



# Performing Expertise in Building Regulation: ‘Codespeak’ and Fire Safety Experts

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**Abstract** Fire safety expertise was in great demand following the Grenfell Tower fire in London in June 2017. The government established a review of building regulations and an expert panel to inform its responses to Grenfell, and many other relevant organisations also formed their own expert panels. However, expert knowledge in fire safety is a highly contested domain, with knowledge claims based on differing sources. Fire fighters can claim expertise based on their experience of fighting fires, scientists and science-based engineers can claim expertise from experimentation, and those who create and enact regulations can claim expertise in what can termed ‘codespeak’—the language of regulation. Although distanced from fundamental empirical experience of fire, codespeak is powerful because of its relative clarity and certainty, and legal status. Building users also bring their own form of ‘local’ expertise—they have first-hand experience of the practicalities of the solutions wrought by the other experts. Policy-makers thus face many competing forms of expert advice on fire safety, and their ability to judge what is most relevant in any particular case rests on the existence of a sufficient range and depth of in-house government expertise.

**Keywords** Fire safety · Regulation · Expertise · Governance · Declaration

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## Introduction

Since 72 people died in the Grenfell Tower fire in June 2017, fire safety has been at the top of the agenda in the UK construction industry. The Metropolitan Police and the Public Inquiry continue to investigate the circumstances surrounding the fire, and the Ministry of Housing Communities and Local Government (MHCLG) has taken steps to identify and address latent risks within existing buildings. MHCLG also commissioned an *Independent Review of Building Regulations and Fire Safety*, led by Dame Judith Hackitt, to identify what regulatory changes may be required in the construction industry.

What each of these activities have required is people with appropriate expertise. The government quickly established an Independent Expert Advisory Panel, the Metropolitan Police engaged the services of a forensic investigator (BRE Global), and the Public Inquiry appointed 17 expert witnesses. Meanwhile the Hackitt Review drew on ‘over 250 submissions [that] were received from a diverse range of stakeholders, including the construction, housing and fire sectors, independent experts in relevant fields and residents’ (Hackitt 2018: 140). Following the government’s lead, many professional and membership organisations also established their own expert panels. For example, the Royal Institute of British Architects, Construction Product Association, Construction Industry Council, and Royal Institute of Chartered Surveyors have all convened expert panels on fire safety.

This hurried assembly of expert panels raises questions about the nature of the expertise involved, and the role that the experts perform in informing fire safety governance. These experts are potentially important because their advice may be influential in shaping industry best practice, regulation, and government policy in general; and ultimately because of the effect on safety outcomes. It thus matters whether they conform to normative expectations of experts—that they are both specialists in a particular knowledge domain but also impartial and thus trustworthy (Grundmann 2017: 26).

Following Grenfell, public outcry, media speculation, and expert commentary addressed a variety of perceived problems with UK fire safety, including broader issues of inequality, austerity, and deregulation (Hodkinson 2019; MacLeod 2018). In this paper we focus on one particular outcome of expert advice following Grenfell: the decision to revise building regulations to ban combustible cladding on certain classes of building above 18 m. There are separate debates to be had about the test methods that can be used to support the use of materials and products within buildings (e.g. Brannigan 2008), and whether industry has made use of such tests and their data in an ethical manner (Booth 2018). Here we focus solely on the expert advice that led to the ban. This ban was the first (and as of March 2021 the only) significant change made to building regulations following Grenfell, and what is particularly noteworthy is that it flew in the face of the recommendations of government-commissioned expert advice, including the influential Hackitt Review.

Our argument is as follows. Policy-makers often face complex challenges, relying on expert advice that may stem from diverse knowledge domains. From the

perspective of policy-makers, such challenges can be seen as ‘ill-structured problems’ (Simon 1973) if it is unclear how to frame the challenge and what expertise is most relevant. Expert advice will thus appear particularly useful if it enables the policy-maker to structure and formalise a problem—turning an ill-structured problem (ISP) into a well-structured problem (WSP)—because as (Simon 1973: 186) argues, ‘there are no WSPs, only ISPs that have been formalized for problem solvers’.

The challenge of fire safety regulation following Grenfell might seem to be a well-structured problem because the desired outcome appears straightforward. Overall, it can be summarised by the statement made by Minister of State for Policing and the Fire Service Nick Hurd following Grenfell ‘to ensure that people in similar buildings are safe’ (Hurd 2017). More specifically, in relation to the cladding ban at the heart of this paper, the desired outcome is described in functional requirement B4 of the Building Regulations as: ‘The external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and position of the building’.

However, even defining what is meant by ‘safe’ or to ‘adequately resist the spread of fire’ is challenging, never mind deciding how to obtain such outcomes. Both safety and adequate resistance to fire spread are subjective outcomes whose realisation hinges on the method of implementation. For example, it is not practical to ensure that building occupants are completely ‘safe’; not only are buildings designed to meet multiple (sometimes competing) performance goals, but also home dwellers are free to accumulate combustible materials and to indulge in risky behaviour. Furthermore, any government spending will involve opportunity costs with regard to other potential societal benefits (e.g. in road safety).

Historically, fire safety precautions became designed into the built environment through the use of building codes with prescriptive rules whereby a particular class of building (e.g. an apartment block above a certain height) had to incorporate specified fire safety measures. Implementing such rules does not require a building designer to understand what they are doing or how it affects safety. The alternate to a rule-following approach is to focus on performance outcomes and ensure that fire safety design is carried out and/or regulated by competent practitioners with adequate understanding of the relevant processes. Such an approach to regulation relies not on rules requiring specific fire safety precautions, or on the banning of certain materials, but on judgements as to whether performance outcomes have been achieved, and in the event of a fire, whether conditions would remain tenable long enough for occupants to escape.

Since the mid-1980s, English fire safety regulation has been an uneasy hybrid of these two approaches with performance outcomes expressed as subjective functional requirements, but with most designers relying on prescriptive rules set out in Approved Documents that provide guidance for ‘more common types of building’. Grenfell exposed weaknesses in this regulatory system across a wide range of issues, and addressing these failings poses a complex challenge for policy-makers. What to do about fire safety regulation following Grenfell thus constitutes an ill-structured problem for government because it is ‘a problem whose structure lacks definition in some respect’ (Simon 1973: 181). The difficulty of defining desirable fire safety

outcomes is compounded by the challenge of choosing appropriate regulatory mechanisms aimed at producing those outcomes.

After describing some key issues with the role of experts, we set out a typology of fire safety expertise in order to demonstrate how diverse practitioners can claim to offer useful expert advice. We then describe the role of government-sponsored experts following Grenfell, and the contrasting approach taken by the Royal Institute of British Architects (RIBA) with its strong advocacy for prescriptive solutions. Our argument is that analysis of these cases shows how the idea of banning combustible materials proved successful because it made a complex, ill-structured problem appear straightforward.

