# Fires in Rome: the ancient city as a fire régime

by

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**Volume 1**

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Margaret Desmond

# Summary

The aim of this thesis is to explore the concept of fire as a process in ancient Rome using the model of the city as a 'fire régime', a model where systems of building and managing cities have developed in relation to specific patterns of fire engendered by local and environmental conditions. This approach presents a framework where fires are explored as a continuum or a process to which a general typology of urban fire is applied, and where Rome, like all cities, was a habitat for fire. Chapter 1 sets out the inter-disciplinary and multi-disciplinary methodological approach to the subject and the manner in which traditional material is looked at anew through the lens of modern fire science and sociological research.

The thesis argues that much written by the ancient sources has been taken at face value by modern scholarship and needs to be re-evaluated. That re-evaluation begins in Chapter 2 with a close reading of the language and vocabulary used by the sources for each of the 88 recorded fires from the period 460 BC to AD 410. The focus and context of the record is examined while modern commentary is collated on each fire. Chapter 3 presents an analysis of the findings of the close reading and discusses whether the language used can throw any light on why certain fires are recorded in the first place. This chapter also looks at the chronology of the sources as well as presenting case studies to test their reliability.

Chapter 4 explores the flammability of Rome and suggests that the individual elements which made Rome a flammable city did not in themselves constitute fire hazards; it was the combination of a number of factors such as topography, population, housing conditions, building materials, human behaviour, the inter-mingling of commercial and residential areas together with ubiquitous naked flame which conspired to make the danger of fire constant in Rome. By applying modern research on building materials, particularly wood, this chapter also investigates whether assumptions have been made by secondary sources about the nature of the flammability of Rome.

Chapter 5 examines the Romans' awareness of the danger, the constant efforts made to prevent, contain and control outbreaks of fire, and the manner in which this was interwoven with political, religious and ritual life of the city. Legislation, building materials, technology and design are all discussed and it is argued that fire prevention and management were part of the fabric of the city. While the 'fire-brigade' of Rome, the

*Vigiles*, have been studied more than any other aspect of fires in Rome, there has been a lack of consensus about everything from their numbers, policing role, quarters, and methods of fighting fire. Chapter 6 looks in detail at the *Vigiles*, takes the same evidence that has been used by earlier commentators but, based on modern fire-fighting and technology, as well as consultation with fire experts, asks different questions of that evidence.

Chapter 7 searches for what is *not* reported in the sources and argues that fire and fires were a continuum, a process, a lived experience, along with perennial urban problems such as floods and quakes.  The silence which surrounds the immediate effects of fires on human experience in the sources presents considerable challenges which are addressed by applying the findings of comparative research into contemporary situations of disaster, and by careful scrutiny of descriptions in the ancient sources of human behaviour, especially in time of crisis. The Roman attitude to grief and loss is also discussed.

As in any urban fire régime, fires played an important part in shaping the fabric and streetscape of the city. Chapter 8 examines how fires were part of a transformative process which destroyed and regenerated individual structures and whole areas of cities. This chapter concentrates on fires that gave scope to change the city or individual buildings in a way which proclaimed an ideology or political agenda as they gave leaders the scope to shape the city in their own image. It also looks at the manner in which fires could generate economic growth and employment.

The final chapter discusses the findings of the dissertation and suggests further areas of study.

The dissertation is presented in two volumes.  Volume 1 contains the text of the thesis and Volume 2 is made up of two Appendices:  Appendix 1 contains translations of relevant primary sources for each of the recorded fires; Appendix 2 contains all figures and illustrations.

