

# Why Didn't Paris Burn in the Seventeenth and Eighteenth Centuries?

DAVID GARRIOCH

**ABSTRACT** Several European cities experienced devastating fires in the seventeenth and eighteenth centuries, and some burned repeatedly. Paris did not. Yet there, as elsewhere, the central quarters were crowded, and wood was widely used. People relied on naked flames for heating, cooking, and lighting and for most industrial processes. This article suggests that a combination of interconnected factors explains Paris's good fortune and differentiated it from other cities. It enjoyed a climate that reduced the likelihood of bad fires and provided abundant water, assisted by a geology that also offered fire-resistant building materials. These factors helped its inhabitants fight fires with surprising success, even before the creation of a permanent fire service. The nature of the city's economy also helped, because there were few concentrations of highly combustible products, and its various institutions of government collaborated to make both preventive measures and fire control more effective.

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Nothing is to be feared as much as fire [Rien n'est tant à craindre que le feu].  
—Fréminville, *Dictionnaire*, 1771

A number of late eighteenth-century observers pointed out that bad fires were common in London but rare in Paris. In 1754 the Englishman William Mildmay, writing about the police of Paris, referred to “accidents by fire, a calamity so frequently terrible in our metropolis, but which rarely happens in this.”<sup>1</sup> The future revolutionary Jacques-Pierre Brissot attacked a proposal to establish fire insurance in Paris, in 1786, on the grounds that, unlike in London, fires were extremely rare and did little damage.<sup>2</sup> Mildmay and Brissot were right. London of course experienced the Great Fire of 1666, which destroyed over thirteen thousand houses and eighty-seven churches, the greatest fire

1. Mildmay, *Police of Paris*, 93 (written 1754 but published 1763). For another example, see Dussausoy, *Le citoyen désintéressé*, 26.

2. [Brissot de Warville], *Dénonciation*.

disaster (in terms of property damage) to strike Europe in this period. But London had many other bad fires. In the City itself, one hundred or more houses burned in individual fires in 1715, 1748, and 1765. Around six hundred houses were destroyed in Southwark in 1676 and nearly five hundred in another big blaze near the port in 1794. Across the seventeenth and eighteenth centuries as a whole, if we include the suburbs as well as the City, the English capital experienced some twenty-four fires that each destroyed fifty or more houses.<sup>3</sup> Paris, meanwhile, although it had a larger population than London in the seventeenth century, had only one fire of this size: in 1621, when the Pont au Change and the Pont Marchand burned, along with the half-timbered houses on top of them and several more in the adjoining streets, probably between eighty-five and one hundred houses in all.<sup>4</sup>

London was exceptionally fire prone, but it was not alone. Stockholm too lost several hundred houses in 1640, in 1652, and again in 1664, 1719, 1723, 1751, and 1759. Other European capitals were less severely affected, but a number experienced one or more devastating fires across these two centuries. In 1652 whole quarters of Amsterdam and Glasgow were destroyed, and a large part of Copenhagen burned in 1728. In Lisbon, in the aftermath of the 1755 earthquake, terrible fires completed the almost total destruction of the city. A few French cities also experienced major fires, notably Rennes, Châteaudun, and Brest.<sup>5</sup> Paris, meanwhile, had only the one significant fire, and it burned a very small area of the city.

Jacques Wilhelm is one of the few historians to have noted how astonishing this is: “That people could have had heating and done their cooking, without Paris experiencing great fires like that of London, seems miraculous.”<sup>6</sup> Fire was in everyday use not only for heating and cooking but also for lighting and in a large number of industries. Bakers and blacksmiths, candle makers and confectioners, goldsmiths and glassmakers, and a great many others all used fire. The risk was always present, and several fires did threaten whole swaths of the city. In 1618 the Palais de Justice burned and strong winds blew embers toward the Right Bank, raising fears of widespread damage. The fire of 1621 on the Pont Marchand and the Pont au Change spread to the streets on both sides of the river, but the adjoining quarters escaped.<sup>7</sup> In 1718 a fire destroyed the twenty

3. Garrioch, “1666,” 323.

4. Early seventeenth-century “bird’s-eye view” maps, like that of Mérian of 1615 and the Plan Vassalieu of 1609, offer approximate, though broadly similar, depictions of the buildings and suggest around this number.

5. Nières, *La reconstruction d’une ville*, 33–46; Cabantous, *Histoire de la nuit*, 47. See the important work on Germany by Zwierlein, *Der gezähmte Prometheus*, esp. 71–197.

6. “Que l’on ait pu s’y chauffer et y faire la cuisine, sans que Paris ait connu de grands incendies comme celui de Londres, semble un miracle” (Wilhelm, *La vie quotidienne des Parisiens*, 57).

7. Félibien, *Histoire de la Ville de Paris*, 2:1310–11; *Récit véritable*.

half-timbered houses on the Petit Pont and seriously damaged fourteen more, including five on the Ile-de-la-Cité and one on the Left Bank, leading the *commissaire* Delamare to comment that

on one side it was close to burning the Hôtel-Dieu [the central hospital], whereby it could have spread to the archbishop's residence, to the church of Notre-Dame, to the Rue Neuve, and from there to the whole [island of the] Cité; on the other side, the fire burned one house in the butchery next to the Petit Châtelet, close to spreading to the Rue de la Huchette and to the entire university quarter.<sup>8</sup>

The fire did not spread, however, nor did one on a windy night in 1733, when a boat laden with hay caught fire near the Place de Grève. The flames endangered the houses on the Pont au Change and on the nearby riverbank but burned themselves out after several anxious hours.<sup>9</sup> On several other occasions during the eighteenth century, fires in large buildings again posed a risk: the Chambre des Comptes burned in 1744, the Foire Saint-Germain in 1762, the Hôtel-Dieu in 1737 and 1772, the Opera in 1763 and again in 1781. But in each case the fire was confined to the building where it started.<sup>10</sup>

There were also a huge number of smaller fires. The infant fire service attended 80 in 1722, 114 in 1723, and 98 in 1724, and there were certainly many more, since the firemen were not always summoned. In the later part of the century, between 1764 and 1789, Siméon-Prosper Hardy mentions in his journal some 140 fires, most of them in his own quarter. Many were caused by soot that caught alight inside poorly swept chimneys and so did not pose a serious threat, although faulty construction of the chimneys themselves, or the posing of wooden beams in the masonry of the chimney, could lead to a chimney fire spreading to the rest of the house.<sup>11</sup> Any one of them was therefore capable, given the right conditions, of setting fire to a house and perhaps an entire quarter. The question, then, is why none of these major fires, or the myriad smaller ones, spread to destroy large areas of Paris. What made Paris different from those other towns and cities that experienced disastrous fires, and particularly from London, which was so similar in many other respects?

8. Bibliothèque Nationale de France (hereafter BNF), Collection Joly de Fleury (hereafter JF) 1324, fol. 268: "L'on vid d'un coté le feu prest à prendre à l'Hôtel-Dieu, qui auroit pu se communiquer à l'Archevesché, à l'Eglise de Notre-Dame, à la rue neuve, et de là s'étendre dans toute la Cité; d'un autre costé le feu prit à une maison de la boucherie joignant le petit Chastelet fort prest à se communiquer à la rue de la huchette et de la dans tout le quartier de l'Université." For the list of houses destroyed and damaged, see BNF, JF 1324, fol. 127. See also the painting by Jean-Baptiste Oudry, *Le Petit-Pont après l'incendie de 1718*, Musée Carnavalet.

9. Chérière, *La lutte contre l'incendie sur la Seine*, 61; Archives Nationales (hereafter AN), Y12027, Dec. 26, 1733.

10. Chagniot, *Paris et l'armée*, 168; AN, K1022, nos. 142–44, 147; Barbier, *Chronique*, 3:93, Aug. 1737; Farge, "L'incendie de l'Opéra."