## Conceptualising Experts and Expertise

Incidents such as the Grenfell Tower fire highlight the important role that government can and should play in mitigating risk. Technological innovation brings many benefits to society, but often also involves potential risks. For some risks, attitudes vary as to what extent government should intervene through regulation or other mechanisms, but in the case of fire there has historically been little doubt. As humans created urban settlements of increasing size, it eventually became clear that fire was a shared problem, and not one that should be left entirely to individual choice (Bankoff et al. 2012).

If government is to take action on protecting its citizens from risks, then it needs to understand what these risks are and how they can be mitigated. The role of expertise in risk governance thus hinges on two types of activity: the production of appropriate knowledge; and its communication to policy-makers. For such a mechanism to work well these two processes should be linked; those with appropriate knowledge should be the ones that government turns to for expert advice.

Although expert knowledge is a communal achievement, it can also be seen as an individual attribute. Those who have the highest levels of expertise appear, on the face of it, well suited to provide expert advice. Individuals acquire expertise through education and experience, and important signifiers of its possession can be seen in professional accreditation or academic status. Both Chartered Engineer and University Professor are in their own ways (sometimes for the same individual) titles that should indicate a person has attained a high level of expertise in a particular field.

However, the possession of such status, and the attainment of expertise thus signified, does not an expert make. Expertise is not the same as expertness because who gets to be seen as an expert depends more on social relationships than individual attributes. In this perspective, expertness depends on social context and the relationship between those seeking expert advice and those purporting to be able to provide it. As Martin (1973: 159) put it: 'Expertness is an ascribed quality, a badge, which cannot be manufactured and affected by an expert himself, but rather only can be received from another, a client'.

According to this viewpoint, what makes an expert hinges on their potential utility to those seeking expert advice. A key issue then is who gets to be considered an expert for a particular problem, and what attributes confer 'epistemic

authority' (Slayton 2003; Spinardi 2013). While the acquisition of high levels of expertise typically requires specialisation, policy problems rarely confine themselves to such siloed perspectives. Specialist knowledge is clearly important, but it also matters that the perceived expertise of an individual is considered relevant to the issue facing policy-makers. Policy challenges typically impinge on several knowledge domains, and can thus be seen as what Simon (1973) termed 'ill-structured problems'. If an expert can 'decompose' such problems to provide apparent clarity then this may make their advice seem more useful.

Indeed, a distinctive aspect of expert advice compared with normal scientific practice is that it usually demands certainty. Faced with competing solutions and costs, politicians must take decisions. Some difficult decisions (such as that concerning a third runway for London's Heathrow airport) can be deferred, pending further investigation, but when the risks are potentially large, or public outcry is vociferous, decisions need to be taken quickly. For example, the appearance of 'mad cow' disease in the UK in the late 1980s posed a classic expertise/governance challenge because decisions about banning human consumption of British beef required urgent attention in a context where there was little scientific understanding of the nature of disease and its potential risk to humans (Seguin 2000). A premature ban would have had significant economic impacts, and damaging effects on the livelihoods of many farmers, but a failure to ban could have resulted in large numbers of human deaths. While the scientific tradition embraces uncertainty because knowledge gaps help to focus future research, policy-making usually requires 'closure' around definitive recommendations.

Expertness would thus appear to require relevant knowledge in an appropriate domain, but an aptitude to distance oneself from the uncertainties of cutting-edge research. This accords with the 'certainty trough' phenomenon, whereby those slightly removed from the site of knowledge production have the lowest perceived uncertainty as to related knowledge claims (MacKenzie 1990). Although those within the 'core set' (Collins 1985) of specialist practitioners are best placed to make complex judgements, those slightly removed are more able to speak with certainty unclouded by the fine details. They may not have the type of expertise necessary to carry out cutting edge research, but they are sufficiently conversant with the field to pass as experts. In the terminology of Collins and Evans (2007: 14), they possess 'interactional expertise', if not 'contributory expertise'.

To sum up, in this view of expertness, expertise *per se* is not the only requirement. Policy-makers may seek out specialists, but the ability to provide clear solutions to problems, decisiveness, fluency with technical language, and apparent impartiality are qualities that are also important. From the policy-maker's perspective, the approach to choosing (and using) experts will also be shaped by their political aims. When it is expedient to be seen to be doing something, but undesirable to reach a definite conclusion, then assembling an expert committee with the leading specialists in a range of disciplines may well have the desired effect of leading to prolonged discussion and recommendations mainly focussed on the need for more research! Where urgent and definitive outcomes are required, the aforementioned qualities may be more desirable in potential experts.

However, while this view of expertness as being an ‘ascribed quality’ captures many key features of the relationship between experts and policy-makers, it depicts potential experts as passive recipients of expert status. Turning to the specific context of the role of experts following the Grenfell Tower fire, it is clear that the formation of several expert panels, by a number of organisations as well as government, shows that claims to expert status play an important role in a broader social context, and that the performance of expertness is an active process.

Indeed, most of the expert panels established following Grenfell do not owe their claims to expert status to their direct relationship with government. Instead the proliferation of experts demonstrates more complex organisational motivations, in which the performance of expertness serves a number of functions. The key question in this jockeying for claims of expertness lies in its significance for affecting actual policy outcomes. How do governments respond when presented with competing expert advice? To what extent is it necessary to have the highest level of expertise—what Collins and Evans (2007) call ‘contributory expertise’—in order to have impact as an ‘expert’? Or can other attributes of expertness, deployed skilfully, affect policy outcomes? In particular, could the ability to provide straightforward solutions to apparently complex challenges be crucial in conferring epistemic authority?

## Claims to Fire Safety Expertise

Although expertness can be seen as a socially ascribed property, knowledge claims play a significant role in who is seen to be an expert. However, for policy-makers, in the terminology of Simon (1973), fire safety presents particularly ‘ill-structured problems’ because knowledge is obtained from disparate sources, all with their distinct limitations. Three main types of knowledge are important (a fourth, that we discuss later, perhaps should be more important). These are knowledge based on fighting fires, knowledge based on enacting regulations, and knowledge based on scientific investigation of fire and its effects.

The most authentic source of data is actual fires, and traditionally those who fight fires and investigate fire scenes have had a strong claim to experiential expertise. As fire services became institutionalised as public organisations, so this expertise became organisationally strengthened. To the extent that anyone could claim to be an expert in fire safety, fire fighters could, and their claim to be experts was solidified when the formation of the Institution of Fire Engineers (IFE) was initiated in 1918, not by engineers, but by Chief Fire Officers. This view was encapsulated in the UK by the Report of the Department Committee on the Fire Service which claimed in 1970 that ‘only men with practical fire-fighting experience can properly assess the adequacy of the fire prevention provisions made in particular premises, since only they have an adequate knowledge of what constitutes the chief fire dangers, the way in which fire is likely to behave in the particular circumstances of the occupancy and the likely reaction in a fire of people in the building’ (Holroyd 1970: 164).