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# Abbreviations

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| *AE* | L'Année Epigraphique |
| *AJA* | American Journal of Archaeology |
| *APA* | American Psychiatric Association |
| *Bull. Comm. Arch.* | Bullettino della Commissione Archeologica Comunale di Roma |
| *CAMWS* | Classical Association of the Middle West and South |
| *CIL* | Corpus Inscriptionum Latinarum |
| *FUR* | Forma Urbis Romae |
| *Historia* | Historia: Zeitschrift für alte Geschichte |
| IBC | International Building Code |
| *JFA* | Journal of Field Archaeology |
| *JRS* | Journal of Roman Studies |
| *JSAH* | Journal of the Society of Architectural Historians |
| *KLIO* | Klio: Beiträge zur alten Geschichte |
| *Latomus* | Latomus: Revue d'études latines |
| *LSJ* | A Greek-English Lexicon compiled by H.G. Liddell and R.Scott (revised by H.S. Jones) 1996 |
| *MAAR* | Memoirs of the American Academy in Rome |
| *NSA* | *Notizie degli Scavi di Antichità* |
| *NTDAR* | New Topographical Dictionary of Ancient Rome |
| *OCD* | Oxford Classical Dictionary (4th Edition 2012) |
| *OLD* | Oxford Latin Dictionary (2nd Edition, 2012) |
| *PBRS* | Papers of the British School at Rome |
| *PLoS* | Public Library of Science |
| RIC | Roman Imperial Coins |

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**Chapter 1**          **Methodology**

**Introduction**

Rome was a city, like many more recent cities, where the reality of fires, and the battle to control them, was interwoven with social and economic development, architectural and technological innovation, and the ideological and political milieu; in addition, the view of fire as the direct intervention of the gods in the life of man was paramount in the Roman psyche, traces of which have remained in the perception of destructive fires to this day. The aim of this thesis is to explore the concept of fire as a process in ancient Rome, not as a series of separate events which, in some cases, did have a profound effect on the city and which has been the traditional way to view the subject. Recent studies on the ecology of fire in the urban context have focussed on the modern city as a 'fire régime', a régime where systems of building and managing cities have developed in relation to specific patterns of fire engendered by local and environmental conditions.[1]  This study looks at ancient Rome through the lens of the concept of a fire régime. We have records of 88 fires from the period 460 BC to AD 410 but additional evidence points to fire being endemic in the city.[2]  The evidence of individual fires, although incomplete and occasionally misleading, appears easily accessible as demonstrated in Chapter 2. A more challenging task is to shine a light on the long periods between these events and on the many smaller fires which affected daily life in the city. Our sources refer to the constant threat and actuality of fire and yet there is a silence surrounding those who may have been most affected by this urban threat.[3]  This thesis seeks to give voice to that silence by an innovative multi-disciplinary and inter-disciplinary methodology. Comparisons can be made with other urban conflagrations and what we know now about fire technology and the effect of trauma on the human condition can be applied, with caution, to the situation in ancient Rome.

The hard evidence for major fires in Rome which has survived can be analysed; that includes mainly literary records, and some archaeological, epigraphic and numismatic evidence. However, there are limitations to this methodological approach when trying to estimate the significance and extent of what has *not* survived, but silence about a topic is not sufficient

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[1] Bankoff *et al*. 2012, 8.
[2]  Such evidence will be pointed up in the relevant sections.  It includes poetry, personal letters, the works of Vitruvius, legislation and the large numbers of the *Vigiles.*
[3] Neither Juvenal (3) nor Martial (3.52) is representative of the indigent in Rome.

reason to ignore it.[4] I would argue that it is worthwhile trying to analyse systematically what we have taken for granted for many years and to search for what is *not* reported. The danger of empathy as a tactic of historical analysis has to be recognised but it should not stop us trying to understand the Roman experience, daily life as lived and not as idealised, or filtered, by ancient literary sources.[5] Comparisons across time and space are fraught with challenges and false trails but modern understandings can be applied – with caution. I wish to argue that fire and fires were a continuum, a process, a lived experience, along with perennial urban problems such as floods and quakes, and that fire prevention and management was part of the fabric of the city. I also argue that those fires played an important part in actually shaping that fabric.

While the different methods of treating this subject are set out below under separate headings, the study involves both multi-disciplinary and inter-disciplinary approaches which are rarely discrete. Ancient written sources are fundamental to all themes; archaeological evidence is called upon in many different contexts; epigraphic and numismatic evidence is pervasive; comparative fires and modern fire science are used to illustrate technical aspects of fire, the behaviour of fire and the lived experience of the fire régime; what is now known about the effect of trauma on the human condition is applied with care to the situation in ancient Rome.