11. Hardy, *Mes loisirs*; BNF, JF 1325, fols. 147–50.

The historical literature offers little direct help in answering this question. The history of fire is in its infancy, although much work has been done on individual conflagrations like the Great Fire of London or that of Chicago in 1871. Comparative studies of urban fire have focused on the ways people interpreted disasters, often emphasizing the shift from a religious to a secular world view. The urbanistic, social, and political ramifications of fires have been explored in specific contexts, and Jean-Claude Caron has shown the continuing power of fire, in nineteenth-century France, as a form of social and political protest.<sup>12</sup> Very little work has been done, however, on why fires occurred in different ways in different places or on the longer-term history of urban fire.<sup>13</sup> The dominant historical view is that the replacement of flammable building materials—especially wood—by brick and stone made cities far less susceptible to fire. This is usually assumed to have taken place in both London and Paris in the later seventeenth and eighteenth centuries, although recent work has partly qualified that view. Historians of both cities have placed little emphasis on other aspects of fire prevention or on firefighting, which they see as becoming effective only in the nineteenth century.<sup>14</sup> The major exception is Alan Williams, whose 1979 book *The Police of Paris* argued forcefully that measures taken by successive lieutenants-general of police, after 1670 but particularly in the eighteenth century, had a big impact. Looking both at police ordinances and at the provision of fire pumps, fire stations, and water supply, Williams concluded that Parisians learned to prevent major fires by reporting small ones promptly and that by the time of the Revolution the fire service was extremely effective.<sup>15</sup> But his work, which took a very rosy view of the police of Paris in general, has not convinced everyone. While some subsequent studies have acknowledged the ameliorative efforts of the police, and Justine Berlière's study of policing in one central quarter shows that firefighting there was effective, Jean Chagniot agrees with Jacques Michel that the fire service began to have an impact only after the 1760s and concludes that even then "it was unwise to count on the firemen."<sup>16</sup> Vincent Milliot's recent book on the police, like his earlier one on Lieutenant-General of Police Lenoir, acknowledges the ambitious goals of the "new police" of the late

12. Porter, *Great Fire*; Rosen, *Limits of Power*; Frierson, *All Russia Is Burning*; Roberts, "Agencies Human and Divine"; Caron, *Les feux de la discorde*. Cyrille Sillans has studied the incidence of fires and developments in fire prevention in nineteenth-century France, particularly Lyon: "L'incendie dans les villes françaises."

13. One exception is Bankoff, Lübken, and Sand, *Flammable Cities*, 3–20.

14. Blackstone, *British Fire Service*, 70–72, 78; Tulard, *Nouvelle histoire de Paris*, 238–42.

15. Williams, *Police of Paris*, 246–58.

16. Milliot, "Qu'est-ce qu'une police éclairée?"; Garrloch, "Police of Paris"; Berlière, *Policer Paris*, 144; Michel, *Du Paris de Louis XV à la marine de Louis XVI*, 1:118–20; Chagniot, *Nouvelle histoire de Paris*, 360.

eighteenth century but warns us not to take at face value its claims about its own efficacy. Thomas Le Roux suggests a different chronology, seeing the police's regulation of dangerous industries, including those that posed a major fire risk, as broadly successful in the eighteenth century but increasingly undermined in the last two decades of the Old Regime by the growing power of industrialists and by new types of production.<sup>17</sup>

This article considers these actions of the Paris authorities but within a longer-term and more comparative context. I assess the range of factors that determined the incidence and severity of fires, including environmental conditions, natural resources, the nature of the fire risk, the precautions taken, and the responses of the population and the various authorities to fires that did occur. The comparison with London, often made by eighteenth-century observers, offers a good way to explore the particularities of Paris. Both cities were large for the time: London grew from around 200,000 to a million between 1600 and 1800; Paris, from some 220,000 to between 600,000 and 700,000 in 1789.<sup>18</sup> Both cities were spilling out into the countryside, and their construction industries were booming, as were their thriving consumer economies. The fact that the fire history of Paris was so different derived in part from certain natural advantages that the city enjoyed and to a significant degree from its very different economy. Yet it also resulted from the ways in which power was organized and exercised in the French capital, where disparate authorities collaborated to a surprising degree.

### **Building Materials and Forms of Construction**

When eighteenth-century observers commented on how few bad fires the French capital endured compared to London, they usually attributed this primarily to the nature of the buildings. In 1754 William Mildmay pointed to the houses being of stone, with thick dividing walls. A few years later Maille Dusaussoy also singled out the types of construction. In 1786 Jean-Pierre Brissot similarly observed that most of the houses were of stone and plaster, both very resistant to fire. He added that Paris chimneys prevented fires from spreading either through the walls or from roof to roof and noted, as did Dusaussoy, that whereas in London even brick houses had floors and furnishings of highly inflammable pine, Paris interiors contained less wood, and most of it was oak or beech, which did not catch fire so easily.<sup>19</sup>

17. Milliot, "L'admirable police," 25–26; Le Roux, *Laboratoire*, 25–162.

18. Cowan, *Urban Europe*, 8; Roche, *People of Paris*, 20.

19. Mildmay, *Police of Paris*, 93–94; Dusaussoy, *Le citoyen désintéressé*, 26; Brissot, *Dénonciation*, 17.

Historical work on forms of construction in both cities largely bears out these observations. After the introduction, in the late seventeenth century, of metal chimney flues that could be bent so as to fit several together alongside each other, Paris chimneys were fairly systematically set against the load-bearing side walls of the houses. This created a buffer between adjacent buildings. These wide chimneys extended above the roofline, and that was vital, since bad fires most often spread from roof to roof. In London, by contrast, there seems to have been no common pattern in the placement of chimneys.<sup>20</sup>

The disappearance from Paris of most of the gabled houses that were common in the sixteenth century also helped, since debris accumulating in the gutters between adjoining roofs could catch if a nearby fire sent embers into the air. Brissot and other observers were also right about the use of oak, stone, and plaster, as Yuri Carbonnier shows in his detailed study of house construction in central Paris in the late eighteenth century. Sixty percent of the facades were of stone, and all the walls between the houses were of undressed stone. Plaster was almost universal. By then, too, Paris roofs were universally tiled or covered in slates, unlike in Stockholm, Moscow, and many smaller towns across Europe, where wood and even thatch remained widespread.<sup>21</sup>

Paris was fortunate to have abundant supplies of local limestone that, unlike the stone in the vicinity of London, was good for building.<sup>22</sup> Admittedly, dressed stone remained more expensive than timber for a long time, although because it was a prestige material, a form of conspicuous consumption, wealthy people were prepared to pay more. The implantation of aristocratic families in the Marais in the seventeenth century and in the Faubourgs Saint-Germain and Saint-Honoré in the eighteenth encouraged the proliferation of stone houses, for reasons that had nothing to do with fire prevention. Yet the economics were shifting as good-quality timber became scarcer and more expensive. This made more viable the use of limestone rubble framed by shorter wooden beams, at least by the early eighteenth century, even for quite humble houses. There were also technical reasons for using stone in the end walls, since these generally provided structural support to two houses and wood was not always strong enough.<sup>23</sup>

Other fire-resistant building materials were also readily available and relatively cheap in Paris. The gypsum required to make good-quality plaster was

20. Meyer and Poussou, *Etudes sur les villes françaises*, 278; Guillery, *Small House*, 61–64.

21. Poisson, *Nouvelle histoire de Paris*, 83; Carbonnier, *Maisons parisiennes*, 36, 47, 63. On the more general pattern in France, see Montclos, “Difficultés d’approvisionnement,” esp. 228–34.

22. Schofield, *London, 1100–1600*, 148.

23. Neveux, “Recherches,” 251, 255; Carbonnier, “Le bois contre la pierre,” 262–66; Montclos, “Difficultés d’approvisionnement,” 233–34.

found locally, notably at Montmartre, and clay tiles were brought down the river from Burgundy. The wood used continued to be mostly oak: although its price was rising, it remained much cheaper than in London, where (as noted by observers at the time) pine and other softwoods were more often used in the eighteenth century.<sup>24</sup> Economic factors thus strongly encouraged Paris house owners to comply with building regulations.

Perhaps partly for this reason, there is some evidence that these were effective, possibly more so than in London. Both cities had long-standing rules banning thatch, regulating the construction of chimneys, mandating fire walls, and prescribing fireproofing where fire was in constant use. Historians of London suggest that these rules were effective in the early modern period but that as the population grew they were not enforced.<sup>25</sup> In Paris, by contrast, stone and plaster had been progressively replacing timber since the late sixteenth century. In 1560 a major ordinance required the removal of jetties projecting over the street and obliged new houses to have street facades of masonry or brick. Officials of the masons' guild were made responsible, in 1574, for ensuring that building rules were followed. In 1667 the Bureau des Finances decreed that all wooden facades must be covered with plaster. Carbonnier's study shows that these rules were broadly obeyed. By the late eighteenth century most street facades were built of stone, in conformity with the regulations, compared to only a minority of those in the courtyards, where it was not required by law.<sup>26</sup>

Yet fire-resistant building materials were not the sole explanation for the French capital's good fortune. Timber continued to be widely used for construction. It also remained the primary building material for the innumerable street stalls and for the artisans' workshops, storehouses, and stables that cluttered the city's courtyards. As late as the 1840s the police were still trying to get rid of wooden-roofed outbuildings in the Faubourg Saint-Germain.<sup>27</sup> The danger was highlighted in 1780, when a bad fire broke out opposite the Collège des Quatre Nations, on the riverfront. It raced through the workshops of a blacksmith, a wheelwright, and a cabinetmaker, all of them housed in wooden buildings and containing stocks of charcoal and timber used by these artisans. Everything was destroyed, including the three apartment houses on the block.<sup>28</sup> Even stone houses had oak beams supporting the facades and internal walls, and timber

24. Guillery, *Small House*, 70–71.

25. Carbonnier, "Le bois contre la pierre," 262–63; Delamare, *Traité de la police*, 4:142–43; Isambert, *Recueil général*, 11:157, 14:87; Keene, "Fire in London," 196–98; Schofield, *London, 1100–1600*, 74–76, 241.