Experience of fires is what gives fire fighters their particular claim to expertise, and such fires also produce two important forms of evidence: that derived from collation of statistics of fire incidents, and that based on detailed analysis of fires

considered particularly significant. In the UK those fires that attract the work of the fire services will produce incident reports that can be compiled and analysed to provide statistical evidence. This aggregate data provides useful indications of trends over time, and variations between jurisdictions (e.g. England compared to Scotland) or between different types of building, but these patterns only indicate correlations, with any cause-and-effect being a matter of supposition. Moreover, these statistics focus mostly on deaths and injuries, and thus fail to provide detailed insights into the broad range of fire occurrences (with many small fires unrecorded).

Particularly serious fires, usually those involving multiple deaths, will be investigated in detail, with the resulting reports often becoming linked to a key failing remedied by subsequent regulatory change.<sup>1</sup> Such regulations then created another significant fire safety knowledge domain, as building codes were implemented that placed requirements on designers. For example, the regulations produced following the 1666 Great Fire of London outlawed the use of wood for building structures in London, and set requirements for party walls that created a barrier to fire spread between adjoining buildings (Knowle and Pitt 1972). These building regulations then became further strengthened with the development of standard testing of the fire-related properties of materials and elements of structure in the early twentieth century (Babrauskas and Williamson 1978a, b).

These standardised tests underpinned prescriptive regulations as implemented by building designers, particularly following the introduction of national building regulations in the UK in the 1960s (first in Scotland, and then in England & Wales). This produced a 'compliance culture' that equated safety with following rules, albeit rules that were often arbitrary, broad-brushed and ambiguous, and implemented by designers and regulators who had little understanding of the limitations of the testing methods or of the underlying processes involved. Expertise based on experience of fighting fires thus came to be challenged by an alternative claim to epistemic authority based on knowledge of the regulations.

Regulatory roles developed according to the perceived relevance of these two forms of expertise. Building regulations assigned design approval responsibility to local authority building control officers, with architects typically responsible for producing the designs. For these actors, as well as those in the fire services who could be consulted in the design approval process, fire safety expertise came to be equated with knowledge of how to apply the rules, and with fluency in 'codespeak'—the language of regulation. However, regulation of existing buildings was seen to be something not so easily encapsulated in rules, instead requiring the judgement of experienced fire fighters. By the start of the 1960s the fire authorities provided oversight of the 'means of escape' aspects of regulation contained in the Factories Act and the Public Health Act, and this key involvement of fire fighters in post-construction regulation was further extended in the 1971 Fire Precautions Act.

Finally, during the latter half of the twentieth century, a body of knowledge emerged that focussed on fundamental fire science phenomena, creating a new

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<sup>1</sup> Examples include: Beverly Hills Supper Club, Bradford Football Stadium, Kings Cross Underground station.

domain of expertise. In the UK this was initially driven by the wartime focus on incendiary bombing. Whereas there was little government-funded research on fire before WWII, at the end of it the people who had worked on incendiary bomb testing formed the core of the Fire Research Station (FRS). Formerly the Fire Testing Station of the Fire Offices' Committee (a consortium of major insurance companies), the FRS continued as a joint enterprise of government and insurance companies after the time of its absorption into the Building Research Establishment (BRE) in 1972 (with the involvement of the insurance companies ending in 1976) (Read 1994: 25).

The work of the FRS drew on knowledge and techniques acquired during the war. Alongside data from a wide variety of experiments and tests, it was also claimed that 'the large number of fires which has occurred during the war has provided a wealth of fundamental information on the behaviour of buildings in fires' (DSIR 1943). This knowledge underpinned work on the Fire Grading of Buildings (initiated before WWII and published in 1946) that would form the basis of subsequent regulations, and it helped establish a research agenda that would place FRS at the forefront of fire science over the following decades. The FRS was ideally placed to influence policy and practice, with its work being central to the development of new regulations.

For example, the 'enclosing rectangle method' developed by Margaret Law at FRS is an example of an engineering methodology used to calculate allowable separation of buildings that was based on cutting-edge scientific understanding (and in full knowledge of the uncertainties that this brought), but was also communicated in such a manner as to establish its use in regulatory practice for over 50 years. However, despite FRS's world-leading status in fire science, industrial and political pressure meant that there were regular calls for work to be orientated towards industry's immediate needs (i.e. compliance testing) rather than 'blue skies' research. For example, concern about regulatory testing capacity in 1966 led to complaints 'that the Station's work tended to be orientated away from testing in the direction of research of a comparatively pure nature and that this tendency would not be offset until the Station's scientists and physicists were leavened by a number of architects/structural engineers' (Kendall 1966).

The process of taking state-of-the-art knowledge and embedding it in practical building codes generally worked well enough but it did not compel broad understanding of the underlying principles. Most practitioners could operate at the level of codespeak by following the rules. However, this would prove problematic following the revision of building regulations driven by the deregulatory impulses of the Thatcher government. The Building Act 1984 set out functional requirements and did not mandate the use of prescriptive rules. Basing the building regulations solely around functional requirements that were typically expressed in subjective terms (such as 'adequate' or 'satisfactory') meant that designers were free to choose whatever approach they wanted (including the use of rules that were now provided as guidance in Approved Documents).

Functional requirements enabled bespoke fire safety engineering, as pioneered by Margaret Law following her move to establish a fire safety engineering group at Arup. Early examples included the Pompidou Centre in Paris and the new Stansted



airport terminal. Another colleague, David Rasbash left the Fire Research Station in 1973 to become the first Professor at the new Department of Fire Engineering at the University of Edinburgh. Perhaps the most intellectually acclaimed FRS scientist, Philip Thomas, was, along with Rasbash, one of the founder members of the International Association for Fire Safety Science. The claim to expertise of these individuals was based around their scientific skills, their knowledge, and their proven influence. The value of the scientific approach was further bolstered by its role in identifying and remedying regulatory flaws in the investigations of major fires (e.g. the Piper Alpha oil rig and the Kings Cross tube station).

The fire science discipline that was built through these activities (in the UK, and notably in the USA and Japan) was replete with scientific terminology, significant uncertainty, and a continuing need for 'more research'. In the terminology of Collins and Evans (2002), those with 'contributory expertise' used their 'interactional expertise' to generate rules that could be followed by those who were not conversant in the language of the emerging scientific discipline. This was necessary as those charged with designing buildings (i.e. architects and increasingly specialised fire safety engineers) could not be expected to retrain as research scientists in order to propose design solutions.