**Background to the study**

Fire and fires in ancient Rome are frequently mentioned in primary sources, prose and poetry alike, but only 88 fires are historically recorded in the period from 460 BC to AD 410, a number of which may not have been fires at all. The manner in which fire may act as a conduit through which to examine the history, architecture, politics, economy, social and psychological well-being of ancient Rome has not been fully researched. The paucity of research on the topic is surprising given the role of fire in the life of any city at least claimed by both the ancient sources and modern scholarship and especially in a city like Rome.

In addition, the approach and assumptions of modern scholars, starting with Werner in 1906, have been based on an acceptance of the traditional listing of the fires as separate events and on largely taking the sources at face value. It is not until Sablayrolles in 1996 that a comprehensive critical commentary emerges although still adhering to the traditional fire by

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[4] Aldrete 2007, 92.
[5] Hopkins 1983, xv.

fire approach.[6]  This dissertation includes a chronological layout in part but moves far beyond the traditional model to explore whether the accepted interpretation of the reported incidents of fire needs to be revised.  It also collects in one place, for the first time, primary sources and modern commentary, both fire scholars and topographers, of each recorded fire. This is of fundamental use in all subsequent chapters and should continue to be so in any further studies of the topic.

**Timeframe**

The study extends from 460 BC to AD 410 (the sack of Rome by the Visigoths).  This period has been chosen because it provides a natural beginning and end, but it is also chosen to include the period of the greatest clusters of recorded fires and to examine the problems raised by such clusters. The timeframe includes exploration of the period of great destruction by fires, followed by arguably the greatest period of concerted effort to solve the problem - the late republic and the early empire.  This was the time of the establishment of the *Vigiles*, of legislative concern with fires, of major building programmes and of innovations in building techniques. But the timeframe also includes the later period from the early 3rd century to AD 410 when our sources become sparse and less likely to provide detail of fires. In fact, many later writers appear to refer briefly to fires that have already been mentioned in earlier sources, possibly even using the same phrases.[7]

The timeframe thus serves to illustrate one of the challenges facing such a study: the uneven nature of the records of fire as well as the shift in emphasis and agenda on the part of the sources.  It is clear that there were far more fires than are recorded, or for which records exist, and such a long time-span highlights this.[8]

**Theoretical framework of fire**

Underpinning this entire study is the theoretical framework of how fire behaves in an urban setting.  In the past decade, there have been great advances in the understanding of the behaviour of urban fires and their ecological role, as well as technological advances in fire management. This is a particularly opportune time to extrapolate findings from recent research and practice on fire as there has been an international focus on legislation, retardant

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[6] Sablayrolles 1996.

[7] Julius Obsequens uses the same phrases as Livy for the fire of 275 BC.  Orosius and Hieronymous also use the same phrases as the earlier sources for a number of fires.  This is noted in Chapter 2 whenever it occurs.

[8] Rainbird 1986, 151 estimates that there were 100 fires per day in Rome in the early empire. (Chapter 7, 203).

technology, building models and materials on foot of 9/11.[9] Reports, handbooks, scientific data from fire prevention authorities are all easily accessible.[10] The application of this knowledge can throw light on the lived experience of fire in Rome. While inferences can be made based on scientific data despite ancient silence, a *caveat* remains that our understanding of fire in the modern urban context may lead to assumptions that are misleading in the Roman context.   Modern urban landscapes, buildings and individual rooms, have actively sought to expunge flame with building codes, materials, and designs intended to prevent or retard fire and to create escape routes for residents and fire-fighters.[11] Bankoff has written that 'fire régimes' developed in early modern cities.[12]  He defines a fire régime as a model where systems of building and managing cities have developed in relation to specific patterns of fire engendered by local and environmental conditions. This study contends that there is no reason why an ancient city such as Rome could not also be defined as a fire régime.  This innovative approach presents a framework where fires are not explored as a series of events but as a process to which a general typology of urban fire is applied and where Rome, like all cities, was a habitat for fire.[13] The use of this model is, like all models, selective but it gives a new perspective; ever-changing ways of conceptualising the past stimulated by recent developments in fire-retardation, science and ecology as well as disaster studies can be applied.  No model is permanent and this one will, no doubt, be improved upon in time.[14] For now, the work of Pyne and others on the way in which fire management shapes the life of a city allows informed speculation on the experience in Rome.[15]

