commented that 'had the supply of water been abundant at first', the firemen 'could have prevented the fire extending beyond the premises' in which it originated.¹¹ Conversely, when ample supplies were available, newspapers tended to emphasize the speed with which the flames were brought under control and order restored. For example, 'abundant' supplies of water combined with a prompt turn-out by the town's fire-engines meant that a Birmingham umbrella maker, whose workshop was insured for more than £1000, lost only £80 during a fire in July 1841.¹² Newspapers classified firefighting according to the tools at the firemen's disposal, and water was essential to their arsenal.

Fire insurance companies were quick to recognize that inadequate water supplies increased risk and charged higher premiums in towns poorly served by water companies.¹³ Throughout the 1830s and early 1840s, Liverpool suffered 'an unenviable notoriety' for the frequency and extent of its warehouse fires, which was exacerbated by a deficient supply of water at night because the two joint-stock water companies insisted on turning the mains off. Although they employed watermen to turn on the mains during fires, 'an hour or two' often elapsed before the pressure was sufficient to draw water. Newspapers refused to blame the town's firemen, who, until the creation of a 'fire police' under the reformed Corporation's Watch Committee in 1836, worked for a variety of insurance companies, as well as the Parish Vestry. While the firemen worked together during warehouse fires, the water companies refused to participate in this public-private partnership. Their turn-cocks even turned off the water during one extensive warehouse fire in October 1834, after they complained that the firemen had wasted their reserves.¹⁴

The formation of the 'fire police' in January 1836 attempted to circumvent these problems and, in the short term, enticed some insurance

companies to resume business in the town. Water carts were kept in a state of readiness at the police stations, and provided the first line of defence 'until Notice can be given to the Water Companies to fill the main pipes'. Forty policemen acted as firemen under the direction of a 'foreman of the fire police', John Hewitt. To stimulate action, rewards were offered 'for extraordinary merit, personal risk, or exertion'.¹⁵ However, problems were soon encountered during a fire in a bonded warehouse in October 1838. Hewitt complained of a lack of water from the fire-plugs once the water carts had been exhausted, and was forced to direct two engines to refill at the canal. In his report to the Watch Committee, the Head Constable, Michael Whitty, reported a scene of 'indescribable alarm and confusion' in which the firemen were forced 'to abandon the Warehouse on Fire' and direct their efforts 'to the preservation of those on each side'. Following a double explosion of saltpetre, the flames spread down the adjoining streets and left the firemen 'stood as it were under a dome of Fire, Flame, Stones, Cotton bags and ignited missiles'. It took more than 24 hours to extinguish the fire, which caused damage estimated at £120,000. Three firemen were 'dangerously hurt' during the explosions; one of them 'would have been suffocated...were it not for Mr Hewitt who alone ventured into the ruins and dragged him out'. An investigation absolved the firemen of any blame.¹⁶

Matters came to a head during a major fire in September 1842, which began in a wooden shed used as an oil store in Crompton Street. Although the alarm was 'instantly given', several warehouses caught fire before the engines had arrived. Moreover, the watermen were late to arrive and open the fire-plugs, which inhibited the firemen's work from the outset. Whitty's report to the Watch Committee captured the sense of helplessness that undermined the firemen's efforts:

...there was no possibility of approaching the back of the Warehouses, the Windows of three of which were in five minutes on Fire, leaving three Engines and the West of England [engine], which had just arrived, to prevent the extension of the flames in Crompton Street.¹⁷

In the absence of any effective control, the flames spread to the warehouses on the north of Formby Street. In so doing, Fireman Samuel Hodgson, 'whose conduct all morning as it had ever been was most cool, fearless and energetic', was 'crushed to death' when a wall fell upon him. His fellow branchmen managed to escape a similar fate as 'down came

Warehouse after Warehouse in such rapid succession that in a few minutes all Formby Street was a Crater of Fire.¹⁸ The flames spread through the city's principal streets, causing an 'immense' loss:

... several sheds, a Cooperage and a Wheelwright's Yard in Crompton Street were consumed; in Great Howard Street two Cotton Sheds; in Formby Street eleven Warehouses, and in Neptune Street two Cotton Sheds, a Cooperage and two Rice Sheds partially injured.¹⁹

Approximately 48,000 bales of cotton were destroyed. *The Liverpool Mercury* estimated that losses exceeded £600,000, one-third of which was uninsured.²⁰

In the fire's aftermath, a series of meetings were held between the insurance companies, which devised a common tariff, raising average warehouse premiums from 8s to 35s per cent. Similar risks in London ranged between 2s 6d and 5s per cent. In addition, a salvage corps was formally established to protect insured goods from fire and water damage. Rate revisions would be considered once the town introduced measures to improve its water supply and regulate its warehouses.²¹

Liverpool Corporation reacted immediately to protect its merchant interests. In the absence of any national legislation, it obtained a local Fire Prevention Act in 1843, which amended the town's existing fire regulations by seeking to restrict the likelihood of large fires from occurring.²² First, it contained powers to levy a public rate to supply the town with water solely for firefighting and street cleaning. Demarcation of water according to its public value marked the first tentative step towards its complete municipalization. Second, the Act introduced limits to the size of new warehouses, enacting that no warehouse could be built 'except of good materials of sufficient strength in a substantial and workmanlike manner'. No warehouse could exceed 4000 square feet. A system of registration, inspection and certification was devised to enforce this. In addition, strict rules regulated the storage of inflammable materials like spirits, oil and naphtha. In return, the insurers agreed to discounted rates for those that complied with the new regulations.²³

The 1843 Act, reinforced by an amending Act the following year, invested significant powers in the Corporation. From 1843 to 1849, whereupon administrative responsibility transferred to the Watch Committee, a fire prevention committee met weekly to arbitrate between the insurance companies, warehouse proprietors and building surveyors in its enforcement of the legislation. In 1844, a warehouse fire police was

formed out of the police-firemen, who were invested with powers to enter warehouses and examine the storage of particular merchandize, and confiscate smoking pipes and matches from workers caught smoking within the building. Funds were raised from a fire police rate levied at 2 pence in the pound on the town's warehouse proprietors, which raised about £1500 per annum.²⁴ Overlapping membership of the town's economic and political institutions meant that Liverpool's elite was better positioned to implement a uniform solution to identifiable problems. Self-regulation was an acceptable trade-off for lower insurance rates.²⁵

Liverpool acted whereas London did not because, since the Municipal Corporations Act, the town was largely governed by a uniform system of local government, whereas London, being exempt from municipal reform, was bereft of this uniformity. Instead, London was comprised of a 'congeries of disparate authorities', veering between the unreformed Corporation and the vestries of nearly 80 civil parishes. Although the latter enjoyed powers to maintain fire-engines, few wielded them. Institutional fragmentation was exacerbated by hundreds of *ad hoc* boards and trusts, which exercised limited powers over paving, lighting and street cleaning. Other services, including gas and water, remained under private control, which further inhibited service co-ordination among the different bodies. London needed structural reform before individuals like James Braidwood could benefit from a uniform approach to fire protection.²⁶

The politics of constant water

The issue of the supply of water for extinguishing fires was obviously embroiled in contemporaneous debates about the standard of public health in industrializing towns. In particular, the cholera and typhoid epidemics of the 1830s and 1840s focused the attention of policymakers on the necessity for improved water supply and sewage disposal systems. Successive royal commissions and select committees were charged with the task of discovering uniform solutions to urban problems, basing their recommendations on the written and oral testimonies of a growing army of professional specialists. Such policy learning approaches were evident in the *Report on the Sanitary Condition of the Labouring Population of Great Britain*, published in 1842, which was based on Edwin Chadwick's visits to industrial towns, as well as detailed medical reports and questionnaires returned from around 1000 local experts. It was this evidence-based policy learning that led Chadwick to explicitly connect constant water with improved public health and safety. Chadwick

recommended that national legislation and uniform administration, rolled out across England and Scotland, would best improve the supplies of water for health and fire safety. Only by 'doing the same things in the same way' could disparate local experiences be shared in an integrated manner.²⁷

Chadwick asserted that constant high-pressure water was not only 'good and practical', but 'imperative' to the health of the urban working-classes. It was as imperative for servicing the drains as it was for providing water for personal cleanliness. Intermittent water, on the other hand, served the interests of the 'irresponsible and arbitrary' water companies. The co-ordination of the supply and technology of water embodied the utilitarian virtues of the time, which inevitably extended to fire protection. It duly fell upon 'the most eligible local administrative body', preferably under national supervision, to undertake responsibility for procuring 'proper supplies for the cleansing of the streets, for sewerage, for protection against fires, as well as for domestic use'.²⁸

In its reports of 1844 and 1845, the Royal Commission on the State of Large Towns and Populous Districts reaffirmed the idea of taking a uniform approach towards the provision of water and fire services. Indeed, one of its specified objectives was to recommend 'the best means' for supplying water 'for purposes of health or the better protection of property from fire'. Its research strategy focused on the analysis of a vast quantity of scientific and professional evidence collated from firemen, insurance agents and water engineers, as well as first-hand observation of firefighting operations. Echoing Chadwick's report, the Royal Commission concluded that constant supplies of water available at high-pressure provided 'the most efficient means ... for the arrangement of supplies of water for the extinction of fires'.²⁹

Examples of local practice were incorporated into the Royal Commission's two reports to strengthen its case for legislative compulsion. Constant pressure, according to the superintendent of Preston's 'fire police', Samuel Bradley, allowed his firemen to attach their hose directly to the water-mains, thereby minimizing frictional loss. Bradley explained the benefits of his system in reference to a cotton warehouse fire, which was extinguished solely with the hose:

The hose is on a reel on the engine, but we much prefer to use the hose alone. We unwind it, screw it on the plug, and use it instead of the engine. For the last two years we have never used the engine. The hose is more effectual and more rapid in its operation. The water by the hose can be thrown over the highest building... [I]t is much

more handy, can be easily taken into any part of the building, and requires much fewer hands to manage it.³⁰

Bradley's evidence was verified by Professor Lyon Playfair, who reported that, upon his arrival in Preston to inspect the town's water service, he observed a fire. Within 15 minutes of the alarm, a horse-drawn hose-reel, carrying ten firemen, was at the scene. Two minutes later, the hose had been unwound, attached to the mains, and several strong jets of water thrown into the building. The fire was quickly extinguished, unequivocally proving 'that the fears of a failing supply or diminished force by the use of several jets at the same time are quite unfounded'.³¹

Playfair deliberately contrasted the experience of towns with constant water with those reliant on intermittent supplies. Statistical evidence was presented, which indicated that, in those towns where water was not on constantly, there were a higher annual average number of fires and a higher ratio of the number of fires to the number of houses. For example, Liverpool and Manchester averaged 116 and 60 fires a year respectively, or 1 to every 382 and 766 houses. In both towns the firemen carried water with their engines because it took 'from fifteen to twenty minutes' to get water turned on. As a consequence, Liverpool had recently strengthened its reactive firefighting body, through the appointment of 64 police-firemen to take charge of its 20 engines.³²

'Very long' delays in turning water on were similarly found in Bolton and Salford, which suffered 22 and 16 fires every year respectively, or 1 fire for every 672 and 512 houses. Meanwhile, in Wigan there were 'no plugs or available supply' from the mains, and the town was 'very scantily and irregularly served' from wells and streams. An observable link had been established between intermittent water and an imperfect standard of fire protection. Consequently, intermittent supply was inevitably accompanied by a far higher loss of property by fire – totalling £2,000,000 in Liverpool alone between 1795 and 1842 – and 'premiums almost prohibitory to insurance'.³³

By contrast, in those towns where the water was in 'constant readiness', Playfair observed advantages for fire protection. In Preston, a lower incidence of fire (averaging eight a year, or 1 for every 1248 houses), combined with water available 'instantly', meant that it only employed 14 constables as firemen, compared to 22 in Salford and 26 in Bolton. Fewer fires were reported because workmen were drilled to extinguish small workplace fires using water directly from the mains. In Oldham, constant water combined with the low cost of installing fire-plugs, which cost less than £30 for a five-storey warehouse, meant

that manufacturers generally took responsibility for their own protection. Ashton, Bury and Rochdale were also on constant supply, and only averaged one or two fires every year. Instant water guaranteed financial benefits by reducing these towns' dependence upon larger bodies of engines and paid firemen, which helped to keep the rates within acceptable limits and reduced insurance premiums. Playfair even reported that some Oldham mill-owners had 'so much confidence' in their 'increased security' that they had stopped taking out insurance policies altogether.³⁴

Professional authority was added by Thomas Hawksley, engineer of Nottingham's Trent Water Company. Hawksley agreed that constant water was accompanied by financial and operational benefits in giving firemen greater water elevation to fight fires from the ground, while saving time and money in engine maintenance, horse hire and pumping. With reference to a recent fire at the Nottingham Exchange, Hawksley contended that 'if the water had not been on at the time at high pressure..., the fire would, in all probability, have been as extensive as the recent fire at Hamburg [*sic*],' which had destroyed 2000 buildings, killed 51 people and left 20,000 homeless. Although Hawksley conceded that Nottingham was unlikely to mirror Hamburg's catastrophic experience, the timing of the fire accounts for the comparison. The experience of fires in both Hamburg and Liverpool proved that careful building construction, combined with investment in a network of fire-plugs connected to a high-pressure water supply, guaranteed order where fire-engines and intermittent supplies could not.³⁵

The Royal Commission was convinced of the financial and environmental benefits to be accrued from adopting constant water. Out of the local experiences examined were identified a series of national standards that could be enforced locally through extended supervisory powers. The Commission urged that water companies should be compelled, 'under a penalty', to supply water for firefighting, separate to that available for domestic and industrial purposes. In its adoption of Hawksley's scheme, it further commended that water should 'in all cases' be constant, 'at as high a pressure as circumstances will permit', free of charge for firefighting, with fire-plugs 'inserted in the mains at short intervals'. Its preference was for municipal government to administer this 'natural monopoly'.³⁶

As for the organization of fire services, the existing system was condemned by the Royal Commission as being, 'for the most part, very defective'. Its preference was to extend the 'fire police' model by unifying 'all the fire-engines in the town' under the 'united management'

of 'an efficient superintendent', with improved rewards for firemen who promptly attended fires. The utility of appointing a uniform fire service lay in the guarantee of a response to every alarm. Only by accepting firefighting as a public duty incumbent upon municipal government could large towns effect 'a most important improvement both in respect to security of property, and in the economy of the expense of maintaining the existing separate establishments'. This was economy in the sense of giving value for money, rather than simply 'keeping the rates down', mixed with efficiency, which necessitated optimizing the effectiveness of services at the point of delivery. Municipalization promised economies of scale in pooling together technology and labour, as well as access to water, which meant that municipal government was identified as the legitimate authority for improvements to public health and safety.³⁷

Parliament was slow to put the Commission's recommendations into legislation. Some were adopted in the Waterworks Clauses Act, 1847, which gave firemen free access to public supplies and compelled water companies to fix fire-plugs to mains 'at such convenient distances' for extinguishing fires. However, this was little more than 'arms-length' regulation since a number of loopholes meant that water companies interpreted convenience for economy, and continued to space them apart at unsafe distances. Beyond some permissive clauses that granted municipal authorities the power to purchase engines and hire firemen, which were contained in the Towns Police Clauses Act, 1847, proposals to organize firefighting on the 'fire police' model were left to local discretion.³⁸

This is not to say that municipal government continued to do nothing, though, because a model of economical and efficient government had been established. For example, Bradford Corporation reformed the town's fire brigade on the 'fire police' model in 1849 and hired a full-time superintendent 5 years later. Middlesbrough formed a similar body in 1855.³⁹ In addition, municipal authorities slowly began to pursue a uniform approach towards the supply arrangements of water for public health and firefighting. The northern industrial towns were again at the forefront of this transition. Manchester, Liverpool and Glasgow each bought out their private water concerns in 1847, 1848 and 1855, respectively. Once under public control, the authorities moved over from the intermittent to the constant system, and had the mains always charged under high pressure, which helped their 'fire police' forces to establish greater control over fire.

Manchester's system, sourced from the Longdendale Valley, was completed in 1853. Water was now available from 6000 hydrants, 'with a pressure sufficient to throw over the highest building'. Fire loss statistics soon showed 'a dramatic fall'.⁴⁰ Liverpool Corporation, meanwhile, had installed nearly 12,000 hydrants by the 1860s, from which a jet of water could be thrown over 100 feet. Glasgow's Loch Katrine works, opened by Queen Victoria in 1859, supplied 50 million gallons of water every day by gravitational engineering. Although it cost £1.6 million to build, economies of scale were achieved by installing an extensive network of 3000 fire-plugs, which incorporated an improved ball hydrant, from which firemen could connect two hoses directly into the double-ended stand-pipes.⁴¹

Constant water gave firemen control over most fires. Hose-reels, capable of carrying 500 feet of hose, were much smaller and lighter to pull than the cumbersome manual engines. With improved responsiveness, firemen could attack a fire from multiple angles and master the flames more quickly. Manufacturers also attached portable ladders to these machines, which gave firemen greater flexibility and control when fighting flames in the upper stories of large buildings, and allowed them to rescue people whose escape was blocked by the flames. Even when caution dictated that firemen respond with their engines, they often found that 'a plentiful supply of water was obtained by applying the hose to the street main.' Although not dispensed with, Glasgow's fire-engines were 'seldom used' during the 1860s since the water pressure was sufficient 'to send the water to the highest house', while its water-carts were sold, with 'a considerable annual saving being the result'.⁴²

By the mid-1860s, once they had studied the experience of these innovators, municipal governments across the country recognized the political and operational legitimacy of constant water supplies. A sample of 51 large- and medium-sized towns in 1865 revealed that 88 per cent were dependent on water from the mains to fight fires. Of these, 38 per cent had their supplies on high pressure and used water directly from the mains. All but five were northern or midland industrial towns. Some, like Leicester and Birmingham, were serviced by private companies, which indicates that councils used their own local acts to establish an improved quality of service without resorting to municipalization.⁴³ A uniform approach to the delivery of fire and water services had begun to uphold the principles of economy and efficiency within municipal government by promising economies of scale, while optimizing the effectiveness of both services at their point of delivery.

Joining together firemen, water and steam

As firemen continually struggled to master large fires, each new invention was soon eclipsed by another technology that guaranteed a combination of greater power, precision, flexibility or speed. New fire hydrants, particularly the sluice valve and screw-down varieties, replaced the ball hydrant for their adaptability to different hose couplings and resilience to corrosion. Although the larger brigades adopted them from the late 1860s, many of the smaller ones continued to rely on the older models, preferring to buy standpipes, which allowed firemen to connect their hose with all types of fire-plugs. Manufacturers' catalogues were replete with curious devices – spreading nozzles, breeching, nozzle cocks, swivel hose screws and hose clamps – which all promised to improve a fire brigade's performance in a small way.⁴⁴

Unconvinced that attaching hose directly to the mains could provide sufficient power to combat large fires, fire-engine manufacturers honed existing technologies, notably Braithwaite's steam engine, to provide economical solutions by working off their own pressure. They built new models, like Merryweather's aptly named 'Deluge', and exhibited them at international exhibitions during the 1850s and early 1860s, during which they boasted that these machines were capable of quickly extinguishing fires that broke out in factories, warehouses, department stores and theatres. Poorly partitioned, lit by gas, crammed with flammable goods and products, which ranged from cotton clothes to make-up, and used by large crowds of people, these structures and spaces challenged the durability of existing technologies and practices of government.⁴⁵

Firemen recognized the warning signs. Braidwood frequently warned that unregulated building construction and defective water supplies in London's warehouse district would combine to produce a terrible conflagration involving considerable loss of property and life. Writing to the Commissioner of Public Works in 1854 about plans to build one of these 'monster warehouses' in Tooley Street, which was a notoriously hazardous district on the southern banks of the Thames, he argued that if it caught fire it would 'become such a mass of fire that there is now no power in London capable of extinguishing it, or even of restraining its ravages on every side'. Efforts to regulate the future construction of buildings, incorporated in the 1855 Metropolitan Building Act, did little to assuage Braidwood's anxiety about those standing warehouses.⁴⁶

Disaster struck in June 1861. Described as a 'terrible conflagration', flames ripped through six-storey cotton and depot warehouses in Tooley Street. Beginning in a consignment of jute in a warehouse on Cotton's

Wharf, the iron doors that separated the different warehouses were left open which, aided by deficient water supplies, allowed the flames to quickly spread out of control. Fuelled by a volatile cocktail of flammable goods – hemp, saltpetre, tallow, tea, sugar, spices, cotton and oil – it took two weeks to bring the fire fully under control, and was fought gallantly, yet hopelessly, by the full complement of the LFEE, in addition to 112 hired assistants, whose work was hampered by violent explosions of saltpetre in the hidden vaults of the burning warehouses. As the largest single fire loss endured by the insurance companies, estimated losses exceeded £2,000,000.⁴⁷

Leading by example, Braidwood marshalled his firemen from the fire-ground. As he surveyed operations in the early evening, an explosion of saltpetre caused a cotton warehouse to bulge, before crashing to the ground, burying him in the ruins. Killed instantly, his body was not recovered from the smoking rubble until the following morning. As one of the most recognizable fire disasters in modern British history, Tooley Street's greatness was measured in terms of its destructive prowess, financial loss and the inevitable column inches that Braidwood's death garnered in the metropolitan and provincial press. One newspaper compared his death with that of the Duke of Wellington's: 'Our Wellington and our Braidwood are gone.' Approximately £7000 was raised by private subscription from the insurance companies to provide for his widow and six children, while his managing committee recorded its unanimous regret at the loss of its 'esteemed and valued superintendent'. This 'Great Fire', as it was described in *The Times*, marked a prophetic end to a distinguished career.⁴⁸

Braidwood's death signalled two important changes to London's fire service: one was organizational and the other technological. In the aftermath of the disaster, a sub-committee was formed by the LFEE's managing committee to consider the implications of the disaster. At its first meeting, its members calculated that, over the preceding decade, the brigade's expenditure had doubled to £26,000. The sub-committee concluded that the insurance companies should disband their brigade and transfer its equipment and personnel to 'the Metropolitan and City Police, or other competent public authorities'. Negotiations were subsequently opened with the Home Office and the Metropolitan Police Commissioner.⁴⁹ A Select Committee on Fires in the Metropolis was hastily arranged, which conceded that firefighting had become a necessary public duty. Evidence was mined from Glasgow, Liverpool and Manchester, which the Committee used to recommend that London establish its own 'fire police' under the Metropolitan Police. This

satisfied its Commissioner, Sir Richard Mayne (1829–68), who, in his testimony, insisted that ‘it has always appeared to me that the preservation of life and property from fire ought to be as much a part of the duty of the police as preservation from thieves, and murderers, and burglars.’⁵⁰

Braidwood’s successor, Captain Eyre Massey Shaw, brusquely dismissed the proposal to align London with the provincial model. A retired army officer with less than 2 years’ experience at the helm of Belfast’s ‘fire police’, Shaw disputed the notion that ‘skilled firemen fit for London’ could be made ‘out of street constables’, who were mainly recruited from a pool of unskilled labourers.⁵¹ Instead, he produced alternative plans that would allow a public brigade, independent of police control, to protect the capital for only £50,000 a year. This sum would be derived from a public rate not exceeding half-a-penny in the pound, augmented by an annual subvention of £10,000 from the government and contributions from the London insurance companies fixed at the diminishing rate of £35 for every million pounds of their premiums, which amounted to roughly £26,000 per annum.⁵²

The fulcrum around which an independent brigade would work was the steam fire-engine. Shifting the emphasis of controlled firefighting from water to technology, Shaw contended that investment in a fleet of light steam engines, housed in a network of district stations, and manned by a body of skilled firemen, guaranteed greater responsiveness, speed and control. Having studied their adoption in North America during the 1850s, Shaw recognized their labour-saving capabilities, while precipitating a division of labour by demanding specialized knowledge to work them. Whereas once firefighting relied upon muscle, sweat and courage, now it also demanded additional diagnostic and practical skills. Shaw’s plan to join together the branches of technology, skill and discipline convinced Sir George Grey, the Home Secretary, to transfer the establishment, renamed the Metropolitan Fire Brigade, under the management of the Metropolitan Board of Works, the metropolis’ local authority since 1855, on 1 January 1866. Responsibility for its administration was soon devolved to an independent fire brigade committee.⁵³ A year later the brigade absorbed the escapes, stations and conductors belonging to the Royal Society for the Protection of Life from Fire. Shaw’s firemen would save lives as well as property.⁵⁴

Technology did not replace firemen as Braidwood had feared, but it did alter their responsibilities. Obeying orders was still important, but firemen also had to understand how fire-engines worked: ‘No fireman can ever be considered to have attained a real proficiency in his business, until he has thoroughly mastered this combination of theory

and practice.⁵⁵ Upon his appointment, Shaw inherited a brigade overwhelmingly dependent on manual power, with 36 manual engines, 127 firemen and one floating steam engine used to protect the wharves on the banks of the Thames. Within a decade he had acquired a fleet of 25 land and two floating steam engines, supplemented by 85 manuals, and worked out of 53 engine stations, all of which were connected by telegraphic communication. He had also re-organized his men's rankings according to aptitude and function, dividing them into foremen, engineers, sub-engineers, senior firemen, junior firemen, extra men and drivers, thus opening up the service to the career hierarchies that, according to Harold Perkin, heralded the triumph of the professional ideal.⁵⁶

Shaw did not dismiss the provincial model of pooling available resources to contain fire more economically; he simply modified it to fit London's hotchpotch system of local government. Whereas Braidwood had tried to convince London's water companies and the government to provide appropriate water for extinguishing fires, Shaw re-oriented fire-fighting away from water and onto steam technology, which relied upon skilled firemen who were theoretically, as well as practically, trained. Organization and discipline remained core tenets of Shaw's model and were not incompatible features with a permanent fire brigade, free of police control. Steam technology connected limited water supplies with disciplined and skilful organization. By constructing his own model of organized fire protection, Shaw took the next step in building a professional fire service.

Diffusing steam

In provincial towns, where pragmatic attitudes towards fire and water had precipitated a long-term commitment to constant water under municipal control, the utility of steam engines was viewed with caution. For example, Manchester Corporation trialled an American-built steamer in 1863, but bought three manual engines instead. Liverpool Corporation bought one in 1865, over 2 years after its head constable had first recommended one to his Watch Committee. Portsmouth dockyards bought one in the same year, which it used to protect the town in the absence of a municipal brigade. In 1867 the Select Committee on Fire Protection, which had been formed to ascertain greater knowledge of the diffuse systems of firefighting throughout the country, reported that, of the 78 towns that had given notice of owning fire-engines, 'very few' were steam-powered. Many preferred to rely on Merryweather's

'London manual' during large fires, which required 30 strong men to work the levers, and delivered around 140 gallons of water per minute.⁵⁷

It was the decade that followed the publication of the Select Committee's disappointing report, which merely reiterated the importance of constant high-pressure water, that saw provincial towns embrace steam power. They did so on their own terms, largely because of continued water shortages during large fires. Shortages were evident at a machine works fire in Manchester in 1861, two factory fires in Glasgow in late 1868 and early 1869 and a woollen factory fire in Leeds in 1875, where, *The Leeds Mercury* reported, 'The deficiency of water and the low pressure were a serious drawback to the efforts of the various brigades to extinguish the fire.'⁵⁸ However, the decision to buy a steam engine involved a considerable outlay, particularly outside London where there was no government funding. An engine cost £800 on average, while it also necessitated the building of an expensive network of fire-engine stations, telegraphically connected, as well as the purchase or hire of a fleet of horses to pull the engines. Municipalities had to be convinced that firefighting infrastructure, albeit inexpensive compared to town halls and waterworks, was a legitimate source of municipal indebtedness, which, for England and Wales, stood at £95,000,000 in 1875.⁵⁹

To convince their employers to invest in new technology, senior firemen argued that steam engines complemented constant water, giving fire brigades greater flexibility and choice in controlling fires. They contended that a steam engine with 30 horse power could do the work of 150 strong men during a large fire, while throwing the same amount of water as four or five manual engines, and costing a fraction of the total. Manufacturers were invited to demonstrate their engines, which they did to public interest. When, for example, Glasgow's Watching and Lighting Committee was investigating steam engines in 1870, the two largest firms, Merryweather and Shand Mason, participated in competitive trials to see which model could work up full pressure the quickest and then throw the greatest volume of water the furthest and highest distance. The latter won, having worked up steam in under 10 minutes and thrown water 149 feet in distance and over 12 feet higher than the Merryweather engine. Glasgow duly bought its engine, and sanctioned the purchase of another two when its municipal boundaries were extended 2 years later.⁶⁰

Almost every large- or medium-sized British town included at least one steam engine in its repertoire by the early 1880s. By combining firemen, water and technology, steam power provided the catalyst for modernizing fire protection in Britain as well as North America.⁶¹

For some years, Glasgow's firemen were sworn in as constables, but, with one or two exceptions, performed no police duty. Although the ties binding the police and fire brigade were not officially severed until 1892, when a Fire Brigade Committee was established under the Town Council, the adoption of steam power established clearly demarcated responsibilities. Professional authority was devolved entirely to its Inspector of Fires, James Bryson (1855–84), who built a compact, but highly skilled, staff of permanent firemen, appointed on a fixed wage. Their duties extended from extinguishing fires and saving lives to maintaining equipment, inspecting buildings, examining hydrants and providing frontline protection during theatre performances. This professional body was supported in outlying districts, where the threat of fire was lower, by police auxiliaries, although these were strictly under the authority of a permanent fireman. Bryson directed that, since the technology demanded integrated thought and co-ordinated action, the steam engines would only be used by the professional firemen.⁶²

Glasgow's experience was discernible elsewhere where municipal authorities created the nucleus of a dedicated and full-time brigade, augmented by either police auxiliaries or retained men who pursued an everyday trade. Leicester separated its police and fire brigade in 1872, relying on local artisans to help the small contingent of full-time firemen fight fires. Birmingham, which formed a 'fire police' in 1874, separated the two branches 4 years later. Manchester's 44 permanent firemen did no police duty.⁶³

In most towns, though, firefighting continued to be seen in an economical manner. An experienced fireman would be employed to lead a body of police-firemen who would do ordinary police duty and receive an allowance for firefighting. These 'police fire brigades', as they became known during the 1860s, existed in Liverpool, Bristol, Cardiff, Hull, Leeds and York, among other towns. Liverpool's 148 firemen, for example, all did routine police duty, but 'on the occasion of a fire breaking out they drop the duty of constables and become, as it were, for the time being, only firemen.' Municipalities preferred this system because, so long as fighting fires did not impede routine police work, 'police fire brigades' qualified for the annual Exchequer grant towards the cost of police wages and uniforms, a subvention that was doubled in 1874.⁶⁴ Prudent organization coupled with optimal performance guaranteed the system's legitimacy and longevity.

Such differences in detail mask some important commonalities, though, not least that firefighting was now widely accepted as a public duty. As an organized and disciplined service, best arranged under single

officer control, successful firefighting demanded a rapid response to alarms and mastery of the fire-ground. This, in turn, depended on having access to, and control over, labour, water and technology. Regardless of whether it was seen as a full- or part-time vocation, firefighting in the larger towns and cities had become paid work, and, in order to attract and retain the best calibre of recruit, brigades had to incentivize it. Improvements to water supplies and steam power were inseparable from the formation of a paid and professional fire service.