This brief history demonstrates how multiple sources of knowledge contribute to the understanding of fire safety outcomes, thus providing varying types of relevant expertise. The range of different types of evidence used for constructing fire safety knowledge claims means that 'ownership' of fire safety expertise is readily contestable. Claims to fire safety expertise can be seen as bounded by two extremes that derive from direct empirical experience of fire phenomena. For fire fighters this is the experience of fighting fires, while for fire scientists (and science-based fire safety engineers) it is the experience of the experimental laboratory. However, those with expertise in regulatory compliance continue to constitute a powerful third group. Codespeak remains central to regulation in England and Wales because although the 1985 Building Regulations set out functional requirements, these were backed up by guidance for common types of buildings in the form of Approved Documents. As the Hackitt Review notes, 'the cumulative impact of the Approved Documents changes an outcome based system of regulation to one that is often inferred by users to be prescriptive' (Hackitt 2018: 26).

This third group derives its claim to epistemic authority from fire safety's pragmatic origins where rule-based regulation preceded fundamental scientific investigations, and the continuing need for translation from science to application provides a role for those who are conversant in the language of the rules and standards. This form of knowledge is particularly interesting as it requires no direct experience of fire. People with this form of knowledge have not fought fires (like the fire service); they have not studied fires (like the research scientists). Instead their 'knowledge' is derived entirely from the societally constructed forms of regulation, codes, and standards. This third category therefore has a particular advantage with respect to the certainty with which they hold their knowledge—because the codes and standards were created precisely for the purpose of providing clarity. These regulatory experts thus reside in the 'certainty trough' (MacKenzie 1998), slightly removed from the site of knowledge production, and with the lowest perceived uncertainty

as to related knowledge claims. They are also sufficiently conversant with the field to pass as experts. However, this type of knowledge is isolated from knowledge production—since the language of regulation and the language of science have been purposely made different. It is not that the practitioner has basic ‘conversational fire science’, whereas the scientist is ‘fluent’—they are speaking a different language. The claim to epistemic authority of individuals with this type of knowledge is further bolstered not just by the lack of ambiguity, but also the legal authority given by the state to the codes and standards. Codespeak provides a common language for a range of disparate practitioners to talk about fire safety (providing what Galison (1997) terms a ‘trading zone’).

For example, to be confident that they can satisfy the functional requirements set out in the Building Regulations requires a fire safety engineer to have the educational background to understand fire phenomena, structural performance and evacuation behavior, but the practicalities of working in industry also requires fluency in codespeak. In practice, many current fire safety engineers may find that, when it comes to their day-to-day business, the language of codespeak is far more useful than the language of science—because it is in this language that they can converse with the other stakeholders in the built environment (e.g. architects, building control officers, and fire service personnel), and also because it allows their decision making to reside in the trough of certainty—unsullied by scientific ambiguity. However, while the fire safety engineer may find it useful to reside in this space, they cannot (unchallenged) claim primacy in codespeak as this is a space where architects, building control officers and the fire services have traditionally dominated.

Finally, it should be noted that a fourth claim to epistemic authority can be made for those who have direct and sustained empirical experience of the built environment (residents and other building users) even if they have no relevant experience of fire or fire safety regulation. It is a long-standing principle of Health and Safety (embedded in UK legislation in 1974<sup>2</sup>) that the operators and users of buildings (ranging from industrial plants to shops) are best-placed to understand and mitigate the risks involved. The Health and Safety Executive thus advises that those who work in a building should be consulted as part of the process of risk assessment because they ‘are often the best people to understand risks in the workplace and involving them in making decisions shows them that you take their health and safety seriously’ (HSE 2014: 5). The same logic applies to residents, including those of multi-apartment residential buildings. Firsthand experience of the practicalities of the solutions wrought by the other experts, and day-to-day delivery of fire safety measures within a building creates its own claim to knowledge. While other experts may be able to profess expertise of how it *should* be, the users of a building will have an intimate knowledge of the actual operation of their homes. For example, risks associated with blocked or otherwise non-functioning evacuation routes and accumulations of flammable material in stairways can be most readily observed by residents.

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<sup>2</sup> In the Health and Safety at Work etc. Act 1974.

In fire safety, at least in the UK, this fourth type of claim to epistemic authority has acquired prominence due to the evidence that Grenfell Tower residents were aware of many of the fire safety deficiencies within the building. The influential Hackitt review, established by the government following Grenfell, recommended that: ‘Residents should be involved in the decision-making process for work that can impact on the safety of their homes’ (Hackitt 2018: 64). However, such ‘local expertise’ (a more appropriate term than ‘lay expertise’) may be overlooked or undervalued because those who possess this form of expertise lack the necessary ‘interactional expertise’ with which to communicate effectively with other experts (such as engineers and the fire services), and vice versa (Collins and Evans 2002: 261).

In summary, there are four forms of fire safety expertise on which claims to epistemic authority can be based:

- Authority based on first-hand experience of fighting fires—former or current fire service personnel;
- Authority based on study of fire phenomena—fire science researchers;
- Authority based on fluency in *codespeak*—practitioners who apply codes and standards;
- Authority based on first-hand experience of using a building—residents and building managers.

However, as argued in the previous section, expertise alone does not determine expertness. As our typology of four types of fire safety expertise demonstrates, claims to fire safety expertise are readily contestable. Although individuals may be considered experts within their own domain, policy-makers presented with this disparate array of knowledge claims are faced with an ‘ill-structured problem’. They must make sense of multiple, competing, performances of expertness. Faced with the complex challenge of how to improve the regulatory failings exposed by Grenfell, it turned out that the expert advice that resonated most strongly was that which provided an apparently straightforward solution.

## Expert Advice on Fire Safety

Policy-makers can seek the advice of experts for a variety of reasons. It can be in order to rapidly make decisions in the face of political pressure to do *something* or in order to be seen to be doing something while deferring the decision to a later time. In addition to informing an evidence-based decision, experts can also recommend further research, or provide the legitimisation for decisions that are primarily political. An idealised view of the role of experts would see their core role as providing unbiased expert advice with the interests of society in mind, and in particular, that expert advisers would ‘speak truth to power’. However, it has long been recognised that neither the production nor the transmission of expert advice are immune from politicisation (Doty 1972).