**Primary Sources**

The greatest source of evidence for fires comes from ancient writers from whom much information on the cause, frequency, extent, location of fires, and political context can be gleaned.  But it is also essential to look closely at *how* fires are recorded in the primary sources and to ascertain what this tells us not only about the fires but also the context in which they occurred *and* the context in which they were recorded.  One gets an insight into the writers themselves; they are not neutral observers.  It is only in recent years that a critical

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[9] There is a large body of studies in the wake of the collapse of the Twin Towers in New York in 2001 which deal with the construction of fire retardant buildings.  The use of wood in this regard is particularly pertinent.
[10] The relevant websites are cited in the Bibliography.
[11] Pyne 2001, 162.
[12] Bankoff *et al*. 2012, 8.
[13] Bankoff  2012, 16; Pyne 2001, 102.
[14] Jehne 2007, 4.
[15] Pyne 2012, 2014; Goudsblom 1992.

approach to the primary sources has been presented on the topic of fire and this approach needs to be extended and explored further.[16] This thesis challenges the assumptions based on the acceptance of literary evidence alone which have characterised the scholarly discourse on the subject and it begins with a close reading of the vocabulary used by the primary sources. The interrogation of the sources must extend to the language if we are to fully understand how fires are represented. The purpose of close reading is to examine whether the actual language of fire used by the sources gives any indication how fires were perceived and interpreted by the Romans. The study of the 'language of fire' in Chapter 2, and its analysis in Chapter 3, also asks whether the vocabulary used by the different authors changed over time and what light, if any, the words used throw on the author's attitude to fire, and the attitude of the social and political environment of the time.

This may or may not yield significant results but it has not been done before and, if not significant, needs to be established as such. There is no escaping the vexed question of the reliability of inferences from this method of working and it cannot claim to collate every word used for fire in the sources. The fact that our primary sources are the results of centuries of manuscript copying and recopying has to be kept firmly in mind.[17] There are also pitfalls in listing the fires individually, the very approach I wished to break from; but the narrative of fire is more telling than simple recording of events. The silence, the gaps, both of other fires and of what buildings burned, is eloquent. Arguing from a negative structure is always challenging and the task is to find what is *not* said while looking carefully at what *is* said. By first examining the language, the locations cited, the context of the fires and the structures mentioned, and using that as the foundation, light can be shone on what is *not* recorded and bring into focus the lived experience of fire which forms the subject of the subsequent chapters.

**Close reading of the language of fire: primary sources**

The study begins with close reading of the sources, both in Latin and Greek, establishing all records of fires between 460 BC and AD 410. The significant passage or passages have been translated for each fire and that has highlighted the challenge of interpretation. (Those passages and their translations are in Appendix 1). As seen in Chapter 2 there is a challenge which faces all students and scholars of fire in ancient Rome: the intention and potential bias

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[16] Sablayrolles 1996; Rubin 2003; Closs 2013.
[17] Wiseman, 2014, 3 - 22.

of the ancient authors. On face value, the sources provide us with much information and we are dependent on them for the dates and locations of fires. However, there are problems associated with any use of these sources when studying the instances and the impact of fires. When it comes to the annalistic writers upon whom the greatest evidence of recorded fires depends, it is also clear that there are frequently other agenda at play.[18] Aldrete makes the same point about the subjective nature of the primary sources; both floods and fires are frequently recorded as portents and these records are a rich source of information not only on fires but on the value systems of the sources. An obvious problem occurs around the relationship between the actual frequency of fires and the frequency with which they are mentioned in the sources. There is an identifiable spike of information in the literary sources in the late republic and early empire.[19] Moving into the 3rd and 4th centuries of the empire the records are less clear and different in nature and an additional challenge arises as it is highly probable that later sources such as the Chronographer of 354, Herodian, Aurelius Victor, Ammianus Marcellinus, Julius Obsequens and Hieronymous used the same earlier sources as we have. In some cases, a Christian perspective also needs to be appreciated. [20]