Conclusion

By 1880, most British towns and cities were protected by a public fire brigade in some form. In addition, they had also tried to solve the problems associated with deficient water for extinguishing fires, as well as to meet growing consumer demand. The risks posed to property and life by fire and water were seen in pragmatic terms by municipalities, which, conscious of the financial and legal limitations imposed upon them, worked to expand their responsibilities economically. Preference for constant high-pressure water, bolstered by steam traction in the event of a large fire, emerged as the underlying *modus operandi* for fighting fires.

The pace of change was cautious since investment in a new water supply, or a fleet of steam fire-engines, demanded careful scrutiny of the available evidence to avoid making a mistake and wasting ratepayers' money. This was, as Anthony Wohl, John Garrard and Christopher Hamlin have shown, the case for reforms to municipal government as a whole.⁶⁵ Firefighting became dominated by an evidence-based style of policy learning that drew upon the detailed reports of official parliamentary enquiries between the 1840s and late 1860s, as well as the reports of the superintendents and inspectors of fires to their fire brigade committee, the tone of which grew increasingly authoritative. A British fire service, locally moulded according to principles of economical and efficient municipal government, was slowly being created.

4

Firemen as Workers and Heroes: Working for Victorian Municipal Fire Brigades, c.1861–1900

James Braidwood's funeral in June 1861 signalled the beginning of the Victorian public's adulation for the fireman and his profession. The cortege, numbering many thousands, stretched over one-and-a-half miles and took 3 hours to make the journey from the central fire station on Watling Street to Abney Park Cemetery, where Braidwood was buried beside his stepson, a fellow fireman killed on duty 5 years earlier. Comprised of over 1000 policemen, 700 members of the London Rifle Brigade, the 100 conductors of the Royal Society for the Protection of Life from Fire (RSPLF), various private and voluntary fire brigades and all of his firemen, the cortege's composition reflected the professional authority and heroic disposition that Braidwood had engendered for his fire service. Mourners lined the streets, their 'hushed demeanour' paying homage to a man who was publicly revered as the first fireman hero. Braidwood's heroism was indelibly inscribed in his personal sacrifice at the 'post of duty . . . , the holiest place on earth on which to live or die'.¹

In the four decades that followed Braidwood's death, the ideal of the paid fireman as an everyday hero doing his dangerous duty under difficult conditions was established. Prevalent in popular boys' literature, memorials and urban newspapers, this new breed of urban hero worked tirelessly to protect life as well as property, and enjoyed the public reputation for respectability that, according to Keith McClelland, was a necessary pre-requisite for working-class citizenship during the late nineteenth century.² As a uniformed city worker with a regular wage, the fireman was visible and accessible to impressionable working-class audiences. He was seen running into burning buildings when ordinary people would run away from them. Firefighting was depicted as an honourable calling that young men could pursue if they met the stringent physical and mental criteria stipulated for entry into the service. The

fireman's heroism was everyday because it was part of his duty, but it was also noble, daring and selfless, the character traits of all 'heroic martyrs'. He could be seen riding fire-engines, scaling ladders to fight fires or rescue helpless women and children, entering burning buildings armed solely with a length of hose, and standing triumphant over smouldering ruins. The fireman's 'immaculate manhood', as Robyn Cooper describes it, emerged as 'the supreme model' for late Victorian working-class respectability, not least because it comprised the virtues of chivalry, self-discipline and deference to social authority.³

If professional firemen were heroes, they were also municipal employees, subject to the social and political authority of their employers. Firemen's heroism became intertwined with the fire service's professionalization, and was seized upon as the natural preserve of a municipal fire brigade. This chapter will examine the relationship between the fireman's heroism and the reality of his life as a paid worker during the late nineteenth century. While it served the interests of his employers to propagate the image of his exemplary heroism, in order to reinforce their own authority locally and nationally, they did not automatically reward it with improved working conditions. Self-sacrifice in the line of duty was an expected trait of the professional fireman, but it did not guarantee a decent pension for his dependents. Control over the supply of human capital became the main conflict between senior officers and their employees because the firemen's labour and skill was, by the late nineteenth century, the key determinant of the service's professionalism.⁴

The ideal fireman

Although they had to work within the constraints of the local job market, senior firemen ascribed specific qualities to firefighting when recommending suitable candidates to their employers. Once firefighting had been commonly accepted as a public duty by the mid-1860s, municipal brigades recruited firemen with core characteristics that distinguished them from other uniformed public sector workers. Discipline was the most important of these. Captain Shaw insisted that, owing to the dangerous conditions of firefighting, recruits 'must obey, without a moment's hesitation, all orders he may receive from his superiors in the [Metropolitan Fire] Brigade'. The commotion of a raging fire demanded 'unity of action' from firemen, who worked as a team to master the flames, unlike policing where beat patrol was individualized work. A strictly defined chain of command, combined with 'clearly-defined

duties and responsibilities', guaranteed the discipline that was necessary to bring order to the chaos of the fire-ground, while solidifying the chief superintendent's nascent professional authority.⁵

Competing interpretations of which men made the best firemen intensified as the pace and scale of municipalization accelerated. Officers tended to prefer either sailors or artisans, and their selection hinged on contemporary interpretations of the skills necessary to be a good firefighter, as well as the candidate's corporeality. For Shaw, who was granted authority to select candidates for appointment from the Metropolitan Fire Brigade's inception, a candidate's age and physique were key determinants of his suitability. All candidates had to be aged under 30 (raised to 35 during the 1870s), at least 5 feet 5 inches tall, and measure not less than 37 inches around the chest. Subject to a rigorous medical examination, applicants then demonstrated their strength by raising a fire-escape single-handed. These physical criteria excluded many men from the service, including those with disabilities, while single men were preferred over those who were married. These were bodies that, while receptive to being moulded through regular drill and gymnastics, were defined by certain immutable traits that inevitably closed off the service to large numbers of men on the basis of age, ability and physical capacity.⁶

Physical strength alone was not enough, though. Firemen also needed mental toughness to cope with the risks to their own lives, as well as removing bodies from the smouldering ruins of a burnt-out property. Braidwood described it as 'character', professing that the best firemen exhibited 'coolness and judgment' in working amid the 'noise and confusion' of a fire. They had to carry on working even when they lost colleagues to the flames. For example, a lengthy report by the secretary of the LFEE extolled 'the excellent conduct of the Brigade Force' during the fight to extinguish the Tooley Street fire, and noted that firemen remained on watch duty for 5 weeks, during which not a single case of intoxication was reported.⁷

It was, therefore, the duty of every superintendent to acquaint himself with 'the character and conduct of every man under his orders'.⁸ Character denoted that firemen had to be punctual, deferential, sober and smartly attired in their uniforms. Contraventions of these regulations were punishable by fines, suspension and, ultimately, dismissal. For example, Shaw suspended Second Class Fireman Hawkes in October 1866 for signing himself off sick with syphilis, 'as a warning to the young men recently joined'. A few months later, he also suspended Second Class Fireman Pearson and fined him 1 week's pay for returning

late from leave drunk and 'unfit for duty', and being found in bed with 'a loose woman'. The Metropolitan Board of Works' Fire Brigade Committee duly dismissed him. The Committee took a similarly dim view of First Class Fireman Donne who, after being found drunk in a public house where he committed a nuisance by 'making water behind the counter', was summoned to a full meeting where he was dismissed by its chairman.⁹ The adoption of strict rules governing individual behaviour meant that senior firemen ensured that those recruits who lacked manly character would eventually be weeded out of the service.

Mental and physical toughness permeated contemporary attitudes towards firefighting. Inheriting a corps 'ready-made for him, [and] well disciplined by the late Mr. Braidwood', Shaw continued his predecessor's preference for appointing decommissioned sailors as firemen in London. Although he conceded that the fire service relied upon acquired technical skill, only sailors were accustomed to the mental and physical rigours of firefighting:

The sailor has learnt discipline, and is so strong and handy at climbing and other quick work, that he can be made available for the general work within two or three months, and I defy any one to do that with any other class of men.¹⁰

Sailors were well versed in the institutional culture of confinement without action for long periods of time, punctuated by a sudden emergency that demanded 'all hands on deck'. They also brought practical skills to the job, particularly in scaling ladders, climbing ropes and tying knots, which were useful for saving lives or attacking flames from a height. An experienced sailor, inured in the values of discipline, camaraderie and duty, could easily become a skilled fireman.¹¹

In response to suggestions from other witnesses to the Select Committee on Fire Protection in 1867 that artisans 'are the proper persons to employ', Shaw dismissed them as sluggish in their attitudes to work and difficult to discipline. An artisan's body, but especially his mind, was far less adaptable than a sailor's. A decade later, under examination from the Select Committee on the Metropolitan Fire Brigade, he had not shifted his opinion. Successive chiefs agreed with him since, in 1905, 14 years after his retirement, only 94 out of 1351 London firemen did not have a seafaring background. His two immediate successors were naval officers themselves, Commander Wells (1895–1903) and Captain Hamilton (1903–8), which indicates that their employers on the London County Council's Fire Brigade Committee (which succeeded the Metropolitan

Board of Works as the brigade's authority in 1889) also saw firefighting as the sailor's calling. For these men, firefighting was ascribed with specific 'socially constructed skill' formed during a candidate's service at sea, in addition to the 'genuine' technical qualities of skilled work.¹²

William Inkster is a fitting example of Shaw's seafaring-fireman. Born in 1859 on Orkney, Inkster was apprenticed to a ship carpenter before joining the mercantile marine in 1874. He was at sea for 8 years, during which he made what Valerie Burton has called the 'time-honoured' transition into manhood. Acting on the advice of a second-mate, Inkster applied to join the London Fire Brigade, as it was now known, in 1889. He passed Shaw's stringent physical examinations and was appointed to the fourth class, the lowest rank in the brigade where nearly all firemen were expected to 'learn the ropes'.¹³

Within a year, Inkster had been transferred to brigade workshops, where his skills in carpentry were utilised in repairing appliances. After serving in London for over 7 years, Inkster returned to Scotland in 1896 to become Aberdeen's chief superintendent. Inkster is indicative of the diffusion of innovations from London into the provinces between the 1860s and 1900s wherein a number of brigades appointed London-trained firemen to senior positions, normally to modernize their own organizations.¹⁴ Far from the 'unrespectable manhood' prevalent in conventional depictions of 'whoring, drinking sailors', ex-sailors like Inkster epitomized the virtues of discipline, camaraderie and duty that made ideal firemen.¹⁵

In other provincial towns, notably Glasgow, Edinburgh and Leicester where professional brigades operated from the early 1870s, preference resided with the appointment of locally apprenticed artisans, in conjunction with a significant minority of ex-sailors. The category of artisan included those craftsmen whose work traditionally contained strong elements of learned skill or 'manualness', that is manual skill acquired through 'on-the-job' training, such as an apprenticeship. Engineering provided a third pool of recruits, that is, those occupations predominantly undertaken by machine technology by the late nineteenth century.¹⁶ During the final quarter of the nineteenth century, for example, Edinburgh's chief superintendents, Samuel Wilkins (1876–93) and Arthur Pordage (1894–1924), appointed more than twice as many artisans and engineers as ex-sailors (Table 4.1), despite their own seafaring backgrounds.

Glasgow's preference for artisans and engineers was more ingrained than Edinburgh's, with only 13 per cent of recruits between 1878 and 1904 being ex-sailors, compared to 58 per cent artisans and 6 per cent

Table 4.1 Recruitment to Edinburgh and Glasgow Fire Brigades, 1877–1904 (per cent)

Brigade	Sailors	Artisans	Engineers	Other	Sample
Edinburgh, 1877–1900	26	50	6	18	100
Glasgow, 1878–1904	13	58	6	23	100

Source: Lothian and Borders Fire and Rescue Service Library [unreferenced], Edinburgh Fire Brigade Service Record Book No. 1; Glasgow City Archives D-F151, Glasgow Fire Brigade Appointment Book.

engineers. Glasgow's inspectors of fires, as its superintendent was styled, James Bryson and William Paterson (1884–1907), were both experienced in the building trades, which undoubtedly influenced their attitudes towards recruiting firemen from similar backgrounds. Bryson was himself an apprentice-joiner, who preferred men in the house-building trades because 'they are employed generally about the station-house.' Paterson trained as a joiner with his father before moving to Edinburgh where, after working as a journeyman, he was appointed secretary to the local branch of the Associated Carpenters' and Joiners' Society. In 1883, he was appointed an assistant inspector under the Factories Act, but resigned following his appointment as Inspector of Fires.¹⁷ This type of men was, as McClelland has noted, sharply differentiated from the conventional working-class, having learned skills in their trade through formal apprenticeship. Although their levels of skill varied, many artisans retained 'manual dexterity' into the late nineteenth century, countering Shaw's supposition that they lacked the physical pliability to become good firemen.¹⁸

The types of skills brought by artisans to service included plumbing, slating, joinery, plastering, painting and coach-building. These were practical skills that could be usefully deployed in provincial brigades because, as Bryson conceded, 'in Glasgow the firemen make their own hose and paint their own engines . . . , and a very large saving is effected by these means.' They also made all the doors and plumbed the new fire station for the city's eastern district in 1887, and cleaned and painted all 11 police stations. They also made their own boots, fixed their appliances and maintained their fire hydrants. This was economical government, saving on direct labour costs, but it was equally presented as an efficient use of firemen's labour outside of fighting fires.¹⁹

R. W. Connell argues that 'manual work creates an institutionalised masculinity of hard work and physical toughness exemplified by changes to a worker's body.'²⁰ Fire brigades were certainly organizations

in which hard work, coupled with physical toughness, could change a worker's body. Workers from the building trades, according to Pordage, exhibited the flexibility and depth of skills not enjoyed by sailors, 'each having a particular knowledge which is most useful in emergencies at fires', including dexterity, adroitness, ingenuity and intelligence. For example, Adam Paterson, a 21-year-old joiner, was appointed by Edinburgh Fire Brigade in 1883. Within 15 years he was appointed Assistant Firemaster of Leith Fire Brigade. Daniel Ritchie, a 23-year-old joiner, was hired as a fourth-class fireman by Glasgow Fire Brigade in 1883; he served for 47 years, retiring as second officer in 1930. James Anderson, a plumber, joined the Glasgow Brigade in 1893 and retired 39 years later as a senior superintendent. These were dexterous bodies and intelligent minds that had been continually toned and sharpened for a distinguished career in the service.²¹

Not all artisans could be moulded into suitable firemen. The Edinburgh and Glasgow personnel books list numerous workers from the building trades with unimpressive service records. One man, a joiner from Kelso, lasted 4 years in Edinburgh, during which he was found drunk on duty on three occasions before he was finally dismissed. Another, an engineer who joined the Brigade in 1893, was severely reprimanded for being improperly dressed on duty in 1895. Two years later he was dismissed for 'refusing to do any more duty'. Later re-hired, he was twice suspended in 1899, first for being 'drunk and unfit for duty', and second for failing to 'turn out' to a fire with the hose tender. He was eventually dismissed the following year for being found drunk on duty at the Waverley market. These men, like many others, lacked the mental toughness necessary to be self-disciplined and obedient firemen, and were weeded out of the service.²²

By the turn of the twentieth century, senior firemen took the common-ground by recruiting a combination of sailors, artisans and engineers, welding the ideal character traits of each. Modern building design and the introduction of new hazardous materials like petrochemicals and electricity demanded a greater depth of scientific and engineering knowledge from professional fireman, who were expected to survey and estimate the risk posed by a fire in the perilous seconds before attacking it. Yet firemen also had to obey orders unreservedly, scale buildings and exhibit a devotion to duty, personal risk and comradeship unprecedented in comparable civilian occupations.

Alfred Tozer, for example, recruited a core of sailors to diversify Manchester Fire Brigade's existing structure during the early 1860s, which was overwhelmingly dominated by artisans. Having worked

under Braidwood as his chief clerk and head engineer, Tozer shared his views on employing a number of sailors inured in the discipline demanded of systematic firefighting.²³ His son, Alfred Robert, approached recruitment to Birmingham Fire Brigade in a similar manner upon his appointment as chief superintendent in 1879. Between 1880 and 1920, when the brigade was led by Tozer and his son (also named Alfred Robert), approximately half of all its new firemen were recruited from the Royal Navy; the other half were largely comprised of skilled artisans. The logic was that, through constant interaction, some of the physical and mental traits expected of candidates could mix to create the ideal fireman. In this fashion, tradesmen might learn the qualities of patient endeavour and self-discipline, while sailors would improve their manual dexterity, as well as their basic knowledge of fire prevention. Together, this would create the ideal fireman, who required wider skills than just physical strength and agility, however important it was to privilege action over thought in an emergency.²⁴

Working as a fireman

A rank-and-file fireman employed in a professional fire brigade in Birmingham, Leicester, Manchester or London could expect, whether working the day or night shift, to undertake a lot of station work. Birmingham's day firemen had to clean the station toilets and yard every day, along with the windows on Tuesdays, while the night firemen were responsible for cleaning the watch-room, offices and library, as well as the fire-engine lamps. Firemen also tested telegraphic instruments and bells twice daily, while men on out-station duty would examine hydrants and call boxes. A fireman on stable duty was expected to feed, dress and muck-out the horses daily, and wash the stables weekly. Station chores, senior officers judged, inscribed firemen with the collective responsibility for their working environment, as well as the routine discipline deemed appropriate for a paid fireman's 'character'. They also kept the firemen busy, and their employers happy, during the long periods of inaction.²⁵

Seniority was accompanied by more exigent and taxing responsibilities. Engineers kept the fire-engines, hose reels and escape ladders in working order, testing them daily. Equivalent in rank to a police sergeant, they also performed some administrative duties, visiting out-stations under their watch and inspecting firemen on parade. Responsibility for liaising between rank-and-file firemen and the chief superintendent tended to rest with the second (or, in larger brigades,

third) officer or assistant superintendent, who compiled daily incident reports for his superior. At the head of the brigade was the superintendent (also described as inspector of fires, chief officer and firemaster) who, enjoying considerable discretionary and disciplinary powers, was responsible for the general administration of the brigade and provided the link between the fire brigade and the fire brigade committee of the council.

Firemen were employed on continuous duty, which meant they were liable to be called out to a fire at any time, even when off duty. While on duty, a fireman had to wear his uniform and belt, with axe, in constant readiness for a fire alarm. Sleeping on duty was strictly forbidden, although a fireman on night duty might steal a few minutes on a trestle board in the watch-room or, if on fire escape duty in London, in his sentry box. Professional firemen, according to Shaw, 'are like sailors on board a ship; they are either at work or ready for work.' Not, according to one disgruntled first-class fireman, who complained to the Select Committee on the Metropolitan Fire Brigade, that 'we cannot get to our hammocks like sailors.'²⁶

If any fireman 'missed the machine', as Birmingham Fire Brigade's defaulters' book recorded failing to turn out with the engines to a call, he could expect a reprimand or caution followed by a fine, usually 1 day's pay. Between 1880 and 1899 tardy time-keeping accounted for almost 60 per cent of all offences dealt with by Birmingham's Chief Superintendent (from a random sample of 157 cases). Persistent lateness resulted in dismissal. Senior officers set high standards for promptly responding to fire alarms, regularly testing the response rates of their engines and men, and altering the environment in which firemen lived and worked to maximize turn-out times, installing American-style sliding poles into fire stations and alarm bells into firemen's quarters. Alfred Robert Tozer, for example, calculated the time taken for his men to turn out to mock fire alarms, while Edinburgh's firemen were drilled in the brigade's various appliances on 295 separate occasions between May 1888 and May 1889.²⁷

Insubordination and neglect of duty were also intolerable offences, and were difficult to disprove when a senior officer bore a grudge against a junior fireman. For example, Captain Shaw reported Sub-Engineer William Perdue to his Fire Brigade Committee in 1866 for being 'lazy ... without energy ... [and] totally unfitted for general command'. Although he had been fast-tracked through the ranks under Braidwood since his appointment in 1853, Shaw opined that it 'has always been a source of surprise to me, that he should ever have become

an Officer at all'. Perdue was subsequently overlooked for further promotion. Six months later, Shaw reported him as drunk on duty, following which he was reduced to the bottom of the first-class ranks of firemen. He resigned, without pension, a fortnight later. In another case, Fireman Brown resigned in 1876 'through the bad treatment he had received from his officer'. Shaw disputed this charge, finding instead that Brown used 'improper and disrespectful language' to the officer. The experiences of Perdue and Brown suggest that the fireman who incurred the wrath of a rancorous officer, and failed to 'render prompt and cheerful obedience to the command of a senior officer', would struggle to carve out a successful career in the service.²⁸

In return for conforming to his employers' strict regulations, a professional fireman could, by the end of the 1870s, expect a weekly wage, free uniform (or a uniform allowance), subsidized accommodation, a discretionary pensionable allowance (subject to a clean service record and long service), 1 week's annual leave, with perhaps 1 day off every fortnight, and, subject to a senior officer's permission, short-time leave of 1 hour during his shift. A Birmingham fireman in 1880 was paid 22s a week after completing his probation, rising by annual increments to 26s; his London counterpart got between 24s 6d (the minimum for a fourth-class fireman) and 35s (first-class fireman) a week. An engineer fireman received a little more. Senior officers were better remunerated: Tozer received an annual salary of £250, while Shaw was paid £1000.²⁹

Firemen's pay compared favourably with commensurate ranks in the police, but discipline was stricter, and firemen's complaints were becoming more vocal and frequent. Soon after their transfer to the Metropolitan Board of Works, London's firemen started to complain about their working conditions. A petition from third-class firemen for increased wages in 1866 claimed that they were 'always at the Stations, day and night, and are frequently called away to attend fires in various parts of London and the Suburbs' late at night for no extra pay. In his report on their petition, Shaw brusquely dismissed the claim:

The pay which the men receive... is that for which they agreed to serve; and... cannot be considered inadequate for the services of men, who on first joining, are unskilled, and have therefore to learn the duties of their profession before they can make any reform at all to their employers.³⁰

Unsurprisingly, the Fire Brigade Committee rejected the claim; five of the petitioners resigned 1 month later.³¹

To local government employers, expressing dissatisfaction was a sign that their chief superintendent had lost control over his men. Although harsher penalties re-asserted his authority, this further antagonized rank-and-file firemen. Following protracted complaints from London's firemen about being over-worked and unrewarded, a Select Committee examined the Metropolitan Fire Brigade's conditions of service in 1876–7. As the first enquiry to take evidence from serving firemen, the Committee expressed its dismay at the intolerable hours and the poor pensionable allowances awarded to dependents of deceased firemen. In one case, a fireman who lost his leg in a collision with an omnibus while riding a horseback from a fire was awarded a gratuity of £10 by the Fire Brigade Committee, which claimed that riding horseback was not part of a fireman's duty. An appeal for compassion from his colleagues was rejected.³²

Long hours were the firemen's main complaint. Most comparable workers in industry worked the 56-hour week, yet firemen professed to having consistently worked between 60 and 72 hours without leave. One second-class fireman complained that staff shortages meant that 'I have been a whole week without having my clothes off,' which meant sleeping whenever he could in his boots.³³ Another former third-class fireman, William Wheeler, in a letter addressed to the Chairman of the Fire Brigade Committee, explained his decision to resign:

I myself have gone out four consecutive nights in the depth of winter on escape duty and each morning upon my return... (which has lasted thirteen hours) I have had the general work of the station to do... Such work lasts invariably till dinner time, and I have made a point of taking my clothes off and trying to sleep... Such rest, I am sorry to say is not often of long duration, for often before I have been in bed half an hour my bell has been rung for me to attend a chimney on fire which perhaps lasts till tea time [after which]... I have had to get ready to go out in the streets for another thirteen hours.³⁴

Under-strength, and facing high turnover because of his tyrannical regime, Shaw was compelled to postpone off-duty time and force his men to man the fire escape stations all night before returning to do station chores during the day. Although they would not publicly criticize Shaw's intolerable regulations, the firemen's testimony was replete with suggestions that any misdemeanours counted against their prospects for promotion and a guaranteed pension.³⁵

Chaired by Henry Selwin-Ibbetson, a sympathizer of police reform, the Select Committee recommended, like its predecessor in 1862, to amalgamate the capital's police and firefighting forces. Drawing on the example of Liverpool, Selwin-Ibbetson urged that amalgamation would create a reserve of 10,000 police-firemen who could be called upon during emergencies, which would give the permanent firemen greater respite. It would also bring the Metropolitan Fire Brigade in line with the Metropolitan Police's disciplinary code, which was not as punitive. The Assistant Police Commissioner agreed with the Select Committee and proposed that every police sentry box be fitted up with fire hose so that constables could tackle small fires on their beats without having to send for the over-worked firemen. Only by co-ordinating resources could London avoid a conflagration on a similar scale to Chicago's in 1871, in which 18,000 buildings were destroyed at a loss of around \$200 million within a burnt district that exceeded 2000 acres. Over 28 miles of streets, 120 miles of sidewalks and 2000 lamp-posts were destroyed, and the death count numbered 300. As a disaster that brought the dangers of modern urban life to an international audience, Selwin-Ibbetson feared that his city was teetering on the brink of a disaster of its own.³⁶

Policemen as firemen

Although it undoubtedly remained an economical option for many provincial municipalities, the police model of employing policemen to extinguish fires faced sustained criticism during the late 1870s from professional firemen and policemen alike. According to Mayne's successor as Metropolitan Police Commissioner, Lieutenant-Colonel Sir Edmund Henderson (1869–86), the policeman's role during fires was to maintain public order and allow the firemen room to work, not to fight the flames. Captain Shaw and his Fire Brigade Committee agreed, successfully blocking Selwin-Ibbetson's proposal. Another proposal to amalgamate the forces was defeated in 1882.³⁷

On the contrary, Shaw argued that London should emulate the experience of major international cities. Chicago, for example, had formed a professional and independent fire brigade in the aftermath of its great fire, as had most large American cities by the mid-1870s. Paris, meanwhile, was protected by the Sapeurs-Pompiers, a highly trained and mobile branch of the French army. As a 'corps d'élite' that adopted the army's ranking structure and nomenclature, its firemen were recruited from the ordinary infantry regiments and their pay aligned with that of

the army. Discipline was pivotal to its firemen's reputation for being, in Shaw's words, 'if not the best, very nearly the best, firemen in Europe'. Berlin, meanwhile, was protected by a Royal Police Fire Brigade, which was a highly trained and technically proficient body comprised of skilled firemen.³⁸

Police fire brigades were attacked for being the products of municipal economy. Manchester's Chief Superintendent, Alfred Tozer, recognized the important subsidiary role that the police played during fires, but insisted that they remain operationally distinct bodies. Senior policemen, like the Home Office's Inspectors of Constabulary, questioned the validity of expecting a chief constable to double up as a superintendent of firemen. Moreover, employing one or two trained firemen to direct the policemen during firefighting operations, like in Brighton and Norwich, did not constitute sufficient control because policemen did not automatically make good firemen: 'the former is a big man, of commanding presence, thoughtful and slow to act; the latter is of the middle height, wiry, intrepid and quick in movement.' Police fire brigades undermined the modernizing ethos of the independent brigades because they implied that firefighting was an 'additional' duty that could be performed by anyone in uniform.³⁹

The police model was discredited in August 1878, when Birmingham's under-strength police fire brigade disastrously failed to rescue a family from a burning confectionary shop in the town. In the absence of effective policing, 'a large, disorderly and excited crowd' formed of 'regular roughs', who attempted to rescue the family by tearing down the shop shutters to force an entrance, which inadvertently fanned the flames. The town's wooden fire escape then caught fire, hindering attempts to rescue a 3-month-old child, who was dropped 15-feet to the pavement by a constable, and later died in hospital. The head of the household, Joseph Dennison, was the sole person to escape. His wife, 'overcome by fright', passed out from excessive smoke inhalation, before herself falling 'with fearful violence' to the ground, 'amid a horrified yell from the crowd'. The charred bodies of their older daughter and maid were found the following morning.⁴⁰

Acting on the borough coroner's damning report, the Home Office and Local Government Board forced the Town Council to separate the two departments. Much to the Council's embarrassment, the effectiveness of Birmingham's police force, water supply and, more generally, its ability to self-govern were questioned by the state's agents: 'in one important department of local administration Birmingham is lamentably deficient, and has need to put its house in order.' Ashamed

of their neglect of the fire service, Chamberlain and his colleagues shunned the family's funerals.⁴¹

Such vilification was sustained, although it was clearly partisan in intent. It was also a reaction to the Council's failure to arm the firemen with appropriate artillery for rescuing ratepayers from their burning beds. The firemen themselves escaped blame because their disorganization reflected bad management rather than a lack of commitment. The Watch Committee itself admitted that the firemen 'did their duty as well and as expeditiously as the circumstances permitted', but their defeat was the result of incompetent officership, rather than the firemen's own failings.⁴² By discrediting the police model of firefighting, Birmingham's experience reinforced the narrative of the ideal fireman as a paid, independent worker with identifiable skills, who was prepared to perform feats of everyday heroism.

Firemen as heroes

The people have proclaimed that he who has just departed was as surely a great warrior and a great general; that his whole life was as truly a great campaign as if, with a field-marshal's baton in his hand, he had withstood the shock of hostile armies and hurled his columns on advancing legions; that after a whole life spent in his dread elemental warfare, he fell as fitly and as nobly as any captain ever did when leading on his men to victory.⁴³

The Morning Chronicle's report on James Braidwood's death in 1861 established a set of criteria by which exemplary firemen heroes could aspire to behave in order to be distinguished from ordinary firemen. All firemen were deemed to exhibit the traits of everyday heroism – 'bravery, gallantry, intrepidity, daring, courage, boldness, magnanimity, [and] self-sacrifice' – by doing their job without recognition or reward, but only a minority were ever publicly revered or rewarded for their heroism. Firemen heroes, first, had to withstand the full horrors of combat by performing warrior-like feats on the battlefield. They were not found squirting water onto flames from the street, but were in the thick of the action, directing the hose at the seat of the fire, rescuing women and children trapped by the flames, and putting their own lives at risk beyond the ordinary limits of 'enforced duty'. Firemen heroes, like London's William Wheeler who saved nine lives from fires during his 6 years' service before resigning because of 'the continual strain of duty both physical and mental', pushed themselves beyond their mental and

physical limits.⁴⁴ Heroism, like the fireman's masculinity, was a trait that had to be earned through regular physical and mental performance, and was never an innate feature of his manhood.