This paper looks at the differing advice on combustible cladding given by official government advisers on the one hand, and by the most prominent alternative view,

given by the RIBA Expert Advisory Group, on the other. While the Public Inquiry is likely to draw conclusions on the role of regulation in the fire when it completes its Phase 2 report (not expected before 2022 at the earliest), it has not to date had a direct role in advising government on this issue. Our central concern is to what extent these expert advisers conform to the normative expectations described above with regard to being seen as impartial and having appropriate expertise. What is the basis of their expert status, and how have their competing claims to expertise influenced policy outcomes?

### *Government-Sponsored Expert Advice*

Following Grenfell, official expert advice on building regulation came from two main mechanisms established by the UK government. The Hackitt review into fire safety regulations provided a thorough analysis of the regulatory system, and set out recommendations for how it should be changed. Meanwhile, the Independent Expert Advisory Panel (IEAP) was established by the government on 27 June 2017 with the intent that it should ‘advise on any immediate measures that can be put in place to make buildings safe following the Grenfell Tower fire’ (MHCLG 2017a). The IEAP was chaired by Sir Ken Knight, a former fire fighter, London Fire Commissioner, and former Government Chief Fire and Rescue Adviser. The initial membership was ‘made up of a range of building and fire safety experts’ (MHCLG 2017a), comprising Dr Peter Bonfield, Chief Executive of the Building Research Establishment, Roy Wilsner, Chair of the National Fire Chiefs Council, and Amanda Clack, President of the Royal Institution of Chartered Surveyors and a Partner at Ernst and Young. In 2018, it was announced that Amanda Clack and Peter Bonfield had been replaced by Ann Bentley (MBA MICE FRICS, Global Director of Rider Levett Bucknall), and Professor Colin Bailey (FREng, President and Principal of Queen Mary University of London) (MHCLG 2018a).

The IEAP thus comprises a range of types of experts, covering the full gamut of fire safety expertise identified in Sect. 3, with the notable exception of the ‘local expertise’ possessed by the residents of social housing tower blocks. As noted by the government: ‘The panel have a wealth of experience in fire and building safety, including testing processes, and are drawing in wider technical expertise as necessary to inform this advice’ (MHCLG 2020). However, while this panel is presented as ‘independent’ it should be recognised that by drawing on those with fire safety expertise the panel is, necessarily, comprised of ‘insiders’. While such individuals may be independent of government they are necessarily a product of the system that led to their appointment.

In his first public statement regarding the panel on the 27 June 2017, Ken Knight said that he welcomed ‘the opportunity to work with other experts to ensure that our buildings are safe and that we take whatever steps are necessary to ensure such a dreadful incident never happens again’ (MHCLG 2017a). This intent to bring in other experts was further emphasised on 6 July 2017 when it was reported that ‘earlier this week the panel brought together a group of technical experts from a wide range of professions and organisations’ (MHCLG 2017b).

The IEAP quickly got to work and it was reported that ‘the independent expert panel on safety has advised further testing as the next steps’ (MHCLG 2017b). The results of these tests were used by the IEAP to produce advice that was subsequently issued as guidance by government. Thus on 5 September 2017 it was reported that: ‘The owners of affected buildings have been given detailed advice drawn up by our independent expert advisory panel’ and ‘We have today published further advice that brings together all the results and the views of the expert panel on the implications for building owners’ (Javid 2017a).

The advice of the IEAP was cited by politicians as the basis for the various government actions that were being undertaken. For example, Communities Secretary Sajid Javid, in a statement to parliament on 20 July 2017, indicated that the initiation of cladding system testing was based on ‘the advice of the Independent Expert Advisory Panel on Building Safety’ (Javid 2017b). Similarly, recommendations of the IEAP were also invoked by government in relation to more general advice. For example, on 14 July 2017 it was reported that: ‘The Department for Communities and Local Government has written to all building control bodies in England highlighting key Building Regulations requirements when cladding work on high rise buildings over 18 metres tall is undertaken’ following ‘advice from the Independent Expert Advisory Panel whose members were particularly concerned that further risks are not created in any new works undertaken by building owners’ (MHCLG 2017c).

Since June 2017, a total of 23 Advice Notes have been issued by MHCLG, with many of these using a form of words that indicates that the government advice originates with the IEAP. For example, Advice Note 11 states that: ‘This note was developed in consultation with MHCLG’s Independent Expert Advisory Panel on building safety’ and ‘The panel have a wealth of experience in fire and building safety, and have drawn on wider technical expertise to inform their advice to government, including from experts on building design and construction, building control, testing processes, fire safety and fire engineering’ (MHCLG 2018b).

Moreover, the advice of the panel was not limited to cladding materials and systems. Concerns about the performance of fire doors were also addressed by the IEAP, and on 15 March 2018 it was reported that: ‘To properly understand what has happened, the government has consulted its Independent Expert Panel’; and: ‘Based on this advice, the expert panel advise that owners of buildings with this type of door should review their building’s fire risk assessment and consider how quickly these doors should be replaced. The expert panel has published guidance to assist building owners’ (MHCLG 2018c).

Based on these statements regarding its activities, the IEAP fits the textbook definition of a government expert panel that is intended to DO something. The panel’s members have core ‘expertise’ across three of the four relevant categories of knowledge, thus making them less likely to be susceptible to blinkered perspectives or sectoral bias than, for example, the RIBA panel discussed below. Being both established by government and then listened to as the key source of advice in addressing the concerns with fire safety raised by Grenfell, the IEAP has had expertness conferred on it by this relationship.

This role extended to broader issues of fire safety regulation raised by the Grenfell Tower fire with part of the IEAP's stated role being to: 'Provide expert advice and insight, when required, to assist the department in enabling the implementation of the Hackitt Review' (MHCLG 2018a). On publication of Hackitt's interim findings the government released a statement from the IEAP saying that: 'We welcome the publication of Dame Judith Hackitt's Interim Report, which marks a significant milestone in her Review of Building Regulations and Fire Safety', and noting that: 'The Expert Panel endorses Dame Judith's call for concerted action and leadership by industry, government and other actors in the system' (MHCLG 2017d). Advice Note 15, published on 18 December 2017, notes that it was 'developed by DCLG's Independent Expert Advisory Panel in response to the publication of Dame Judith Hackitt's Interim Report' (MHCLG 2017d).

While the IEAP comprised insider experts in fire safety, Dame Judith Hackitt was a less obvious choice to lead the *Independent Review of Building Regulations and Fire Safety*. As a former chair of the Health and Safety Executive (HSE) she was well-versed in issues of risk assessment and mitigation, but not in building regulations. The resulting final (May 2018) Hackitt report reflected this background, with an explicit endorsement of the 'health and safety' approach adopted in the UK in the 1970s of 'risk being owned and managed by those who create it' (Hackitt 2018: 6). Dame Judith argued that 'there is a strong case for the full effect of the key principle of risk ownership and management to be applied alongside building regulations' (Hackitt 2018: 6). The argument was that 'the regulator can learn from how the HSE has delivered its responsibilities' so as to 'manage risk and deliver robust and focused safety case reviews in the same way that the HSE undertakes them with dutyholders in the context of large-scale chemical plants and offshore oil and gas installations' (Hackitt 2018: 21).