Even those traditionally regarded as the most 'reliable' sources have to be treated with caution. For example, there are gaps in Livy's historical coverage, not all of his works survive, and even he does not mention all fires. It will be seen that those fires that he, and others, do mention, frequently refer to the burning of certain symbolic structures in particular political contexts; fires that devastated homes and took lives may not be mentioned at all.[21] Specific buildings may have only been mentioned because they were important while other contiguous structures were not deemed worthy of mention. The fires of 213 BC, 31 BC and AD 64 are presented as case studies in Chapter 3 and are represented graphically (Appendix 2) in an attempt to understand whether the path of specific fires must have burned structures other than those listed and whether the silence points up the values and intention of our sources.[22] The case studies address the concept of the ideology of landscape and whether the sources registered only the destruction of monumental buildings.[23]

The concept of the 'reliability' of our ancient historiographical sources is itself contested. The purpose and intention of annalistic sources such as Livy, Tacitus and Dio, and of

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[18] These agenda are identified and discussed in Chapters 2 and 3.
[19] Aldrete 2007, 78
[20] This is pointed up in Chapter 2.
[21] Pliny, Suetonius, Tacitus and Dio are notable in this regard as shown in Chapter 2.
[22] Many other fires could be analysed in the same way, especially 14 BC, AD 80, AD 191.
[23] Larmour and Spencer 2007.

biographers like Suetonius and Plutarch, has traditionally been described as 'bias' and yet that purpose is frequently overt and articulated by the source itself.[24] The approach of 19th century scholars of Roman history was to test ancient authors for reliability and factual impartiality.[25] The last 30 years has seen a new generation of studies that has moved from that traditional approach to the exploration of factors like the influence of moralising historiography, self-conscious literary artistry, and rhetoric. Many now argue for more subtle understanding of the historical 'reliability' of, for example, Livy and Tacitus, and hold that to search for an absolute truth is misguided. No report can capture a past event in its entirety and at best what our sources present is a plausible reconstruction where something is always lost.[26] Our annalist sources inferred and imagined what might have happened, and regarded this as a virtue of their work; if this involved wilful perversion of the truth in order to instruct and to extol Roman ideals, it is not surprising.[27] Such moralising is a characteristic of historians such as Livy while Tacitus' use of rhetorical devices alerts the reader to the fact that the text is the product of a completely different mindset from that of a modern work of history.[28] Dio (53.19.6) also admits to using his own judgements as part of his methodology; he gathers from hearsay, from what he has seen, and he is able to form a judgement that differs from the common report.[29]

As part of the close reading of fire, an attempt is made to identify the different intentions of the recorders and to classify them as, for example, highlighting the wrath of the gods, making political comment, showing disapproval or approval of a ruling régime, or simply recording a major conflagration. References to lightning strikes, frequently cited in the sources as portents, have to be treated with particular caution and this clearly shows that one must constantly consider both the context in which the fires occurred and the context in which the writer is recording the events.[30] Chapter 3 presents analysis of the language used by the sources, of the context in which it is recorded and of the structures burned. Because of the skewed nature and clustering of the sources this analysis is unscientific and could be considered unsound as the classifications are rarely discrete. However, it is precisely for that

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[24] Livy (*pr*.6) and Tacitus (*Ann*. 3.20, 3.65, *Hist*. 2.78) set out their purpose and moral agenda. Livy (43.13) says the spirit of an older and better time entered his writing of history. Cicero (*Orat*. 2.52 - 54, 62 - 64) declares mere compilation of facts, without oratorical artistry, as dull.
[25] Marincola 2007, 2 - 3.
[26] See, for example, Oakley 1998, Nicolai 2007, Smith 2010.
[27] Oakley 1998, 76, 77, 89, 115.
[28] Woodman 2004, 142. An example of the device of referencing antiquarian connections occurs in Tacitus' description of the fire of AD 27 on the Caelian Hill (**No. 46**).
[29] See Hose 2007, 465 for a discussion of Dio's avowed intention.
[30] These are discussed as they occur in the chronological treatment of fires in Chapter 2.

reason that it is interesting and highlights what we do *not* know and have taken for granted in the past. Chapter 3 also presents a chronological list of primary sources and their focus so that the nature of the sources, and the way they viewed the fires, can be seen at a glance. This has not been done before.

**Modern scholarship: fire studies**

Modern research on the subject of fire in ancient Rome is relatively scarce.[31] This is surprising given that it was a fundamental urban problem. What we do have are collations from primary sources for instances of fires as well as recording of the locations and extent of those fires. Where such information is unclear from the primary data, very useful discussions and interpretations are available in the secondary sources.