26. Poisson, *Nouvelle histoire de Paris*, 83; Fredet, "La maison parisienne," 205; Fredet, *Les maisons de Paris*, 54; Carbonnier, *Maisons parisiennes*, 36. For the regulations, see Carbonnier, "Le bois contre la pierre," 262–63; Delamare, *Traité de la police*, 4:142–43; and Isambert, *Recueil général*, 11:157, 14:87.

27. Archives de la Préfecture de Police, Paris (hereafter APP), DA 266.

28. AN, K1022, no. 145.

was universally used for the roof supports and the rafters, and usually for the stairs and floors. Once a fire took hold, the intense heat penetrated the plaster, and the roof and floors would collapse; once the frame was compromised, the chimneys and walls could also fall, posing a big risk to adjoining buildings. This happened in 1746, when nine people died in a fire that destroyed one house on the Pont au Change and very seriously damaged the ones on each side.<sup>29</sup>

Plaster and stone had a retardant effect, therefore, but did not entirely prevent houses from burning. And of course, the argument that relatively fire-resistant building materials saved Paris neighborhoods from an event like the Great Fire of London does not apply during much of the seventeenth century, when there were still a great many wooden houses in the city. As noted earlier, the houses on the Petit Pont that burned in 1718 were half timbered, the wooden beams of the facades clearly visible on the sketch provided by the architect, and this was true of many of the older buildings in the city.<sup>30</sup> After a fire near the Halles in 1706, the official report observed that “the houses are very high, very tightly packed, occupied by secondhand clothes dealers and full of merchandise, most of them old and made of wood, and therefore easily set alight. . . . It is a sort of miracle that these houses do not catch fire more often, given the way they are built and the number of people who inhabit them.”<sup>31</sup>

## Fire Prevention

To what extent, then, did this miracle result from other preventive measures, beyond building regulations? In both London and Paris, since late medieval times municipal ordinances had attempted to regulate high-risk activities like tallow making, brewing, baking, and lime burning and to stop people lighting fireworks in public places. Parisians were enjoined to use enclosed lamps, not naked candles, when they went into stables and not to burn straw mattresses in the streets. These prescriptions were repeated many times over the centuries. So were restrictions on the sale and storage of gunpowder, although that was partly to do with governments’ desire to ensure plentiful supplies to the army.<sup>32</sup> Another concern was tobacco smoking, though initially less because of the fire

29. Carbonnier, “Le bois contre la pierre,” 262–63; Carbonnier, *Maisons parisiennes*, 34–37, 44–63; AN, K1022, no. 140.

30. Carbonnier, *Maisons parisiennes*, 36–37, 45–47.

31. AN, G7 433, fol. 577: “Les maisons sont très hautes, tres serrées, occupées par des maîtres fripiers et pleines de marchandises, la plupart vieilles et de bois, et ainsi très faciles à embraser. . . . C’est une espèce de miracle que le feu ne prenne pas plus souvent à ces maisons de la manière dont elles sont construites et par le nombre de peuple qui les habitent.”

32. Arnaud, *Pompier de Paris*, 43; *Registres de délibérations*, 9:393 (1589), 14:40 (1605), 16:107 (1614); BNF, JF 1325, fol. 237v; Blackstone, *British Fire Service*, 25; Keene, “Fire in London,” 196; London Metropolitan Archives (hereafter LMA), COL/CA/01/02/001, Court of Aldermen, index to repertories: Repertory 15



risk than because it was associated with immorality. In Paris in 1635 a major ruling of the *lieutenant civil*, who before the creation of the Lieutenantance de Police in 1667 was the magistrate primarily responsible for policing in most of the city, launched a campaign against tobacco. The surviving records of the Chambre de Police, which begin in 1643, reveal individuals being fined for this offence right up to the end of the century, so it clearly was being enforced, at least periodically.<sup>33</sup>

The Great Fire of 1666 was followed by detailed new regulations in both cities. In London rules against fireworks were multiplied and those on sweeping chimneys and restricting dangerous trades were reinforced, while in Paris the new lieutenant-general of police introduced a spate of ordinances. A major one of 1672 regulated the storage of charcoal on the ports and fixed the maximum quantity that retailers could keep in their shops. It established very precise new rules for the construction of chimneys, stipulating the minimum diameter of the flues and the thickness of plaster separating them from the walls and imposing draconian punishments on builders who failed to comply. It required all house owners to sweep their chimneys regularly. In 1719, after the fire on the Petit Pont, specific building rules attempted to eliminate the practice of embedding wooden rafters in chimneys.<sup>34</sup>

The inquiries into individual fires indicate that the Paris authorities became both more systematic and more expert across the eighteenth century in identifying the causes of fires. This led to bans on smoking and lighting fires in the markets and on the ports and on sales of fireworks. Woodworkers were forbidden to work at night without a closed lantern, and stricter rules were imposed on the ovens and forges used by bakers and other trades: by the late eighteenth century, they were required to have their chimneys swept every month. After 1735 all bakers' ovens were to be inspected once a month, and each new one was to be approved by a *commissaire* of the Châtelet—the local police official based in each quarter of the city—accompanied by a mason and an architect. Other dangerous industries, like lime burning and the manufacture of fireworks, were exiled to the suburbs.<sup>35</sup>

It is hard to know, aside from the fines for smoking, how far these rules were enforced before the late seventeenth century, although they were certainly

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(1561–66), fol. 250; Repertory 16 (1566–70), fol. 267; Repertory 17 (1570–73), fol. 72; Repertory 20 (1579–83), fol. 425; Cressy, *Saltpeter*, 166–69.

33. Arnaud, *Pompiers de Paris*, 44; AN, Y9541A, fols. 64–74, 140–48v (Mar. 30, 1635), Y9541B (1638–43), Y9545-7 (1643–60), Y9536 (June 13, 1677; May 20, 1699).

34. LMA, COL/CA/01/02/006, Repertory 79, fol. 421; Repertory 80, fol. 90v; Blackstone, *British Fire Service*, 54, 61; BNF, MS Fr. 21681, fol. 57; AN, AD I 25A, no. 13; Delamare, *Traité de la police*, 4:138–41.

35. Chérière, *La lutte contre l'incendie dans les halles*, 130–39; Chérière, *La lutte contre l'incendie sur la Seine*, 10–19; AN, AD I 24, doss. 1; AN, AD I 25A, nos. 23, 31; Fréminville, *Dictionnaire*, 395–97.

used to condemn individuals whose neglect of them led to a fire. In the eighteenth century, however, the indications are that the *commissaires* and, in relation to building regulations, the *Chambre Royale des Bâtiments* were increasingly rigorous. The inventory of the baker widow Catherine Chancelier contains twenty-four receipts of inspections of her oven.<sup>36</sup> More frequent inspections of buildings and chimneys, greater regulation of particular trades, the exiling of industries that represented a high fire risk, and the punishment of individuals who breached the rules almost certainly had some effect.