Hackitt's recommendations were far-ranging but with one consistent theme: that regulation should be 'outcomes-based' rather than prescriptive. The existing approach based on the Building Act 1984 used 'functional requirements', and thus was not prescriptive in principle. However, as Hackitt (2018: 26) notes, 'the cumulative impact of the Approved Documents changes an outcome based system of regulation to one that is often inferred by users to be prescriptive'. This then enabled 'a situation where some of those who construct buildings treat the minimum standards in the Approved Documents as a high bar to be negotiated down, rather than genuinely owning the principles of a safe building and meeting the outcomes set out in the regulations', and 'has also led some to game the system by selecting which bits of guidance and alternative solutions are easiest to achieve' (Hackitt 2018: 84).

Hackitt thus recommended a stronger emphasis on outcomes-based regulation (often referred to as performance-based design in fire safety engineering) rather than the introduction of prescriptive rules to 'fix' specific problems revealed by Grenfell. Although Hackitt brought a distinctively 'health and safety' perspective to the problems raised by Grenfell, her emphasis on outcomes-based regulation was consistent with the functional requirements approach, even if her recommendations were too vague to provide workable solutions (Spinardi and Law 2019).

However, despite their positions of apparent authority at the heart of government policy, the influence of Hackitt and the IEAP proved not to be absolute. While

the IEAP endorsed the outcomes-based approach proposed by Hackitt, others were more critical. One critique in particular—that Hackitt did not recommend an outright ban on combustible cladding—proved decisive in influencing government policy. Amongst advocates of such a ban, one of the most persistent voices was that of another expert panel, one set up by the Royal Institute of British Architects (RIBA).

### *The Royal Institute of British Architects Expert Advisory Group*

The first public statement by RIBA on the Grenfell Tower fire was made by RIBA President Jane Duncan on 15 June 2017. Duncan (2017) said that ‘fire and people safety are absolutely critical in all buildings, which is why there must be an urgent public inquiry to fully understand how this tragedy occurred’. The first sign of a RIBA expert panel came shortly after the government announced the membership of the IEAP, with a former RIBA president branding the omission of an architect from the government’s panel as ‘ridiculous’ (Waite 2017). Instead, RIBA announced that they had ‘convened [their] own expert group on fire safety, and [would] be working with [their] members to provide technical and expert evidence to the public inquiry’ (Waite 2017).

Soon afterwards, a statement by RIBA indicated that: ‘A small panel of experts is working with Jane Duncan and they will issue further information and guidance as it becomes available’ (RIBA 2017a). Notes from RIBA’s council meeting identified that ‘a small RIBA working group had been assembled to engage with policy and regulatory issues arising [from the Grenfell Tower fire]’ and that ‘members were keen to offer their expertise’ (RIBA 2017b). On 7 September 2017, this panel was named as ‘RIBA’s Expert Advisory Group on Grenfell’ (RIBA 2017c). At the subsequent RIBA Council meeting on 28 September 2017 it was recorded that ‘members were appointed to the group’ and that it ‘would be advising national government’ (RIBA 2017d).

The first public act of the RIBA Expert Advisory Group (EAG) on Fire Safety involved its submission to the Hackitt Review, setting out an ‘initial set of specific recommendations from the RIBA’ (RIBA 2017e). These recommendations were notable in advocating a prescriptive approach to regulation of building design, contrary to the intent of the functional requirements approach introduced by the Building Act 1984. Of particular interest, given subsequent events, is RIBA’s recommendation concerning the use of combustible materials in external walls. On 19 October 2017, RIBA recommended for ‘External walls of buildings over 18m in height to be constructed of non-combustible (European class A1) materials only’ (RIBA 2017e). The A1 classification is a product of a standardised testing approach where the notional hazard presented by a material or product is ranked. A1 is the ‘best’ classification with the lowest notional ‘hazard’ with the other classifications being A2, B, C, D, E, and F (BSI 2007).

As it became clear that one of Dame Judith Hackitt’s key conclusions was that the use of building regulations should be more ‘outcomes-based’, RIBA sought to press its case for the opposite, advocating the use of prescriptive rules that building designers would be required to follow. In April 2018, RIBA’s EAG on Fire Safety

wrote to the Secretary of State for Housing, Communities and Local Government (Sajid Javid MP) ‘urging an immediate consideration of the recommendations laid out by the RIBA before the final report is due in May’ (RIBA 2018a). This was followed by a statement in May 2018 that: ‘The RIBA’s Expert Advisory Group on Fire Safety, set up following the tragedy at Grenfell Tower, had expressed serious concerns for some time that the Hackitt Review was not going to include the changes that are needed now, not tomorrow’ (RIBA 2018b).

In the view of RIBA’s EAG, these changes comprised four ‘baseline prescriptive requirements’ (RIBA 2018a). These were for: ‘External walls of buildings over 18m in height to be constructed of non-combustible (European class A1) materials only’; ‘More than one means of vertical escape from new multiple occupancy residential buildings over 11 metres high’; ‘Retro-fitting of sprinklers/automatic fire suppression systems to existing residential buildings above 18m from ground level in height’; and ‘Sprinklers/automatic fire suppression systems in all new and converted residential buildings’ (RIBA 2018a).

However, while the advocacy of RIBA for more prescription generally fell on deaf ears with regard to Hackitt, one particular recommendation caught the public mood. On the day Hackitt released her final report, the idea that the government should ‘ban’ combustible cladding became the lead item across the media. For example, the *Mirror* reported a ‘furious backlash’ (Bartlett 2018), the *Mail* referred to the Hackitt report as a ‘whitewash’ (Spillett and Ferguson 2018), and the *Architects Journal* reported ‘condemnation from the RIBA’ (Jessel 2018). The opposition Labour Party, the popular media, and perhaps most significantly, survivors and relatives represented by Grenfell United (2018), joined RIBA in condemning Hackitt’s lack of support for a ban. In pressing for a ban, the chairman of Grenfell United, Shahin Sadafi, noted that ‘many experts have called for it and they need to listen’ (Bartlett 2018). Thus began a process that rapidly culminated in Dominic Raab, the Minister of State for Housing and Planning, making a commitment on 17 May 2018 to ‘ban’ combustible cladding during an appearance on the BBC’s Question Time programme (Law and Butterworth 2019).