In reviewing the secondary sources which list and discuss the recorded fires, there are specific challenges. For example, not all the same fires are recorded by modern scholars.[32] This is largely due to the different time-frames treated but also because different criteria are used by different scholars. This raises a fundamental question for all studies of fires: what is a fire? Do the extent and duration of the fire influence whether it warrants listing? This dilemma is shown by the fact that different scholars, while agreeing on the most 'important' fires do not always include the same instances and at times disagree on dates.[33] The other question is whether to include lightning strikes. As seen in Chapters 2 and 3, there is frequent mention in the primary sources of buildings, almost invariably temples, being struck, but it is not always clear whether a fire inevitably ensued. Yet another challenge is that the main purpose of modern scholars is to record the fires and the places and buildings affected, and it is not until Sablayrolles (1996), Rubin (2004) and Closs (2013) that we get systematic querying of bias in the primary sources. An example of accepting the sources at face value is found in Canter (1932) when he suggests that the frequency of mention of lightning strikes in the primary sources is indicative of climate change or some 'not easily discoverable' reason.[34] This uncritical approach ignores the intention of the sources and the loaded symbolism of lightning and the structures affected.

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[31] Werner 1906; Canter 1932; Newbold 1974; Sablayrolles 1996; Rubin 2004; Closs 2013.

[32] Werner 1906 deals with the period from Augustus to AD 410, while Canter 1932 covers the period of this study but omits mention of a large number of fires which, in turn, are recorded by Sablayrolles 1996.

[33] These differences will be noted where relevant in Chapters 2 and 3. For example, the burning of Cicero's house in 58 BC is listed by Sablayrolles but not by Werner or Canter.

[34] Canter 1932, 281: 'One cannot read the references to fires originating from lightning without reaching the conclusion that the thunderbolt in ancient Rome, either because of climatic conditions which are no longer

## Modern scholarship: topographical studies

A number of important works on archaeology and the topography of Rome are cross-referenced in this study.[35] Corroboration of the structures affected by fire can be found in those works. They are also fundamental to the archaeological element of the dissertation, to mapping areas affected by fires, to understanding the rebuilding and reshaping of the city after fires, and to identifying the extent of the fires and any anomalies in what is reported by the primary sources and accepted by later scholars. The work of Lanciani is particularly useful as much of what he describes has disappeared since his time of writing. For instance, he records in detail the *graffiti* found in the *excubitorium* of the VII Cohort of the *Vigiles* in Trastevere; a number of the original *graffiti* have since been lost but copies exist and offer invaluable information on the work and life of the *Vigiles*.[36]

The interface between the topography of the ancient city and the behaviour of fire is key to understanding the manner in which the population experienced the movement of flames from one site to another. Modern fire studies can throw further light on this as can accounts, for example, of the fire of Lisbon. The link between the 'twin' disasters, flood and fire, is also highlighted where it occurs (Chapter 3); the low-lying parts of the city most prone to flood are also those areas where most fires are recorded.

The connection between topography and geology occurs in a number of instances when earthquakes and tremors are cited in the sources, often *in tandem* with fires, as portents; in fact, there is a cluster of recorded earthquakes in the late republic and early empire which is contemporaneous to the cluster of recorded fires.[37] Examples are noted in Chapter 2 as they occur. The volcanic nature of the Alban Hills led to the ready availability of fire resistant tufas for the Romans during periods of technological advances as shown in Chapter 5.[38]

## Archaeological evidence

While archaeological evidence is central to this study, fire, by its very nature, has destroyed most of that evidence. Frontinus (*Aq.* 1.18) tells us that the level of the hills of Rome gradually grew higher with rubbish in consequence of frequent conflagrations. Up to 22

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operative or from some other cause not easily discoverable, was at once more frequent and more destructive than it is today.'