The exemplarity of Braidwood's existence was taken as a model for transmitting a set of moral qualities to other aspirational firemen, as well as working men and boys more generally.⁴⁵ One much-quoted incident occurred when he was superintendent in Edinburgh. Attending an ironmongers' fire in 1830, Braidwood approached two firemen hosing the flames and allegedly asked them if they 'would like to take their breakfast in Fife this morning; because there is a barrel containing gunpowder in your neighbourhood.' Braidwood then calmly entered the burning building, 'lifted the cask of gunpowder on his head, and called on the men to play the water on him'. Risking his life to protect his men, he safely retrieved the cask and averted an explosion. Exhibiting the 'cool judgment' and 'steady courage' that he identified himself as character traits of the ideal fireman, Braidwood was presented equally as 'a great warrior' and 'a great general'.⁴⁶

Second, firemen heroes also needed to spend 'a whole life' nobly fighting this 'elemental warfare', that is they had to be fully devoted to giving their lives to the service. Braidwood's feats spanned a career of 37 years and were born and extinguished in the horrors of great fires. As the original career fireman, who never abandoned his post of duty, his heroism was not based on a single incident, but was both cumulative and eternal. Third, firemen heroes had to emulate Braidwood's 'inexhaustible energy', 'enduring vitality', 'superior mind' and his will to lead his men to victory. A devout Church-goer, such characteristics were strongly linked to his 'deep Christian feeling' by writers who noted its echoes in his philanthropic work for ragged schools, as well as his daily duties. Braidwood provided the moral compass against which all other firemen were measured.⁴⁷

Despite serving for 34 years in Belfast and London, Captain Shaw never matched up to Braidwood's reputation. First, he suffered two serious injuries, both involving falls from heights, which restricted his physical capacity to fight fires. Officers who stood outside burning buildings marshalling the men who risked their lives within were not seen in heroic terms by either the general public or the firemen themselves. Second, his reputation as a playboy – symbolized in the Gilbert and Sullivan opera *Iolanthe*, in which the love-sick fairy queen sings for 'Oh Captain Shaw' to 'quench my great love', as well as his citing as a co-respondent in a divorce suit in 1886 – raised doubts about his moral fitness for sharing Braidwood's untainted heroic reputation. Third, his decision to

retire in 1894, following a breakdown in relations with his employers over their interference in brigade management, stymied any chance to memorialize him as a supreme fireman-hero who died at his post of duty. This was noted in an editorial in *The Fireman*, the earliest periodical devoted to the service: 'Whether he ever attained the supreme excellence... which his predecessor exhibited, whose firemanship was of wonder of competent critics, is a matter of opinion which we should hardly care to decide.' Shaw may have been a gifted and disciplined organizer of firemen, but he was not a heroic fireman.⁴⁸

Self-sacrifice during dramatic moments like rescues or raging infernos arguably ascribed greater cultural significance to a fireman's exemplary heroism. Firemen's lives were memorialized in a variety of ways, including poetry, inscriptions, novels, newspaper reports and paintings. Braidwood's death, for example, was recounted in R. M. Ballantyne's boys' novel, *Fighting the Flames*, published in 1867, while Murphy, a Newcastle firemen killed during a chemical warehouse fire, was memorialized in H. D. Rawnsley's *Ballads of Brave Deeds*, published in 1896. Three years later, George Frederick Watt's memorial to commemorate 'heroic self-sacrifice' in London's 'Postman's Park' provided a permanent reminder of two firemen heroes, both of whom had died rescuing women and children from burning properties.⁴⁹

The decision to make paid firemen responsible for saving lives as well as protecting property reflected broader social and cultural attitudes. The decision to municipalize life saving formally aligned municipal government with the heroic deeds of firemen. In Manchester, the police had originally manned the single fire escape, but, following a fatal house fire in November 1862, Tozer convinced the Watch Committee to transfer control to his firemen. Within a year, his men attended large fires with a first response of fire-engine, hose cart and fire-escape.⁵⁰ The Metropolitan Fire Brigade also assumed responsibility for life saving in 1867 when it took control of the RSPLF's apparatus and conductors. Similar decisions were made in Leicester, Glasgow and Birmingham during the 1860s and 1870s. Life saving became part of the fireman's professional identity, which meant that negotiations between senior officers and their employers over the provision of fire escapes and breathing apparatus became as integral to the service's modernization as were concurrent debates about fire-engines and water supplies.

Fire rescue narratives also used the gendered exclusivity of the firemen's profession to re-assert patriarchal values by focusing on cases when firemen saved women and children. For example, the hero of *Fighting the Flames*, Frank Willders, saved an elderly woman after forcibly

entering her bedroom during a night-time fire. By combining the physical traits of grit and muscle with the traditional masculine role of protecting women, Ballantyne juxtaposed Willders's strength and courage with her frail, frightened form. Similar scenes were visually depicted in paintings such as John Everett Millais's *The Rescue* (1855) and Charles Vigor's *Saved* (c.1892), the former showing a London fireman returning three children to their frantic mother, and the latter depicting a fireman carrying an unconscious woman, dressed in night attire, from a burning building.⁵¹ Newspapers depicted real incidents in a similar manner, contrasting the erratic behaviour of women and children with the calm assuredness of the fireman. One of Watt's sacrificial heroes, Joseph Andrew Ford, single-handedly rescued six people from a fire above a chemist's shop in 1871, climbing the escape ladder on each occasion to individually carry them to safety. Newspapers reported how Ford, 'scorning the perils of his adventure', calmly worked beyond the demands of ordinary duty by climbing through fire to rescue the sixth person, a woman 'maddened with fright'. On his descent he got tangled in the wirework of the canvas chute and, having safely dropped the 'hapless creature' into the arms of a waiting crowd, was roasted alive.⁵²

Ford's 'martyrdom' reinforced the gender order and was depicted as indicative of all firemen 'who risk their lives and "die daily"'. Deploying quintessentially heroic symbols, London newspapers described him as a 'gallant fireman', his 'heroic action' indelibly marked by 'the sacrifice of his own life'. They reported Captain Shaw's statement that Ford was 'a respectable and trustworthy man, and in all respects an excellent servant of the Board', before drawing broad lessons from the dramatic moment, emphasizing that Ford's social status as a man 'of humble birth... tells us... that moral valour is of no particular class nor of any particular clime'. As disciplined and uniformed public workers, firemen like Ford and Willders proved their heroism by doing their manly and moral duty, which was inscribed onto their broken and bruised bodies.⁵³

Narratives of firemen's deaths thus bridged the gap between heroic and working firemen by bringing their actions to the attention of their employers. Sensitive to the public exaltation that had existed since Braidwood's death, fire brigade and watch committees passed resolutions recognizing the bravery of individual firemen, granted pensions or gratuities to their widows and, in a limited number of cases, provided public funerals for their fallen heroes. Recognizing the symbolic display of a fireman's funeral for its own authority, the Metropolitan Board of Work's Fire Brigade Committee awarded Ford a public funeral, which was attended by 'many thousand persons', who all shared in 'nothing

but lamentation and woe' for this model worker. His cortege echoed Braidwood's in its composition, and he was interred in the same cemetery. *The Era* contended that 'a greater feeling of respect has never been evinced upon the death of a public servant who died at the post of duty since the funeral of the late and much respected Mr. Braidwood.' A public subscription duly raised over £1000 for his family.⁵⁴

For rank-and-file firemen, such rituals masked important grievances. Ford's funeral diverted attention away from their complaints that, first, the arduous working conditions were responsible for his death, and, second, that the Committee used the excuse of the public subscription to deny its own responsibility to provide a permanent pension for his widow. The coroner questioned whether the escape, fitted with flammable wire netting instead of non-flammable gauze, 'was of the best form to preserve the life of the fireman as well as of the person he was trying to save'. Both Captain Shaw and his Committee defended the apparatus, claiming that it was 'in good order'. Ford had not been let down by technology; rather, his own physical strength had failed himself.⁵⁵

As a second-class fireman working in an under-strength brigade, with 4 years' service, Ford often worked a gruelling 16-hour shift performing station duties. On alternate nights he would take a fire escape out, waiting in one of the escape stations for a call. Here he might be able to sleep, but the cold probably kept him awake. In the morning he returned to station duties. He was entitled to one night in bed each week, but was still liable to respond to a fire alarm. This combination of long hours mixed with sleep deprivation went unacknowledged in reports of Ford's heroism. The Fire Brigade Committee commended his 'heroic action', describing him as 'a bright example of self-sacrificing devotion to his duty' for 'his brother officers and comrades' to emulate, but declined to draw attention to the arduous conditions under which he worked. Firemen's anticipations that their feats of bravery might lead to improved working conditions went unheeded.⁵⁶

The Fire Brigade Committee had initially voted to grant Ford's widow and two children a weekly allowance of £1, but withdrew this when the subscription was collected on the grounds that 'it brought to the widow an actually larger income than the pay her husband received while he was living.' This case re-opened gaping wounds for firemen angry that they went unrewarded for long service. The wounds had not healed when, 5 years later, representatives of each rank gave evidence to the Select Committee on the Metropolitan Fire Brigade. They attacked the discretionary pension, complaining that a fireman's service

record, including any minor indiscretion, was held against him when awarding allowances. In one case, First Class Fireman Thomas Sharp was invalidated out of the Brigade through heart disease after 17 years' service. The brigade surgeon certified that his illness was exacerbated by his service, and Shaw reported that 'his conduct has been in every way highly satisfactory,' yet he was awarded a pension of only 16s a week. He died 6 months later, leaving his wife and children destitute apart from a grant of £20. The Committee again defended its decision, describing the pension as 'sufficient, having regard to the length of service and to the pay which he was receiving'. The absence of a guaranteed pension or widows' allowance was recognized by many firemen as the main cause for high turnover within the Brigade.⁵⁷

Heroic and loyal service did not guarantee financial reward, then. The Committee's secretary contended that, although his board was 'very anxious' to award Ford's widow a pension for life, 'it would not be right to increase her income further' than the subscription collected.⁵⁸ While Braidwood's death had created a set of criteria against which a fireman's action could be measured to determine his heroism, it enabled employers to divert public attention away from the firemen's complaints. The public funeral had been established as the ultimate symbol of the heroic fireman's veneration, but it masked the realities of his calling. Reports on heroic deeds might have elevated the fireman's reputation among a munificent public, but it only brought limited material benefit for his profession.

Conclusion

It suited municipal governments to align themselves with portrayals of firemen's heroism. Within popular culture, the fireman was a hero first and paid worker second. Newspaper reports, memorials, poetry and paintings emphasized the social and cultural virtues of being a fireman, deflecting public attention away from the financial rewards. Although this was a risk worth taking, it could backfire with important implications for municipal government. When errors were made during fire rescue operations, as at Birmingham in 1878, the firemen's courage and dedication to duty were not questioned. Exonerated from blame, firemen's physical or mental failings were the fault of parsimonious municipalities and obstreperous crowds who were guilty of obstructing their activities through either under-investment or over-enthusiasm.

The tales of James Braidwood's bravery, including his death at the Tooley Street fire in 1861, became staple stories in fire service lore as early

as the mid-1860s. In turn, they acted as an allegory for the multitudinous stories of other serving firemen. They also inadvertently helped mask the realities of the fireman's calling. Municipal firefighting was an arduous occupation, demanding long hours, uncomfortable working conditions and dangerous work. As a closed profession, in which senior firemen openly discriminated in favour of particular types of workers with specifically ascribed skills and physical attributes, the fire service was difficult to enter, but easy to leave. By the end of the 1870s, fire brigades were beginning to suffer from low morale and poor retention rates, but they faced few difficulties in filling vacancies. The public image of the ideal fireman as a courageous, at times heroic, public servant with a regular wage guaranteed this.

If Braidwood's death signalled the passing of the private fire service, Birmingham's fire discredited, without dismantling, the dominant paradigm of the police fire brigade. It was now recognized by senior firemen that firefighting and policing were separate vocations that demanded varied skills performed by independent workers. The chief advocate of this view, Birmingham's newly appointed chief superintendent, Alfred Robert Tozer, would play a leading role in the professionalization of the fire service around the turn of the twentieth century. As we shall see in the next chapter, the development of firefighting as a professional service with shared cultural values became institutionalized during the early twentieth century. At the heart of this movement remained the fireman.

5

Building a Professional Fire Service: The Rise of the Chief Fire Officer, c.1879–1914

In the aftermath of Birmingham's fatal fire in August 1878, an independent fire brigade was formed under the town's first permanent chief superintendent, Alfred Robert Tozer (1879–1906). The son of Manchester Fire Brigade's chief superintendent, Tozer systematically re-structured and modernized Birmingham Fire Brigade during the 1880s and 1890s. Upon his death in 1906, he had, according to his Watch Committee's resolution, established it as 'very high among the fire brigade services in this country'.¹ Following his appointment, Tozer convinced his employers to ratify various expensive reforms through which he transformed the brigade's structure. Most of his ideas emanated from his observations of firefighting organization under his father. Similarly to Edinburgh and London, the Birmingham Fire Brigade was re-organized into divisions to decentralize operations and speed up response rates, with hose carts adopted as the first line of attack. Other appliances purchased included a horse tender similar to that used in Manchester, a telescopic escape and a plethora of stand and branch pipes, hand pumps, alarm bells, ceiling hooks, pocket lines and axes, all designed to improve brigade efficiency and boost its public standing. Shortly after, Tozer adopted the telegraph and street fire alarms to improve brigade responsiveness and flexibility.²

Like other firemen, Tozer was a local authority employee, subject to the social and political authority of his elected employers. He was also a career fireman, appointed to his post by merit and devoted to building a professional vocation. In this sense, Tozer's professional ideal fulfilled Perkin's dual criteria of building 'trained expertise' and 'selection by merit' into the fire service's agreed conventions.³ In his pursuit of professional recognition for the service, Tozer frequently reminded his employers of the specialized nature of firefighting. To become a good

fireman by the 1870s demanded specialized training and skills, a technical aptitude to handle complicated machinery and a strong work ethic founded on self-discipline and collective organization. It was this combination of skill and discipline that informed the late Victorian fireman's professionalism.

Senior firemen like Tozer aligned labour specialization with professionalism. In order to be guaranteed the material benefits of their profession, which included a regular salary on a sliding scale, a guaranteed pension and other fringe benefits like paid holidays and sick leave, professional firemen sought to differentiate firefighting from urban policing in an operational and administrative context. They insisted that the principle and practice of the police fire brigade undermined the construction of a meritocratic fire service. Professionalism was dependant upon operational and administrative independence by the late nineteenth century. When translated into firefighting vernacular, this meant that subservience to a senior police officer weakened the fireman's autonomy. Independence, on the other hand, guaranteed security, granting the incumbent the right to criticize or proffer advice 'without fear of the consequences', as long as it was founded on professional knowledge.⁴

This chapter examines the motives and methods of senior firemen in their efforts to unite an existing medley of disparate fire brigades into a professional fire service between the 1870s and 1914. These firemen, who re-styled themselves as chief fire officers or firemasters around the turn of the twentieth century, sought to construct a modern fire service with working conditions and fringe benefits commensurate with other uniformed working-class services like the police and the post office.⁵ They asserted their own professional credentials among their local authority employers, before establishing an integrated associational culture through which their professional credentials and technical knowledge could be disseminated nationally. Within this framework, they interacted with other professionals, including architects and insurance agents, but also volunteer and retained firemen who provided numerical and moral support to their cause.

The chief fire officer

Alfred Robert Tozer was appointed as Birmingham's chief superintendent in 1879. Upon his death in 1906, he was ubiquitously referred to as chief fire officer. The precise title mattered little to Tozer, who, until 1901 when he officially adopted chief officer, signed off general orders to his

firemen using the title superintendent. Rather, it was the cultural significance of managing one of the largest independent fire brigades, whose numerical strength trebled from 27 to 65 permanent firemen between 1884 and 1899, and a leading figure in the nascent fire service, which mattered.⁶ Yet the title demanded obedience and respect from Tozer's firemen, who, as surmised in his obituary, 'knew him as a chief who not only won willing service but one who was worthy to lead'. Following his death, he was publicly lauded as 'second to none as a fire brigade officer', and, in a similar manner to Braidwood, eulogized in heroic language:

Fearless in the discharge of his duties, prompt in action – in him were the characteristics of a thorough Englishman. A hero and a man has passed from our midst, one who was filled with the spirit of a Nelson.⁷

Contemporaries connected Tozer's death, at the age of 52, with the effects that living 'a strenuous life' had on his body, particularly since his duties sent him 'hurrying at the head of his men to all parts of the city at all hours of the day and night'. Indeed, it was while directing his men at a serious fire in March 1906 that he caught a chill, which, combined with a protracted liver infection, caused his death, which was thus described using romantic language similar to that used for other contemporary heroes.⁸ The fireman's heroic masculinity had been conventionally depicted to describe those firemen, like Braidwood and Joseph Andrew Ford, who sacrificed their lives while performing heroic deeds. Now the criteria had been extended to denote those whose bodies were worn down by continued action. For the Edwardians, the meaning of heroic masculinity was cultivated over time, which normalized heroism by placing it within the reach of long-serving firemen who performed their everyday duties nobly and diligently. This inevitably chimed with their nascent professionalism by providing a contrast with social fears about the deterioration of working-class health and fitness in the degenerate slums.⁹

The heroic language of firemen's self-sacrifice contributed to the evolution of the standardized title around the turn of the twentieth century. Once all firemen had the potential to be celebrated as heroes, a minority indubitably felt obliged to differentiate themselves from rank-and-file firemen by being formally designated as chief fire officer. In addition, this trend was stimulated by a cultural shift in the credentials of a professional fire service governed by a corps of expert officers, whose authority was invested in the principles of seniority and meritocracy.¹⁰ In English

and Welsh towns, the title of chief fire officer became common parlance, replacing the older titles of master of engines, foreman, inspector of fires and captain. For example, William Ely (1889–1909) was appointed superintendent of Leicester Fire Brigade in 1889. He was formally designated chief fire officer in 1908 shortly before his retirement. Smaller semi-professional and voluntary brigades also adopted the title to illustrate their commitment to a uniform fire service. For example, William Pett worked his way up the ranks of the Sevenoaks Fire Brigade in Kent from messenger-boy to engineer before his appointment as chief fire officer of Exeter Fire Brigade in 1888, which was a retained body of 20 firemen who worked in the building trades.¹¹

In Scotland the title of firemaster was preferred. Braidwood had initially been appointed as Edinburgh's master of engines in 1824, while James Bryson worked as Glasgow's inspector of fires for a large part of the mid-Victorian period. By 1891, Bryson's successor, William Paterson, had become publicly styled as firemaster in newspaper reports, which represented the extent of his control over the brigade and the public's respect for his professional authority. His fire brigade committee referred to him in similar terms during the mid-1890s. By the turn of the twentieth century, the title was in common use in most large Scottish towns, including Edinburgh, Greenock, Aberdeen and Dundee.¹²

This piecemeal abandonment of traditional titles helped to differentiate these chief fire officers and firemasters from their predecessors, who were more likely to have worked under police control. Police fire brigades were directed by the head (or chief) constable, who liaised directly with his watch committee over firefighting, while a chief superintendent with firefighting experience was appointed to work under his immediate authority. Although the head constables of borough forces lacked the social authority of their counterparts in the counties, David Wall has shown that they exerted considerable operational authority over their regimes by the 1880s.¹³ One can surmise that that this authoritarian approach extended to his control of a police fire brigade. For example, according to its head constable, Captain J. W. Nott-Bower, in his evidence to the Select Committee on Fire Brigades, established in 1899, Liverpool's chief superintendent, J. J. Thomas (1897–1907), was 'in sole charge of the brigade, and responsible to me for its efficiency'. Although it was Thomas's duty to inspect and maintain the condition of the fire-engines, hose reels and fire escapes, Nott-Bower was responsible for them to his elected employers because 'whenever anything is damaged either at a fire or otherwise, he has to report at once to me in order that it may be repaired or replaced.'¹⁴

This dependency relationship placed Thomas in a weak bargaining position because he first had to convince the head constable to submit a report to the relevant sub-committee. When, for example, Thomas recommended an increase to his permanent staff of firemen in 1901, Nott-Bower commented that 'the Brigade is in no worse position now than it has been for the last six years, and that, during that period, it has been found efficient for all emergencies that have arisen.' Having advised the Fire Police Sub-Committee that 'the main question ... is one of expense,' Nott-Bower calculated that investment in firefighting resources would inevitably shift additional funding away from routine policing. It took another two written reports submitted by Thomas, combined with convoluted negotiations spread over 3 months, before the Sub-Committee sanctioned the increase.¹⁵

Having a chief fire officer or firemaster in control, on the other hand, signified autonomy, in practice as well as discursively, over the brigade's operations and administration. Rather than going through an intermediary, the chief fire officer dealt directly with his fire brigade sub-committee, which inevitably speeded up negotiations over resources. He submitted reports directly to his sub-committee, in which he made informed recommendations on operational and administrative matters. For example, Tozer submitted a lengthy report on theatre fire safety to the Birmingham Fire Brigade and Finance Sub-Committee in 1882, and followed this with another on the standards of fire protection in large English towns in 1886, both of which formed the basis for later improvements.¹⁶ Distinguishing between the career fireman, who practised no other profession, and the amateurish police-fireman, who extinguished fires as a subsidiary part of his police duties, empowered the former to establish his credentials as a professional equal in status to the policeman.

It was not just the title that marked chief fire officers out as prominent firemen. Born and raised in Manchester's central fire station, Alfred Robert Tozer was a third-generation fireman. His grandfather, Robert, worked for the Hand-in-Hand Insurance Company Fire Brigade, before its transfer to the London Fire Engine Establishment in 1834, where he served under James Braidwood. His father also learned his trade under Braidwood in London, before moving to Manchester in 1862, where he led the largest provincial fire brigade in the country until his retirement in 1892. Having grown up on fire stations, where he was employed as a messenger-boy for his father, firefighting was a natural calling for Alfred Robert during an age when sons often followed their fathers into the family trade. One newspaper noted that he had been 'born a fireman'.

First apprenticed to Merryweather & Sons, he learned to dismantle and rebuild steam fire-engines, before being appointed chief superintendent of Bristol's new police fire brigade in 1876. Upon his arrival in Birmingham, at the age of 26, Alfred Robert Tozer was already inured in Braidwood's model of uniformed and disciplined firefighting, had a working knowledge of hydraulic engineering and had been convinced of the merits of independent control.¹⁷

Chief fire officers gradually asserted their professional integrity and authority in their relationship with their local authority employers, shifting from a position of subservience to one of mutual dependence by the end of the 1880s. They did so by establishing routine conventions through which their professional judgement was heard. These included the submission of monthly reports to their sub-committee, within which they criticized standards of policing and water supplies during firefighting operations, and highlighted problems encountered with interfering bystanders or delays in securing water at high pressure. Where they once deferred to the social and professional authority of other chief officials, from the 1880s they dealt with them equally. Upon his appointment in Birmingham, for example, Tozer wrote to the water department's chief engineer to complain about the conduct of the turncocks, who were persistently late in turning on the water-mains during fires. He also censured Birmingham's chief constable, a former army officer, in 1880 for the 'insufficient attendance of police at fires within the Borough', and requested an investigation into arrangements to secure the necessary means 'as will be sufficient to keep the crowd in order and at a safe distance from the burning premises'. On both occasions, the Watch Committee sanctioned his action.¹⁸

Another formal convention was his annual report on the brigade's activities. Hitherto circulated among the members of the fire brigade sub-committee only, from the 1880s the report was published and disseminated within the nascent professional network. Local newspapers and trade journals printed abridged versions, within which the brigade's activities were recorded in detail and were sometimes accompanied by an editorial reflection in which the chief fire officer was extolled for bringing it to a state of efficiency. This was the case with William Ely, in an editorial comment in the trade journal *Fire and Water* in 1893, which conceded that he had 'done more towards making the Leicester Fire Brigade an efficient organization than any other person'.¹⁹ An observable link was thus established between the chief fire officer's leadership credentials and his brigade's operational effectiveness, in contrast to

those police fire brigades such as Liverpool's, where the head constable authored the annual report.

The annual report materially contributed to a growing discourse of professionalism. By incorporating statistical tables – which reported the numbers of fires, their causes and locations, the time and season in which they occurred and the level of insured and uninsured loss – chief fire officers directed the deployment of resources, while asserting their right to quantify, regularize and systematize the study of fires. This new strategy, which has been described by Patrick Joyce as 'governing by numbers', entailed the chief officer to reinforce his growing power-base and regulate the creation and diffusion of knowledge about firefighting.²⁰ Increasingly self-aware of their professional authority, chief fire officers like Tozer mixed quantitative evidence with qualitative statements to assert their professionalism:

It is due to the Chief Superintendent to state that the marked improvement which has taken place in the conduct, efficiency, and expertness of the men is owing to his exertions in their training, and to his thorough knowledge of the duties of his office.²¹

Annual reports were important tools in governing municipal governments because, through their narrative and statistical comparability, they provided authoritative knowledge to help map the fire service's professionalization.

Tools like the monthly and annual report exemplified the chief fire officers' growing confidence to exploit the public's fascination with heroic firemen. They were aided by improved firefighting technologies, including the piecemeal substitution of petrol for steam engines during the 1900s, which reinforced brigade responsiveness, flexibility and professionalism. The recognition that speed and organization were central to extinguishing incipient fires again came from the chief fire officers, who first read the reports on motorized traction written by experts from the United States and Germany. They then inspected working models at international exhibitions, trialled them locally, and then pressured for their purchase in their reports. Tozer first inspected self-propelling engines at the International Congress and Exhibition of Fire Brigades, held in 1901 in Berlin, which he attended with a deputation from his sub-committee and Chief Superintendent Thomas from Liverpool. Unimpressed by the speed and reliability of the early models, he continued to maintain faith in steam power until his death.²² Within a year,

his son, Alfred Robert Jr., convinced his employers to buy a motorized engine. Transnational technological transfers, which involved the diffusion of innovations and their adaptation to suit local conditions, meant that, to improve their professional knowledge and expertise, chief fire officers had to become policy learners as well as policy teachers.²³

Learning and teaching involved taking informed risks. Chief fire officers staked their professional reputations on particular models, forging working relations with their preferred fire-engine manufacturers. Tozer preferred Shand Mason engines for their power, as did Glasgow's firemasters; Liverpool's chief superintendents preferred Merryweather engines, which tended to be slightly cheaper than their main competitor's.²⁴ The elected members of a fire brigade committee gambled their judgement, as well as the ratepayers' money, on their decisions, which they increasingly made on the professional recommendation of their chief officer. Thus, when an Edinburgh councillor attacked Firemaster Pordage's expensive proposal to replace his entire horse fleet with Merryweather-manufactured motorized plunger engines in 1912, the Convener of the Fire Brigade Committee came to his defence, insisting that Pordage's professional expertise was indubitable:

If he was not looked up to in his own city, he was certainly looked up to in many larger cities in Great Britain, as he had personally discovered. He was a very high authority indeed.²⁵

The risk repaid when, following the first engine's delivery, it was used to supply water to three hoses at a fire in a drysalers, while the remaining nine hoses were supplied by four steam engines.²⁶ By heralding the rise to power of officials, municipal authorities had become infected with a professional ethos that emphasized paid labour and technical knowledge to guarantee an economical and efficient approach to urban administration.

The creation and diffusion of technical knowledge, as well as full-time service, empowered chief fire officers to build and sustain an elevated position within municipal government and the fire service community around the turn of the twentieth century. The elected members of fire brigade committees, notwithstanding their administrative experience, possessed insufficient working knowledge of the internal functions of a steam or petrol fire-engine, the dynamics of firefighting operations, or the disciplinary regulations that governed firemen's actions. The chief fire officer's independence and authority inevitably became defining features of municipal administration because, as the fireman's work became

more technical and time-consuming, councillors were unable to devote as much time to the minutiae of departmental administration. This empowered chief officers to develop sophisticated and hierarchical work structures through which they exerted their superior technical knowledge and professional authority over their employers, as well as their firemen.