Although some of the same regulations were found in both cities, the way local government functioned facilitated far greater enforcement of fire regulations in Paris. London's patchwork of jurisdictions meant that even acts of Parliament did not always apply to the entire metropolis. After the Great Fire, for instance, the new building regulations applied only to the City proper. Furthermore, London's very devolved government meant that it was up to parish vestries, aldermen, and ward officials, and in some areas manor courts, to order locally selected constables to enforce the regulations. It is clear that officials sometimes attempted to take action, as in Southwark, where after a bad fire in 1676 the local authorities managed to get rid of some of the wooden stalls in the main street. They also tried to move some market buildings, but this required an act of Parliament, and a group of residents successfully lobbied to protect the market. Other local people brought formal complaints about fire hazards to ward meetings, but these were held only once a year, and in any case, many aldermen were unwilling to follow up the matters raised. As a result, some people bypassed the local authorities and took matters directly to the criminal courts, but this depended on proving a clear breach of the law, and it was costly. The easiest route was sometimes to negotiate with a neighbor whose activities represented a fire risk, even if this usually involved compromise.<sup>37</sup>

In much of the English capital, outside the City itself, fire regulation was the responsibility of parishes, county magistrates, and justices of the peace. Hence in July 1669 the vestrymen of Saint Mary's, Westminster, reported that wood and shavings were being stored near forges in their parish, but they depended on the county magistrates to order the local constables to step in.<sup>38</sup> There was possibly more direct regulation in certain trades. The Bakers' Company, for instance, resolved in 1669 that in future no ovens could be installed without their approval, although the subsequent minutes record only one approval being granted. The Armourers were also attentive to fire risk, at least in

36. AN, Minutier central des notaires LXXXIX 453, Sept. 9, 1738; Potofsky, *Constructing Paris*, 43–44.

37. Johnson, *Southwark*, 128, 296, 306; Cavert, *Smoke of London*, 68–79.

38. LMA, inventory 60.225, Middlesex Session Books, no. 260.

the 1730s, when they refused to allow a forge to open in a building that already housed a sugar baker.<sup>39</sup>

In Paris the lines of responsibility and authority were more direct. Certain common rules applied to the entire urban area. Paris customary law (the *coutume de Paris*) laid out the basic requirements for building chimneys, while the Parlement imposed specific citywide regulations, as in May 1706, after an explosion, when it banned fireworks manufacture anywhere in the city center. In 1723 the Royal Council itself banned the establishment of new forges without letters patent.<sup>40</sup>

In everyday enforcement, most of the city came under the control of the Châtelet. Any of its *commissaires*, alerted to a breach of the rules, reported the perpetrator to the next session of the Chambre de Police, normally held within a week. It usually imposed an immediate penalty or rectification, or sometimes ordered a further investigation, and the minutes of the court show that in the eighteenth century these were systematically followed up.<sup>41</sup> The trade guilds also came under the Châtelet, reporting to the *procureur du roi*, although infringements of their statutes were taken to the Chambre de Police. There is very little evidence of the guild officials bringing prosecutions over the danger of fire, although it is quite possible that their inspections led to informal action that does not appear in the records.

Not all matters and not all areas of the city came under the Châtelet. Responsibility for enforcing building regulations fell to the Chambre des Bâti-ments. The ports and the river were under the control of the Municipality, which issued its own fire regulations. There were also seigneurial jurisdictions where the *commissaires* could in theory not go, notably the Temple and ecclesiastical areas like Saint-Germain-des-Prés or Saint-Jean-de-Latran.<sup>42</sup> Yet although the different Paris jurisdictions are sometimes depicted as jealous rivals, they coordinated their fire regulation efforts remarkably well. For the first two-thirds of the seventeenth century the *prévôt des marchands* and the Municipality played the more important role but liaised closely with the Châtelet, aided by the fact that for much of the period between 1596 and 1637 the *lieutenant civil* also held the office of *prévôt*! From 1577 on there were weekly meetings between magistrates of the Châtelet, the commander of the City Watch (*guet*), representatives

39. Guildhall Library, MS 5198, Nov. 25, 1669; Glover, *Men of Metal*, 134.

40. *Nouveau coutumier général*, vol. 3, Nouvelle coutume (1580), Arts. CLXXXIX, CXC; Delamare, *Traité de la police*, 4:144, Arrêt du Parlement, May 10, 1706; Isambert, *Recueil général*, 21:257, Arrêt du Conseil, Aug. 9, 1723.

41. For example, AN, Y9441A, May 6, 1740. On the functioning of this court in the eighteenth century, see Williams, *Police of Paris*, 28–36.

42. Carvais, “La Chambre royale des Bâti-ments.” For an overview of the different jurisdictions, stressing the conflicts between them, see Gay, “L’administration de la capitale,” 324–70.

of the Municipality, the administrators of the Hôtel-Dieu, and representatives of the guilds and of the different quarters of the city. As Reynald Abad has shown, it was really only when the balance of authority was upset, as happened after the Lieutenant de Police was created in 1667 and took on far wider powers, that rivalries erupted.<sup>43</sup> Yet by the late 1720s the lieutenant-general of police, the first president of the Parlement, and the *prévôt des marchands* were meeting regularly in what came to be called the Assemblée de Police. It continued to meet until 1778, and possibly longer.<sup>44</sup> As Alan Williams points out, most regulations that applied to the whole city were crafted there, before being issued by all of the relevant jurisdictions. They discussed fire prevention at length in 1733, and in that decade the Municipality and the Châtelet issued a series of ordinances that reiterated in very similar terms earlier bans on open fires, in the one case on the ports and in the other in the markets. In the 1780s the Bureau des Finances, the *prévôt des marchands*, and the lieutenant-general all took action to clear wooden street stalls, mainly to improve traffic flow but also because of the fire risk.<sup>45</sup>

There was, in fact, an incentive for each body to demonstrate its judicial and administrative credentials by legislating against the risk of fire. That is perhaps what various seigneurial jurisdictions were doing when they issued very similar regulations. Failing to do so would open them to losing control of their territory, as the authorities at the Arsenal discovered after a fire in 1729. This tiny jurisdiction, where large quantities of gunpowder were stored, was controlled by the bailliage of the Artillerie, but after the accident the first president of the Parlement expressed concern at the absence of precautions and proposed that henceforth the Châtelet be allowed to police it.<sup>46</sup> Perhaps learning from this, the bailliage of Saint-Jean-de-Latran, which belonged to the Order of Malta, issued ordinances on fire prevention in 1747 and again in 1762. For the Temple enclosure, where the royal police had no right of entry, extremely detailed fire regulations were issued in 1758, repeating almost word for word those issued by the Châtelet but substituting the Prince de Conti's architect for that of the police and the *bailli du Temple* for the lieutenant-general of police.<sup>47</sup> It is likely, nevertheless, that in some jurisdictions there was de facto collaboration in enforcement; because their records are often very sparse, we often do not

43. Chassaigne, *Lieutenance générale*, 27; Piasenza, "Juges," 1191; Abad, "Les luttes entre juridictions." For a fuller account, see Piasenza, *Polizia e città*, 43–77.

44. On both disputes and collaboration, see Williams, *Police of Paris*, 163–85.

45. Williams, *Police of Paris*, 177–78; AN, AD I 24, Ordonnance du Prévôt des Marchands et échevins, Dec. 23, 1737; Sentence de police, Dec. 15, 1730; Chérière, *La lutte contre l'incendie sur la Seine*, 26–27; AN, AD I 23 B, Lettres patentes du roi, May 1784.

46. Williams, *Police of Paris*, 183–84.

47. AN, Z2 3670, Z2 3808.

know. But at Saint-Germain-des-Prés, where the abbot jealously guarded his privileges, in the mid-seventeenth century everyday policing was nevertheless in practice undertaken jointly by the *bailli* and the local *commissaire* of the Châtelet.<sup>48</sup> Although Paris, like London, contained many different jurisdictions, in the domain of fire prevention their efforts were generally coordinated.

### Preparing for Fires

The inevitability of fires was accepted in both cities, but this did not mean that either the inhabitants or the authorities were fatalistic about them. The London Court of Aldermen purchased fire buckets at various times across the sixteenth and seventeenth centuries, and in each ward the alderman was responsible for ensuring their maintenance. In 1624 two fire pumps were bought by the City. But increasing responsibility was given to the city's parishes, more than one hundred of them by 1700. Their accounts show that throughout the seventeenth century at least some were buying and maintaining leather buckets, ladders, fire hooks, and hand squirts. A major act of Parliament in 1707 required every parish to have a large fire engine and other equipment, and most seem to have obeyed. In the early eighteenth century the insurance companies also began investing in well-equipped fire brigades.<sup>49</sup>

In Paris the medieval ordinances issued by the Municipality required each house owner to keep a full barrel of water near the door, in case of fire in the vicinity, and all the inhabitants were expected to lend a hand. This remained the case across the seventeenth century. The municipal officials responsible for each quarter (the *quarteniers*) were ordered to store ladders, fire hooks, and buckets in their houses, and their subordinates—the 64 *cinquanteniers* and 256 *dizainiers* elected in each neighborhood—were to take charge if there was a fire in their area, summoning the local people to assist and distributing firefighting equipment. In 1681 the Municipality ordered that all of these officials, along with the twenty-four city councillors, all the former *échevins* (elected municipal officers), and an unspecified number of “notables bourgeois,” be given buckets and fire hooks.<sup>50</sup> By then, however, responsibility was passing to the newly installed lieutenant-general of police. His major ordinance of 1670 codified existing measures and added new ones, among other things enjoining the owners of houses

48. Lemercier, *Les justices seigneuriales*, 159.

49. LMA, COL/CA/01/02/001, index to repertories, Repertory 39, fol. 19, Nov. 11, 1624; Freshfield, *Accomptes*, 24, 36, 51, 71; Blackstone, *British Fire Service*, 48–51, 61; Wright, *Insurance Fire Brigades*, 8–9; Trebilcock, *Phoenix Assurance*, 124.