[35] Lanciani 1898; Platner and Ashby 1926; Richardson 1992; *LTUR* 1993-2000; Coarelli 2007; Claridge 2010.
[36] Lanciani 1898 (reprinted 1967), 545.
[37] Ventriglia 1971; Heiken *et al.* 2005; Aldrete 2007.
[38] Heiken *et al.* 2005.

metres of deposits overlie Rome of the early empire.[39] To counteract the problem of the overlay of such depth scholars look to other sites such as Ostia and Pompeii. Ostia, in particular, provides important comparative evidence about the working and living conditions of the *Vigiles*, the construction of *insulae,* and changes in building practices and materials as discussed in Chapters 4, 5 and 6. The validity of using such comparative evidence is, however, problematic, as it is unclear whether the robust buildings of Ostia are representative of the *insulae* in Rome traces of which have not been comprehensively studied until relatively recently.[40] The work of modern archaeologists is on-going and this means that some conclusions have to be speculative.

**Epigraphy**

Epigraphic evidence is used to establish meeting points with archaeological and literary sources. We have invaluable epigraphic information on the *Vigiles*, a number of rebuilding programmes after fires are attested only epigraphically, and one of the richest sources of epigraphic evidence comes from the plaques dedicated to the goddess who stopped fires, Stata Mater, and who is discussed in Chapter 5. Obviously an important goddess in neighbourhood rituals to avert fire, there is very little mention of her in either ancient or modern sources.[41]

The so-called *Arae Incendii Neroniani* which represent epigraphical reference to the interface between religion, political ideology and fire are discussed in Chapter 3. The fact that recent studies have raised questions about the actual function of these altars highlights the importance of revaluating much of what has been assumed about the fire of AD 64.

Epigraphy can also throw light on attitudes to death caused by fire, especially the death of the young and vulnerable. The topic of whether the Romans 'cared' about such deaths is fraught with danger as we cannot apply 21st century sensitivities to the lived experience in Rome.[42] This is especially true when the poor, whoever they were, are significantly underrepresented in epitaphs and dedications.[43] Therefore, epigraphic evidence has to be supplemented by

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[39]An example is the *excubitorium* of the VII Cohort of the *Vigiles* which is now nine metres underground and in danger from the buildings above.

[40] Packer 1967 and Ward-Perkins 1981 are of different views. Study of the Capitoline *Insula Ara Coeli* can be found on http://www.southampton.ac.uk/archaeology/research/projects/insula.

[41] This important goddess is not mentioned in Beard *et al*. 1998, nor in Ogilvie 1969. However, Lott 2004 deals in detail with her importance in the local community and with the significant archaeological evidence to support that view.

[42] Dyson 2010; Friggeri 2001; Hope and Marshall 2007; Hope 2007; Hopkins 1983.

[43] Woods 2007; Hopkins 1983.

other methodologies in any attempt to catch sight of sections of the Roman poor who are effectively invisible.[44]

## Other evidence

The *Forma Urbis Romae* (*FUR*) is an invaluable resource of primary evidence on the nature of the layout of narrow streets which exacerbated instances of fire. It is used to illustrate issues raised in Chapter 5 (Appendix 2).[45]

Numismatic evidence frequently illustrates the construction and restoration of individual buildings and can often depict structures which only survive on coins, sometimes revealing things about which ancient authors are silent.[46] Nero's restoration of sacred structures after the fire of AD 64 is one such example while scanty literary sources for the 3rd and 4th centuries are also profitably supplemented by coins. Debasing of currency can also be traced and can be speculatively linked to the cost of the aftermath of major fires. This is demonstrated in the aftermath of AD 64 in Chapter 8.[47]

The Regionary Catalogues comprising the *Notitia Regionum Urbis Romae* (compiled in between AD 337 and 354) and *Curiosum Urbis Romae regionum XIV* (compiled between AD 354 and 403), although their figures do not always tally, are referenced throughout particularly in estimating population and *insulae* numbers.

## Fieldwork

The theoretical framework of the behaviour and impact of fire in an urban fire régime has led to practical fieldwork with the fire services in Dublin and Cork, including attending lectures on fire science and on the current work of the fire-fighter. Many insights into the nature of flames, behaviour of fire, and the risks for the fire-fighter are supported by reference to the main handbook of fire-fighters in the English-speaking world.[48] This book is used to furnish illustrations (Appendix 2) of the characteristics of fire and the efficacy of methods of prevention.[49]

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[44] Whittaker 1993; Veyne 2000.