A networked fire service²⁷

The chief fire officer's professional authority was contingent, as earlier cases indicate, on the diffusion of ideas, which was harnessed during the late 1870s and early 1880s by competitive periodicals aimed at a professional readership. *The Fireman*, published monthly by the fire-engine manufacturers, was launched in London in 1877 to report on technological innovations, with specific sections devoted to provincial and metropolitan brigades. *Fire and Water* followed in 1884, which was published in Birmingham to provide greater coverage for fire brigades in the Midlands. Together with the fire engineering news chronicled in *The Builder* (launched in 1843) and *Engineering* (launched in 1866), these periodicals helped to construct and disseminate a shared professional knowledge through their reports on the activities and opinions of chief fire officers, their reviews of new technologies, firefighting manuals and drill competitions and their editorial commentaries on the service's professionalization.²⁸

This thirst for knowledge, assisted by a growing sense of camaraderie, brought together professional, retained and voluntary firemen into a network of representative associations from the late 1870s. Aided by the trades' periodicals, which chronicled their work, the motives of these associations were originally modest. For example, the earliest recorded body, the Fire Brigade Association, began in 1877 as a disparate collection of volunteer fire brigade officers whose main aim was to establish a system of inspection and communication across West Yorkshire and Lancashire. Other regional fire brigade associations were established during the 1880s to collate information and encourage mutual solidarity. The largest were in the Midlands and Surrey, where specialized works' fire brigades functioned in the engineering, chemical and brewing industries. The specific experience of private firemen in both preventing and extinguishing chemical fires was recognized by public officers like Tozer, who, as President of the Midlands Fire Brigade Association (1884–7), studied their working practices closely. Tozer learned about the changing fire regimes facing industry, but also provided his

own organizational expertise to create a set of standardized regulations for administering works' brigades.²⁹

It was through the practice of 'learning by doing' that these regional associations amalgamated in 1887 to form the National Fire Brigades Union (NFBU), which had an original membership of 71 brigades. Dominated by the chief fire officers of small- and medium-sized towns concentrated in the Midlands and South-East, its Executive Committee advocated a united institutional front between the volunteer fire service and the professional fire brigades. It did so through annual drill competitions and public demonstrations to promote the standardization of firefighting equipment among smaller town brigades.³⁰ Professional firemen were reciprocal in their support for its work. Captain Shaw accepted its inaugural presidency, while Alfred Tozer publicly endorsed its efforts to improve the standards of volunteer firefighting and establish a widows' and orphans' benevolent fund.³¹

Whereas voluntary firemen were successful in forming a network of fire brigades during the 1880s, professionals were initially reluctant to mobilize in large numbers. In 1882, Alfred Tozer helped establish an association of superintendents among Lancashire's municipal fire brigades, provisionally titled the Firemen's Mutual Institution. All the chief officers of the 'public Fire Brigades' were invited to join, attracted by the provision of practical lectures and inter-brigade correspondence on organizational and technological subjects. However, a lack of interest, particularly from brigades outside of the North-west, caused its rapid demise. Disbanded within 2 years, Tozer commented bitterly that 'The Institution joined the majority from lack of interest.'³²

The NFBU, meanwhile, quickly grew in size and influence through the circulation of its published annual reports and the opening of its competitions to spectators. Within its first decade, its membership increased nearly sixfold to 397 brigades, representing 6579 voluntary and retained firemen. Buoyed by this, the NFBU began to foster political ambitions, and campaigned from 1897 for statutory recognition for independent fire brigades.³³ Although a Private Member's Bill sponsored by the NFBU was withdrawn, a Select Committee was appointed in 1899 to inquire into the standard of fire protection across the country.³⁴ Issued in 1900, its report rejected statutory recognition, as well as proposals to introduce government inspection, standardized training and a uniform pension. Rather, the Committee insisted that such duties should continue to be discretionary. For the professional officers, the Select Committee's failures were systemic because, with the exception of Manchester and Exeter, those brigades that sent senior officers – Liverpool, Bristol and

Nottingham – sent their head constables. These police-firemen, unlike their professional counterparts, already enjoyed the benefits of the paternalistic police service, in particular annual inspection, improved pay and a guaranteed pension, which skewed the Committee's opinion on working conditions. Birmingham was represented by the former chairman of its Fire Brigade Sub-Committee, Joseph Powell Williams, who pragmatically dismissed the need for any external regulation of his town's affairs: 'I should let matters alone, being quite satisfied, myself, that in the course of local government, anything that is deficient will eventually be supplied.'³⁵

Although the chief officers resented their exclusion from proceedings, the Select Committee's minutes of evidence inadvertently discredited the 'police model'. Sunderland's town clerk, for example, was forced to defend his council's refusal to buy a steam fire-engine, which had ended in disaster in July 1898 when the police brigade was forced to fight a major drapery fire armed solely with water pumps and hoses attached to the mains. Once the flames had been exhausted, having spread across neighbouring streets, losses of approximately £130,000 were left among the debris. Meanwhile, Norwich's town clerk defended his police brigade's incompetence during a fire that destroyed a large warehouse, shops and the civic library, including its historic collection of 60,000 volumes. In the absence of competent public controls, the private brigade of the Carrow Works was forced to assume responsibility for protecting the town against fire.³⁶

These cases illustrate the fragmented nature of late Victorian municipal government. Despite being described as the 'golden age' during which a uniform system of municipal government emerged, attitudes towards municipal administration remained driven by the dual pressures of economy and efficiency. Municipal governments continued to observe problems pragmatically, and combined services like policing and firefighting wherever appropriate. In 1903, 43 per cent of English and Welsh county boroughs (these were the top tier of urban authorities, with minimum populations of 50,000, as designated under the 1888 Local Government Act) maintained police brigades, compared to 12 per cent who had independent brigades, 36 per cent retained and 9 per cent voluntary.³⁷ Burdened by spiralling costs, urban finances became a significant determinant of local and national policy-making between the 1870s and 1914. For example, Manchester Fire Brigade cost an annual average of nearly £17,000 in the late 1890s, while Birmingham Fire Brigade's expenditure in 1898 was £11,188, 66 per cent of which was paid out on wages, clothing and interest accrued on loans. As long as

municipalities could continue dovetailing the costs of firefighting into the annual police grant, they were unlikely to support an independent brigade from the rates. Only Powell Williams was prepared to publicly denounce the principle of the police brigade to the Select Committee, insisting that the fire brigade was 'as much separate from the police as the duty of making the roads is separate from them'.³⁸

A united front

Disheartened by their experience with the Select Committee on Fire Brigades, various chief fire officers held a series of meetings in late 1901 and early 1902, during which they discussed forming an association of professional firemen to strengthen their political representation. Negotiations were dominated by experienced officers, notably Arthur Pordage, William Paterson, William Ely, Alfred Robert Tozer and J. J. Thomas. By encouraging firemen to 'exchange their views on brigade matters', these experienced hands aspired to build a professional fire service based on their own schooling in the Braidwood model of uniformed and disciplined fire services.³⁹

Initially shrouded in secrecy, the Association of Professional Fire Brigade Officers of the British Empire (APFBO) was formally constituted in mid-1902 ('of the British Empire' was removed from the title the following year). Membership was open to chief fire officers and chief superintendents of professional fire brigades, including the police fire brigades. Until 1904, though, when they were accepted as honorary members (without full membership entitlements such as voting rights), head constables were excluded. As much a symbolic gesture as recognition of his professional credentials, J. J. Thomas was unanimously elected as its founding president.⁴⁰

During its first annual conference in 1903, held in London, Thomas's successor as president, William Paterson, outlined the association's policy objectives. These broadly involved 'the improvement of the fire service', which, Paterson indicated, was 'best brought about by professionals exchanging views'. More specifically, Paterson identified the extension of brigade powers into 'fire prevention', which provided a further opportunity to cement the service's professionalization. Additional proposals were tabled to help build a uniform fire service, including a guaranteed pension to improve retention rates, a national scheme of vocational education, statutory fire investigations, improved water supplies and the adoption of standardized hose couplings to allow brigades to co-ordinate firefighting efforts. The conference proceedings

were dominated by the chief fire officers from the established professional brigades, while Alfred Robert Tozer was elected an honorary vice-president as a mark of his contribution to the service's professionalization. Once its structural and policy parameters had been established, the APFBO ascertained that a reformed fire service would be urban in its focus, integrated in its strategic approach to fire protection and prevention and professional in its composition.⁴¹

The APFBO's conference was held, at the invitation of the organizing committee of the International Fire Brigade Council (IFBC), to coincide with the International Fire Congress and Exhibition at Earl's Court in London. The IFBC's President, Edwin O. Sachs (1870–1919), attended the conference, where he presented a paper on urban water supplies.⁴² A qualified architect, with expertise in theatre design, Sachs had been intensely interested in fire safety since the mid-1890s. He studied architecture at the *Königliche Technische Hochschule* in Charlottenburg, following which he served as a temporary ensign in the Berlin Royal Police Fire Brigade, before securing a supernumerary commission in the Viennese and Parisian brigades. During these sojourns, Sachs studied continental firefighting methods and, following his return to London, campaigned for a more rigorous approach to firefighting in Britain.⁴³ Thus, the logic behind inviting the APFBO to hold its first official meeting under the patronage of the IFBC was to encourage professional firemen to deepen their practical and theoretical knowledge of preventative strategies for controlling fire.

Sachs came to public attention in 1897 when, in collaboration with fellow architects, engineers and insurance agents, he founded the British Fire Prevention Committee (BFPC), a voluntary organization that aimed to improve the standard of fire safety in building construction. The BFPC was formed in the aftermath of two major fires that collectively strengthened the case for an international approach to fire safety and an integrated strategy for delivering fire prevention and protection services. The first, the Paris Charity Bazaar fire in May, broke out in a temporary wooden building with untreated velaria covering the underside of the roof, killing 124 and injuring more than 200.⁴⁴ Six months later, London suffered its largest fire since the Great Fire of 1666. Beginning in the Cripplegate district, the flames quickly escalated into a conflagration by spreading through nearly four acres of warehousing full of stocks of millinery, trimmings and fancy goods. Forty-one powerful fire-engines from the London Fire Brigade unsuccessfully fought the flames. Losses totalled £1.25 million, and several thousand workpeople, mostly women and girls, were left unemployed. The record of the fire losses in

the Brigade's daily logbook ran over six consecutive pages and meticulously detailed the level and extent of the fire damage. One week later, Sachs founded the BFPC.⁴⁵

The incidence of fire allowed Sachs to implement some of his ideas. His first major study, *Urban Fire Protection*, was published in 1895, in which he challenged the prevailing view that the most effective method to combat fire was to maintain public fire brigades:

In reality the fire brigade, as such, has but a minor role in a rational system of protection. Really well protected towns owe their position in the first place to properly applied preventive legislation based on the practical experience of architects, engineers, and fire experts.⁴⁶

Although he did not specify who he referred to as 'fire experts', Sachs later wrote that royal engineers and professional architects were best suited to act as chief fire officers if fire prevention was to be seriously treated as a science. Furthermore, Sachs opined that, with architectural, engineering or military training, a chief officer's 'social standing' would be elevated to that of a fellow professional. The majority of serving municipal brigades were led by a class of man that, while being 'very fine fellow[s], would unfortunately seem quite out of place in any recognized club room'. Exclusion extended to his own 'club room', since only one chief fire officer, J. Herbert Dyer, of the Alton Volunteer Fire Brigade (and a vice-president of the NFBU) was ever elected onto the BFPC's Executive Committee.⁴⁷

Rather than solely depending on a public fire brigade to respond to a fire alarm, which he derided as one of the 'most expensive items in the system of fire protection', Sachs proposed that the most economical and efficient method to tackle a fire was to install automatic heat detectors and sprinkler installations in industrial and commercial buildings, train and equip workers to stub out an incipient fire and improve the fire-resisting properties of materials and structures: 'Fire protection, as I understand it, is a combination of fire prevention, fire combating, and fire research.'⁴⁸ It was economical to design out fire, or contain it within a single room, rather than rely on a reactive labour-intensive force.

Sachs's views chimed with numerous other fire safety experts. One year after its formation, the association numbered 425 members, including key government departments like the Office of Works, the Factories Inspectorate, professional bodies such as the Institution of Electrical Engineers and the Royal Institute of British Architects, and

representatives from the London County Council and Metropolitan Water Board. A testing station was opened near Regent's Park, where the BFPC's volunteers tested the fire-resistant properties of various products commissioned by fire appliance manufacturers. Between 1899 and 1904, 79 tests were conducted on floors, partition walls, doors, glazing, building materials and fire extinguishers, with the results published in a series of 'Red Books', through which the BFPC garnered a reputation for scientific impartiality.⁴⁹

From the outset, Sachs lionized the standards of firemanship in European fire brigades. He led study tours to German, Austrian and Hungarian cities during the 1890s and 1900s where his deputations studied working conditions and innovative technologies for controlling fire. Special praise was reserved for German municipal brigades in Berlin, Hamburg and Frankfurt, where firemen conducted their own scientific tests to determine stringent building codes and investment in firefighting technologies. These brigades pioneered smart technology like motor traction and the pneumatic ladder, which incorporated operational flexibility, responsiveness and mechanical simplicity. They also adopted the pompier ladder, pioneered in Paris by the Sapeurs-Pompiers, in which the iron-hooked end was sunk into a building's window-sill to allow firemen to quickly climb burning buildings from the outside.⁵⁰

British brigades were slower to adopt this simple device, as exemplified in London's Queen Victoria Street fire in 1902, where the firemen's efforts to perform a rescue were hampered by defective fire escape ladders, which were 10 feet too short to reach the uppermost storey. Eight young women and one man died from suffocation. A vociferous and sustained critique of the London Fire Brigade's 'faulty organization and antiquated plant' was published under the pseudonym 'Phoenix'. Never proven, this 'scurrilous little book', as Blackstone describes it, was widely attributed to Sachs. Unsurprisingly, the London Fire Brigade adopted the pompier ladder in the fire's aftermath.⁵¹

German fire brigades also recruited firemen from the engineering and architectural professions, as well as the military. Lauded as highly skilled professionals, German firemen were responsible for a wider range of technical duties than their British counterparts, including responsibility for factory inspection (not introduced in Britain until 1901) and the safe storage of flammable materials such as celluloid and petroleum (not substantively introduced in Britain until 1909 and 1928, respectively). In addition, promotion to officer class was contingent on passing a demanding examination in either architecture or civil engineering at a royal technical college. It was this combined interest in fire

protection and prevention that, according to Sachs, raised the standards of continental fire brigades above their British counterparts.

Alfred Robert Tozer and J. J. Thomas first encountered Sachs at Berlin's International Congress and Exhibition of Fire Brigades in 1901. The IFBC had been founded the previous year in Paris to foster the transnational diffusion of fire service policies and innovations. Sachs's election as its president in 1902 signalled a new policy agenda by integrating protective and preventative measures. Its 1903 congress at Earl's Court, which was organized by the BFPC and chaired by Sachs, was held in conjunction with an International Fire Prevention Exhibition and Congress. As the largest fire safety event of its kind in the world, the Congress attracted hundreds of delegates from overseas to listen to lectures on building construction, electrical fire risks, oils and spontaneous combustion, fire surveys and fire insurance. They also flocked to view 3630 exhibits of firefighting appliances and fire-resisting materials, and to watch the nightly staged spectacle of a battle against fire, called 'Fighting the Flames', which was arranged by the NFBU and performed by volunteer firemen.⁵²

Among other chief fire officers, Tozer, Thomas, Paterson and Ely attended the Congress and Exhibition, accompanied by delegates from their respective fire brigade committees. Tozer also convinced his employers to send Birmingham's firemen to visit the Exhibition to 'see for themselves the different improvements which were being made in fire appliances'.⁵³ Arthur Pordage presented a paper during the Congress, titled 'Fire-resisting construction from the fireman's point of view', while his Edinburgh Fire Brigade was presented with a gold medal in recognition of its contribution to the development of municipal fire services. William Paterson lectured on a similar subject. Eighty-one towns and cities sent representatives from their fire brigade or council, where there was, according to one report, 'much to be seen and learnt'.⁵⁴

The Congress and Exhibition provided an outlet for the chief fire officers' burgeoning interest in fire prevention, offering opportunities to examine new inventions and debate new methods for preventing and extinguishing fires. Professional firemen's nascent interest in preventative methods was equally discernible in the flurry of articles devoted to building construction and the Factory Acts in periodicals like *The Fireman* during the early 1900s.⁵⁵ Chief fire officers also aligned themselves and their representative association with established international organizations like the IFBC, as well as noted fire brigades like the New York Fire Department and Paris' Sapeurs-Pompiers, which further strengthened their claims to professional legitimacy. Professional firemen were

inevitably attracted by Sachs's connections with European fire brigades, and were prepared to overlook his views on the priorities of urban fire protection. They subsequently invited him to the APFBO's 1904 conference in Glasgow, where he was elected an honorary vice-president and, with Ellis Marsland, the BFPC's secretary, awarded its gold badge 'in recognition of their services to the Association'. In response, Sachs proposed a toast to Firemaster Paterson, before lecturing his uniformed audience on the lessons to be learnt from Chicago's Iroquois theatre fire in December 1903, in which 602 women and children died following a mass panic.⁵⁶

Chief fire officers returned to their stations after the Congress and Exhibition imbued with a heightened professional self-assurance and a sense of their place in a networked fire service. Extolling the virtues of a preventative approach to deal with fire in their monthly and annual reports, they stressed the advantages of extending their regulatory powers over building construction and proposed establishing fire prevention departments responsible for enforcing safety regulations. In Birmingham, Tozer produced a revised set of conditions of service for his firemen, which also contained hints on life saving and measures to control 'specially dangerous risks' posed by electricity, gas, celluloid, petroleum and sulphuric acid. Thomas followed suit in Liverpool. Tozer also instituted a scheme of drilling for firemen in theatre fire safety; following this in 1905 with the appointment of his second eldest son, Charles Wright, as visiting officer with responsibility for inspecting the city's places of public amusement. From 1905, having learned valuable lessons from the Iroquois fire, theatres were inspected for fire hazards on a monthly basis in Birmingham, Edinburgh and Glasgow, while theatre staff were instructed in their use of fire extinguishers.⁵⁷ Senior firemen clearly read Sachs's writings and observed the BFPC's activities with considerable interest, before adapting those ideas to fit their professional ambitions. This relationship suited Sachs, who conceded the potency of the municipal fire brigade in his aim to popularize fire safety.

Fire prevention had become a powerful weapon in the chief fire officers' arsenal to establish the British fire service on an independent and professional footing. However, this united front with organizations like the BFPC only lasted while they depended upon it for their professional authority. A critical editorial on the Earl's Court Congress published in *The Fireman* recognized this unstable relationship:

... the number of people who are now prepared to instruct the most experienced firemen how to extinguish fires and to tell engineers

who have devoted their lives to the work how to design and make fire apparatus is greater than it ever was before... These are the people who flock to congresses and connect themselves with societies; meanwhile the men who know and do go quietly on with their work, and the extinguishing of fires is accomplished, as usual, without any visible alteration of method.⁵⁸

Firemen learned their trade experientially 'in the stations and on active duty', not in the congress hall or laboratory, however much they might be indebted to Sachs and the BFPC.⁵⁹ Firemen had become professionals 'in their own terms'. An expert might predict the nature of a fire, but it was the 'shared understandings' of active firemen who entered burning buildings, however intense and dangerous a fire might be, that created the British fire service.⁶⁰

Conclusion

It was between the late 1870s and 1914 that the chief fire officer knitted together a disparate collection of fire brigades into an independent fire service. In the process, the chief officer's visibility, knowledge and professional connections superseded social substance as the main marker of elite status, contrary to Edwin O. Sachs's assumptions. Chief officers like Alfred Robert Tozer, Arthur Pordage and William Paterson harnessed their technical knowledge to present their arguments objectively, in order to raise their service's professional status as much as to improve their individual working conditions. The extension of their authority was assisted by the activities of professional associations, which had become, by 1914, an accepted feature of policy-making and learning.

The chief fire officer was a pivotal figure in the fire service's professionalization because he commanded unprecedented public support beyond that enjoyed by other municipal officials and, with a few exceptions, rank-and-file firemen. The increasing public and professional recognition of his expertise gradually strengthened his position locally and, ultimately, rendered the fire brigade his personal fiefdom. It also plugged him into an emerging international community of firemen and firefighting technologies, which secured the fire service as a public profession.⁶¹ Once professional authority had been secured by the turn of the twentieth century, the chief fire officer was duly empowered to diversify his service's working culture by entering the specialized and differentiated field of fire prevention. Conventionally the domain of architects, engineers and insurance officials, who, as Sara Wermiel has shown in her

study of fireproof construction, increasingly looked overseas for ideas to contain fire within buildings, chief fire officers acted on their growing reputation for professional expertise by casting fire prevention as an indispensable public service, albeit secondary to fire protection.⁶² In so doing, they cemented fire protection and prevention as mutually dependent responsibilities.

Associations like the APFBO, NFBU and BFPC were also mutually dependent in their quest to extinguish and prevent fires. The scientific testing of building materials built a corpus of technical knowledge that informed the chief officers' reports, and brought fire prevention and protection experts into closer proximity during the 1900s. Meanwhile, Sachs lacked the popular legitimacy and visibility of Tozer, Pordage and Paterson, who were able to promote fire safety to a wider public audience than the BFPC's 'Red Books'. Consequently, their views were increasingly sought and proffered on factory fire safety, high-rise building construction and theatre protection. By the outbreak of the First World War, the chief fire officer had methodically extended his control over his profession. The modern fireman viewed himself not merely as a firefighter, but as a fire engineer, responsible for promoting fire safety as well as extinguishing fires.

6

Rational Reform in an Age of War: Creating a Modern Fire Service, 1914–38

By the outbreak of war in 1914, chief fire officers like Alfred Robert Tozer Jr., Henry Neal and Arthur Pordage had made significant inroads locally into municipal administration. Through their regular reports to their elected employers, as well as their participation in a burgeoning associational network, these firemen asserted influence in determining standards of fire protection and prevention within their nascent profession. The British fire service's institutional roots were put down in this diffusion of the cumulative experience of extinguishing and preventing fires, and drew together those professional fire brigades that were independent of police control, as in Birmingham, Glasgow, Edinburgh and Leicester. The modern fire service was destined to be both professional and local.

If the fire service's institutional roots were sown before 1914, it was during the successive period to 1938 that they became distended. With its unprecedented resource demands on fire brigades' manpower, the Great War provided the first impetus to establish uniform operational standards and conditions of service. It also brought the organization of fire brigades to the attention of policy-makers within central government.¹ By 1919, the chief fire officers' two service associations, the Association of Professional Fire Brigade Officers (APFBO) and the Institution of Fire Engineers (IFE), had usurped the British Fire Prevention Committee (BFPC) as the leading advocates of structural reform. Consequently, they intensified their efforts to build a fire service on their membership's terms. They did so by conducting a national campaign to sever the resented ties between policing and firefighting. Only with operational and administrative independence, their leaders insisted, could professional firemen construct a service capable of

responding to national defence needs without becoming an agency of central government.²

In the short term, the chief officers were partially successful in fulfilling this objective. They convinced an indifferent Home Office to accept firefighting as a legitimate public duty under the administrative responsibility of local government. The 1938 Fire Brigades Act statutorily recognized firefighting, but not fire prevention, as a locally prescribed service. Yet municipal governments retained discretion to organize manpower according to local circumstances, which inevitably provided a stay of execution for the police fire brigades during a period of public sector spending restrictions.³ No radical thought permeated service administration or delivery; firefighting was simply accepted as the legal duty of local government, which obliged the firemen to persevere with their own modernization agenda. Although grassroots reform had to wait another 3 years in many belligerent local authorities, when the police fire brigades were ignominiously abolished, the modern fire service, professionally structured and locally organized, was effectively created between 1914 and 1938.

The wartime impetus for reform

The First World War heralded the first attempt to nationally co-ordinate standards within the British fire service. Under-strength fire brigades, drained of labour power following the resignation of hundreds of young firemen to serve their country, struggled to control the heightened threat posed by fires. In August 1914, over 200 London firemen, many of whom had remained on the naval reserve list after leaving the sea, were either recalled to the Royal Navy or volunteered for the army. London Fire Brigade was left one-fifth below its authorized strength and forced to rely on firemen who worked for private or voluntary brigades to provide basic fire cover in its outlying districts. Nicoletta Gullace has argued that many men of fighting age were determined to prove their 'loyalty, citizenship and manhood itself' by volunteering their services during the First World War; firemen were no different in this respect.⁴

Labour shortages in London and the large provincial cities were temporarily filled by auxiliaries, many of whom having worked for professional, voluntary and private fire brigades and deemed unfit or too old for military service. In September 1914, the BFPC established a Special Fire Service Force (SFSF) to co-ordinate the employment and allocation of these auxiliaries in fire patrol squads, which would be responsible for watching munitions factories. Dressed in their own

distinctive uniforms to distinguish them from the professionals, with a cap bearing the BFPC badge – an owl emblazoned with the motto *Semper paratus* ('Always ready') – the SFSF secured state recognition as civilian embodiments of the rites and values associated with militarization.⁵

Additional emergency assistance was guaranteed by the Boy Scouts, private fire brigades and local volunteer corps. For example, in Leicester approximately 300 private firemen from almost 30 fire brigades were drafted in to provide emergency support to the municipal brigade, which was deprived of one-quarter of its regular personnel. In Southampton, support came from the 1st Battalion Volunteer Training Corps, whose members were given elementary firefighting training by senior firemen in the town's brigade.⁶ The BFPC simultaneously formed a Fire Survey Force, comprised of engineers, architects and insurance officials, which issued detailed fire and air-raid warnings to improve the safety standards of around 1000 munitions factories and hospitals.⁷

While welcomed nationally, the BFPC's efforts to integrate fire protection and prevention into a single plan of fire control antagonized senior firemen who feared the dilution of the professionalism and manliness of firefighting at the same time that contemporaries ascribed the moral imperative of performing one's manly duty by joining the armed services. Edwin O. Sachs's suggestion that the Boy Scouts could help salvage property, for example, was a direct challenge to the professional fireman's heightened sense of manliness and skill. Boys might learn citizenship skills in observing firemen at work, and absorb the fireman's moral code in making the transition into adulthood, but they were physically and emotionally under-developed to extinguish fires or pull charred bodies from the debris of burned buildings. In consequence, few chief fire officers actually enacted the BFPC's proposals. Henry Neal, for one, invited the local scout troop to visit Leicester's central station, where the boys observed first-hand the manly virtues of teamwork and discipline, but did not include them in his emergency scheme for the town's protection. In other towns, the 'older lads' were drafted in sporadically to help the police keep a free passage for firemen to extinguish fires, as in the case of a cooperage works' fire in Liverpool in October 1914, but only as a last resort.⁸

Angry that it was not consulted by the BFPC, the National Fire Brigades Union (NFBU) severed formal ties, obliging Sachs to resign his vice-presidency. A year later, Alfred Robert Tozer Jr., who was president of the APFBO, publicly denounced the BFPC's interference in internal matters, insisting that it 'has no authority to speak for the public or professional fire service'. Rather, it was the responsibility of the 'modern

fire officer', professionally trained and authoritative, to enact 'defensive or protective methods' to limit 'national loss' from fire. Enlisting auxiliaries or boys undermined the professional fireman's ability to do his job, as well as his campaign for professional recognition and parity with the police.⁹

In response, the BFPC's Secretary, Ellis Marsland, protested that his organization had secured 'full authority...some years' before the APFBO's formation, which ought to guarantee compliance with its work. Undeterred, the APFBO and NFBU banned the SFSF's auxiliaries from membership and stipulated that they wear 'a distinctive armlet' to differentiate them from the professionals. As Corinna Penniston-Bird and Nicoletta Gullace have shown, the wearing of a distinctive uniform, particularly one that was modelled on the armed services, helped the public to distinguish between those men who performed valuable wartime work and those who shirked their moral and manly duty. Armlets had been adopted to protect the medically unfit from harassment and accusations of cowardice, but they also served as a reminder of the wearer's physical inferiority and his qualified citizenship.¹⁰ The fire service's uniform was commonly recognizable whereas the uniform of the SFSF was not, which acted as a barrier between their assimilation. Denounced by the NFBU as 'temporary firemen', and lacking the professional and manly virtues that had become established criteria of 'permanence' within fire service culture, the BFPC's auxiliaries were excluded from both the institutional apparatus and cultural rites of the regular fire service, and quietly disbanded later in the war.¹¹

The APFBO's resolute opposition to these 'temporary firemen' was a necessary adjunct to its campaign against further depletion from the regular ranks of its member brigades. Having rejected suggestions from military chiefs that firefighting could, as a wartime exigency, be ably performed by older men trained in just 6 weeks, the professional fireman would not countenance accepting support from similarly under-trained auxiliaries. Instead, the APFBO's leadership lobbied the War Office for greater controls over the enlistment of firemen of military age to avoid leaving the home front under-protected during any Zeppelin or Gotha air-raids, and to eschew any accusations that firemen were shirking from the defence of the country. In November 1915, the War Office agreed to meet a deputation from the APFBO, following which a public announcement agreed that professional firemen were 'doing as good work for their King and Country...as if they were serving with the Army in the field'. Professional firemen were thereafter regarded as 'already doing work of national importance' and prohibited from resigning from a public fire

brigade without their chief fire officer's written permission, or with any slur on their manhood.¹²

The APFBO had won the argument that a fireman's professionalism was a guarantee of citizenship in a time of war. His professional status had also been defined by learned skill acquired through on-the-job training. Inevitably, rank-and-file firemen agreed. According to one London fireman, in a letter written to *The Fireman* before the War Office's decision had been publicly released, it required extensive experience 'at all classes of fires' for a fireman 'to think and act with smartness and make correct decisions on the moment'. He simultaneously disputed another correspondent's claims that there was 'nothing in fire brigade work, excepting only escape work and hook ladder work, that cannot be done by older men', asserting that auxiliary firemen lacked the physical strength and mental dexterity needed for firefighting:

[Professional firemen need] continual drill and training to keep their limbs supple, their nerve at its best, their bodies hard to stand the strain of turning out of a warm bed and drive at a fast pace through the cold, and perhaps remain wet through with steam and icy-cold water for hours at a stretch at a big fire, to say nothing of the strain while actually climbing up ladders with a few dozen yards of wet hose over the shoulder.¹³

The 'able-bodied' nature of professional firefighting demanded constant physical training over a protracted length of time to produce flexible bodies capable of enduring the intensity of an explosive fire in a munitions factory, in addition to the regular fires in commercial and residential properties. Blurring the distinction between combatant and non-combatant work, firemen depicted themselves as going into battle with fire to defend their nation from attack.¹⁴

Having established its right to represent the professional firemen's interests, the APFBO's Executive Committee turned its attention to institutionalizing the service's interest in fire prevention. At its annual conference in Leicester in 1918, Henry Neal proposed an IFE with responsibility for promoting the theory and practice of fire engineering work. His aim was to incorporate a professional body, separate to the APFBO, to represent firemen's engineering interests, which he anticipated would rank alongside similar vocational associations, notably the institutes of civil and electrical engineers. Fifty chief and second officers from professional fire brigades were invited to become founder members.¹⁵

Neal's decision to establish an independent association formally distinguished fire prevention as a separate issue to the APFBO's campaign for statutory recognition. In practice, though, membership of the two associations overlapped so decisively that fire prevention was inevitably subsumed as a corollary to the political campaign. The 13 inaugural members of the IFE's Executive Committee, under Neal's presidency, were chief or second officers from independent brigades, all of whom were also members of the APFBO. Pretences that firefighting had become as much an engineering issue as an organizational one drove a deeper wedge between the professional and police fire brigades by excluding chief constables, who had no practical or theoretical knowledge of hydraulics, while extending membership rights to the chief superintendents.

It is equally significant that professional firemen refused to become members of the BFPC, despite its credentials in fire prevention. The wartime experience fractured already strained relations between the organizations, leaving professional firemen determined to modernize the fire service on their own terms. Senior figures in the BFPC and the Home Office, which ended the Great War with ministerial responsibility for firefighting, expressed alarm at the gathering momentum of the professional firemen's campaign. Sachs, for example, challenged the IFE's application to the Board of Trade for incorporation, citing his opinion that the proposed institution was merely 'camouflage' for the fire appliance manufacturers working 'behind the scenes' to control the fire engineering market.¹⁶ Sachs's defensive stance reflected the demise in his own personal authority, which was accelerated by failing health and suspicions within Westminster about his German lineage. Vanquished from the organizational realm of the post-war fire service, and increasingly marginalized within fire prevention networks, the BFPC's rapid demise was completed with its president's death, in September 1919.¹⁷

The Home Office's opposition to the IFE's incorporation reflected its officials' conservative attitude towards reform. One of the initial sceptics of an independent fire service was Arthur L. Dixon, the Under-Secretary of State, who expressed anxiety that the IFE's incorporation would trigger a schism between the fire and police services at a time when the latter needed administrative and operational stability. Dixon was particularly concerned at the impact of a separation between policing and firefighting in northern industrial towns, such as Liverpool and Wallasey, where prolonged industrial unrest had precipitated a re-assessment of the police's conditions of service by a select committee chaired by Lord Desborough. Any proposed reform to the fire service was thus examined

within the Home Office for its likely impact on policing resources, as well as its implications for central–local government relations.¹⁸

Labour unrest was temporarily assuaged with the promise of a departmental inquiry into ‘the whole question of fire brigade organization’, with the caveat that only then would Dixon reconsider the IFE’s application for incorporation. This concession promised improvements to the professional fireman’s working conditions, as well as the political legitimacy of his vocation, but Dixon made his administrative priorities clear by stipulating that it would only take place after the Desborough Committee had issued its report.¹⁹ Firemen would presumably be left to fight over the scraps left by reform to the police.

Scraps they might have been, but Dixon’s promise merely postponed the IFE’s recognition. The First World War had provided the impetus for professional firemen to gather momentum in their campaign to establish an independent fire service responsible for preventing fires as well as extinguishing them. Only an independent and integrated fire service could guarantee national protection in the event of a future war, while protecting the firemen’s active citizenship and manliness. For the first time, there were clear signs that professional firemen would get a fire service on their own terms.