RIBA’s ‘experts’ continued to emphasise this point, stating on 13 June that it is ‘our recommendation that only non-combustible (European Class A1 only) materials should be used in the external wall construction of existing or new buildings’ (RIBA 2018c). On 27 June, giving evidence to the Housing, Communities, and Local Government Select Committee with regard to the final Hackitt Review report, RIBA Executive Director of Practice, Adrian Dobson noted that RIBA was ‘calling on Government to radically overhaul the Approved Document guidance to include clear baseline prescriptive requirements for fire safety’ (RIBA 2018d). He repeated the call for a ban, stating on the 14th of August that ‘continuing to allow materials of “limited combustibility” (A2 classification) is unacceptable in the wake of the tragedy at Grenfell Tower and the evidence from the UK and around the world that these materials do not provide adequate protection for the public’ (RIBA 2018e).

On 29 November 2018, the government finally banned combustible cladding. The ‘ban’ required that products should be Class A2 (or better), and was accompanied by a list of exemptions. Responding to the government’s decision to ban combustible cladding, RIBA released a statement on 30 November 2018 in which Duncan,



as Chair of the RIBA's Expert Advisory Group on Fire Safety, noted her satisfaction with this outcome: 'The legislation laid out today is a welcome outcome from a lengthy consultation. It is of the utmost importance that we get this right—for the victims of such a devastating tragedy and for the future safety of our homes' (RIBA 2018f). Duncan's response emphasised that the 'ban' aligned with RIBA's position—saying that: 'I am pleased that the government have taken recommendations on board and broadened the cladding ban to include other high-risk buildings such as hospitals, residential accommodation and care homes' and that 'I therefore welcome the fire ratings proposal for A1 and A2-s1, d0 products which we believe align with our research' (RIBA 2018f).

RIBA's Expert Advisory Group was a significant voice amongst those calling for a ban, and by declaring its expertness and vocally presenting its expert advice it appeared to have had a substantial impact on media narratives and, ultimately policy outcomes. Although the RIBA expert panel only represented one form of fire safety expertise (codespeak), the apparent clarity of its approach to regulation had resonance for both the public and politicians.

## Discussion

What is striking about the post-Grenfell role of expert advice on fire safety is that the government's apparent deference to a normative view of experts was so easily subverted by a media storm over banning combustible cladding. Such a ban was not recommended by the IEAP, and Hackitt specifically warned against the 'desire to "do something" quickly' driven by the belief 'that there is one "fix" typified by the "if we just do this one thing, it will all be better" response' (Hackitt 2017: 7). As Hackitt argued: 'Any attempt to modify details of the regulation without addressing the clear systemic failings would be akin to adding a paint job and decorations to a fundamentally non-roadworthy vehicle' (Hackitt 2017: 7).

Prior to the ban, post-Grenfell government policy on cladding safety had been derived almost entirely from the advice of the IEAP. Together with establishing Hackitt to provide recommendations for reforming the regulatory system, it appeared that political decision making on fire safety was completely delegated to appointed 'experts'—with ministers relegated to a role of communicators. As documented above, day-to-day activities to mitigate the risks posed by existing buildings were determined by the IEAP, whilst the longer-term revision of regulations were framed by Hackitt's recommendations. Even after the combustible cladding ban, the government continued—for example, in its June 2019 Consultation Document *Building a Safer Future*—to say that it 'accepted the findings of the Independent Review' (MHCLG 2019: 10).

However, in agreeing to the ban on combustible cladding, the government went directly against the advice of the Hackitt Review, despite the Chairman of the IEAP, Ken Knight, testifying to the House of Commons, Housing, Communities and Local Government Committee that he was 'much more comfortable to leave it with an outcome-based robust test than I am about banning' (HCLG Committee 2018: 14). Furthermore, government communications concerning the ban do

not seek to legitimise this legislative action by citing advice from the expert panel or (notably) Hackitt's recommendations—with Dominic Raab stating that 'we understand the concern, we've listened to the expert review and report *but* we will be looking to ban it' (BBC 2018, emphasis added).

That government should reject all its official expert advice is noteworthy. Its advisors encompassed a wide range of relevant expertise, with the members of the Independent Expert Advisory Panel ticking all the boxes of epistemic authority outlined above—with the exception of 'local expertise'. Moreover, Hackitt consulted widely in formulating her analysis, and statements from the IEAP also indicate that the members of the panel, while having claims to epistemic authority based on their background, have sought out additional expertise from a wider range of sources. Not only is the IEAP able to claim access to broad expertise, but it also had its status of authoritative expertness conferred on it by its appointment by government. The Hackitt Review and the IEAP thus represent the epitome of 'expertness', if judged according to the definition of Martin (1973: 159) as something that 'can only be received from another, a client'.

Instead, the government chose to follow the advice that had been actively and consistently promoted by RIBA—to ban combustible cladding. Although the RIBA expert panel had no special status as an advisor to government, and represented a specific sectoral interest, its advocacy of such a ban (along with others, notably including the survivors and relatives group, Grenfell United) proved successful. While the popular media outcry in favour of a ban, supported by survivors and relatives of the Grenfell Tower fire, was clearly important in shaping the government's decision, RIBA provided the 'expert' underpinning with its articulation of prescriptive rules based around material test ratings.

The advice of RIBA's expert panel reflects the interests of its members in promoting a prescriptive view of fire safety regulation, in opposition to the functional requirements approach that was introduced in England and Wales with the Building Act 1984 and the post-Grenfell recommendations of Hackitt. With RIBA members typically only being conversant with the codespeak form of expertise, it is to be expected that their advice will conform narrowly to codespeak type recommendations. RIBA's use of language in arguing for the ban, and other prescriptive measures, was telling; it criticised Hackitt's proposals by arguing that they 'will not provide clarity for professionals or deliver reassurance for the public' (RIBA 2018b). In other words, in arguing for increased prescription, RIBA was arguing for a regulatory system suited to the particular skills of *its* professionals—architects.

Presented with conflicting expert advice, as would be typical for all 'ill-structured problems', the government found it convenient to follow the approach advocated by RIBA. The government's own experts in the form of the IEAP and Hackitt provided complex analysis that did not point to easy solutions. For example, Hackitt (2018: 26) concluded that effective outcomes-based regulation depended on adequate competence so that 'those undertaking the work, and those appraising it, will need to have sufficient levels of skills, knowledge and expertise to make appropriate judgement calls'. However, she provided no clear route to ensuring such levels of competence amongst key practitioners (Spinardi and Law 2019).