50. Arnaud, *Pompiers de Paris*, 20, 25, 45; Picot, “Recherches sur les quarteniers,” 162; *Registres des délibérations*, 9:246, Jan. 13, 1589; BNF, MS Fr. 21681, fol. 30.

with wells to ensure that the cords and pulleys were properly maintained, so that water would be readily available. It also required all masons, carpenters, and roofers to give their addresses to the local *commissaire* and to obey the summons to attend any fire in their area.<sup>51</sup>

It was not until 1699 that Paris acquired its first Dutch fire pump, and more were soon purchased. Paid firemen were first employed in 1716, and their number too grew across the century, rising from the original 32 men to 221 in 1785. By the time of the Revolution there were twenty-five permanently manned posts around the city. The fire service was funded directly by the royal government.<sup>52</sup>

But the pumps would not work without water. One might expect neither London nor Paris to have any problem in this respect. Both were on major rivers. They were located in the temperate, maritime zone of Europe, with neither the long, hot, dry summers of southern Europe nor the short, dry ones of the northern countries.<sup>53</sup> Rainfall was reasonably plentiful all year round and peaked in summer: figures from the Paris Observatory (commencing in 1680) show that in the eighteenth century up to half of the annual precipitation could fall in July and August, making the summers significantly wetter than they are today.<sup>54</sup> High humidity across the year, but particularly in the hotter weather, reduced the fire risk and in principle provided water for fighting fires. A further important climatic factor was the rarity of freezing weather, compared with northern, central, or eastern Europe, since very low temperatures could make wells and even the rivers freeze, along with water in the fire hoses and pumps.

But for fighting fires, water needs to be readily accessible in adequate quantities. The Thames was tidal, and the level was therefore often low, whereas the Seine had a more constant flow. More important still, in case of fire, was the supply from wells and public fountains. In London the water table sank as the population grew rapidly in the seventeenth and eighteenth centuries, so the wells often ran dry. Furthermore, public water conduits fell into disrepair across the seventeenth century, and piped water—far more widely available than in Paris—was owned by private companies, which were sometimes accused of not providing water quickly, or in sufficient quantity, when fires erupted. The water companies generally supplied their clients only on certain days, and then only for a few hours, so firefighters often found the pipes dry. Furthermore, the

51. AN, AD I 25A, no. 2, Ordonnance du lieutenant de police, Mar. 7, 1670; Delamare, *Traité de la police*, 4:153–54, Sentence de police, Jan. 7, 1701.

52. Arnaud, *Pompiers de Paris*, 55–64; AN, O1 360, no. 31, “Etat de l’emploi de 73.000 livres accordée par arrêt du Conseil du 17 décembre 1770. Pour le service des Incendies de la Ville de Paris.”

53. Pyne, *Vestal Fire*, 13–15.

54. Slonosky, “Wet Winters, Dry Summers?,” 3. See also Guillerme, *La naissance de l’industrie*, 25–27.

stopcocks fitted to water pipes did not always match the fittings on the fire pumps, and even if there was water, the pressure in the pipes was often too low. Again and again, fires raged unchecked while people tried desperately to get water.<sup>55</sup>

Paris supplies, by contrast, were more abundant, even if the quantities per household were never large. Here again, the different jurisdictions took concerted action under direction from the crown. In the early seventeenth century Henri IV pressured the Municipality to repair public fountains that had fallen into disrepair during the upheavals of the late sixteenth century, obliging them to raise the necessary taxes and to get the seigneurial jurisdictions to follow suit. The Samaritaine pump on the Pont Neuf was inaugurated in the early seventeenth century, aqueducts from Arcueil and Rungis were reconstructed in the 1630s, and another pump was installed on the Pont Notre-Dame in the 1670s. In the eighteenth century the Châtelet and the Municipality collaborated to ensure the supply of water. The system of public fountains went from sixty in 1700 to eighty-five by 1789, and they were on the whole well maintained. In addition, a great many houses had wells: except on the Montagne Sainte-Geneviève, they were fairly cheap to dig since the water table was only five to ten meters below ground.<sup>56</sup>

Specific additional supplies were arranged in case of fire. In 1733 the *prévôt des marchands* agreed to a proposition of the lieutenant-general of police to install fireplugs on the pipes that fed the public fountains, and the Municipality duly carried out the work. After 1764 the lieutenant-general of police commissioned water carts to accompany the fire pumps and in the 1780s created dedicated depots where they could be refilled. Water tanks were installed in the largest theaters.<sup>57</sup> It was rare for the Paris fire service to complain of being seriously short of water to fight a fire. This seems to have happened only twice: in 1746, when the river froze over, and in 1781 at the Opera, where the water tanks under the roof had not been kept full.<sup>58</sup>

## Fighting Fires

The differences in government between Paris and London are even starker when we consider the actual fighting of fires. In 1666 the liberties of the City of

55. Garrioch, "1666," 328; Wright, *Insurance Fire Brigades*, 10.

56. Ranum, *Paris*, 63–65, 72–75; Roche, *Histoire des choses banales*, 164–71; Beaumont-Maillet, *L'eau à Paris*, 37–91; Chérière, "L'eau à Paris"; Carbonnier, *Maisons parisiennes*, 424, 31, 35–37.

57. Williams, *Police of Paris*, 177; Chérière, *La première bouche d'eau*, 4–8; Arnaud, *Pompiers de Paris*, 26, 64, 547.

58. BNF, JF 1525; Favier, "L'almanach du messager boiteux," 367.

London prevented early intervention by the royal army, and the reluctance of the mayor and aldermen to create firebreaks by demolishing houses—an assault on private property, for which compensation would have to be paid—was arguably one reason that the Great Fire became as extensive as it did.<sup>59</sup> In Paris, by contrast, the privileges of the city were primarily fiscal, and as Laurence Croq has shown, after the Fronde the Municipality was more and more an arm of the royal administration. The fire service, once it was created, was under centralized command, unlike in London, where the pumps were controlled either by the parishes or, increasingly in the eighteenth century, by the insurance companies. Although these different squads mostly cooperated, fights between them were not unknown. There were also instances in the early eighteenth century when an insurance brigade refused to fight a fire in a property insured by a different company, leading the Sun Office, in 1731, to propose better collaboration. No such conflicts arose in Paris, where the firemen were entirely government funded and after 1722 were unambiguously subject to the magistrates of the Châtelet.<sup>60</sup>

In firefighting, as in prevention, the various Paris authorities collaborated with remarkable success, although the balance of responsibility shifted. In 1618, when the Palais de Justice burned, the *lieutenant civil* and the *prévôt des marchands* both attended. So did the first president and the *procureur général* of the Parlement, who appear to have directed activities within the confines of the Palais itself, which was a privileged jurisdiction. But it was the *prévôt* who directed the efforts of the local population living on the bridges and in the surrounding streets, which came into the domain of the Municipality. Several *commissaires* of the Châtelet were also there, presumably mobilizing the building workers who reported to them in such circumstances. The *lieutenant civil* took care of cleaning-up operations.<sup>61</sup>

Nearly a century later, at a large fire near the central market in 1706, the principal magistrates of the Châtelet attended immediately, and the *prévôt des marchands* and the municipal officers—who had no direct authority there—arrived some hours later. But in 1718 when the Petit Pont burned, the leaders of the Municipality seem to have taken the lead, since it was within their jurisdiction. They were assisted by the military governor of Paris, who brought some cannon in case houses needed to be demolished to form a firebreak. The archbishop of Paris was also present—the cathedral was close by—and according to one account he gave orders that helped save the Hôtel-Dieu, although another

59. Porter, *Great Fire*, 1, 35; Keene, “Fire in London,” 191.

60. Croq, “La Municipalité parisienne”; Blackstone, *British Fire Service*, 71; LMA, CLC/B/192/B/017/MS11934/001, Jan. 6, 1731; Williams, *Police of Paris*, 174.