Adopting the police model

Lord Desborough’s report into policemen’s conditions of service, issued in 1918 and enacted the following year, established the police as the model of a rational public service. In collaboration with the Chief Constables’ Association, which was the police chiefs’ representative body, and the local authority associations, the Home Office established uniform police regulations under which local forces were managed.²⁰ These encompassed administrative and operational guidelines, which empowered local forces to co-ordinate resources by mutually lending labour or equipment during crises like strikes and political protests. Industrial unrest among rank-and-file policemen was artificially bypassed through the withdrawal of their right to strike, which was offset by substantially improving and levelling their working conditions.²¹

In theory, these new police regulations would be debated and fixed by the newly constituted Police Federation, as the rank-and-file’s representative organ, and the Police Council, which was an advisory body on which the various administrative and operational interests were represented. In practice, decision making rested with the Home Secretary, while implementation was determined by a rigorous system of

annual inspection. According to the annual report of the Chief Inspector of Constabulary in 1919, operational and administrative uniformity empowered the police to 'decentralise for action, [and] centralise for instruction, criticism and record'.²² Anxious about the threat to their powers and prestige, the borough watch committees constituted a standing police committee on the Association of Municipal Corporations (AMC) in 1921 to defend their right to self-determination on the Police Council. A rational police service, insisted senior watch committee chairmen, necessitated the balance of national and local interests, without making local government an agency of national policy.²³

Regulation extended into practice, where policing became synonymous with operational mobility and administrative flexibility. Chief constables embraced technology – in the form of the patrol car, the police box and the wireless – in their operations. The doctrine of 'constabulary independence', meanwhile, recognized constables as legally autonomous professionals, rather than the 'domestic missionaries' of the Victorian middle-class. Inter-war policing remained uniformed, disciplined and hierarchical, but it was also operationally diverse, socially inclusive (appointing limited numbers of female police officers during the 1920s), apolitical and professional.²⁴

Policing became an attractive career option for working men with the award of improved working conditions in 1919. Trading in his right to strike, the professional police constable saw the appeal of job security, a standard rate of pay, rent and uniform allowances, an 8-hour working day and a guaranteed pension in a career pounding the beat. From 1920, a constable started on 70s a week, rising to a maximum of 90s with additional incentives available for good conduct. Skilled workers in comparable industries, such as iron moulding or printing, received significantly less.²⁵

For rank-and-file firemen, as well as their senior officers, the inter-war police provided the model of a rational and economical public service. They contrasted the combination of operational de-centralization, national regulation and organizational professionalism in the police with the fire service's reputation for operational diversity, administrative localism and austere discipline. Policing exhibited the characteristics of a stable and rational service, embracing the 'conservative modernity' that Martin Dauntton and Bernhard Reiger identify as shaping inter-war British political culture.²⁶ Conversely, organized firefighting remained the responsibility of a diverse patchwork of local authorities, ranging from the London County Council and the larger county boroughs to the smallest rural districts and parishes staffed by their volunteer firemen

and manual pumps. This patchwork model was not lost on contemporaries, who identified the anomalies of firemen's working conditions in the uncoordinated system of fire brigade control:

The Fire Service of the country still remains almost exclusively a local one. Efficient brigades are maintained in some of the larger towns, but in many parts of the country no adequate arrangements exist for dealing with serious outbreaks of fire.²⁷

Only with administrative standardization, insisted the professionals, could working conditions be uniformly improved.

It was against this backdrop that the government's inquiry into the working conditions of professional firemen was conducted in 1920. Headed by Sir William Middlebrook, Liberal MP for South Leeds and an experienced local government hand (as a former Lord Mayor of Leeds and Morley), the Select Committee took evidence from rank-and-file firemen, chief fire officers, the president of the APFBO and the general secretary of the recently established Firemen's Trade Union, John Horner (1939–64). John Callaghan, a Birmingham fireman, gave evidence in his capacity as branch president of the Amalgamated Society of Gas, Municipal and General Workers, which, he claimed, represented 'more than two-thirds' of his colleagues. Angry that the city's watch committee refused to recognize the union, Birmingham's firemen had considered joining with their 107 striking police colleagues in August 1919, but had been dissuaded by the threat of dismissal.²⁸

Professional firemen demanded parity with policemen in three areas: pay, pensions and working hours. Progress was evident in pay negotiations; brigades in Birkenhead, Birmingham, Glasgow, Leicester, London and Manchester had adopted the Desborough police scales for most ranks by 1920.²⁹ In his oral evidence, Alfred Robert Tozer Jr. reported how his watch committee graded firemen as constables, station officers as sergeants and district officers as inspectors. He had himself been graded as assistant chief constable. The men were also provided with free quarters: married men got houses in the vicinity of their fire station, while the single men were housed in adjacent dormitories. Additional benefits included travel expenses, free medical care and 9 days' annual leave, all on a commensurate scale to the police.³⁰

Chief officers, frustrated by what Arthur Pordage confidentially denigrated as the 'official apathy' of the Home Office towards their profession, predicted that police parity would irrevocably bring statutory recognition of the fire service. The Middlebrook Committee agreed,

concluding that firemen 'should be treated more or less equal with the Police and more generously than other municipal employees', who were collectively mobilizing for similar motives in unions like the National Association of Local Government Officers (NALGO). Frequently exposed to 'all kinds of weather' and hazards in the workplace, firemen's work was of 'a more arduous nature' than most municipal workers. In so doing, firefighting demanded recruits of 'a sound and healthy constitution' and 'a high standard of technical ability'. Only by improving and standardizing the rate of firemen's pay would every fire brigade be able 'to attract, as well as to retain, a good type of man'.³¹

The Middlebrook Committee similarly concluded that professional firemen should share parity with the police in retirement. Here there were obvious anomalies. Police-firemen had enjoyed the benefits of the guaranteed police pension since 1893, which was underwritten by the exchequer and made them eligible for retirement after 25 years' approved service on two-thirds pay. They also qualified for full pensionable entitlements if they were incapacitated from duty after 15 years. A minimum retiring age of not less than 55 was generally in force.³²

Professional firemen, on the other hand, relied on their own internal superannuation schemes, which were funded entirely from local sources. For example, Birmingham's firemen were awarded a guaranteed pension in 1896, which was funded by the insurance companies' annual contribution to the fire brigade, expenses received for salvage work and a weekly deduction from their pay. A lower scale than the police was adopted because of the absence of central funds, while members were prevented from retiring before the age of 60 unless they were certified as medically unfit.³³ Other schemes were established in London, Leicester, Salford and Derby during the 1890s and 1900s, while a Private Member's Bill, promoted by the APFBO in 1911 to grant parity with the police, was blocked by municipal interests on financial grounds.³⁴

Three-quarters of all professional firemen (approximately 2500 out of a workforce of 3400) received a guaranteed pension in 1920, albeit on a lower scale to the police. Firemen also tended to retire at an older age, with most forced to work into their sixties. In their evidence to the Middlebrook Committee, Tozer thought the maximum age for a serving fireman should be fixed at 60, while Henry Neal advocated 55. Both agreed that firemen lost their capacity for physical labour with age. They also agreed that widows' allowances were meagre. For example, two experienced Birmingham firemen had been killed by asphyxiation during a gasworks' fire in 1919; their widows were granted the maximum

rate of £15 per annum, which Tozer criticized as 'too paltry for the dependents to live on'.³⁵

In those professional brigades where the award of pensions was dependent on their employer's discretion, notably in Glasgow and Birkenhead, firemen complained that they were being forced to 'hang on till they are ready for tumbling into the grave'. Glasgow's Firemaster, William Waddell (1909–28), urged the Committee that it ought to be his men's professional right to a pension 'at least as favourable as that enjoyed by the police'. Neither length of service nor age qualified Glasgow's firemen for retirement; rather, 'a superannuation allowance will only be given when a man is certified as incapacitated for further service.' Peripheral benefits like the introduction of a special merit class and the award of long service medals after 20 years' service recognized the incremental nature of firefighting as a career, but struggled to paper over the cavernous cracks that were widening between Glasgow's firemen and the Corporation.³⁶

Convinced by the evidence submitted, the Middlebrook Committee recommended a uniform pension scheme, which would entitle firemen to retire without medical certification after 25 years' service. Its report proposed incorporating the model adopted by the Local Government Board's 1919 inquiry into local authority workers' pensions, which, while not providing the right to retirement on the same terms as the police, did at least formally guarantee superannuation. However, police parity would be established in cases of disablement and widows' allowances. Fifty-five was recommended as the maximum retiring age for all ranks up to station officer, with 65 the preferred age for senior ranks.³⁷

Foremost among the firemen's complaints was the impact of long working hours on their domestic lives. The police had been awarded an 8-hour working day in 1919, yet most firemen worked continuous duty, with 1 day's leave in every 7 to 10. This was typically divided into a 12- or 16-hour day shift of station duties followed by 'stand-by' service at night, during which the men could rest, but remained liable to respond to any call. Being constantly on call, with electric bells fitted in his house or quarters to raise the alarm, a fireman's domestic independence was strictly controlled and his familial authority undermined. One Glasgow fireman, John Banks, commented in his evidence that, of the 28 men who joined the brigade with him in 1897, only eight remained. Living with his wife, two sons and two daughters in four rooms (comprising two bedrooms, kitchen/living room and parlour) in one of the city's district fire stations, Banks commented that 'Many a good man has left

the service through his wife's ill-health,' which was exacerbated through insomnia caused by 'the ringing of the bells and the rushing about of the men' at night. Far from the stereotypical image of the disinterested husband and father, firemen worried about the debilitating effect that their job had on the health of their dependents, as well as their ability to maintain a standard of domestic comfort: 'When the husband returns soaking wet or in need of clean clothing the wife generally gets up in order to provide dry and clean clothing, and nearly always has to provide hot drinks; so she is deprived of restful sleep.'³⁸

Tozer recognized his men's growing frustration over the long hours: 'They consider that if a policeman only does 8 hours, a fireman should do the same.'³⁹ One newspaper described rank-and-file firemen as 'Municipal Slaves', while Blackstone likened the firemen's confinement to that of domestic service.⁴⁰ Others defended the system. Neal, for example, insisted that the 'spit and polish' engendered camaraderie among his men. Leicester's firemen were kept busy repairing buildings, appliances and uniforms when not performing fire drill or cleaning the station, which brought savings to the city's budget. In his evidence, Neal emphasized the benefits of continuous duty for his men:

They go on at 8 o'clock in the morning when they have had their breakfast. We give them from 20 minutes to 11 to 11 o'clock for a little bit of lunch and a smoke to break the morning; then they have the full dinner hour and finish at four, when they clean themselves up and perhaps do some of their own jobs at home between 4 and 5.⁴¹

Following evening duties, the firemen were then able to 'stand down'. Although they remained liable to being called out, with an average of 0.65 fire calls a day, disruption was less frequent than in Birmingham, where its firemen were called out to an average of 2.39 fire calls per day. Arthur Henry Wright, a Leicester fireman, confessed to being called out after midnight roughly twice a week.⁴²

Having sifted the evidence, the Middlebrook Committee concluded that the alternative systems to continuous duty were impracticable. To introduce a three-shift, 8-hour working day would require trebling the numerical strength of most brigades, which required a substantial outlay at a time when local government faced severe expenditure restrictions. The two-platoon system, under which two shifts of men would perform 12 hours' duty alternately, would also involve substantial costs, but was resisted by many firemen themselves since half the platoon would have to work at night, missing the opportunity to spend time

with their families. According to Wright, Leicester's firemen were 'very much against' the double shift because 'half our lives we would be working nights. It would be one week days and one week nights.'⁴³ Inured to continuous duty, firemen defended the *status quo*, preferring to trade better pay and leave for long hours since, during a time of housing shortages, they feared losing their subsidized quarters. Conscious of the likely opposition from local authorities to any significant increase in their labour costs, the Committee concluded that continuous duty represented 'the most efficient and most economical' system.⁴⁴

Although the Middlebrook Report was dutifully circulated among local authorities, and generally welcomed by firemen, the Home Secretary, Edward Shortt, refused to legislate any of its recommendations, preferring to leave it 'for the responsible local authority to take action'.⁴⁵ Most of the expensive recommendations concerning pay and pensions were either rejected or postponed by watch committees anxious about forthcoming public expenditure restrictions from the Treasury's Committee on National Expenditure, which were announced in 1921. Others, conscious of the swelling antagonism among rank-and-file firemen, sought compromises. For example, Manchester's firemen were awarded the 12-hour shift system shortly before they were incorporated into the police, while Middlesbrough's firemen were granted a pay rise in return for accepting continuous duty. Frustrated by the government's 'procrastinating policy', the Professional Fire Brigades Association (PFBA), as the APFBO was known from 1920, pushed ahead with its own reforms, publicly campaigning to establish a guaranteed pension and the IFE's incorporation.⁴⁶

Policy inertia continued with Shortt's decision to engulf fire protection and prevention in a convoluted royal commission in early 1921. Overburdened by trivia, the commission held 89 meetings, examined around 100 witnesses and formed toothless sub-committees to go on fact-finding missions. After 2 years of painstaking work, costing over £3000, it finally published its findings. At almost 250 pages, the verbose report contained little substantial policy. Its main recommendations were to statutorily enshrine firefighting as a local authority duty, without national inspection or an annual grant, and provide systematic training for firemen. The Home Office, under pressure from the Treasury to resist saddling the exchequer with additional costs for running the civil sector, shelved the report, where it gathered dust.⁴⁷

On the issue of firemen's pay, the Royal Commission merely concurred with the conclusions of the Middlebrook Committee that professional firemen's pay 'should approximate to that of the police',

recommending that, in the absence of any negotiating body, pay arrangements should continue to be determined locally. Similarly, the pensions of professional firemen 'should be assimilated to those of the police rather than to those of other municipal employees', proposing an amendment to the Local Government and Other Officers' Superannuation Act, 1922, to enable local authorities to apply the police scale to their full-time firemen.⁴⁸ Wholly permissive in character, local interests remained entrenched against the growing tide of uniformity within the professional community. Leading firemen unsurprisingly dismissed the report, with Neal noting that 'many of the most important of these recommendations have been in operation' in his and other professional brigades 'for several years'. Arthur Pordage described it as 'indefinite and disappointing' in making 'no really definite recommendations' to improve either the conditions of service or the standard of fire protection in the country.⁴⁹

Despite rejecting a proposed amalgamation in the aftermath of the Royal Commission's report, the IFE and PFBA persevered in their collaborative pursuit of professional recognition. Incorporated in 1924, the IFE held its first annual meeting in the same year, electing Neal as president and Pordage as honorary secretary. Under a self-fulfilling 'Charter of Emancipation', the IFE supported the PFBA's aggressive campaign for a guaranteed pension for professional firemen, which it achieved in 1925, albeit not on full parity with the police. A guaranteed pension, it was anticipated, would tackle some of the recruitment and retention problems facing local brigades, while heralding the formation of a uniform profession.⁵⁰

The PFBA's leaders condemned the Home Office for its obfuscation during the early 1920s. Although it was forced to kowtow to the Treasury's economy drive, the densely bureaucratic apparatus of the Home Office acted as a brake on consensual reform. Comprised of seven divisions, each under the control of an assistant secretary with a staff of approximately ten clerical and administrative officers, and with a large ancillary staff of advisers and inspectors, the department managed a large workload, which inevitably led to administrative delays. Fire brigade administration fell under the remit of F Division, which, as the Permanent Under-Secretary of State, Edward Troup (1918–22), frankly admitted, was chiefly interested in police regulation.⁵¹ Under Dixon's watchful eye, F Division's staff guarded against the professionalizing tide of firefighting on functional as well as administrative grounds. Dixon himself, in his evidence to the Middlebrook Committee, had mocked the firemen's demands for parity with the police, insisting that while

'a constable is exposed day in and day out for 8 hours of the day to weather of all sorts,' a fireman 'spends a very considerable portion of his time in the shelter and warmth of a station – to a much greater extent than the typical policeman does'. Against such scepticism, it was unsurprising that Pordage confidentially warned Neal that Dixon wanted 'to see the Fire Service merged into the Police'.⁵²

Creating a public service

To assert their right to full professional status, firemen persistently emphasized the public service ethos of firefighting during the 1930s. The impulse came from a younger generation of professional firemen, armed with their IFE diplomas and PFBA membership cards. Between 1925 and 1931, the chief officers of Bradford, Edinburgh, Nottingham, Wolverhampton, Manchester and Tottenham fire brigades retired, with an average experience of 35 years' service. George Parker, Hull's chief officer, cited his desire to 'give younger officers a chance to assume responsible posts' as his reason for taking early retirement in 1931. This new generation, the majority having joined shortly before the Great War, postponed their campaign for pay parity with the police, and entered into dialogue with the Home Office to discuss how to reform standards of fire cover for a likely war involving high-explosive and incendiary bombing raids on towns and cities. The solution, for both sides, was to embrace comprehensive nationwide reform.⁵³

Having finally committed to dialogue, the Home Office sent representatives to the annual conferences of the PFBA, IFE and the National Fire Brigades Association (NFBA, as the NFBU was known from 1920) to listen to expert views on how to modernize fire cover. Following successful trials in Leicestershire and Norfolk, in which the county town brigades offered extended protection to outlying towns and villages, the co-ordination of fire brigade resources was typically identified by senior firemen themselves as an economical solution for establishing national fire safety standards.⁵⁴ At the PFBA's annual conference in 1932, Henry Johnson, the forthright chief fire officer of West Ham Fire Brigade, was adamant that state financial aid would necessitate 'a substitution of efficiency for extravagance, and a co-ordinated scheme of fire defence as opposed to the present patchwork system'. He subsequently insisted that the byword for state aid was rationalization:

Rationalization of the Fire Service means complete defence against uncontrolled fire wherever it may raise any of its many heads,

whether it be in a big city's public institution situated in a rural area, or whether it be in a crowded docks, uncontrolled fire will be more easily fought and more speedily quelled by a rationalization of the Fire Service on the lines indicated.⁵⁵

These younger chief fire officers – also including T. E. Smith of Halifax, Walter Mardon of Middlesbrough and Thomas Varley of Blackpool, where the town's amateurish police brigade was ignominiously disbanded in 1934 – were, as Varley himself noted, as comfortable discussing the theoretical side of firefighting as they were in fighting fires: 'I believe the theoretical side of firefighting is becoming increasingly important, and that every fireman should be a student as well as a practical fire-fighter.'⁵⁶ Having cut their teeth during the testing wartime and post-war years, these officers were also well versed in the politics of local government finances, and were comfortable debating policy and resources within the bureaucratic state apparatus.

Since their members were discussing state control at their respective conferences, the PFBA, IFE and NFBA held a joint conference in 1933 to present a united case for rationalizing the fire service on a national platform. During the early 1930s, the PFBA represented 300 large- and medium-sized municipal fire brigades, the NFBA some 900 voluntary, industrial and retained brigades, while the IFE had a membership of 285 senior firemen and 269 graduates. Singularly, each association was highly respected within the service, but lacked full external authority. Together, they enjoyed a loud and influential voice between 1933 and 1938, institutionalizing fire service reform nationally.⁵⁷

They did this by convincing the Home Office to establish a third governmental inquiry in 15 years, this time under the chairmanship of Lord Riverdale, into the standard of fire cover in 1935. This time, though, Riverdale's report, published in 1936, was a *fait accompli*, the Home Secretary, John Gilmour, and Dixon having conceded that the service required comprehensive reform, as a corollary to the government's air-raid precautions policy.⁵⁸ Costing only £178 to prepare its report, the Riverdale Committee took evidence from senior figures in the fire service community, and used its evidence to enact those bold decisions that the 1923 Royal Commission had eschewed. First, its report insisted that peacetime firefighting should be mandatory for all units of local government, with the exception of the county councils. Compulsion would be lubricated by an exchequer grant, to support local authorities 'which would not be in a position to shoulder added responsibilities by themselves', but equally because 'the fire service has become an essential

factor in the scheme of national defence.' Efficiency would, as with the police, be enforced through national inspection and an approved training school.⁵⁹

Second, police fire brigades were condemned for their dependence on large numbers of auxiliaries, who comprised 70 per cent of police brigade personnel nationally. Noting the practical difficulties in redirecting constables from their beat to fight a fire, Riverdale predicted that, in the event of a war, 'this difficulty would be much more serious and, in our view, it is definitely bad policy for the two services... to depend on the same set of auxiliaries.'⁶⁰ Careful not to recommend the abolition of efficient police brigades comprised of constables permanently employed on firemen's duties, as was the case in Liverpool and Manchester, Riverdale insisted that the standards of full-time labour, officership and motorized traction enjoyed in some of the professional brigades (London, Birmingham, West Ham, Leicester, Tottenham, Walthamstow, Bootle, Hendon, Willesden, Enfield, Southampton, Croydon and Coventry were all singled out as examples of 'best practice') should be adopted by those like Norwich and Sunderland, which remained wedded to the Victorian traditions of the economical 'fire police'.⁶¹

Most significantly, wartime firefighting demanded an emergency level of systematically organized fire cover. This necessitated greater regional co-ordination of existing resources, intensive investment by the exchequer into motorized pumps and the recruitment of a reserve army of part-time firemen and 'fire wardens', locally sourced and trained, to provide operational support when called upon. Technical and administrative lessons were garnered from earlier trials in regional co-ordination, notably the Home Office's experiments with fire brigade schemes in North Norfolk and North Derbyshire in 1933-4.⁶²

The consensus had been reached that the state could only fully prepare for wartime contingencies through comprehensive reform to fire service law, organization, equipment, personnel and management. The changing political context transformed national attitudes towards fire protection:

... in time of war the prevention and extinction of fires ... becomes of much greater national importance ... and it is then much more than a mere matter of preventing fire waste: it may be a matter of safeguarding food or other supplies which are essential for the prosecution of the war ... or it may be a matter of preventing a shock to the national morale which might have as serious consequences as the loss of any material supplies.⁶³

Riverdale's criticisms proved uncomfortable reading for the Home Office's officials, who, having formed a separate fire brigade department under Dixon's direction in 1936, duly proposed to make firefighting a mandatory responsibility of local government.

Once again, the Treasury blocked proposals to award a subvention towards peacetime firefighting. The demands of the professional firemen were dashed by a state apparatus geared towards funding its 'war-fighting sector'. According to senior Treasury officials, the exchequer would not accept responsibility for funding 'adequate measures of civil protection', despite Dixon stressing the 'gravity' and 'considerable urgency' of wartime fire preparations during inter-departmental negotiations. The Treasury did concede financial assistance towards wartime planning, though, including the procurement of emergency firefighting appliances and the recruitment of an auxiliary force of firefighters. Generous loan arrangements were also sanctioned to enable local authorities to invest in improved water supplies and open additional fire stations for housing wartime appliances and auxiliary firefighters.⁶⁴

The legislative outcome was the Air Raid Precautions Act, 1937, and the Fire Brigades Act, 1938, which together rationalized the practice, if not the principle, of wartime and peacetime firefighting, respectively. The former compelled local authorities to prepare and submit fire precautions schemes, and to recruit and train a volunteer force of auxiliaries. The Auxiliary Fire Service (AFS), as it was known, was duly built on 'a corpus of knowledge, experience and skill that already existed among long-established fire brigades'. Its main impact on the British fire service was one of scale, multiplying the numerical strength of professional brigades tenfold.⁶⁵ The 1938 Act, meanwhile, established peacetime firefighting as the statutory obligation of local authorities, rationalizing the number and scale of existing fire brigades and virtually signalling the end of the voluntary tradition of firefighting, particularly in large- and medium-sized towns and cities. A Fire Service Inspectorate was formally constituted to standardize operations and co-ordinate the extension of the regional schemes. Local intransigence would be bulldozed by the appointment of regional boards, which were empowered to continue contingency preparations unabated.⁶⁶ A modernized fire service fit for purpose had finally been ushered in.

Conclusion

In 1939, during the country's acceleration towards war, the Home Office's Fire Brigade Department was divided into two branches.

'A' Branch continued implementing peacetime reforms, overseeing the transition from voluntary to professional firefighting in smaller towns governed by urban and rural district councils. 'B' Branch assumed responsibility for wartime contingency planning, its officials' main focus being on the training and integration of AFS personnel and the co-ordination of emergency supplies of fire appliances.⁶⁷ Notwithstanding this administrative bifurcation, 'preparations for wartime firefighting could only be undertaken within the broader framework of reforming the unregulated and geographically heterogeneous collection of peacetime brigades.'⁶⁸ Between 1938 and 1941, some slimming-down was achieved by substituting rural district councils for parishes as a mandatory unit for rural fire protection (reducing the aggregate from 1668 to 1450 brigades). With nationalization in 1941, the number of fire authorities was slashed to 39.⁶⁹

Modernization was a piecemeal process shaped by the practicalities of inter-war central-local government relations, public expenditure restrictions and a heightened professional agitation. The fire service had become part of the fabric of local government, which re-enforced its function as the country's optimal deliverer of environmental and personal services. Concurrently, the modern fire service did not represent a rupture from service tradition; nor was it built on immutable foundations. The wartime impetus for modernization, in the guise of the lessons learned during the Great War and the preparations for civil defence from the mid-1930s, was pivotal in driving the mode and direction of fire service reform.

This modernizing discourse had been honed by the professional firemen and their representative associations throughout the inter-war years, and they had, by the 1930s, earned a sustained reputation for evidence-based policy steering within the fire service community. The older generation of chief fire officers consciously set the reform agenda. Trained in the late Victorian and Edwardian traditions of servitude and uniformed discipline, these men recognized the occupational affinity between policing and firefighting, and, in their pursuit of professional recognition, sought parity on these grounds. They were succeeded during the 1930s by a younger generation of firemen, many of whom had trained in the larger municipal brigades, and who shifted the policy agenda away from police parity towards a more consensual model of rational reform. For now, firefighting essentially remained a local service, albeit subject to national regulatory controls. Modernization thus sounded neither the death knell nor the 'golden age' of British municipal government.

7

From Braidwood to Braidy: A National Fire Service, 1941–7

When I think about [Sub-station] XIY, the men who gave the place its atmosphere were those who had been there longest, through all the blitzes. They had already composed a mythology with stories which were recited, together with confidential warnings to you ‘not to believe half of what the others tell you,’ especially about the blitzes.¹

Stephen Spender joined the National Fire Service (NFS) in the autumn of 1942, having been twice rejected on medical grounds in 1939, and seconded to Sub-station XIY in Cricklewood, London. He completed a 3-week course in basic firemanship during which, ‘dressed in dungarees like rompers’, he was ‘made to obey humiliating and often ridiculous orders’ given to him by the regular firemen.² Finding the work ‘wet and cold, and intractable and heavy’, Spender frankly admitted to never fitting in to life as a fireman. Reflecting on his first experience of a firefight, he admitted to playing ‘a minor role – indeed, I hesitated to get out on to a sloping roof two hundred feet above the ground, and let some one else do it who had been on the job many times.’³

Although he never enjoyed the work of a fireman, Spender admired his colleagues, particularly those experienced ‘regulars’ who he conceded were ‘best at their jobs’. He described them as ‘tactful and light and easy’, and fondly reminisced about his 48 hours of duty (followed by 24 hours off) among his ‘happy family’. As he noted in his autobiography, ‘The B.B.C. Light Programme and the clicking of snooker balls were the warp and woof upon which for forty-eight hours out of every seventy-two, during the months when there were no fires, the patterns of my fire brigade experiences were woven.’⁴ From Bill, the ‘rough diamond’ Cockney with ‘a heart of gold’, to Abe, the Leading Fireman

obsessed with his promotion, to Alfie, the Station Officer (commonly referred to as 'Sub'), who, despite his 40 years' experience in the London Fire Brigade, lacked any notable leadership skills beyond his status as a 'regular', Spender noted how the mythology of 'our' station was framed by the Blitz experience of 'the small group of men who had been together through all the great raids' and constantly shared their memories of its 'dramatic simplicity' during the lulls of inaction throughout 1942 and 1943. Having proven their value during the Blitz, these men had been 'reborn into the camaraderie of the sub-station'.⁵

This image of the wartime fire service comprising 'one big happy family' constitutes part of the enduring Blitz mythology, which has attracted increasing historical attention since the publication of Angus Calder's *The Myth of the Blitz*.⁶ Conventionally, it was the Blitz of 1940–1 that demonstrated the pervasiveness of social solidarity among ordinary British people. Men and women stood 'shoulder to shoulder, regardless of class or creed', and, laughing and singing in unison, withstood the full brunt of the Luftwaffe's firestorms. This shared camaraderie was most visible in the image of St. Paul's Cathedral following a heavy night of bombing, 'standing proud while wreathed in smoke and flame'.⁷ Although the firemen, exhausted following a night of intense fire-fighting, were absent from this image, they remained active agents in the perpetuation of this mythical narrative. The regular and auxiliary firemen, and their female counterparts, stood for the cultural values embodied in this myth: they assumed collective responsibility and participated in a sense of shared hardship in defending Britain's towns and cities from devastation between August 1940, when the London air-raids began, and spring 1941. These everyday heroes, stoic in their actions, whether relaying fire alarms in the control room, driving the NFS canteen van around the city streets or holding the branch on the fire-ground, exemplified the central characteristics of a fixed national identity during the Second World War.

But how representative was this image of the 'one big happy family' for firemen, and how did the firemen's Blitz experience help shape negotiations between central and local government and the firemen themselves in devising a post-war settlement for a reformed fire service? The wartime experience of the Blitz was, as Helen Jones has recently identified, a local one. Air-raids were local events, shaped as much by a local authority's own preparations and responses as by their actual experience of bombing.⁸ Indeed, they occurred before the decision was made to nationalize the fire service, following which the bombing campaigns became less frequent and the local brigades more experienced to handle

them. This chapter examines the conventional narrative account of the firemen's Blitz and questions the assumption that it engendered the unified camaraderie exemplified by Spender and others. By identifying the multiple characters and attitudes involved in combating Blitz fires, and in shaping the wartime and post-war service, the experience of the Second World War continued the tradition of disputes over the direction of fire service reform. At the end of the 'Phoney War' in August 1940, the British fire service was both professional and modern, but it was not homogeneous.