RIBA's proposed ban not only appeared more straightforward in practice, but also had popular appeal. Almost everyone has experience of fire, and banning materials that are combustible appears self-evidently desirable despite what some 'experts' might say. RIBA's claim to expertness was enhanced by offering apparent regulatory clarity through the use of codespeak, with epistemic authority stemming from the traditional role of architects in building design (and RIBA's long-standing status as a professional body). In contrast, the IEAP had no such institutional backing, and there is no professional body that can really speak for fire safety engineering because the IFE, while nominally the professional body of fire safety engineers, is dominated by fire service personnel, whose expertise is either based on fire fighting or fluency in codespeak.

Moreover, privatisation of the government's fire research activities in 1997 (i.e. the Building Research Establishment) means that the government no longer retains in-house scientific expertise that it might have drawn upon in the past. The government thus had little access to core fire safety expertise in the years prior to Grenfell, reflecting the deregulatory impulses of administrations over the previous 30 years. In such a context, the claim made by Martin (1973) that expertness can only be ascribed by a client may need reappraising. If the state has been 'hollowed out' to the extent that the client themselves lack sufficient expertise to evaluate expertness, it is inevitable that political interests will increasingly hold sway. Independence is often seen as an advantageous attribute for expertise—however, if government becomes *totally* reliant on 'independent' expertise for the formulation of policy, then government itself loses the ability to differentiate between the validity of different claims to expertise. When policy-making is driven by complete deference to 'expertness', and the state itself no longer maintains core competence, then holders of political office may struggle to make rational choices based on weighing the substance of 'expert' advice.

Instead, the basis for governance will rely on a policy-maker's own evaluation of an expert's claims to epistemic authority, which in fire safety (and probably in other domains) is a highly contested space. How can a policy-maker with no in-house expertise of their own arbitrate between knowledge claims based on fire fighting, science, codespeak, and first-hand experience of using buildings? In announcing the ban, government gave primacy to the claims to epistemic authority of RIBA and other campaigners rather than to the curated 'expertise' represented by the IEAP and Hackitt. What RIBA offered in its advice had popular appeal not only because of its apparent 'common-sense' recommendation to ban combustible cladding, but also because it appeared to cut through many of the complexities raised by the advice of Hackitt and the IEAP. Whereas the lengthy Hackitt report only served to highlight the complexity of the problem with its analysis of the failings of fire safety regulation, RIBA's advice offered apparent clarity and simplicity with its promotion of a ban.

Such a decision will always have a political dimension (as is appropriate given the government's electoral mandate), but choosing the correct means to implement policy requires expert advice. Judgements about which advice to trust can be best made if the state maintains some core expertise, but in the case of fire safety the pragmatic goal of regulation of building design gave primacy to expertise in

codespeak—a constructed form of expertise that rests on other more fundamental types of knowledge. While a key motivation of the deregulation embodied in the Building Act 1984 was to enable greater innovation in building design, this freedom was not accompanied by sufficient attention by government to the retention and growth of fire safety expertise in each of the core areas. Thus, in the moment of post-Grenfell crisis, government keenly felt its lack of confidence in its judgement of expertness. Ironically, the deregulatory impulses that were supposed to promote a departure from prescriptive rules have, in the absence of sufficient expertise, led to a popular (and understandable) backlash, and a return to prescriptive rules.

## Conclusions

Fire safety expertise is contested, with multiple voices laying claim to epistemic authority. Fundamental knowledge claims are bounded by two extremes derived from direct empirical experience of fire phenomena. For fire fighters this is the experience of fighting fires, while for fire scientists (and science-based fire safety engineers) it is the experience of the experimental laboratory. In an effort to disseminate their knowledge to those without direct experience of fire, these two groups have created regulations, codes, and standards. Empowered by legislation, fluency in codespeak (the language of regulation) has become its own form of expertise. There are thus three practitioner groups that who have apparently authoritative claims to expertise. There is also a fourth group comprising residents and other building users—the utility of whose local knowledge should also be recognised. The presence of four categories of expertise each with its own technical (and non-technical) language means that there is considerable scope for contestation over who can claim epistemic authority and in what contexts.

This means there is no single coherent ‘voice’ speaking on behalf of fire safety, creating a challenge for policy-makers trying to differentiate the content of the advice they are receiving from any ‘expert’. This diverse range of potentially relevant expertise made it hard for policy-makers to structure their response to the regulatory problems posed by Grenfell. The Hackitt Review established by the government identified a wide range of failings in regulatory practice, but with solutions that were potentially complex and hard to achieve. In this context, RIBA’s advocacy of a prescriptive ban appeared to offer a straightforward solution to an ‘ill-structured problem’.

The ban on combustible cladding reflects a codespeak approach to fire safety regulation rather than one based on understanding of fundamental fire phenomenon. There is little reason to doubt that such an approach, if properly implemented and enforced, will mean that no building so designed will suffer external fire spread of the kind that happened in the Grenfell Tower. However, by apparently paying heed to only one form of expertise, the government failed to comprehend the full ramifications of the ban. By implying that new buildings which did not meet the new regulation were ‘unsafe’, the government in effect condemned thousands of existing buildings across the UK. Consequently, mortgage providers refused to lend on properties that they considered to be non-compliant with the new ban on combustible

cladding, even if breaches of the new regulation are trivial with regard to fire safety outcomes (MacKenzie 2019). The limitations of a rule-based approach to regulation were made apparent by the need for competent practitioners to provide an assessment as to whether any external combustible material actually constituted a significant fire risk.

In addition, the ban runs counter to one of the key motivations of the Building Act 1984, which was to enable more innovative building design. Ironically, the advocacy of RIBA's expert group for a prescriptive approach to building design also limits the potential for innovative architecture, leaving many architects who favour the use of engineered timber frustrated (Cousins 2019). Moreover, viewing the ban as the triumph of codespeak over other forms of fire safety expertise has worrying implications if this means that fundamental fire safety knowledge is neglected—codespeak, after all, is derived from these other more fundamental forms of knowledge.

Lacking its own in-house expertise meant the government was reliant on expert advice following Grenfell. It sought this by instigating the Hackitt Review of regulations, and by establishing the Independent Expert Advisory Panel. Conforming to a normative view of the role of experts, the IEAP proved highly effective at influencing government advice, and political office holders appeared to delegate decision making power to this group. In contrast, the RIBA Expert Advisory Panel on Fire Safety had no formal role and, represented a narrow sectorial interest with one kind of epistemic authority (codespeak). Nevertheless, consistent messaging, capture of the public mood, and the use of an Expert Panel to present an organisational rather than individual view (thereby further elevating the credibility of the expert advice) allowed RIBA to apparently play a substantial role in subverting the curated 'expertness' of the government's expert advisers. The very act of this subversion is an illustration of how, if the state does not have sufficient 'in house' expertise, then when faced with conflicting advice from different sources of epistemic authority, the holders of political office can be persuaded to over-rule their designated 'experts' in deference to other forms of expertise.

## Declaration

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