61. APP, Collection Lamoignon AD 10, fols. 1009–14v.



report claimed that his main contribution was to have the Blessed Sacrament brought out to protect the hospital.<sup>62</sup>

Jurisdictional sensitivities were respected, therefore, but responsibility was shared. The “leading magistrates” (*premiers magistrats*) were all present when the Opera burned in 1781, including, according to one report, the *prévôt des marchands*. Justine Berlière concludes that this fire offers “the best example we can find of collaboration between all the magistrates of the capital.”<sup>63</sup> Nevertheless, there was a clear shift in overall responsibility for firefighting from the *prévôt des marchands* to the Châtelet. The fact that in 1718 the Municipality’s fire pumps did not attend the nearby fire on the Petit Pont and were later found not to be in working order hastened the shift of responsibility.

Since most fires took place in quarters where the Châtelet clearly had the main role, we usually find its *commissaires* directing operations. Only occasionally do we find them being refused entry when a fire had broken out. In 1718 a man who did so was fined the huge sum of three hundred livres, and a month later a general ordinance reminded the Paris population that it was forbidden to refuse access to the *commissaires* in case of fire.<sup>64</sup> This did happen again in 1764, when there was a fire in the abbé Nollet’s apartment in the Louvre, within the jurisdiction of the Prévôté de l’Hôtel, the authority responsible for royal residences. Even the firemen were initially sent away, but they were called back when the fire started to spread. Three *commissaires* entered through an adjoining apartment but found an inspector of the Bâtiments du Roi taking charge of operations. The fire was not serious, and there seem to have been no legal consequences for either side.<sup>65</sup> A few years later the nuns of the Presentation convent in the Rue des Postes initially refused to open their doors when one of the dormitories caught fire, with tragic consequences, since five of the girls sleeping there died. Perhaps as a result, the following year, when a fire erupted in a brewery opposite the same convent, the *prévôt des marchands* and the lieutenant-general of police simply ordered the convent doors to be forced, along with those of two other religious houses whose occupants tried to refuse access to their wells.<sup>66</sup>

Coordination among the city’s authorities allowed firm leadership at the scene of a fire. This was vital, because even after the creation of a professional fire service, a great many individuals and groups assisted. The workers in the building trades played a major role, since they were used to scaling houses and

62. Dangeau, *Journal*, 17:299; Buvat, *Journal*, 1:314.

63. BNF, MS Fr. 6684, 475; AN, K1022, no. 147; Berlière, *Policer Paris*, 335.

64. Bimbenet-Privat, *Ordonnances*, no. 103; BNF, MS Fr. 21681, fol. 32, Ordonnance de police, Sept. 20, 1718.

65. AN, Y11354, Nov. 8, 1764. On the Prévôté, see Marion, *Dictionnaire*, 453.

66. Hardy, *Mes loisirs*, 1:283–84, 594.

knew how to remove tiles or demolish walls. They would dismantle wooden buildings in the vicinity to stop the fire spreading and could even demolish houses to create a firebreak. They were required to attend fires in their area, and from the early eighteenth century those few who failed to attend were fined by the *Chambre de Police*.<sup>67</sup>

A second group summoned to bad fires were members of the mendicant orders, notably the Franciscans. They clearly developed a certain expertise and were usually in the front line: several were killed fighting the fire in the *Palais de Justice* in 1618, others fighting the 1621 fire on the *Pont Marchand*. They reportedly saved the *Sainte-Chapelle* in 1631 and played a major role in combating a blaze at the *Louvre* in 1661, and more than one hundred Capuchins were said to have helped fight the flames on the *Petit Pont* in 1718. Their valuable assistance at all the big fires, including at the *Opera* in 1781, was commented on by observers. They also helped with more minor outbreaks: *Madame de Sévigné* mentioned their presence in 1671 when a nearby house caught alight, crediting them with saving most of the structure. They helped extinguish a small fire in the *Marais* in 1724 and attended a nasty house fire in the *Rue Croix des Petits Champs* in 1744.<sup>68</sup>

The guards employed on the ports and ramparts were also usually present. In the eighteenth century they and the *City Watch*—later replaced by a much larger force under the control of the lieutenant-general—were given a key role in crowd control. At serious fires, too, the regular army was mobilized. Both the Swiss and the French guards were summoned to the *Petit Pont* in 1718 and to all of the subsequent large fires. In 1766 both regiments were officially put at the disposal of the commander of the fire service, and each of their barracks had its own fire buckets.<sup>69</sup>

It is clear that when a fire broke out, many neighbors and passersby came running and often extinguished small fires on their own. At larger ones, they formed bucket chains to bring water from a fountain or other supply point, and they constructed *batardeaux*, makeshift dams in the street that provided a supply for the firefighters. People uphill from that point poured water into the gutters so that it pooled behind the *batardeaux*. Passersby and volunteers also manned the pumps.<sup>70</sup> Eyewitness accounts suggest that the numbers of people

67. Delamare, *Traité de la police*, 4:153, Sentence de police du 7 janvier 1701; AN, AD I 25A, no. 16, Sentence de police, May 23, 1721; AN, AD I 25A, no. 22, Sentence de police du 29 janvier 1726.

68. Alençon, *Les premiers pompiers*; AN, Y14774, July 30, 1724; Arnaud, *Pompiers de Paris*, 48–49.

69. Arnaud, *Pompiers de Paris*, 25, 59, 60; Chérière, *La lutte contre l'incendie sur la Seine*, 59; AN, Y12469, Feb. 11, 1774; Chagniot, *Paris et l'armée*, 168–69.

70. Mercier, *Tableau de Paris*, 9:219–21; Rétif de la Bretonne, *Les nuits de Paris*, 2:842, 76e nuit; AN, F9 330, report on fire service to Comte d'Artois, n.d. [early Restoration]. For further examples, see Garrioch, "Fires and Fire-fighting."

assisting at major fires were impressive. When the Pont Marchand and the Pont au Change burned in 1621, the Municipality is reported to have mobilized fifteen hundred workers and to have requisitioned an extra twelve hundred buckets from the shops of the city. In 1671 “an infinity of persons” helped save the Sorbonne. A century later, according to one source, no fewer than two thousand men worked to extinguish the fire at the Opera in 1763.<sup>71</sup> Despite the growing professionalization of firefighting, it remained a whole-of-community effort and responsibility.

There were conflicting views, at the time, on the effectiveness of the paid fire service, but most of the late eighteenth-century critiques must be recognized as part of a new discourse about the police.<sup>72</sup> I have suggested elsewhere that if we look at the way fires were actually handled, we find that in the first half of the century the firemen generally (with public assistance) prevented them from spreading beyond the structure where the flames first appeared, and by the 1780s they often managed to save the other floors of the building. An indication of their growing effectiveness was the virtual abandonment of demolition—except of temporary wooden structures—as a way of preventing fires from spreading.<sup>73</sup>

## Economy

There was one further crucial difference between Paris and London that Brissot commented on in 1786. “In London,” he wrote, “there are many manufactures of which fire is the principal agent, or which require a large quantity of combustible materials, such as those for the navy. . . . There is nothing similar in Paris.”<sup>74</sup> Again, he was right. The Great Fire of London became unstoppable when it reached riverfront warehouses full of products of maritime trade, including hemp, resin, oil, tar, hops, cotton, tobacco, silks, brandy, sugar, coal, sulfur, and other highly flammable substances. Many of the subsequent terrible fires in London either began in sugar refineries, breweries, distilleries, or oilmen’s shops or spread to storehouses full of combustibles. The same was true in Amsterdam and in late eighteenth-century Hamburg.<sup>75</sup>

The Paris ports, by contrast, disembarked wood, hay, and grain, which posed a far smaller risk, and only the wood was stored there for any length of time. As Paris was not a major seaport, it had no shipbuilding industry, no

71. Cherière, *La lutte contre l'incendie sur la Seine*, 87; Arnaud, *Pompiers de Paris*, 49.

72. Milliot, “*L’admirable police*,” 14–22.

73. Garrioch, “Fires and Fire-fighting,” 4–5.

74. Brissot, *Dénonciation*, 17–18.

75. Garrioch, “1666,” 334–37; Van der Heyden, *Description*, 23–79; Zwierlein, *Der gezähmte Prometheus*, 115–17.

concentrations of hemp and linen for rope and sails or of pitch, tar, and turpentine for waterproofing. Nor did it contain warehouses full of the highly combustible items that London and Amsterdam imported, reexported, and sometimes processed. The first sugar refinery in Paris appeared only in 1757, and it was located at Bercy, outside the city. It was not until beet sugar became viable in the early nineteenth century that refineries multiplied. In London, by contrast, there were already some eighty refineries in the 1750s and over one hundred by the early 1780s, and huge quantities of sugar were stored either for consumption within the city or for export to the provinces and the Continent. Beer too was far more important in London, where there were nearly two hundred commercial breweries in the 1690s. In Paris the brewers complained in 1791 that their number had declined from fifty or sixty to sixteen. Although the remaining establishments were probably much bigger, they still could not match the London ones for scale.<sup>76</sup>