The firemen's Blitz

In August 1940, the German air-raids began with the bombing of oil installations on the outskirts of London at Pembroke Dock, Thameshaven, Shellhaven and Purfleet. Fires burned for days, which firemen from the regular service as well as the Auxiliary Fire Service (AFS) futilely tried to extinguish, while being attacked by high explosive and incendiary bombs night after night. Many firemen had waited patiently for a year to tackle 'a real big fire'. Once called to 'action', these men, resplendent in their brand-new tunics and clean boots, quickly became dismayed. Ordered to contain fires raging in burning tanks, they stood in huge concrete pits 'deep with oil', which, when doused with water, 'boiled and belched like a volcano'. In his account of the Thameshaven fires, James Gordon recounts how these firemen – who included the gruff regular Tommy, impatient to fight something other than a chimney fire, the auxiliary Fred, who saw the fire service as 'a holiday' from his peacetime job as a meat trader at Smithfield Market, and the quiet Paul, who was ordinarily a university lecturer – collectively shared the sense of fear and adrenaline involved in fighting a Blitz fire regardless of social class. The promise of death and destruction was everywhere and took no account of status: from the burning oil that threatened to drown them in their concrete pits to the 'shattering crashes of falling bombs and the spat of mobile anti-aircraft guns', which left firemen cowering under 500-gallon petrol tanks. Yet still they persevered in their work, obeying orders to extinguish the tanks of burning oil, motivated by the promise of a hot cup of tea and a steak-and-kidney pudding once they proclaimed 'victory'.⁹

Exhausted from their first experience of wartime firefighting, firemen had learned crucial firefighting techniques, notably that it was altogether different to peacetime firefighting. Wartime firefighting demanded co-ordinated tactics and a strategic deployment of resources

between fire brigades across London and further afield. This involved avoiding continued exposure to the bombs as they rained down on firemen armed only with hose and a steel helmet. Firemen quickly realized that they could not attack every single blaze, but had to perform on-the-spot risk assessments to determine whether to fight a fire or leave it to burn itself out.¹⁰

The air-raids then spread to central London, which was raided for 57 consecutive nights between 7 September and 2 November by an average of 200 bombers every night. Heavy bombardments returned during December 1940 and April and May 1941. During the largest raid on the 29 December, 100,000 incendiary bombs were dropped, causing fires that were combated by 9000 firemen with 2000 pumps. Sixteen firemen were killed and more than 250 seriously injured; many others suffered minor injuries. Having worked for 24 hours continuously, one fireman conceded that 'never was a cup of tea and a biscuit more gratefully accepted by grimy, weary and smoke-dried firemen.'¹¹

Firemen were forced to deal with multiple fires as flames ripped through London's East End, consuming timber yards, paint factories, soap works, sugar refineries, chemical works, dock warehouses and ships. Cyril Demarne, a professional fireman with 15 years' experience in the West Ham Fire Brigade, before his appointment as a sub-officer responsible for an AFS unit in 1940, conceded that professional firemen had never faced fires on such a scale, or under such arduous conditions. Forced to dodge bombs and fight fires all night, without rest or refreshment, fear 'drew branchmen together in small groups, each gaining comfort from the presence of the other in the face of unprecedented danger, threatening from all directions'.¹² The physical exertions of holding a branch for hours under searing heat proved too much for many firemen, as exemplified in the death of S. H. 'Jacko' Jackson in Humphrey Jennings's 1943 propaganda film, *Fires Were Started*, an emotional narrative of one night of Blitz firefighting by Sub-station 14Y of the London AFS. With the leading roles played by London firemen, their direct experience of Blitz firefighting served as a reminder of the physical and emotional self-sacrifice of these everyday heroes.¹³

Demarne represented the bulk of London's professional firemen who were experienced in peacetime firefighting, and had undergone intensive preparations since 1937 for coping with the anticipated attack. These were the men who, in addition to their routine duties, trained the hordes of voluntary wartime firefighters for no extra pay, instilling in them some semblance of the traditions of the British fire service. Indeed, it fell upon the experienced and professional 'regular', as he was

commonly described, to shoulder the burden of carrying the inexperienced auxiliaries through the early onslaught, despite never having faced such challenges before.¹⁴ An anonymous professional officer, reporting on his experience at London's dockland fires, identified the three characteristics demanded of the wartime firefighter as 'discipline, courage, [and] technique', which the 'regulars' had in abundance.¹⁵ Another contemporary account celebrated the 'wonderful sang-froid' of the chief officer of a local brigade, who stood, next to a large crater in the road caused by an unexploded bomb, 'firm as a rock, with that same cheerful smile with which, in days gone by, he had solved for the tyro some complex problem of fire-engineering'. In this case, it was the fearless professional 'regular – with his 'brawn, bravery and brains – who provided the 'inspiration and encouragement' to the frightened unprofessional auxiliary.¹⁶

Out of the ashes of this nightly onslaught, Victor Bailey contends that the air-raids merged the auxiliaries and regulars into a single 'citizen army' united by a freshly unearthed camaraderie.¹⁷ Demarne recollects that regulars and auxiliaries, 'force-fed with the fire-fighting experiences of a lifetime crammed into the space of eight months', were in the main united by an unbreakable camaraderie.¹⁸ Contemporary reports praised the heroic stoicism of the auxiliaries, who had been imbued with the same characteristics of discipline, courage and technique as the regular fireman: 'Despite bombing, machine-gunning and all the hazards connected with firefighting, the AFS thoroughly maintained untarnished the traditions of the British Fire Service, which had trained and fostered the war-time auxiliaries throughout.' The firemen's Blitz thus evolved a mythology of its own, one which was shaped by, and contributed to, the prevailing 'All pulling together' national myth.¹⁹

The firemen's Blitz mythology was also shared by firewomen despite the enduring perception that the physical exertions demanded of fire-fighting rendered it 'essentially a "man's job"'.²⁰ For the first time, women were enrolled into the service as auxiliaries. At its peak, 30,000 full-time and 50,000 part-time women were enrolled in the NFS and, while very few held the branch, women were 'in the thick of the battle, alongside the boys'.²¹ Women staffed the control rooms, where they co-ordinated the deployment of pumps and firemen, and provided ancillary support as dispatch riders and mobile canteen operatives. At first, they encountered resistance from both the male regulars and auxiliaries who feared that they 'would invariably faint at the first sign of danger'. Oral testimonies note that some regulars 'would rather resign than be made to drill young girls and women to be firemen'.²² But

once women had demonstrated their exemplary stoicism by enduring the same gruelling conditions as their male comrades, they too were accepted into the service's culture, albeit only temporarily. Betty Cuthbert, the NFS' Chief Woman Fire Officer, explained this change in an interview towards the end of the war: '... when they saw that we did not go into hysterics when the bombs fell, and went out with them into the dangers of the blitzes, they capitulated. Handsomely.'²³

Female auxiliaries were also included in this stoic narrative. In one memorable scene in *Fires Were Started*, a bomb hit the control room, causing a female telephonist to suffer a deep cut to her forehead. She immediately regained composure and resumed her duties. In another 'official' account of the NFS, firemen and firewomen were included in the same narrative sequence, albeit with a distinction between responsibilities: 'Here firemen are moving about, having a last look at their appliances; firewomen are stocking a canteen-van.'²⁴ Men continued to enter burning buildings and extinguish fires; women provided auxiliary support to allow the men to do this. In response to opposition from within the ranks of the male control room staff who feared the de-skilling of their profession, firewomen adopted the 'stiff upper lip' of their male comrades in order to become 'good citizens' and, according to John Leete, 'become the backbone of the service'.²⁵ If men and women could stand together with no distinction of class or status in factories, so too could firemen and firewomen, notwithstanding the unifying barriers of experience, physical strength, skill and gender.

According to many auxiliaries, this was a collective myth that empowered them to stand aside their regular peers and assert their claim to equal status. For the duration of the war at least, these men would, in the parlance of the Fire Brigades Union's (FBU) Executive Committee, be 'comrades'.²⁶ With comradeship, they insisted, should come parity in pay, conditions of service and injury compensation. In reality, auxiliaries were paid less than regulars, received a smaller uniform allowance and were covered by the Civil Injuries (Personal) Scheme, which only provided 2 weeks' injury pay or 3 weeks' sick pay if members were incapacitated on duty. After this short period, an auxiliary was liable to be discharged and forced to apply for means-tested state benefits. Widespread resignations among the AFS during the 'Phoney War' attracted the 'heart-breaking disgust' of the regulars, who 'had sacrificed their scant leisure to train these recruits, and, gratuitously at that'.²⁷

To overcome this animosity, auxiliaries wrote of their own experiences of air-raids to underline the shared Blitz experience between themselves

and the regulars. For example, Auxiliary-Fireman F. K. Castlemount, who was stationed in the London fire region, wrote an account of his first call-out during a raid in September 1940, which was published in *Fire* to encourage closer integration among its diverse readership. Admitting that his crew (which consisted of one regular and five auxiliaries) of a heavy pumping unit did not know what to expect, Castlemount asserted the shared dangers as their unit raced through London's streets, avoiding falling debris and panicked crowds, while they blocked out the sound of exploding bombs and the 'rumble' of anti-aircraft fire. Having reached the docklands, a large bomb exploded nearby, sending the crew fleeing for cover under a railway arch. Huddled together to escape the danger, Castlemount noted how the men were all novices in this field of action, and were drawn together by their collective disgruntlement at 'the combination of cold, hunger, and the anxieties of the night'.²⁸ In so doing, their experience was one of hundreds that underpinned Humphrey Jennings's narrative in which Sub-Officer Dykes and his auxiliary crew in 14Y collectively responded to a similar fire alarm. Everyone 'pulled together' since no one knew what to expect.

Castlemount's narrative emphasized the discipline, courage and technique demanded of all wartime firemen. Everyone was involved in the pitch of battle because the bombs never distinguished between their uniform markings. As an academic study of the fire service found, 'Almost overnight the Auxiliary Firemen became heroes. There were plenty of fires now, and night after night the pumps went out, till after a month of raiding every auxiliary had a fire experience as great as many regular firemen of several years' service.'²⁹ In place of the discursive labels 'regular' and 'auxiliary' was pasted the universal title of 'fireman', which embodied the character traits of everyday heroism and camaraderie that were deemed to characterize the firemen's newly unearthed collective identity.

The central feature of the firemen's Blitz was the sense of homosociability that was supposed to have infected every crew. One auxiliary referred to his 'comrades' as his Alma Mater because the life of a probationary fireman – drilling, 'scrubbing', 'bunking up' and playing practical jokes – reminded him of his schooldays. In *Fires Were Started*, all the 'boys' were pleased to be reunited in Heavy Unit One. Later, as the air-raid sirens sounded, they gathered round the piano to sing 'One Man Went to Mow', symbolizing their shared experience (as well as the integration of the new recruit, Barrett, into the group). The shared danger faced by firemen united a hitherto disparate collection of men. To participate in the firemen's Blitz, thus, one had to be a member of the

service during the 'Phoney War' in order to understand firefighting without the bombs. More significantly, as Spender himself noted, one had to be actively involved during the air-raids in order to recall the physical and emotional hardship, but equally the heroic stoicism that pervaded firefighters, male and female, regular and auxiliary alike.

From a local to a national service

With a few exceptions, the burgeoning interest in the firemen's Blitz experience was London-centred. The provincial air-raids never attracted the same level of attention within popular culture, although their significance as local events cannot be underestimated. By stripping away the mythical narrative of wartime firefighting, as was the case in provincial cities like Birmingham and Coventry, we are left with a rather different picture, which exemplified the realities of wartime firefighting in provincial Britain.

Immediate similarities between London and the provincial brigades included the lukewarm welcome given to the AFS by the regulars. In the aftermath of the 1937 Air-Raid Precautions Act, when municipal governments established civil defence committees, Alfred Robert Tozer Jr., Birmingham's chief fire officer, voiced his concerns at the recruitment of under-trained volunteers to perform what he and his father had established as a professional vocation within the city. Tozer initially aired these concerns as a member of the Home Office's Fire Brigade Recruitment Committee, which had been established in the aftermath of the report from the Riverdale Select Committee in 1936. Conterminously, Birmingham City Council formed a Special Committee of Air-Raid Precautions, which instructed Tozer to prepare a draft scheme for protecting the city in the event of aerial attack. Tozer's scheme included provision for limited voluntary support, mainly from the many hundreds of factory workers who protected their works from fire, but he was reluctant to extend the principle of voluntary co-operation to people without firefighting experience.³⁰

Once the Home Office's Fire Brigades Division issued its first circular in 1937, which formalized the establishment of the AFS, Tozer pre-empted its adoption by insisting that it would be 'sounder to increase the strength of the Regular Brigade before creating a huge Auxiliary force, as otherwise there would be danger of the latter overcrowding the administrative resources of the Brigade and creating a state of chaos.' He lost the argument, though, and the City Council approved the formation of

a local AFS branch in August, placing it under the control of the ARP Committee and a Conservative City Councillor, the rubber-works proprietor Henry Sale. By the end of 1937, over 2000 volunteers had been recruited, including 442 women.³¹

The Birmingham AFS was founded on the assumption that roughly 1000 simultaneous fires would be started in the city from air-raid attacks. With the consequent effects of disrupted water mains, blocked roads, broken communications, damaged fire stations and appliances, and poison gas, the city was divided into three categories of risk (heavy, medium and low) and advertisements issued to recruit up to 10,000 auxiliaries. At the time, Birmingham was protected by a fire brigade comprised of 300 men divided between six districts and armed with 20 self-propelled pumps. Moreover, its administration was performed by operational officers, supported by a small clerical staff. Under the proposed AFS, the administrative responsibilities would be transferred to a largely female clerical staff.³²

Throughout 1938 and much of 1939, Tozer refused to allow Birmingham's auxiliaries to fight fires, and only reluctantly allowed them to pass the police cordon to observe his regulars in action.³³ However, Tozer's voice was increasingly marginalized within the brigade's management, despite receiving assurances from his Watch Committee that 'the control and supervision' of the AFS would remain with the fire brigade.³⁴ Regular firemen were seconded to drill the AFS personnel, and provide technical support in preparing plans to relay water supplies and extending emergency cover from neighbouring brigades like Smethwick, Bromsgrove and Solihull. In August 1939, a test blackout called the AFS to nine 'mock' air-raid fires. By the outbreak of war, the AFS numbered 11,849 men and women, and was responsible for 178 sub-stations and 535 pumps. Tozer's resistance had been brushed aside by the anxieties generated by modern warfare.³⁵

Within a year of the war, Noman Tiptaft, chairman of Birmingham's ARP Committee, celebrated the inclusivity of the city's AFS, which consisted of volunteers drawn from 'an ordinary cross-section of our citizens':

They include men from the professions, from factories, from counters and from offices. Besides these, there are women who keep records, answer telephones and do other useful work that leaves the men free for more active service. There are motor-drivers and messengers up to 50 years of age, and there is in the AFS the main body of men who a

short time ago knew nothing at all about putting out fires, but who to-day have developed a knowledge, a skill and resource that would have been incredible in so short a time in days of peace.³⁶

Tiptaft defined the fire service's wartime role in relation to what he deemed acceptable duties to be performed by active volunteers. Membership of the AFS owed less to the traditions of the professional fire service, which Tozer protected, but was a determinant of wartime citizenship and a source of local pride, particularly since contingents of the city's AFS were sent to London and South Wales to assist local brigades.³⁷

Despite efforts to integrate the AFS into the Birmingham Fire Brigade, auxiliaries complained of being left to combat dangerous blazes without experienced leadership. In reality it was difficult to provide adequate leadership during the heavy raids between August and November 1940, but the auxiliaries, many of whom were part-time and returned to their regular factories for a day shift following a night of firefighting, found it difficult to develop appropriate coping strategies. On the night of 25 October, 548 pumps fought 276 separate fires, while a further 111 pumps were drafted in from outside the city, including as far afield as Bradford and Manchester. One month later, on 19 November, nearly 600 fire pumps fought 338 'serious' fires in the city. Faced by disrupted water supplies and telephone lines, and broken transport links, inexperienced and under-strength auxiliary crews were forced to leave many fires to burn themselves out.³⁸

Birmingham's AFS also provided relief in neighbouring Coventry, a middle-sized city with considerable engineering industries, where the organized fire services were unable to cope with the intensity of the air-raids in October and November. On the night of the 14 November, the city experienced the largest and 'easily the most concentrated' air-raid of any British city. A total of 449 bombers dropped 503 tons of high-explosive bombs and 881 incendiary bombs onto the city, killing 554 and seriously injuring 865. Unable to control the hundreds of raging fires with his own resources, the chief officer of the Coventry Fire Brigade asked for help from the 38 active works fire brigades in the city. The Alfred Herbert Works' Fire Brigade, for instance, sent an engine with crew to the city's ordnance works, as well as a rescue party to a residential district, while the remainder of its men dealt with 22 high-explosive bombs that had hit its own works. In its report on the raid, the Coventry Reconstruction Co-ordinating Committee concluded that the AFS was 'seriously below strength' due largely to the higher rate of pay offered by works' fire brigades.³⁹

Works' fire brigades posed additional challenges to the co-ordination and organization of provincial fire services. For example, the Coventry and District Fire Brigades Association (CDFBA) protected the interests of its 38 member brigades, whose combined strength far exceeded that of the public fire service. Whereas the Coventry Fire Brigade and AFS consisted of roughly 460 full-time and 300 part-time firemen and women in 1941, the CDFBA's members constituted some 1000 trained firemen and 2000 auxiliaries, equipped with around 100 motorized pumps (compared to the public service's 25).⁴⁰ Dominated by the city's engineering industries, the CDFBA (as well as its parent body, the Coventry and District Engineering Employers' Association) was a formidable body to reckon with, and agreed to provide support during the air-raids on its own terms, not least that the public authorities would not automatically assume command of their better-paid and more experienced works firemen. Joint ARP training initiatives were organized between 1937 and 1939, and a mutual assistance scheme was devised among federated members in 1938, while lecture programmes were offered to public and private firemen. Despite having its own professional municipal fire brigade, Coventry remained dependent on private interests for its safe protection against large fires.⁴¹

The provincial raids were the catalyst for Home Office intervention, rather than the London Blitz where co-ordination was officially celebrated as an example of best practice.⁴² Mass-Observation's Tom Harrisson viewed local government's shortcomings as the result of the sporadic bombing raids, which had a detrimental impact on the delivery of civil defence services, and caused considerable disruption to urban infrastructure and civilian morale. Many fire brigades remained wedded to Victorian traditions of firefighting: when firemen from London went to assist Portsmouth during its raids, their engines sat unused since their couplings could not be attached to the local hydrants. Similar problems were reported in Liverpool.⁴³

Local newspapers reported about being 'Coventrated', drawing parallels between Coventry's destructive experience and the anxieties of other provincial cities. In November 1940, following heavy bombardment of the Midland cities, the Home Office acted. Following orders from Herbert Morrison, the new Home Secretary, his Chief of Staff, Aylmer Firebrace, visited Birmingham with Arthur Dixon, where he removed Tozer Jr. from office. 'Officially' retired after 48 years' active service, Tozer Jr. was replaced by Bernard Westbrook, the Home Office's Chief Inspector of Fire Brigades (and a former president of the Institution of Fire Engineers (IFE)), and placed under the operational control

of his deputy, Tom Breaks (another former IFE president, and the former chief officer of Sheffield Fire Brigade). They immediately drafted in reinforcements from outside the city to supplement the under-strength AFS, while administrative control passed from the Watch Committee to an independent Fire Brigade Committee. With 'a snap of his finger and thumb', Morrison had broken the Tozer family's grip on the city and the fire service, and forged a new firefighting regime by insisting upon the integration of regulars and auxiliaries.⁴⁴

The next round of air-raids, during the spring of 1941, put the effectiveness of local firefighting back onto the political agenda, where the principle of local self-government was questioned. Inter-brigade reinforcement schemes remained hampered by enduring differences in organization, equipment and service command. Particularly scathing criticisms were reserved for those police fire brigades which obstructed reinforcements. Five raids on Plymouth within 9 days during April 1941 completely overwhelmed its police brigade, following which Nancy Astor, the city's MP, wrote to *The Times* lamenting the lack of protection and skill evident among the city's police-firemen:

Fate compelled me recently to witness...a conflagration in Plymouth, and to see how totally inadequate local firefighting organizations, even when expanded, are to deal with the effects of a real air attack when tens of thousands of incendiary bombs start widely scattered fires simultaneously – when high-explosives interfere with means of communication, and on occasions with water supplies.⁴⁵

Astor urged the government to remove all firefighting responsibilities from local government and take responsibility for emergency fire protection itself, thereby nationalizing the service.

Another report on blitz fires in two unspecified northern cities dismissed their police brigades as 'useless', citing inferior and under-strength personnel, austere discipline and a lack of 'brotherhood' among the police-firemen as their chief defects. Inexperienced auxiliaries were left unsupervised to fight fires. In one large port city, the AFS 'did not know where to place its trailer pumps, or to lay its hose'. Nor did its members pay attention to the wind; when it changed direction 'pumps and hose had to be abandoned to the flames'. The timing of the report indicates that the unspecified cities were probably Liverpool and Hull, both protected by police brigades during the raids.⁴⁶ In his account of the fire service during the raids, Jack While insisted that 'the great fires quickly proved the absolute rottenness' of the police brigade system,

which provided 'a glaring example of the folly of seeking economy by expecting one man to do two jobs well'.⁴⁷ Much like Tozer Jr.'s experience in Birmingham, the police brigades served as a discomfiting reminder of the unpreparedness of the fire service for intensive aerial attack. Something had to give between the traditions of municipal fire services and the realities of total warfare.

The experience of the air-raids was seized upon by senior officers like Aylmer Firebrace and Bernard Westbrook, the FBU's general secretary, John Horner, the outspoken editor of *Fire*, William Seabrook, and public figures like Nancy Astor, who each proposed their own plans for a re-organized wartime service. Although each plan differed in its detail, they were united by their support of modernization, standardization and nationalization. Local government had no place in a restructured fire service geared for wartime protection. As 'the fourth arm' of the armed services, interested observers were baffled by the heterogeneous structure of British firefighting:

Is it possible to imagine the Navy, the Army, and the Air Force organized similarly to the Fire Service of to-day? A battleship, bought and manned by the people of one port for the defence of that port, a minesweeper for another maritime town, a company of infantry here, a battery of artillery there, a bomber for one place and a couple of Spitfires for another.⁴⁸

Although individuals disagreed over whether a re-organized service should follow a regional or a national structure, there was ubiquitous approval that the principle of local self-determination was redundant, at least for the duration of the war.

Under pressure from professional and public interests, Morrison proposed nationalization, though structured on a regional model. Ratified by the Cabinet on 8 May, the NFS was comprised of 39 fire regions, each under the responsibility of a fire force commander, and sub-divided into divisions, columns and companies. To secure the co-operation of the bomb-battered local authorities, Morrison, himself an experienced local government hand following his tenure as leader of the London County Council (1934–40), promised to return the service to local control after the war. During parliament's debate of the legislation, Morrison insisted that a clear difference existed between peacetime and wartime fire protection, stating that 'firefighting, in substance, had become a military operation, and, certainly for the period of the war, had ceased to be a municipal one.'⁴⁹

The establishment of the NFS in only 13 weeks played a formative role in cementing the firemen's Blitz mythology. Morrison's 'bold decision', as Blackstone described it, not only responded to a declinist discourse within municipal government, but recognized the necessity to assimilate regulars and auxiliaries into a uniform organization.⁵⁰ Organizational logic dictated that a regional structure would allow fire force and regional commanders to proactively redeploy men and resources to target areas, to pre-empt German attacks. Substituting a proactive for a reactive service meant that new structures and regulations had to be crafted, breaking with many of the traditions of the past. These included regional fire control rooms, area schemes, new uniform insignia and rankings, and greater integration between firemen and other civil defence workers (including fire watchers, fire-guards, air-raid wardens and roof spotters) through civil defence control centres and joint planning committees. To assuage the senior officers, a new representative body was formed, the Chief Fire Officers Association (CFOA), which displaced the Professional Fire Brigades Association (PFBA). Under Firebrace's presidency, all senior positions were taken by London officers, while a regional structure of districts ensured that important roles were awarded to the mid-1930s generation of the IFE's graduates.⁵¹

The biggest rupture saw the abolition of the police brigades, much to the chagrin of some chief constables like Cardiff's, who was 'not aware of anyone in Wales who has a fuller knowledge or wider experience in organizing or handling fires in the Principality than myself'.⁵² The AFS was absorbed into the new NFS, with 8000 part-time auxiliaries transformed into full-time regulars overnight, and granted the same status. Large numbers of additional recruits were also drafted in under the National Service Act. Voluntary mutual assistance schemes were entered into with works firemen who, despite joining as part-time members of the NFS, never felt fully integrated owing to the absence of uniform. Notwithstanding its antecedents in the mid-1930s preparations for civil defence, this transformation helped forge a universal 'Fire Service' governed by uniform procedures within working practices, technological innovation and exchequer funding.⁵³

'Jim Braid'

To many of the experienced regulars, the NFS threatened the fire service's heritage. Its established traditions and routines, not least the genealogical connections between serving firemen and their Victorian predecessors, were fractured by the creation of new rankings and

uniforms, a standardized disciplinary code and a dilution in the naval traditions of firemanship. In a BBC broadcast in September 1941, John Horner recognized this and sought to placate the regulars. Ignoring the bombs as they rained down onto the fire-ground, Horner extolled the firemen for continuing to perform their duties stoically with 'a cheerful grin'. Although this behaviour epitomized 'the traditions of the Fire Service', it simultaneously proved that firefighting was 'fast becoming a new Service... On the slender framework of the regular fire brigades there was built the massive structure of the Fire Service to-day.'⁵⁴

In the short term, hostility between the regulars and former auxiliaries was exacerbated. This followed the promotion of a number of auxiliaries to senior positions, bypassing more experienced regulars who were 'diffident about taking orders from them on the fire-ground'.⁵⁵ It also reflected the lack of respect shown to experienced rank-and-file regulars, like Stephen Spender's 'Sub', Alfie, who 'could not get used to giving, and not just taking, orders'. The 'old hands', those regulars who remained rank-and-file firemen in Sub-station XIY, 'resented' Alfie and claimed that he was 'two-faced'. Illustrating the enduring cultural differences between the regulars and auxiliaries, Spender commented that these regulars 'lived in a narrow world bounded by Divisional Headquarters at Willesden'. While they took Alfie seriously, 'to me he seemed merely pathetic.'⁵⁶ The new institutional structures and traditions of this modernized 'Fire Service' had, therefore, to be sold to the rank-and-file regulars, who expressed anxiety about the future of their jobs, conditions of service and their professional status.

The NFS formed a new chapter in the firemen's Blitz, becoming an integral component of the regular firemen's own identity, which connected the traditions of the past with an uncertain future. Although the past reminded the firemen of their hard-fought struggle for professional recognition, it was at least knowable. The future, not least with the logistical problems of scaling down the service to fit a reformed system of local government, remained unpredictable. Senior officers recognized this and ensured that the transition was a smooth one. For example, Demarne, who was promoted to company officer under the new system, confessed that 'there was little change in the *modus operandi*,' since the London Fire Brigade 'system of doing things still prevailed'.⁵⁷ Disciplinary regulations remained strict, with neglect, disobedience and absence from duty the most frequent offence in brigades like London's and the South-Eastern Area's, which covered Edinburgh and the Scottish Borders. Offences tended to be punishable by additional duty, ranging from 2 to 48 hours.⁵⁸ Moreover, great emphasis was placed on

staff welfare and training to integrate firemen into the new structures. Inter-divisional sporting competitions were held to foster a greater *esprit de corps* between regulars and auxiliaries, while lectures and discussion groups debated nearly everything, with the exception of religion and politics.⁵⁹

Auxiliaries recognized the sensitivity of integrating with the regulars. Cultural representations of wartime firefighting by serving auxiliaries – exemplified in the writings of Spender and Sansom, and the exhibitionary tour of ‘The Firemen Artists’, who included Leonard Rosoman and Paul Dessau and exhibited at the Royal Academy in August 1942 – sought to capture the historic connection between the Victorian heyday of municipal firefighting and the Blitz. This was most evident in the publication of *Jim Braidy: The Story of Britain’s Firemen*, in 1943. Co-authored by Spender, Sansom and James Gordon, and illustrated by Rosoman, the book traced the story of Britain’s professional firemen from their nineteenth-century origins, basing the title character, ‘Jim Braidy’, on James Braidwood.⁶⁰

Taking its cue from Braidwood’s story, Spender, Sansom and Gordon traced the diffusion of Braidwood’s exemplary masculinity and professionalism, identifying, among his full-time successors, ‘something of the spirit of Braidy in them’. This spirit was embedded within the regular fireman’s body, powering his actions in the station and on the fire-ground. ‘Jim Braidy’ ‘systematically’ inculcated into his firemen ‘the ideals of service and self-sacrifice in action’. The Blitz Braidy thus went into action ‘of his own free will’, and faced fires with the same discipline and fortitude that his Victorian predecessor did: ‘Jim Braidy is the disciplined volunteer, the man with an exciting job who takes it coolly and in a spirit of service.’⁶¹

‘Jim Braidy’ was not a single characterization of wartime firemen, but embodied multiple identities to preserve the service’s cultural traditions. There were three ‘Jim Braidies’: ‘Jim Braidy I’, the old-time regular inculcated in the traditions, language and lore of British firefighting; ‘Jim Braidy II’, the wartime auxiliary, ‘who nevertheless thinks of himself as a fireman’; and ‘Jim Braidy III’, whose position ‘is just an aberration of the time, a dream in the mind of contemporary history’. Placing himself and the other ‘Firemen Artists’ in this category, Spender never saw himself as a proper fireman because he joined the AFS ‘in the same week’ that the raids on London stopped, and left 2 hours before the first ‘buzz bomb’ fell in 1944. Spender’s inexperience was emblematic of the social and cultural distinctions drawn between the different types of ‘Jim Braidy’:

When Jim Braidy III says 'I'm a Fireman,' it's a joke, even if it's a joke that costs him his life. When Jim Braidy I says 'I'm a Fireman,' he means that he has been, he is, and he's going to be a Regular. When Jim Braidy II says 'I'm a Fireman,' he means that the war has made him into a fireman, his value to society consists in his being a fireman, and he does not know what use for him the post-war society will have.⁶²

These distinctions could be further dissected. Women, for one, are absent from Spender's typology, and it is unclear whether they would be classified as type II or III 'Braidies', although they were unlikely to be accepted as type I by the regulars on the grounds of both experience and gender. Social class tensions are also discernible. 'Jim Braidy I' represented an increasingly agitated working-class group of male workers through their membership of Horner's FBU, while the auxiliaries represented by 'Jim Braidies' II and III often came from middle-class backgrounds. Drawing inspiration from the Soviet Union's wartime experience, the FBU's campaign for improved pay and working conditions was framed within more general demands for a post-war world of opportunity: 'The sanity and salvation of our civilization lie from now on in the well-being of the "Jim Braidies" in the Fire Service, and his mates in industry and the other Services.'⁶³

Other cultural productions reinforced this historic connection. Rosoman's painting, *Falling Wall*, portrayed the horrific realities of wartime firefighting in London's Queen Victoria Street, the site of many prominent Victorian and Edwardian fires. Sansom's accompanying short story, 'The Wall', described how he was buried under 'a hundred solid tons of hard, deep Victorian wall'.⁶⁴ In tones reminiscent of Braidwood's own death at Tooley Street in 1861, Rosoman and Sansom together reinforced the characterization of 'Jim Braidy', this idealized everyday hero.

Historic connections are equally discernible in Jacko's death in *Fires Were Started*, while stoically manning his branch during a warehouse inferno in London's docklands. Jacko's funeral, in which his coffin, draped in a Union Jack accompanied by his axe and belt, is carried by his 'comrades', continued a trend evident in late Victorian and Edwardian deceased firemen's processions. The cultural symbols of wartime firefighting contained richer historical meanings than hitherto recognized. The burning warehouse, the collapsing wall and the fireman's funeral were all modes of communication through which the traditions of firefighting (discipline, comradeship and self-sacrifice) were transmitted to a new generation of professional firefighter.

De-nationalizing firefighting

While firemen tried to build a new service to unite disparate factions, proposals for its post-war reform similarly emerged from a diverse range of interests. These emanated from within the service itself – that is, from the firemen and their representative body, the FBU – and from outside, particularly local government, whose local authority associations frequently reminded Morrison of his guarantee to return the service to local control. Yet there had, certainly by 1943, emerged a compelling case to retain the structure and organization of the NFS because it had demonstrated its social and political capital in fostering operational integration between regulars and auxiliaries. Indeed, there existed some sympathy for this view within local government, particularly from the Association of County Councils, which foresaw a greater role for its authorities in any post-war service. Faced with an uncertain future for local government within the policy context of post-war reconstruction, as well as growing support for the regional delivery of key services, supporters of the NFS, such as Firebrace and Westbrook, claimed that to dismantle it would be ‘a retrograde step’.⁶⁵

This multiplicity of voices was discernible on the Home Office’s Committee on the Post-War Fire Service, which was established in 1943. Divided into six sub-committees (organization, conditions of service, pensions, appliances, water and fire protection), under the chairmanship of senior Home Office officials (Dixon chaired the organizational sub-committee and Firebrace the appliances sub-committee), the Committee’s membership included senior fire officers, all of whom were trained in firefighting during the inter-war years and were committed to avoiding a return to the structure that pre-existed the 1941 reforms.⁶⁶ Having benefited from the establishment of the NFS, these officers advocated its retention, or at least some semblance of a regional structure, in order to retain the benefits of national control, which included a single chain of command, operational flexibility, centrally controlled appointments and promotions and co-ordinated training schemes. For these officers, as one put it, the NFS was more efficient than the pre-war fire service: ‘An amorphous agglomeration of brigades has been welded into a single machine.’⁶⁷

There were, however, dissenting voices, which insisted that a national service was unnecessary to control ‘what is essentially a local problem’. Peacetime firefighting remained the preserve of regular men with intimate local knowledge, whereas ‘[a] National Service destroys the intimate link between the fireman and the town he serves.’⁶⁸ Representatives of municipal government, but equally from among the

rank-and-file, welcomed a return to local control because they believed it would engender operational flexibility. For various contemporaries, such as Senior Company Officer Newmark, reform necessitated a middle ground between nationalization and the old system, which practically involved setting limits to the number of local authorities responsible for firefighting.⁶⁹

John Horner's intervention added the labour force's weight to the case against a return to local control. In a passionate tirade against local government, published in two issues of *Fire* in 1943, Horner insisted that to simply re-activate the Fire Brigades Act would be 'a serious and short-sighted blunder', citing the inflexibility of local authority boundaries, as well as its 'hodge-podge' and 'pettifogging' machinery, as evidence that the fire service's needs circumvented local government. Only with regional fire boards fixed upon revised and modernized boundaries, similar to those proposed by Morrison for healthcare, could there exist effective reinforcement schemes. If firefighting was to cease to be the 'Cinderella' of local government, Horner suggested that policy-makers first had to concede that 'one cannot unscramble eggs'.⁷⁰

Horner prefaced his diatribe by conceding that a peacetime service would be too small to necessitate national operational control. The service should remain 'a social service, closely related to local needs', but subject to a greater measure of national administrative and financial supervision.⁷¹ By prioritizing the life-saving aspects of firefighting, Horner aligned his profession with other welfare services like healthcare and childcare, which were undergoing comprehensive structural reform on a national model to relieve some of the burdens on local government.

In 1943, the FBU published *What Kind of Fire Service?* in which it proposed a regional structure sufficiently large to co-ordinate the deployment of resources across conventional boundaries. Designed to appease those who defended local autonomy, while conceding that the structure of local government required reform, this middle course recognized the changing status and conditions of peacetime firefighting, or 'a people's service' as Horner described it. Behind the bluster were more concrete proposals to benefit its members, including a national minimum wage, a 48-hour working week, absolute parity with the police and a more 'liberal' disciplinary code, all of which would be subject to national inspection.⁷² Incentives in working conditions, mixed with structural reform, would restore the peacetime service to an appropriate level of efficiency.

Recognizing the multiplicity of new and expanded fire risks – not least in the relocation of industry to the urban fringe, the development of industries specializing in the manufacture of plastics and

the rebuilding of devastated areas – a consensus had emerged within government in support of national standards of fire cover, through which the local deployment of resources could be loosely supervised. These national standards silenced critics of local firefighting since they enshrined the principle of national control within the pragmatic structure of local government.⁷³ Under increasing momentum, the Home Office proposed that, while firefighting ought to be returned to local government, the unit of control should be altered. In a fine balancing act between the defence of local autonomy and the reformist impulses of the post-war Labour government, Morrison's successor as Home Secretary, Chuter Ede, transferred control of local firefighting to the 135 county councils and county borough councils in England and Wales, and the 11 counties and large town's in Scotland. Some of these authorities simply duplicated the same geographical borders as their NFS area predecessors.⁷⁴

National policy-making would remain with the Home Office, assisted by a Central Fire Brigades Advisory Council, which contained representation from the local authority associations, H.M. Fire Service Inspectorate and the staff organizations. Its first task was to advise Ede on the retention and transfer of roughly 23,500 NFS firemen to the reformed fire brigades. This figure included 15,609 professional firemen, only one-third of whom had served before the war.⁷⁵ Negotiations over working conditions were invested in a National Joint Council for Local Authorities' Fire Brigades, which was comprised of representatives from the local authority associations and the firemen, who were ostensibly represented by the FBU, which emerged from the war in a strong bargaining position.⁷⁶ Annual inspection, initially trialled in 1938, was rolled out across the country with the appointment of Henry Martin Smith, Firebrace's Acting Deputy Chief of Fire Staff, as Chief Inspector for England and Wales. Local authority intransigence was watered down by the *quid pro quo* of a 25 per cent exchequer subvention.⁷⁷ De-nationalization thereby meant the re-territorialization of local government, which returned firefighting to the margins of public policy.

Conclusion

The 1947 Fire Services Act heralded the end of the NFS, as well as the statutory death of the police fire brigades and the parish pump. It also signalled the end of the firemen's Blitz myth. Firemen were no longer presented as national heroes, regulars and auxiliaries alike

pulling together to fight the common enemy. With de-nationalization came de-mobilization: around 600 ex-regular firemen were in the armed forces, the majority of whom sought a return to the service. From within the ranks of the NFS itself, about 12,000 firemen were retained, which left vacancies for 8000 positions, which were filled by a combination of ex-service men and former AFS firemen.⁷⁸ With this came a dilution in the newly established uniform values of wartime firefighting, and a return to the pre-war traditions of civic service, particularly the universally resented 'spit and polish'.

The 1947 Act further signalled the fire service's transition into a new stage in its modern history, one marked by an intensified campaign by the FBU for police parity. Where chief fire officers and their service associations had dominated discussions about fire service reform before 1938, now the agenda would be set by the representatives of labour. Faced by intransigent local authority employers, many of which had no experience of fire brigade administration, relations within the post-war fire service became marked by tension and hostility. Rather than 'pulling together' to craft an efficient peacetime service, the fire service was divided into clear camps in which the competing interests – local government, the FBU and central government – pulled in different directions and singularly failed to rebuild a professional service. Thus, the firemen's Blitz myth, symbolized in the historic character of 'Jim Braidy', was a short-lived ideal fixed in the extreme circumstances of wartime firefighting. For the post-war fireman, 'Jim Braidy' represented an increasingly obsolescent set of characteristics for mid-twentieth century firefighting. In place of the disciplined, heroic self-sacrifice of Braidy had emerged the restless and unionized firefighter.

8

From Fighting Fires to Fighting Firemen: A Fractured Fire Service, 1947–78

The 1947 Fire Services Act re-established key pre-war traditions in the fire service. Firefighting became a legal function of local government, albeit as the statutory responsibility of 50 counties and 75 county boroughs (as well as ten brigades administered by joint boards) in England and Wales, ranging from large full-time municipal brigades to largely part-time units in the more rural counties. In this sense, firefighting was ranked alongside other environmental services like town planning, and personal services like policing and childcare, which were also made the responsibility of the county tiers of local government during the late 1940s.¹ The largest bodies remained London Fire Brigade, with over 2000 full-time firemen, and the larger county borough brigades, including Birmingham (with an authorized strength of 650 firemen), Liverpool (500) and Manchester (351).² The police model of service administration was adopted, with the stick of national inspection counter-balanced by the carrot of an exchequer grant of 25 per cent of the fire authority's annual charge. The remaining 75 per cent largely fell upon local taxation.³

Scotland was divided into 11 fire areas, ten of which were combined authorities, with only Glasgow, the largest of the brigades (with an authorized strength of 578 personnel), retaining its independence. Edinburgh remained part of the South-Eastern Fire Brigade, whose 287 firemen protected an area of approximately 2500 square miles and a population of 760,000. Scotland also had its own Central Fire Brigades Advisory Council (CFBAC), which reported to the Scottish Home Department.⁴

Although the administrative structures varied, national conditions of service were established. Responsibility rested with the local authorities and the firemen themselves, through the negotiating machinery of the

National Joint Council for Local Authorities' Fire Brigades (NJC). Consisting of an Employers' and Employees' Side, the NJC was a powerful agent in determining or resisting changes to the nature and rewards of the post-war fireman's job. The NJC Employers' Side was particularly vociferous in its criticisms of the rising costs of post-war firefighting. Some of its members reminisced about the pre-war days of low wages, continuous duty and the police brigades, but drew the line at restoring parity with the police, proposing instead to determine pay and conditions 'by the nature of fire service employment, its duties and responsibilities'.⁵ Disagreement between the Employers' and Employees' Sides stemmed from their contrasting views on the skills of firefighting, and showed few signs of compromise between 1947 and 1978.

Internal conflict within the fire service echoes broader anxieties about the deep-rooted structural decline of municipal government. Historians have conventionally dated the decline in local authority powers and prestige from the late 1940s, when public services were either nationalized or regulated under a centralized welfarist state. The nationalization of health and public utilities removed traditional functions from the local authorities. Urban planning and housing policy were subject to tightened legal and financial restrictions, notwithstanding relative autonomy in implementation, which merely intensified tensions between the mutually antagonistic counties and county boroughs.⁶

The fire service is conventionally seen to fit this general pattern of decline: under-funded and under-strength, firefighting became tarnished as an unfashionable and unrewarding job during the 1950s. The professional fireman lost pay parity with the police in 1949, and then fell behind comparable skilled manual workers. By the late 1960s, he was recognized as a 'jack-of-all trades technocrat', responsible as much for the unpopular 'spit and polish' station duties as for saving lives and property.⁷ This chapter will trace the increasingly fractured nature of industrial relations between employers and employees, represented ostensibly by the Fire Brigades Union (FBU), from the 'spit and polish' demonstrations in November 1951 to the first national strike in 1977–8.

The 'spit and polish' demonstrations

On 19 November 1951, firemen across the United Kingdom downed mop and bucket, but not hose and stand-pipe, for a 48-hour boycott of non-essential duties. The 'spit and polish' demonstrations were sanctioned by the FBU, and involved roughly 8000 firemen who refused to carry out routine duties, including station work (cleaning stations,

engines and uniform, polishing appliances and equipment), drills and inspections. This was in protest at the deadlock between the NJC's Employers' and Employees' Sides in negotiations over pay, and followed 'unofficial' localized demonstrations across the country during mid-October.⁸ The key issue, as had been the case since the Middlebrook Committee's report of 1920, concerned parity with the police.

The FBU had ended the Second World War in a strong bargaining position, even though its membership had plummeted, from a wartime peak of 71,500 in 1941 to 15,293 in 1946, in line with the National Fire Service's (NFS) phased de-mobilization. Its membership was five times larger than its last peacetime count (at 3150 in 1939), largely because it had extended its influence among the former police fire brigades, in which it had been illegal to be a trade union member since 1919.⁹ In 1946, its Executive Committee successfully flexed its muscles at the Ministry of Labour's Industrial Court, by securing pay parity between firemen and police constables. Having resumed managerial control, in 1948 the local authority interests challenged the FBU's dominance following the concession in reducing firemen's working hours from continuous duty to a 60-hour week. Although the Industrial Court rejected the Employers' Side's proposal to withdraw firemen's rent allowances, it challenged the FBU's assumption that firemen should continue to enjoy parity with their uniformed colleagues, stipulating that 'it is not to be assumed that future increases or decreases of Police pay or allowances should automatically apply to fire brigade personnel.'¹⁰ This provided the Employers' Side with ammunition to sever the historic ties between the two services because, since the abolition of the police fire brigades, the assumption of parity with the police was questionable.

In July 1949, the police were awarded a substantial pay rise. The FBU duly responded with a claim for parity, which the Employers' Side challenged and instead proposed 'to negotiate a wage increase in "a new spirit"'.¹¹ During a landmark case in early 1950, the Industrial Court rejected the FBU's claim. Ten months later, the firemen were obliged to accept a 11s rise in their weekly pay, despite submitting a claim for 15s to re-establish parity. By September 1951, there existed a disparity of 35s between the policeman's and fireman's weekly starting wage.¹²

In the years following the abolition of the principle of police parity, the FBU's 'fierce campaign' centred on its restoration.¹³ David Englander argues that police parity served a broader purpose than acting as a wages referent; it was equally a marker of status. Firemen defined themselves as 'a cut above' other manual local authority workers, and considered it demeaning to be treated as 'mere labourers'.¹⁴ Only with police parity

could firemen define their work as a uniformed civilian profession, part of the public service's own 'labouring aristocracy'.¹⁵ More pragmatically, Victor Bailey contends that the FBU's campaign was rooted in the local authorities' surreptitious aim to implement economies during a time of austerity by returning the brigades to 'pre-war conditions of service', but equally 'to clip the wings of a union which had significantly increased its power and influence during the war'.¹⁶

Firemen felt they deserved more for their contribution to the war, and began to express their frustration verbally and in print. In 1951, the FBU's Executive Committee published a polemical pamphlet, *In Defence of Britain's Fire Brigades*, in which it criticized the decline in the standards of the service.¹⁷ Newspapers reported the simmering resentment of rank-and-file firemen. One, George Henry York from London Fire Brigade, complained that after 12 years' service his pay was £8 3s 6d, plus a 10s cost of living bonus. For this, York worked alternate shifts: one week of 9-hour days followed by another of 15-hour nights. On the day shift he would perform station duties, attend drill, lectures and physical training, and drive one of the engines to fire calls. Night duty generally meant more drill, station chores and lectures until supper, whereupon the men could play darts or cards, talk or study the seven-volume *Manual of Firemanship*, recently issued by the Home Office. Firemen were entitled to 'down time' from midnight until shortly before the end of their shift. However, they had to remain uniformed and slept on a trestle bed, which meant that 'very few' actually slept.¹⁸

From 1948 to 1951 there existed 'a running battle' between the Employers' and Employees' Sides over pay and duty systems.¹⁹ This bitter struggle was fought on the NJC, before the Industrial Court, and in fire stations, and involved rank-and-file firemen as well as FBU officials. Moreover, it centred as much on working conditions as pay. Post-war firemen resented being obliged to work in pre-war conditions, but especially to undertake station duties that owed more to the Victorian traditions of servitude than the professional identity propagated by their union. For example, the FBU's branch meetings held in Edinburgh's central station at Lauriston were dominated by complaints about the uncomfortable working conditions there. Opened in 1900, Lauriston had exhibited all that was innovative about fire station design, incorporating sliding poles, electric alarms, bay doors, firemen's dormitories and mess room. By the late 1940s, though, the station was condemned by firemen as outdated for the requirements of a post-war service dedicated as much to fire prevention as protection, and administratively responsible for a sprawling rural area around a central urban nucleus.²⁰

Rank-and-file firemen stationed at Lauriston persistently complained about the routine tasks that they were expected to undertake. These included scrubbing the firemaster's toilet, sweeping the yard, washing the station balconies, laundering towels, and washing and polishing the station floor. They criticized the draughty premises, frequently requesting additional blankets to keep warm when on night duty. Such complaints owed as much to the men's fear of emasculation as the injustice to their professionalism: one fireman proposed that the firemaster's toilet should be cleaned by the office girls who used it.²¹ This chimes with other historians' studies of post-war masculinity in northern industrial regions, in which working-class men emphasized the physical and dangerous nature of their jobs in order to re-assert their manliness.²² For post-war firemen, but especially the 4600 or so new enrolments nationally from 1949 to 1951, 'spit and polish' duties undermined their masculinity and were cited as a contributory factor for the high rates of wastage among junior ranks: of the 2605 resignations from 1949 to 1951, 1164 (45 per cent) had worked for less than 2 years in the service.²³

The national picture masked some important regional variations. In the West Midlands, high wages and the 5-day working week in industry left most brigades acutely under-strength. In 1950, Birmingham Fire Brigade had vacancies for 146 permanent firemen and 127 part-timers out of an authorized strength of 650 men, while Coventry, dominated by its booming motor-car industry, was protected from fire by a brigade that was 45 per cent below its 136-man establishment. To cope with manpower wastage, their chief officers postponed implementing the 60-hour working week introduced in 1947, instead retaining the 80-hour week without overtime pay. The re-introduction of long service medals did little to boost morale among Birmingham's firemen despite suggestions to the contrary by their chief fire officer, Henry William Coleman (1947–55). According to one angry Birmingham fireman, only parity with the police would improve recruitment and retention rates: 'I believe that to give the best fire service in the world our hours of duty must be reduced and pay brought at least in line with that of the police.' The battle-lines were drawn when the West Midland Branch of the FBU threatened to draw up its own 60-hour rota, or resort to strike action.²⁴ If firemen could challenge some of the obsolescent traditions of the fire service, they also hoped to redefine it as a skilled profession deserving of parity with the police.

Ignited by the NJC Employers' continued recalcitrance over police parity, these factors coalesced in November 1951 to trigger the 'spit and

polish' demonstrations. Participation varied from brigade to brigade. Some remained steadfast in their support for the FBU's strategy, while others wavered under pressure from senior officers. Support was strong and durable on Clydeside and Merseyside, where firemen had developed a reputation for militancy, but it was equally the case in Edinburgh, Bristol and some of the West Midlands' brigades like Rugby, Solihull, Leamington, Nuneaton, Stratford and Warwick, where every fireman boycotted station duties. In Coventry, 98 per cent demonstrated; yet in Birmingham, where Chief Officer Coleman professed to having 'good relations' with the local FBU branch, only roughly one-third picketed. All 63 of Huddersfield's firemen remained loyal to their employers, as did the majority in Worcestershire. Nationally, it was estimated that half of Britain's 19,154 firemen worked to rule.²⁵

Many chief fire officers immediately suspended those who demonstrated, replacing them with a mixture of officers, civilian volunteers and firewomen. Some temporarily re-instituted continuous duty to cope with smaller forces. Suspended firemen in Glasgow and Manchester responded to fire alarms, but were prevented from helping by senior officers. In his annual report to the Home Office, H. M. Chief Inspector of Fire Services, Henry Martin Smith, lamented that 'refusals to obey orders and carry out essential duties...cannot but prejudice the general efficiency and readiness of the brigades.' These demonstrations, superciliously described as 'a Communist-inspired mutiny' by the leader of the London Conservative Party, were deemed to be a breach of service regulations. Local authorities issued charge sheets against the dissenting firemen. London proceeded against 1420 men alone, reprimanding many, but also resorting to fines and reductions in rank. Hefty pay stoppages were imposed on Nottingham firemen by its Conservative-dominated City Council, while the 191 firemen charged in the South-Eastern Fire Brigade were docked 3 days' pay. A few firemen were dismissed, but reinstated on appeal.²⁶

The political circumstances changed in favour of the firemen in December, when three London firemen, who had been suspended during the demonstrations, were crushed to death by a collapsed wall during a fire in a British Railways' goods depot. The London County Council responded by withdrawing all charges against its firemen. Local authorities across the country followed London's lead. In one resolution, the Essex County Fire Brigade withdrew all charges '[a]s a mark of respect' for their London colleagues. Only Nottingham remained resolute, until the following year when Labour removed the Conservatives from power and rescinded the fines.²⁷

In the recriminatory aftermath of the demonstrations, the FBU's claim for parity was referred to the Board of Arbitration. The FBU used its full arsenal to assert the historic case of police parity, drawing on examples ranging from the police fire brigades and the Middlebrook Report to earlier Industrial Court awards. The NJC Employers' Side remained resolute, dismissing the connections between the two services as belonging to the past. Firemen should be paid according to 'the rate for the job', which, for them, was conterminous with that of manual workers. Amid bitter mediation, the Board awarded the firemen a weekly increase of 1s 6d more than the Employers' Side's original offer. Its chairman, Sir David Ross, also stipulated that 'the proper way of deciding the remuneration of the Fire Service is not to relate it to police remuneration but to determine it on its own merits.'²⁸ Severely wounded in the Industrial Tribunal's verdict of 1949, the firemen's claim for parity with the police was fatally defeated in 1952.

Preventing fires, sidelining unrest?

One of the main concerns among post-war firemen concerned the fragmentation of their job. Firemen had provided a gamut of 'special services' since the early twentieth century, which included rescue work, ranging from people in broken down lifts to cats stuck up trees, pumping water supplies during floods, cleaning up chemical spillages and responding to road traffic accidents. Thirteen county borough and five county council brigades were responsible for the local ambulance service by 1950. Firemen also participated in civil defence and radioactivity training exercises to prepare them to respond to nuclear attack.²⁹

A growing burden on brigade resources was provided by fire prevention. The dual responsibilities of protection and prevention, enshrined in the 1947 Act, extended regulated fire safety more fully into the workplace. Before 1939, only London and the larger municipal brigades maintained separate fire prevention departments. As discretionary bodies, these were generally peripheral sections, staffed by a few firemen only. The 1947 Act heralded the nationwide appointment of specialist fire prevention officers (FPOs) armed with their certificates in fire prevention awarded by the newly established Fire Service College, with facilities at Dorking and, from 1953, Gullane in East Lothian. Their responsibilities ranged from the stimulating to the mundane: they studied the potential fire-ravaging impact of atomic and hydrogen bombs, framed regulations for the fire safety systems of airports, leisure complexes and ships, voluntarily inspected thousands of factories, schools,

hospitals and homes, organized exhibitions and lectured on fire safety to schoolchildren and the elderly and inspected hydrants, sprinkler systems and automatic fire alarms.³⁰

Short-term impetus for incentivizing fire prevention derived from changes within manufacturing and the occurrence of fire disasters. Although there were improvements in industrial and commercial fire safety, new risks were created through technological innovations and changes to working practices. Automation, for example, eliminated many of the hazards which workers previously faced, while transferring risk from the process to the maintenance worker, especially in the electronics and petro-chemicals industries. The dangers of electrical failures and materials like foamed rubber, plastics and flammable solvents demanded a co-ordinated fire prevention strategy involving more stringent precautions in their storage. Fires quickly spread through large factories with flammable internal wall linings, destroying plant, and assisted in their spread by volatile plastics and fuel oil.³¹

Although large fires were not everyday occurrences during the 1950s and 1960s, their occurrence invariably triggered the adoption of a more resilient safety regime. For example, Keighley's Eastwood Mill fire of 1956, in which eight workmen died, caused central government to tighten existing workplace regulations and frame new ones. Its immediate aftermath heralded an increase in fire prevention work in factories and mills, particularly in the installation of automatic fire alarm devices. Medium-term repercussions were equally discernible, with one civil servant commenting that the fire presented 'a splendid opportunity... to make a big step forward towards a more sensible organization of the work of the Ministry [of Labour] in this "factory" sphere'.³² Three years later, a revised Factories Act transferred responsibility for the certification of factories from the Ministry of Labour's factories' inspectorate to local fire authorities.³³

Later fires accelerated the reform process. These included an explosion caused by fire in a Glasgow whisky bonded warehouse in 1960, in which 19 firemen were killed, the death of 11 shoppers in a fire in a Liverpool department store in 1960 and a Bolton fire in 1961, in which 19 nightclubbers died from asphyxiation in an unlicensed social club located above a disused factory. Experts condemned the systemic failure in existing regulations, especially what Ulrich Beck has described as 'blindness to risk' by businesses which neglect risks in an effort to increase productivity. In his report on Glasgow's tragedy, Firemaster Martin Chadwick (1948–61) emphasized the path dependence of fire safety regulations: 'Experiences of the past are the means by which we are guided in both

present and future and it is to be hoped that the tragic events of this occurrence might cause to review the associated risks with occupancies of this nature and so introduce whatever action or control is necessary in the interests of fire security.³⁴ Lessons were indeed learned, since additional revisions were made to the Factories Act in 1961 alongside a Licensing Act with explicit fire precautions for licensed premises. To accompany these reforms, a set of regulations were devised for FPOs, while a National Fire Prevention Week was held in the same year to publicize fire safety. Risks would be determined, measured and monitored according to a system of rational bureaucratic procedures; risk avoidance was no longer an option.³⁵

These fires also triggered the Office, Shops and Railway Premises Act (OSRA), 1963, which invested the factories inspectorate and FPOs with the responsibility of certifying fire exits in about one million premises nationwide. Brigades struggled to manage the workload, particularly since many firms continued to blindly avoid their risks. Risk determination brought the side effect of introducing new risks from fire, which included bingo halls, beat clubs and gaming houses. In some cases, as with the Bolton nightclub disaster and an Edinburgh beat club fire in 1967, fires extended state controls over unlicensed premises by empowering fire authorities, as the rational experts of risk calculation, to press for the closure of dangerous premises.³⁶

The legislative process culminated in 1971 with the Fire Precautions Act. In pulling together 'the whole miscellany' of existing controls under the Factories Acts and the OSRA, this Act created a single national directive under which the increasingly exorbitant bureaucratic apparatus of fire prevention would be administered through a series of designated orders. The first regulations were issued the following year through the Fire Precautions (Hotels and Boarding Houses) Order, which required the issue of a fire certificate for any commercial premise offering sleeping accommodation for more than six persons. Unsurprisingly, this Order was another reactive measure, following a hotel fire in Saffron Walden in December 1969, when 11 people died.³⁷ As part of the broader movement to modernize local government practices between the late 1950s and early 1970s, this legislative process constituted part of an emerging governmental discourse that recognized the shortcomings of existing legislation concerning the safety, health and welfare of people at work, which was manifested by fears about the state's liability for workers' compensation.³⁸

Fire prevention duties were more palatable to the FBU's Executive Committee than the 'spit and polish' chores, dismissed by one delegate

at its annual conference in 1957 as a 'constant insult to a man's intelligence', rendering the fireman 'no more than a glorified charwoman'.³⁹ Although fire prevention work removed firemen from their core task of running into burning buildings, this diversified role became a cornerstone of the firemen's pursuit of an elevated public status during the 1960s and 1970s. Abandoning its pursuit of police parity, the Executive drew parallels between the fireman and his skilled factory counterpart in its revised charter, *A Service for the Sixties*. By involving all firemen in preventative work, rather than an elite corps of specially selected and trained officers, the FBU hoped that the remnants of the service's naval traditions would be permanently vanquished. Underpinning this modernized service would be professional standards upheld by 'highly trained craftsmen', accompanied by a level of pay commensurate to that of skilled industrial workers.⁴⁰

The FBU's subsequent pay campaign used the national average wage as its yardstick. Initial success saw the wage differential reduced between 1956 and 1959, while a pay increase in 1962 gave firemen a salary above the male national average. Firemen's working hours were also reduced in 1956, following a protracted campaign, from 60 to 56, and then to 48 five years later. However, the wage drift meant that the service soon lagged behind industrial earnings again. Since wages were negotiated nationally, firemen could not supplement these with local allowances and bonuses, unlike in factories where workplace bargaining prevailed.⁴¹

The FBU faced the additional challenge of negotiating within the Labour government's strict incomes policy. Although it won a 7.5 per cent pay increase from the NJC in 1966, its Executive's members were deflated by the government's recourse to arbitration with the National Board for Prices and Incomes. In its appeal, the Executive emphasized that its members were no longer local government's handymen, but were 'skilled craftsmen facing new and dangerous hazards, acting increasingly as an emergency service in relation to road accidents and other disasters... and administering fire prevention and fire safety legislation'.⁴² The Board accepted the Executive's claim, offering a 7.5 per cent increase, but simultaneously undid its hard work for a shorter working week by offering a pensionable bonus of £170 for firemen willing to return to the 56-hour week. Within a year, 90 per cent of the service had taken up this offer.⁴³

Although the fireman was on a par with the skills and status of the average industrial worker by the mid-1960s, his pay and conditions lagged behind. Moreover, the fire service was fracturing internally

into a heterogeneous profession defined by an elite of expert FPOs and an army of disaffected 'jack-of-all-trades technocrats'. Expansion and recruitment remained buoyant, with the number of full-time firemen in England and Wales increasing by one-third to almost 28,000 between 1958 and 1966. However, wastage rates escalated, officer-men relations deteriorated and trade union membership reached unprecedented levels, peaking at around 90 per cent of all uniformed personnel in local authority fire brigades during the mid-1960s. Security as a public service empowered firemen to 'flex their industrial muscle' and demand improved pay, shorter hours and changes in their working arrangements.⁴⁴ The fire service of the 1960s was significantly larger and more varied in its composition and responsibilities than its counterpart of a decade earlier, but its members were also angrier.

For the beleaguered Home Office, faced with the threat of localized protests and the fear of a national strike, temporary sanctuary lay in the form of the Royal Commission on Local Government chaired by Lord Redcliffe-Maud, which was formed in 1966. A 'wait-and-see' policy was subsequently adopted in which senior officers and FBU officials were asked to be patient for Maud's report. To prepare the service for reform, Sir Ronald Holroyd, the chairman of Imperial Chemical Industries (ICI), was commissioned to head a departmental enquiry in 1967 to examine the future role of the fire service in the likelihood of a reformed local government structure. Once both reports had been issued and digested, the Home Office would then reconsider the value of the fireman's job.

The fractured fire service

Published in 1970, the Holroyd Report conceded that firemen's resentment of the 'spit and polish' traditions could no longer be ignored as one of the causal factors for 'premature wastage' – men leaving the service for personal or disciplinary reasons, rather than death or retirement. Between 1957 and 1968 the fire service doubled in personnel, but wastage rates ran at around 5 per cent annually. The greatest wastage lay in the junior ranks: by 1968, over 60 per cent of total wastage was accounted for by men who had served up to 10 years. In 1969 there was a deficiency of 1458 full-time men in the service; firefighting's traditional appeal as an honourable profession appeared to be over.⁴⁵

Problems were also identifiable locally. At a branch meeting of the Edinburgh FBU in 1969, the 'spit and polish' remained the leading subject of complaint: 'It was felt that in this day and age the area to be cleaned should be reduced, but in Lauriston it is increasing.' The Lauriston firemen's persistence finally paid off in 1971 when their

new firemaster, James Anderson (1970–5), abolished the ‘spit and polish’ duties and hired a staff of civilian cleaners. In its place, Anderson allowed operational firemen to take training programmes in fire prevention, before they could perform house-to-house fire safety inspections, lecture schoolchildren on fire prevention and carry out inspections under the Fire Precautions Act. In his annual report, Anderson noted that these changes ‘had a marked effect in raising morale’.⁴⁶

In Holroyd’s opinion, the fire service needed to be over-hauled to make it a more attractive and rewarding profession. Firemen needed greater job variability as well as an improved rate of pay. Fully qualified operational firemen should be trained in the use of turntable ladders, breathing apparatus, appliance driving and fire prevention. Moreover, although the cleaning and maintenance of appliances ‘should continue to be part of their duties’, Holroyd agreed with Anderson that ‘operational firemen should not regularly be employed on cleaning floors, windows, [or] wash-rooms.’⁴⁷ The abolition of the ‘spit and polish’ would sever the historic ties within the service that acted as a constraint on the firemen’s campaign for a professional wage.

In most areas, though, the Holroyd Report struggled to deliver any significant changes. Empowered to examine ‘the principles which should govern the fire service’, the committee examined a broad array of topics ranging from relations between central and local government, the functions of fire brigades, recruitment, pay and conditions, fire insurance and industrial brigades. It also took evidence from a bewildering myriad of institutions, including 13 government departments, five local authority associations, the four staff organizations (the FBU, the National Association of Fire Officers, which represented middle-ranking officers, the Chief Fire Officers Association and the National Association of Local Government Officers (NALGO)) and 43 other bodies, including the Fire Research Station, the IFE, the Industrial Fire Protection Association, the British Fire Services Association, the Trades Union Congress (TUC), the British Insurance Association and the Confederation of British Industry.⁴⁸ In short, the Holroyd Report spread itself too widely and consequently struggled to satisfactorily address the core structural weaknesses within the service, which were low morale and high wastage. Pre-empting Lord Redcliffe-Maud’s report on local government re-organization, the Holroyd Report agreed that, while the fire service ‘should remain under local government control’, there should be fewer and larger brigades. By introducing economies of scale, it anticipated greater operational efficiency through centralized management.⁴⁹ Taking 3 years to report, Holroyd’s scope was too broad and its findings too vague.