The same is true in other sectors. In London raw cotton was already, by the late seventeenth century, an important colonial import, whereas in Paris there was no manufacturing before the Revolution, only a small number of cotton printing works. Tobacco began to be processed in Paris in the 1670s, as a state monopoly, and in the second half of the eighteenth century it was processed in a single depot just behind the Louvre before being distributed throughout the kingdom. Coal, not a particularly dangerous product but a source of fuel if a bad fire did erupt, was little used in Paris until the Napoleonic period.<sup>77</sup>

Most dangerous industries were exiled from the city. Tile and brick makers had been banned since at least the sixteenth century. Fireworks manufacturers were excluded from the area within the walls in 1706, and from the suburbs as well after 1731. Even then they were made subject to inspections, and this was done scrupulously when one was given permission to set up his laboratory in 1745. Lime burning was not permitted in Paris, either, and since the smell was overpowering, clandestine ones were easily discovered. In principle, no forges or manufacturing ovens (used by bakers, pastry cooks, potters, and others) could be built without prior permission, and they could not be fired before being inspected by a *commissaire*, accompanied by a mason and by the architect employed by the Châtelet.<sup>78</sup> The same applied, since 1707, to the vats used by candlemakers, wigmakers, hatters, and others. Candlemakers were also subject

76. Belhoste and Woronoff, "Ateliers et manufactures"; Stern, "London Sugar Refiners," 27–28; Burstin, *Le faubourg Saint Marcel*, 172–73; Hatcher, *British Coal Industry*, 441.

77. Zahedieh, *Capital and the Colonies*, 227; Chassagne, *Le coton*, 80–85; Chassagne, *Oberkampff*, 14; Smith, "L'industrie du tabac," 237; Hardy, *Mes loisirs*, 4:436; Abad, "L'Ancien Régime," 61–83.

78. Delamare, *Traité de la police*, 4:144–46; AN, Y10989B, Oct. 1, 1745; Le Roux, "Des fours à plâtre," 1; Le Roux, *Laboratoire*, 35–40, 46; Kaplan, *Bakers of Paris*, 489.

to inspections by the officials of their guild. The authorities were never able to remove tallow production from the city, but it was done in small-scale workshops and was subject to strict rules. In theory, at least, butchers were required to declare the quantities they manufactured and could sell it only in the public marketplace. Candlemakers were not allowed to stock large quantities of tallow or of candles ready for sale but were supposed to manufacture them in small quantities every day. The regulation was detailed and intrusive, far more than in London, where it was relatively easy for people to set up in a range of trades without even joining the relevant guild and where the capacity for enforcement by most of the trade companies declined markedly after the late seventeenth century.<sup>79</sup>

We do not know, in every case, how stringently the Paris rules were enforced, but the evidence suggests that the most dangerous industries were quite strictly regulated. In other areas, the authorities clamped down periodically, after a fire or in response to complaints. But there were some limits on their ability to do so. Le Roux has shown that in the 1770s and 1780s the royal government's desire to encourage innovation, combined with certain factors specific to the industry, enabled some lime burners to set up within the city boundaries.<sup>80</sup> This period also witnessed challenges to regulation posed by new technologies, processes, and products, such as nitric acid, bleach, new metal alloys, and oil-based protective coatings for pots, leather, hats, and furniture. Even dangerous manufactories were generally allowed in the suburbs, despite the risk to surrounding housing.<sup>81</sup>

Despite these challenges to Paris regulators, it seems clear that controls were more stringent than in London. In 1744 and 1754 big fires in Thames Street, in the heart of the City, started in a brewery and a sugarhouse, respectively. Another blaze in Cheapside, in 1761, began in a tobacco warehouse.<sup>82</sup> These kinds of establishments were simply not permitted in the center of Paris.

## Conclusion

So Paris escaped the flames. The innumerable small fires did not spread to become huge conflagrations. There may have been an element of luck in this, yet comparison with London enables us to identify a number of factors that

79. APP, Collection Lamoignon, AD 23, fols. 968–73; Le Roux, *Laboratoire*, 38; APP, AD 26, Collection Lamoignon, fol. 556; Kellett, "Breakdown."

80. Le Roux, *Laboratoire*, 96–107, 55–60, 299–301; Le Roux, "Des fours à plâtre."

81. Le Roux, *Laboratoire*, 112–61.

82. *British Chronologist*, 2:330, 3:163, 366. See also Hilaire-Pérez and Thébaud-Sorger, "Risque d'incendie en milieu urbain et 'industrious revolution,'" 32–33.

helped Paris avoid disaster. Even though the English capital had both paid firemen and advanced fire pumps much earlier than Paris, firefighters in London encountered serious problems with water supply that sometimes prevented them from quenching small fires before they spread. The ready availability in Paris of good stone and plaster encouraged their widespread use, whereas the London brick seems to have been less effective in inhibiting the spread of fire, and in many of the suburbs it was in any case slow to be adopted. The timber used there was softwood, which caught fire easily, whereas Paris builders continued to use hardwood.

Yet houses of brick and stone could and did burn if other fuel was available. Large fires in London were fed by large stores of highly inflammable products that were not found in Paris, or only in smaller quantities: sugar, cotton, oil, naval supplies, and the like. The economies of the two cities were entirely different. London was not only a center of consumption but also a great seaport that imported, processed, and reexported large quantities of dangerous commodities, and its shipbuilding industry was in itself a source of many bad fires. The Paris river ports, by contrast, handled mainly products for the city's own consumption, and until the late eighteenth century the city's manufacturing was small scale and dealt in less dangerous substances.

Even so, extensive fires were not an impossibility in Paris. There were many wooden houses, particularly in the seventeenth century but still in the eighteenth, and plaster did not resist intense heat for long. That big blazes did not happen was also because of increasingly effective prevention and growing investment in firefighting. These were made possible by the way Paris was governed. During the seventeenth and eighteenth centuries the French monarchy exercised direct and growing authority over the Municipality, the *Châtelet*, and the seigneurial jurisdictions and on occasion forced them to act. But even when the royal government did not intervene directly, the various authorities collaborated on fire prevention. This runs counter to an administrative history that emphasizes disputes and rivalries, particularly between the Municipality and the *Châtelet*. It is true that these conflicts existed and that they could lead to disaster: in 1770 over 130 people died in a crowd stampede at the *Place Louis XV* when different authorities failed to coordinate their precautions.<sup>83</sup> But that was a tragic exception. Most often, disputes arose when a *commissaire* or a bailiff intruded on another jurisdiction by making an arrest, conducting an inspection, or imposing confiscations or fines on the inhabitants of privileged areas. On important matters of city government, such as fire prevention, the different authorities normally worked closely together.

83. Milliot, *Un policier des Lumières*, 111–16.

In this respect, too, the comparison with London is revealing. There, responsibility for both fire prevention and firefighting was shared among a wide range of authorities: the aldermen in the different wards, some of whom were indifferent administrators; a hundred or so parish vestries, some elected and others not accountable to anyone; magistrates and courts of different kinds; justices of the peace and local constables. The City of London proper, the City of Westminster, the Borough of Southwark across the river, and the peripheral areas beyond the walls, all had different structures of authority. As a result, successive building acts and fire regulations were frequently not enforced, and complaints at ward meetings often went unheard. Hence many sugar refineries, breweries, and other factories that posed a high fire risk remained close to residential housing, even within the walls. The king himself hesitated to infringe the liberties of the City: in 1637 Charles I wrote to the lord mayor suggesting that fire engines be bought for London, but he did not attempt to impose them.<sup>84</sup> And as noted earlier, in 1666 Charles II hesitated to intervene until it was clear that the mayor had completely lost control of the situation.

The way fires were handled on the ground also reflects the very different ways in which authority was structured in the two cities. In Paris, in each location it seems to have been clear who was in charge of each aspect of the combat: mobilizing and directing the building workers and the local population, dealing with crowd control, protecting the goods of fire victims. When the army was summoned, there is no evidence that its officers refused to cooperate.<sup>85</sup> The fire service, once it was created, was far more centralized than in London. It had a “director,” who later became its “commander,” unlike in the English capital where the brigades attending a fire might be answerable to different parishes and insurance companies and where there was no one to coordinate their efforts.