With the NJC unable to determine pay rates, a year later the Home Office appointed another independent committee of enquiry to evaluate the fireman's role, which was chaired by Sir Charles Cunningham, its former permanent under-secretary of state (1957–66). Alarmed by growing militancy within union branches, Cunningham proposed radical changes to the service's pay structure within 7 months of his appointment. Determined to devise a 'long-lasting' pay formula, his report convinced the NJC Employers' and Employees' Sides that, although there were important differences in 'the element of danger and the fact that not all the fireman's duty hours were spent working', the work of the fireman and the (semi-)skilled manual worker was broadly comparable:

...the fireman's job equates broadly, when experience, skill, mental demand and working conditions are all considered, with a band of jobs stretching from the top "semi-skilled" occupations in industry and merging into the bottom half of the skilled manual occupations. It is a feature of the fire service that it frequently takes men without formal qualifications from unskilled and lower semi-skilled occupations, and within a few years trains them to the level of competent qualified firemen.⁵⁰

Consensus on the NJC would bring substantive and long-lasting improvements to the scale of firemen's pay, bringing it in line with that of skilled craftsmen in manufacturing and firemen employed by private industry or the British Airports Authority.⁵¹

Continued delays by ministers alarmed at what they saw as inflated public sector pay demands during the early 1970s resulted in the issue being shelved as part of the Conservative government's voluntary incomes policy. To concede on firemen's pay would, the government feared, trigger a landslide of pay awards to police constables, teachers, nurses and dustmen, among others. The repercussions for the rate support grant were unpalatable for a government committed to economy checks in local government. The firemen's claim to make their service a special case had fallen on unsympathetic ears.

Growing militancy among local authority workers was a recurring theme during the inflationary period of the late 1960s and 1970s. From striking cleaners in Leeds in 1970 to national dustmen's strikes in 1969 and 1970, local government was fractured by low morale and burgeoning 'shop floor' militancy. Firemen were not immune from the heightened unrest, with restrictive workplace practices rife in many

brigades. London's firemen frequently undertook 'emergency calls only' demonstrations between 1966 and 1971 to secure additional allowances, and issued strike plans in 1966, 1969 and 1970, all of which were narrowly averted. Scottish firemen demanded an overtime ban during a pay dispute in 1970, and adopted a 'go-slow' policy the following year. Such practices, according to Aldcroft and Oliver, proved an important source of loss in productivity in both public and private sectors.⁵² Within the fire service, restrictive practices were an impediment to structural reform.

Firemen also became predisposed to the use of the strike weapon. In 1973, for example, Glasgow's firemen underwent a 10-day strike in support of a locally negotiated 'plus' payment. With support from other brigades, whose firemen responded to 'emergency calls only', the under-strength Glasgow Brigade secured a positive deal from its employers, including the abolition of station-cleaning duties and a return to the 48-hour week, to the chagrin of the FBU's Executive Committee which resented this local contravention of national policy.⁵³ The Executive Committee's 25-year dominance over firemen's duties and conditions of service was itself under threat from internal factions led by a younger generation of disaffected professionals.

Cumbersome negotiating bodies like the NJC, coupled with the exacerbation in trade union militancy, masked a deeper explanation for the fire service's weaknesses: an endemic decline in the status of local government. Decline was particularly pronounced within inter-governmental relations, in which heightened anxieties about the inadequacies of an obsolescent structure of local government, coupled with a fall in the quality of elected councillors, infected business concerning local government reform, funding and pay. The central-local government relationship had perceptibly shifted in recent years, away from the historic partnership model in which Whitehall and town hall together shaped the decision-making process, to an unequal agency relationship, under which local authorities took a more 'service-orientated' approach framed by an increasingly corporatist state.⁵⁴ Although this 'conventional wisdom' has been challenged by political scientists and historians, who recognize the continued influence of localized political cultures in determining how politics was conducted, a crisis had enveloped 'the national world of local government', through which resource exchanges were subject to the 'modernizing' constraints of national regulation.⁵⁵

The Holroyd and Cunningham reports should be read in conjunction with the 1969 report of the Royal Commission on Local Government,

and the subsequent 1972 Local Government Act. In particular, Holroyd re-affirmed the core principles of a restructured local government comprised of larger authorities, fewer in number. This was the logical step for the fire service because, as the Royal Commission's report put it, 'the areas of the 58 unitary and three metropolitan authorities should make suitable units for the fire service, metropolitan district councils playing no part in it.'⁵⁶ Local government re-organization, completed in 1974, duly reduced the number of fire authorities in England, Wales and Scotland to 62.⁵⁷

The old county borough brigades were merged with their surrounding non-metropolitan counties to effectively create countywide fire authorities. The three major metropolitan counties (the West Midlands, Greater Manchester and Merseyside) underwent substantial structural re-organization. For example, ten fire brigades around Lancashire and Cheshire were merged into a single Greater Manchester Fire Service with 41 stations and about 2000 personnel.⁵⁸ Glasgow Fire Brigade was subsumed into the Strathclyde Fire Service, the largest operational authority in Europe covering 14,000 square miles from rural Argyll to industrial North Lanarkshire and Ayrshire. Despite protests from rank-and-file Glaswegians, the rich heritage of this brigade was a victim of 'modernization'. Within a year, 200 Glasgow firemen had marched on Glasgow City Chambers to protest against expenditure cuts and another failed pay deal. Localized restrictive practices followed across Britain, during which firemen responded to emergency calls only for 3 months in mid-1975. The government's Civil Contingencies Unit responded with plans for military servicemen to provide rudimentary fire cover in the event of strike action. Owing much to this concerted local pressure, the 48-hour week, without loss of pay, was rolled out nationally from November 1975.⁵⁹

Between 1975 and 1977, FBU branch officials continued to challenge proposed expenditure savings by their local authority employers and alleged victimization by senior officers. Relations between the rank-and-file firemen, represented by the FBU, and the officers, under the National Association of Fire Officers (NAFO), reached breaking point. Baigent contends that, when seen in class terms, rank-and-file firemen saw themselves as defending the service from senior officers who, because they no longer fought fires, sought to reduce the cost of the fire service. In so doing, firemen developed solidarity in numbers, which gave them the confidence to resist unpopular policies.⁶⁰ We see this in FBU strongholds like Strathclyde and Merseyside, where firemen persistently agitated for a resumption of restrictive practices in order to secure

a 40-hour week. As 'the key issue' in 1970s British politics, Tim Claydon has shown how perceptions of industrial relations were tempered by a narrative of internal disorder, which permeated the fire station equally as much as it did the factory.⁶¹

Matters came to a head in 1977 with the third stage of the Labour government's incomes policy, the principal feature of which invoked a 10 per cent ceiling on earnings. The first two stages had reduced firemen's wages to three-quarters of the average pay, and the third stage offered little hope of closing this widening gap. Faced by an intransigent Labour government, the FBU's membership overwhelmingly demanded a real increase in firemen's pay, as well as a 40-hour working week, at its annual conference in May. The Home Secretary, Merlyn Rees, poured cold water on their demands by telling the firemen that 'we cannot opt out of the problem of the economy of the country and the economy of the world.'⁶²

Localized unrest spread across the country. Following an 'emergencies only' dispute in Liverpool, 20 firemen were dismissed. They were soon reinstated following mass picketing and a withdrawal of organized cover in the city. Calls for the Executive to ballot for strike action were received from the West Midlands, Greater Manchester, Lancashire and Strathclyde. Firemen furiously marched in support of their claim, despite appeals for calm from the Executive's leadership, under the general secretaryship of Terrence Parry (1964–80).⁶³

In September, the Executive submitted a claim for parity with the average weekly pay of adults, plus 10 per cent to take account of the hazards firemen faced. This amounted to a 30 per cent claim, which would increase the wage of a qualified fireman from about £3400 to £4500 a year, commensurate to the wages of, among other skilled workers, shipyard boiler-makers, blast furnacemen, riggers and scaffolders, and Heavy Goods Vehicle (HGV) drivers. A Home Office Job Evaluation Working Party's report sympathized with the firemen's plight, warning that 'industrial trouble ... is likely if firemen get no more than is possible within the pay limits.'⁶⁴ Working within the constraints of government policy, the NJC Employers' Side offered an immediate 10 per cent pay rise, with interim discussions over a shorter working week. Rees stood firm, guaranteeing discussion but not implementation of any reforms, confident that the FBU would avoid confrontation.⁶⁵

Localized unrest was expected, but the government never seriously anticipated a protracted national strike, despite arranging for drafts of 11,000 servicemen to man around 850 ex-Auxiliary Fire Service emergency pumps – the infamous Green Goddesses – in the event of strike

action. At a recalled delegate conference on 7 November, the membership over-ruled Parry's pleas for continued negotiations, and voted in favour of strike action by a majority of around 2:1.⁶⁶ The first national firemen's strike began on Monday, 14 November. It lasted for 9 weeks, until Monday, 16 January 1978.

In the midst of ardent media opposition, the firemen downed hoses and huddled round their braziers. Leading with a photograph of a young boy rescued from a house fire the weekend before strike action began, *The Daily Express* emotively urged the firemen to 'Have a heart', while *The Sun* led with the government's proposals to set up neighbourhood fire teams to help the Army, adopting the headline 'Stand by your buckets.' Hostile editorials questioned the 'moral sense' of the firemen 'to put other people's lives at risk in order to get more money'. Even sympathetic newspapers like *The Glasgow Herald* warned of the 'firemen's folly', since '[t]he last shreds of public sympathy will go up with the first smoke which claims human victims.'⁶⁷

Firemen publicly defended their actions against 'the sneering tone' of some editorials, and insisted that troops were 'unable to give adequate firefighting service'.⁶⁸ Public support, meanwhile, appeared buoyant. Opinion polls reported that firemen should be treated as a special case and given a rise above the 10 per cent limit, while local petitions indicated strong support. Some sections of the media remained loyal to the firemen. For example, Gordon Honeycombe, the Independent Television News (ITN) news reader, was suspended for supporting the firemen in a *Daily Mail* article. Drawing from the harrowing narrative of the Paddington firemen who had fought the fatal Worsley Hotel fire in December 1974, Honeycombe insisted that firemen faced frightening dangers that went unrewarded. In a direct challenge to the Prime Minister, James Callaghan, Honeycombe urged him to '[g]ive the firemen back their self-respect and pride. Give them the money... It is all they deserve.'⁶⁹

In December, negotiations with the government stalled. The government offered 10 per cent, phased in over 2 years, plus a permanent formula that tied firemen's pay to 'the adult male manual upper quartile', equating to average manual earnings. In return, the firemen had to resume normal working and not victimize strike-breakers, particularly retained firemen who had refused to down hoses. The Executive rejected the offer. However, when the TUC refused to support its claim, the Executive caved in. Parry urged his membership to accept the offer, which brigades in Leicestershire, Surrey, Hertfordshire and Bedfordshire

did. Bitterness was rife across Scotland and the industrial north, where firemen defied Parry's plea to end the strike. Thousands of firemen marched across Glasgow to defend their claim, while Scottish officials tried to extend the strike to tanker drivers, lift fitters and maintenance engineers. In early 1978, the Executive decided to put the vote to the membership at a time when the service faced internal collapse.⁷⁰

On 12 January 1978, at a recalled conference in Bridlington, a majority of nearly three to one voted to end the strike. For 2 months' solid picketing, the firemen would receive an extra £15 in November 1978 and a total of £102 in basic pay by November 1979. Hours would be gradually reduced to 42. Angry scenes erupted when militant delegates attacked Parry and Willie Miller, the Executive member for Strathclyde.⁷¹ The firemen's strike, like the 'spit and polish' demonstrations two decades earlier, had failed in its ambitious aim.

Three reasons can be attributed to the strike's relative failure. First, covert planning by the Civil Contingencies Unit and greater diligence from industry and the general public meant that the country avoided any large fires. The troops, who were given training and fire-ground supervision by members of the non-striking NAFO, competently fought large fires. Confidential government files recorded high morale and improved professionalism among the troops as the strike wore on. Newspapers celebrated the bravery of the soldier firemen, not least those injured in the line of duty. For example, two Royal Air Force (RAF) airmen, who were engulfed in a ball of flame at an Edinburgh fire, were lauded as 'fire heroes' in *The Scottish Daily Express*.⁷²

Second, the government's obduracy over the 10 per cent ceiling left the FBU with no room for manoeuvre in negotiations over its unrealistic demands. That other public and private sector workforces had accepted deals within the limits of incomes policy undermined the firemen's resolve.⁷³ Third, the strike occurred during a period of relative stability within industrial relations. Keith Laybourn and Chris Wrigley both record a lull in strike activity between 1974 and 1978. In a period of decelerating wage increases and growing co-operation between the government and trade unions, the splintering effect of the firemen's campaign was contrary to the principles and practices of the Labour government's 'Social Contract'. The FBU failed to secure the support of the wider labour movement, especially the TUC, whose influence over incomes policies left the firemen politically impotent.⁷⁴ Isolated for 2 months, the majority of firemen, demoralized and penniless, had little choice but to accept the government's offer.

Conclusion

The first national firemen's strike originated through long-term neglect by an inert NJC Employers' Side and an embattled central government constrained by the pressures of industrial decline. Firemen's hopes were lifted by numerous proposed awards, but invariably deflated on the NJC or before the Industrial Court. As one of the chief negotiators on the NJC, the FBU's Executive Committee was itself saddled with considerable blame for the firemen's wages drift by an increasingly hostile membership.

Firemen also contributed to their own problems. Rank-and-file belligerence, coupled with a growing mistrust of their senior officers' intentions, transformed the firemen's campaign for professional status into a protracted struggle for control over the service. Multi-unionism exacerbated tense relations because the FBU repeatedly challenged the NAFO's representation of officers on the NJC Employees' Side.⁷⁵ Persistent complaints from junior firemen about station duties antagonized working relations with their officers. Baigent notes in his study of the service's working culture how, even though officers are traditionally promoted from within the service, firemen see their hierarchical command structures in class terms and automatically 'build a gap between themselves and officers'. They depict the officers as opponents to their professional status, accusing them of trying to de-skill the profession by enforcing cuts in standards and embracing equal opportunities legislation. This shared understanding of 'The Job', in which firemen enter burning buildings to extinguish fires and prove their manliness while officers remain outside directing operations, binds firemen together in defending their professional ethos and protecting their working-class masculinity.⁷⁶ Professionalism might have been the underlying objective of the fireman, but it was equally the condition for all his woes.

Conclusion: The British Fire Service in Comparative Context

How unique has been the British experience of fire protection and the gradual professionalization of the service? To what extent was North American fire protection similarly interwoven with the changing fortunes of local government? In this conclusion I will contextualize the British experience within the wider literature on the history of fire services in North American cities. There are comparative studies of municipalization available, some of which have provided an analytical framework for this study.¹ In addition, there is a burgeoning literature on the professionalization of firefighting in North America that has examined the changing working practices of firemen in the broader context of social and cultural history. The way in which firemen construct and protect their collective identity within prevailing gender relations has also attracted growing historical interest.²

Municipalizing fire protection

In her comparative study of North American and European fire services, Amy S. Greenberg concluded that it took an 'apparently analogous' combination of economic, social and cultural factors for municipal fire brigades to be formed during the mid-nineteenth century. First, fire insurance companies pressured municipal governments to establish paid fire brigades because a municipal system cost less to them, even if they made annual contributions towards their maintenance. Moreover, a municipal system extended protection to uninsured property at the expense of the ratepayer, rather than the insurance company. The main exception to this rule was London, where the city was protected by a private fire brigade from 1833 to 1866, including those who did not take out insurance premiums. Second, the decision to adopt steam

technology involved an initial outlay on engines and equipment, but brought economies of scale by reducing the number of firemen required to work the engines, as well as the number of engines needed at large city fires. It was this combination of increased power, capacity and speed that heralded a revolution in firefighting technology between the mid-1850s and 1870s. Third, the technical skills demanded of firemen to operate this more complicated machinery, and also to perform a variety of demanding tasks in an increasingly dangerous urban environment, fuelled a growing consensus among insurance agents, municipalities and firemen that firefighting had become a professional service inasmuch as firemen needed incentives such as pay and pensions to improve and maintain their performance.³

Greenberg's argument that firefighting was municipalized by 'a network of financial security gained from insurance' is a compelling one for the British fire service. Because the large metropolitan insurers were in a much more comfortable position by the early nineteenth century, they were able to gradually withdraw from the provision of organized firefighting services in provincial towns, which challenged the incentive structure of municipal government by handing the baton to those 'ratepayers' democracies' that were keen to extend their own powers over the urban environment. Insurance companies undoubtedly played a pivotal role in forming the first paid fire-engine establishments, donating fire-engines to towns, and making annual contributions to the maintenance of municipal brigades. Yet their role was increasingly out of kilter with the evolving responsibilities of the fire service by mid-century, particularly as firemen started to put the saving of lives before the protection of property. It was this broad shift that ultimately forced the metropolitan companies to relinquish control of the London Fire Engine Establishment in 1866, and was a pattern duplicated across provincial Britain.⁴

American fire insurance companies did not run fire-engine establishments because organized firefighting preceded fire insurance there. Rather, the earliest fire brigades were mutual associations of volunteers, which were formed by businessmen and philanthropists to shore up their social and political power as well as to extinguish fires. Membership of a volunteer fire department was, according to Greenberg, a mark of a fireman's citizenship because he voluntarily offered his life to his city, which subsequently allowed him to prove his manliness by racing and matching strength with 'other like-minded men, regardless of occupation'.⁵ The decision to transfer control of firefighting to municipal government, like in Britain, was a local and piecemeal response to a

growing number of pressures, including middle-class concerns over the 'rough physicality' of some volunteer firemen.⁶ It was also partly a reflection of the growth of a municipal interventionist spirit, which began with the award of municipal funds for the volunteer companies to purchase fire-engines, stations and hose in the 1840s and 1850s, and ended when the municipalities themselves bought steam engines for the use of their own paid firemen during the 1860s and 1870s. As Greenberg and Annelise Graebner Anderson have both shown in the case of Cincinnati, which was the first city to form a fully paid fire department in 1852, it was this combination of insurance and steam engine interests, 'couched in the language of professionalism', that triggered municipalization.⁷

In a similar manner, steam engines 'catalysed' the development of paid fire brigades in Britain, particularly from the mid-1860s onwards, but they did not herald an altogether new style of firefighting.⁸ The refinement of steam power by engine manufacturers accelerated the spread of an ethos of professional firefighting, but only in combination with other technological and organizational factors. As Mark Tebeau has convincingly elided in his study of the Philadelphia and St. Louis municipal fire departments, steam technology 'accelerated long-term trends' in their organization, including a specialized division of labour, but it 'did not suddenly change the nature of firefighting work'.⁹ For a good number of British towns – including those at the forefront of the industrial revolution – the decision to establish or reform a municipal fire brigade ordinarily predated the decision to buy a steam fire-engine. The British experience of firefighting differs to the American here in that municipal brigades were formed earlier and for slightly different reasons. Manchester was protected by a publicly funded 'fire police' from 1792, Glasgow from 1807 and Edinburgh from 1824. Liverpool established a similar body in 1836 after adopting the Municipal Corporations Act; so too did Leeds, Leicester, Cardiff and many other town councils. Other towns took longer to accept their responsibility for fire protection and fit Greenberg's general model because they adopted steam power at the same time as they formed firefighting bodies. Newcastle-upon-Tyne, for example, did not establish a 'fire police' until 1867, 13 years after its own 'great fire'; Bristol and Birmingham followed in 1874. In these three cases, the elected town councils only acted after they had been notified by the insurance companies of their decision to disband their firefighting apparatus.

Such uneven pulses of municipalization demonstrate that municipal governments approached reform according to a number of conditions specific to themselves, but always aware of external experiences. These

included the supply constraints of the local fire insurance market, public demands for municipalization in the aftermath of major local fires, access to supplies of high-pressure water, and the negotiating prowess of senior firemen. Municipal governments, in whatever guise they took, approached the establishment and reform of local fire services cautiously and pragmatically. This explains why firefighting was approached in a joined-up manner: police fire brigades were formed to save on labour costs, while water-mains were laid with fire-plugs to improve the supply and pressure of water.

Fire protection was only taken under public control when fire became an identifiable risk locally and was mobilized into a 'political force' by municipal politicians and active firemen. Even then, decisions tended to be reactive and were designed to foster what Ulrich Beck has called 'solidarity from anxiety', rather than reduce or dissipate the risk of fire.¹⁰ The decision to establish or restructure a public fire brigade was also based on a set of established criteria, which, from the 1830s, classified urban firefighting according to the technology at the firemen's disposal, as well as their organization as uniformed civilian workers. Senior firemen like James Braidwood set out to create mobile units comprised of men and machines that responded to alarms of fire with alacrity and discipline. The piecemeal diffusion of this ethos of organized, reactive firefighting inevitably connected a disparate congeries of fire brigades together into a cohesive profession that became commonly known as the fire service around the turn of the twentieth century.

Making a professional fire service

In his study of the professionalization of firefighting in North American cities, Mark Tebeau persuasively argues that firefighters, 'encouraged by a popular press that celebrated their work', constructed the boundaries and parameters of their own service. Although municipalization occurred incrementally and varied from place to place, firefighters recognized late in the nineteenth century that their occupation had evolved into a 'part science and part craft', and the skills necessary to become a good firefighter were 'acquired only through disciplined training and years of experience'. America's municipal *firefighters*, like British *firemen*, would save lives as well as extinguish fires. As such, they formed their own professional associations, like the National Association of Fire Engineers (NAFE) in 1872, through which they disseminated this ethos of professionalism and established 'the jurisdictional boundaries and work activities of the occupation'.¹¹

An almost identical process occurred in Britain, where a professional fire service was first created by firemen who, through their control of the service's human capital, redefined the parameters of firefighting to incorporate the heroic rescue of lives alongside the protection of property. In the process, senior firemen like James Braidwood and Captain Eyre Massey Shaw emphasized the importance of acquiring skills through regular drill and training, as well as physical fitness. The chief fire officer of the New York Fire Department, John Kenlon, commented upon the dual importance of skill and physicality in his international study of firefighting, which was published in 1914. The London Fire Brigade had recently fitted up one of its stations with gymnasium equipment for performing the increasingly popular Swedish drill, which involved performing free-standing exercises in an agreed order to tone the body rather than build muscle mass. Only through 'constant physical training' in groups, Kenlon remarked, could firemen become skilled in firefighting and life saving, 'especially in view of the number of hook ladders carried on fire appliances and the extended use of such ladders'.¹² Like all working-class men, firemen needed physical strength and endurance to perform their duties, but also, as George Mosse notes in his study of modern masculinity, 'to make manliness function correctly'.¹³ This internalized skill-set helped establish the British fire service as a public service in its own right, but equally differentiated it from the police service, which acted as a brake on its specialization for much of the nineteenth century.

Once the ethos of a professional and independent fire service was agreed among senior officers like Alfred Robert Tozer, Arthur Pordage and William Paterson, it was then diffused nationally through the formation of service associations like the National Fire Brigades Union, the Association of Professional Fire Brigade Officers and, finally, the Institution of Fire Engineers. Their annual conferences, drill competitions and publications provided, much like the NAFE's annual convention, a forum for firemen to discuss changes to their working practices. These included technological innovations such as self-propelled chemical and motorized fire appliances, life-saving apparatus like hook ladders and fire escape tenders, and equipment designed to improve firemen's performance, such as breathing apparatus and street fire alarms. Their annual conferences, aided by an increasingly self-referential trades' press, also gradually became the arena in which firemen canvassed for legal and political recognition. Through the collective strength of the service associations firemen asserted their professional credentials and

secured political legitimacy from senior civil servants and politicians with the passing of the 1938 Fire Brigades Act.

Tebeau also shows that, having invested firemen with an elevated public status for heroic self-sacrifice, professionalization 'also became a panacea for many of the issues that firefighters faced: incomplete training regimens, poor wages, widespread differences in organization, management, and work both between and within departments, and the persistence of rough cultures in engine houses.'¹⁴ British firemen faced similar problems during the late nineteenth and twentieth centuries, not least in balancing the public perception of the fireman's heroism with the realities of his calling. Professionalization did not guarantee a wage commensurate with similar public services like policing; nor did it guarantee a pension before 1925. Low pay, long hours and pensionable entitlements were the three recurring issues faced by British firemen for much of the twentieth century. Added to this was a growing sense of injustice and emasculation at being forced to perform station duties, which many junior firemen identified as anomalous to their professional status by 1950. The acquisition of an elevated public status can be read in this context as a long-term cause of the fire service's internal collapse, while the subsequent national strike represented the firemen's last efforts to defend their professional value.

Having disseminated the ethos of a professional fire service, North American firefighters gradually ceded their authority over fire to fire insurance underwriters during the first half of the twentieth century. Firefighters continued to fight fires, yet their working environment was increasingly rationalized by a series of organizational technologies and everyday bureaucratic practices like the surveying and mapping of risks. Fire was seen as a risk that could be mapped, quantified and ultimately designed out of the city. Although fires continued to ravage post-war American society, their destructive prowess tended to shift beyond the suburbs into the 'exurban' hinterlands where they 'blurred' the lines between urban and rural fire risk. Tebeau suggests that it was the shifting nature of fire danger, coupled with the standardization and systematization of the study of fire, that weakened the firefighter's traditional role in providing the frontline defence against fire, particularly since homes were increasingly left to burn themselves out in the knowledge that the buildings and contents were insured against destruction.¹⁵

British firemen consciously took an alternative path to their American 'brothers' during the mid-twentieth century, partly due to the countries' different experiences of de-urbanization and fire danger, but also as a response to the obstacles that continued to distort their own sense

of professionalism. Although firefighting and rescue work remained the core responsibility of the British fire service after 1947, professional firemen started to redefine their own labour during the 1950s and 1960s towards a more preventative role in order to extend their authority over fire. This was as much a proactive strategy undertaken by the Fire Brigades Union (FBU) to improve its members' professional status, as it was a response to the changing legal framework that governed the post-war fire service. Firemen thus approached fire in a systematic and rational way, particularly in inspecting and certifying business premises under a volley of acts passed between 1959 and 1971. That they continued to perform a preventative role during the 1980s and 1990s, particularly as part of community fire safety initiatives, illustrates how fire prevention had achieved equal precedence to fire extinction.¹⁶

If the 'spit and polish' demonstrations represent the tail end of the firemen's campaign for professional status, the first national strike should be read as the firemen's defence of their profession and this diversified role. Professional firemen sought to improve their conditions of service in line with their modernized working practices. They naturally interpreted the irresolution and taciturnity of their local authority employers and central government as opposition to their modernization. Although the economic realities of de-industrialization and the changing political environment of central-local government relations provide more feasible explanations, the government's obfuscation merely inflamed the situation.

The fire service emerged from the national strike relatively unscathed. A new funding formula tied firemen's wages to 'the adult male manual upper quartile', while their conditions of service were formally agreed in the *Scheme of Conditions of Service* (popularly known as the Grey Book) issued by the National Joint Council for Local Authorities' Fire Brigades.¹⁷ The service also survived the Conservative reforms of local government relatively untouched. First, the FBU successfully resisted efforts to unilaterally impose expenditure savings in 1980 through proposed reductions in the national standards of fire cover and fire prevention duties. Second, firemen continued to develop their safety inspection role. For example, the 1980 Housing Act gave them powers to enforce proper means of escape in cases of fire in hostels, flats and multi-occupied houses. Additional safety powers were granted in response to major fire disasters such as the death of 56 at Bradford City's Valley Parade stadium in May 1985, and 31 at the London Kings' Cross underground fire in November 1987. Third, local government re-organization in the mid-1980s modified some of the larger

fire authorities, including subjecting the London Fire Brigade to Home Office control like the Metropolitan Police Force, but involved little substantive restructuring.¹⁸

There does not appear to have been any serious discussion about privatizing or contracting-out the fire service's core responsibilities, although proposals to introduce service charges for fire safety inspections were successfully blocked by the service associations. Although members of the fire service community have criticized fire service managers and administrators for prioritizing financial efficiency over service efficiency in recent decades, the idea of privatizing a public service has not been seriously entertained in Britain.¹⁹ A recent study of the service defined our modern understanding of the fire service as one that is 'funded, regulated, managed and directed through a combination of national and local politics, staff representation, community voice, and management control'.²⁰ The shared risk of fire underpins this consensus that the fire service remains inherently public in its focus and, over the past 200 years, has evolved as the collective responsibility of the state.

The fire service's maturity as a reactive body has also led to it being recast in a wider capacity. Rather than simply responding to fire alarms, firefighters, as firemen are now known, actively identify and manage threats to national security, and are trained to respond to 'special service incidents', which include mass de-contamination, urban search and rescue, flooding and terrorist attacks. The 2002 Independent Review of the Fire Service, established by the New Labour government to pre-empt industrial action by the FBU, concluded that the fire service was 'paid for by the public' and therefore existed 'to protect them from the threat of fire, accidents and other natural events'.²¹ This emphasis on protecting against threats has strengthened the service and, to recognize its changing roles and responsibilities, it was statutorily renamed 'The Fire and Rescue Service' in 2004.

However predictable it may appear in the light of what we already know about the history of public services, the professionalization of the British fire service was a highly contested and localized experience. The decision to municipalize or re-organize firefighting varied over time and from place to place, and resulted from a confluence of local factors. There was no inevitability that municipal government would assume responsibility for fire protection during the nineteenth century, particularly since it had its organized roots in the business of the fire insurance companies. Moreover, it was not unavoidable that the fire service, once established on a professional footing by 1914, would remain the responsibility of local government, although it has done

so. This is particularly because the service has evolved those horizontal and vertical layers of competition and antagonism that Harold Perkin identifies as constituting professional society.²² First, it was divided horizontally between the different typologies of fire brigade, which created operational and policy divisions between the independent chief fire officers and the chief constables, who approached firefighting in divergent ways. Second, it was divided vertically between the firemen's trade unions, senior officers, local government employers and the Home Office, and these bodies have recurrently contested the parameters of each other's responsibilities, certainly since nationalization in 1941. Finally, although administrative responsibility for the service has rested with local authorities for almost the entire duration of this study, it has been passed around different units of local government following different rounds of reorganization. This institutional instability has been a significant contributory factor to the fractured nature of fire service politics for many decades, and shows few signs of dissipating.²³

Postscript

In September 2008, Edinburgh's civic authorities unveiled a 7-foot bronze statue of James Braidwood on the site of the city's 'great fire' of 1824. Sculpted by Kenny Mackay, the statue memorializes Braidwood's contribution to the creation of the British fire service. The statue was the culmination of a protracted campaign by a retired firemaster from the Lothian and Borders Fire Brigade, Frank Rushbrook, and received financial support from the City of Edinburgh Council and its Surplus Fire Fund, which was initially created from charitable donations after the 'great fire'. It captures the essence of the British fire service as a public service created out of the dual impulses of large city fires and fearless firefighters, illustrating how the heroic stories of firefighters like Braidwood are constantly being retold to help redefine the service in its local and heroic terms. As the first fireman hero, James Braidwood's legacy is enshrined both in the built form of the modern city and in the cultural traditions shared by firefighters today.

Notes

Introduction

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6 Rational Reform in an Age of War: Creating a Modern Fire Service, 1914–38

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 13. *The Fireman*, XXXVIII, no. 463 (1915), 116; XXXVIII, no. 464 (1916), 135.
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7 From Braidwood to Braidy: A National Fire Service, 1941–7

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