There were also important differences in the way power was exercised. The Paris authorities, unlike those in London, demonstrated little respect for private property rights. The Municipality in 1621, the Châtelet in 1706, and the military governor in 1718 had no hesitation in ordering the demolition of buildings to create firebreaks. The *commissaires* simply requisitioned buckets and tools from nearby shops if more were needed, and in 1718 they were formally given authority to enter buildings without the owners’ permission, in case of fire, and to take whatever action they deemed necessary.<sup>86</sup> By the eighteenth century the army was mobilized frequently, and if there was any shortage of manpower the City

84. Blackstone, *British Fire Service*, 29.

85. As happened in Stockholm: Wester, *Kungliga Politi- och Brandkommissionen*, 37, 140.

86. BNF, MS Fr. 21681, fol. 32.

Watch dragooned passersby and spectators into assisting, quite heavy-handedly according to some reports.<sup>87</sup>

Preventive measures were also introduced and enforced rigorously. The police court records, although fragmentary for the seventeenth century, contain many examples of individuals who were fined on the basis of a single police official's report, and some (admittedly following inspection by an architect) were forced to rebuild chimneys and ovens. Sometimes local property owners were forced to contribute to the maintenance of public wells and fountains. All this was well within the power of the lieutenant-general of police, and the inhabitants had no means of resisting. He also had the authority to remove many dangerous industries to the outskirts of the city.<sup>88</sup> The de facto police state in Old Regime Paris was both despotic and protective, harsh and relatively effective.

We can see this when we consider what happened during the Revolution when, as a coal merchant told local authorities concerned about the fire risk posed by his establishment, "they could not stop him, since everything was permitted [*tout était libre*]."<sup>89</sup> The Municipality did try to maintain preventive measures, but Le Roux has shown that industrial nuisances of all sorts increased as manufacturers ignored or circumvented the former restrictions. After 1792, particularly, almost all regulation was abandoned where war production was concerned. A whole series of bad fires and explosions resulted, the worst at a gunpowder factory at Grenelle in August 1794, in which 550 people were killed. Within the old city boundaries, another bad fire had already occurred earlier the same month in a saltpeter refinery installed in the former abbey of Saint-Germain-des-Prés. It resulted in at least one death and in the destruction of most of the convent library and of several adjoining houses.<sup>90</sup> The relatively inflammable building materials and the efforts of the firefighters prevented this and other fires from spreading, but the more numerous fires showed how effective the old system had been.

The difference between Paris and London, in fire regulation and enforcement, lay not only in the nature and distribution of power but also in ideologies of government. In London taxpayers were both suspicious of centralized authority and reluctant to fund public infrastructure. Hence the authorities left water supply to private companies. Certainly, investment in firefighting was a parish responsibility, but vestries worried about the level of rates levied on local property owners and were more than happy to leave insurance companies to fund

87. Mercier, *Tableau de Paris*, 9:21; Rétif de la Bretonne, *Les nuits de Paris*, 2:842, 76e nuit.

88. Delamare, *Traité de la police*, 4:140, Ordonnance de police, Apr. 11, 1698; AN, Y12830, de Sartine to commissaire Roland, May 18, 1765; Le Roux, *Laboratoire*, 35–161.

89. Quoted in Le Roux, *Laboratoire*, 172.

90. Le Roux, *Laboratoire*, 163–225; on Grenelle, see 190–94; see also AN, F3 (II) Seine 52, doss. 1.



most of the fire services. In Paris, by contrast, the provision of water was seen as a vital public service for which government was directly responsible: experiments with private suppliers came late, in the 1780s, and were not initially successful.<sup>91</sup> Firefighting came to be seen in the same light. As Vincent Milliot and others have shown, the Châtelet in particular embraced a conception of the “well-policed state” in which royal servants took seriously the idea that rulers had a responsibility to look after their subjects. In the eighteenth century this was inflected by an ideology of improvement that made all the city authorities willing to invest public money in new methods and technologies—including the Municipality, as Isabelle Backouche has demonstrated, particularly in the area of water supply.<sup>92</sup>

Nevertheless, the authoritarianism and relative absence of formal checks on the power of the Paris authorities did not mean that the inhabitants were deprived of a role in fire prevention. On the contrary, just as in neighborhood disputes, they made active use of the regulations and of the mechanisms of policing.<sup>93</sup> In 1740, for instance, two shopkeepers in the Faubourg Saint-Marcel complained to their local *commissaire* that a baker’s oven being built in the cellar of an adjoining house represented a fire risk. He agreed and took the matter to the Chambre de Police, which suspended construction of the oven. Some years later it was once again neighbors who complained that a local man was burning straw in the cloister of Saint-Benoît. The *commissaire* made a report to the Chambre de Police, which issued a fine. There are many similar cases of police action provoked by denunciations. Despite a widespread perception among historians that early modern people were fatalistic about fire, in reality fire prevention was actively supported by many Parisians.<sup>94</sup>

So was firefighting. It is true that across the early modern period people often saw divine intervention in the city’s avoidance of disaster, but like the *commissaire* Delamare after the 1718 fire on the Petit Pont, they often added that while God had “no doubt” assisted—in this case by sending a favorable wind—there was no shortage of human effort in containing the fire.<sup>95</sup> In this sense, too, the people of Paris to some degree made their own luck. It was the neighbors, aided in serious cases by monks and building workers, who brought most fires under control before they did enormous damage. Even after the creation of a paid fire service, the firemen continued to rely heavily on public assistance.

91. Dardenne, *L'eau et le feu*.

92. Milliot, “*L’admirable police*,” 11–18; Milliot, *Un policier des Lumières*; Backouche, *La trace du fleuve*, esp. 256–63. See also Roche, *People of Paris*, 271–77; and Kaplan, “Note sur les commissaires.”

93. Garrioch, *Neighbourhood and Community*, 45–55.

94. AN, Y9441A, May 6, 1740; AN, AD I 25, Sentence de police, July 22, 1768. See also AN, Y9466A, n. d. [June 1764]; June 27, 1764; and Y9484B, Sept. 28, 1781.

95. BNF, JF 1324, fol. 268v.

Yet the nature of fires in Paris was changing. Already toward the end of the eighteenth century, large single-building blazes were becoming more common, erupting in new kinds of industrial establishments and in the theaters that were multiplying and growing in size.<sup>96</sup> By then Paris houses were on average taller than they had been a century earlier, requiring more powerful pumps, longer ladders, and new methods if firefighters were to save people from upper floors and from larger buildings. Fires fueled by oil- or acid-based products, present in larger quantities and in bigger factories, required more specific expertise. In the early nineteenth century gas was to join the list of dangerous industries. Here again, specialist and professional firemen were needed, as well as more sophisticated types of prevention. Although they continued to rely on public assistance until almost the middle of the nineteenth century, firefighting was becoming less of a community responsibility. It was not only the Revolution that put an end to what we might call an “Old Regime fire ecology,” but unprecedented dangers. A new chapter in the fire history of the city was beginning.

The absence of devastating fires in Paris had a number of important consequences for the city’s development. Unlike in London—or in Stockholm, Hamburg, and other cities that did experience massive blazes—there was no large-scale rebuilding and urban renewal, accompanied by new amenities, before the second half of the nineteenth century. Much of the urban fabric was renovated rather than replaced, and this had economic implications. Investment in real estate, in Paris, was relatively safe. Insurance companies were therefore slow to develop, which helped give the city’s financial institutions a different character from those in London. At the same time, in the early nineteenth century the older building stock in central Paris, including nationalized religious buildings that were often converted into manufactories, encouraged the development of thriving and productive small-scale industries that helped revive the city’s economy.<sup>97</sup>

That, in turn, affected the nature of Paris society. The persistence of older housing in the inner quarters (including the old faubourgs) enabled both an artisan population and a relatively poor population to continue living there, in some areas well into the twentieth century. It permitted lively forms of neighborhood life to flourish in the urban center, and this had political implications. The conflation, by early nineteenth-century hygienists, artists, and writers, of the biological and social dangers they perceived in the “insalubrious” quarters in

96. Hemmings, “Fires,” 237.

97. Grimaudi, *Paris, ville ouvrière*, 11–72, 147–76. For an argument linking reduced fire destruction and capital accumulation, see Frost and Jones, “Fire Gap.” On the London insurance market, see Pearson, *Insuring*.

the very heart of Paris contributed to social fears and tensions. In this sense, the city's good fortune in the eighteenth century in escaping large fires may have contributed to the turbulence of its nineteenth-century history.<sup>98</sup>

DAVID GARRIOCH is professor of history at Monash University. His most recent book is *The Huguenots of Paris and the Coming of Religious Freedom, 1685–1789* (2014).

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98. The best-known work is of course Chevalier, *Laboring Classes*, which perpetuated the early nineteenth-century myth. See Ratcliffe and Piette, *Vivre la ville*, 11–33. Grimaudi, *Paris, ville ouvrière*, esp. 244–61, argues for a direct connection between neighborhood sociability and political radicalization.

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