[45] The *FUR* is available on line at http://formaurbis.stanford.edu/.

[46] Pobjoy 2007, 62.

[47] Griffin 1984, 123 - 125 has a full discussion of the different hypotheses in relation to Nero's changes to the coinage and possible connection to the fire. She makes it plain that it is not at all clear-cut.

[48] Dehaan and Icove 2012.

[49] An example is the use of the 'Neronian' porticoes.

Discussions with fire personnel provided greater understanding of the work and inter-personal relationships of the *Vigiles* in Rome. The role of the *Vigiles* is the aspect of fire in Rome that has been treated in more depth than any other by modern scholarship but it is problematic and occasionally contradictory, possibly because our interpretation of their role has been skewed by the modern understanding of a fire-brigade. The history of the establishment and expansion of the *Vigiles* and their importance in the fabric of the city, including the political background, is traced in Chapter 6. This is done at some length because their role needs to be re-evaluated and elucidated and the debate which now surrounds the status of this para-military force is discussed. The question of whether the *Vigiles* were exclusively a fire-brigade or whether their role extended above and beyond that is considered in some detail in Chapter 6. The issue of social control in periods of instability and volatility is also looked at in this context.[50]

Use is made of literary sources, archaeology (particularly the work of Lanicani on *excubitoria* and *castra* which have since disappeared under the modern city), epigraphy and comparative data from Ostia. A new insight into the equipment, function and dynamics of a team of fire-fighters has been gained by interviewing members of the Dublin and Cork fire brigades in their place of work.

Visits were requested and made to the *Insula Ara Coeli* and the *excubitorium* of the 7th Cohort in Trastevere, sites no longer open to the public.

**Comparative fires**

Comparison with fires in other cities helps to construct a typology of urban fire and examine to what extent it applied in Rome. A number of fires, including London (1666), Lisbon (1755), Chicago (1871), and Cleveland (1965 - 1969), are interwoven throughout as comparative case studies. This may help us to understand the impact of fire in space and time; the study of these fires can tell us much more about the behaviour and effect of fires in Rome, such as the possibility of a funnel effect on slopes within narrow streets.[51] These are areas of speculation but there are valid points of comparison. In view of the multi-faceted methodological approach in this study, those comparisons are used in a number of ways. For example, the behaviour and characteristics of the fires, efforts made in the aftermath, the causes and contributing factors, the use of fires as a weapon as well as the political meanings

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[50] Whittaker 1993; Robinson 1995.
[51] The fire of Lisbon in 1755 provides a very useful comparison because of eye-witness accounts.

of urban conflagration are all comparable.[52] Thus, the impact of fire on the fabric of a city is better understood and indicates whether some areas of Rome were more prone to fire than others and not just mentioned more often in the ancient sources.

A great advantage of the comparative use of fires is the existence of many eye-witness accounts. The most detailed accounts for Rome are for AD 64 (Tac. *Ann.*15.38-43; Suet. *Ner.* 38 and Dio *Epit.* 62.16-17) but they were written long after the event. Contemporary eye-witnesses record the precise behaviour of fires, the manner in which they spread, the inability to fight or to contain them, and how they were eventually defeated - not always by human effort.[53] Such testimony also recounts the behaviour of and effect on the population and there are many descriptions of the after-effects of the fire, not only in technical, architectural and economic terms, but also in terms of the human experience, the social reaction and the complex attitudes to those most affected. This helps to reach some understanding of the attitude of the Romans to the impact of disasters and other social ills despite the silence of our sources. There are many references in modern accounts of disasters, as shown in Chapter 7, to wailing, death, panic and looting. Similar references are rare in the ancient sources but where they do occur they ring true.

**Legislation**

Acute awareness of the danger of fire is evident from Roman legislation, although honoured more in the breach than in the observance. Looking at this legislation and its changes and reinforcement over time in Chapter 5 gives an insight into a concern which was probably endemic and felt by all in Rome. To add to our understanding of Roman legislation on the subject of fire prevention and how it affected both official and individual responsibilities in the city, comparison with legislation in other cities which suffered urban fires has been made explicit. Interaction with Irish fire consultants has allowed comparison between modern legislation, and its enforcement, and Roman legislation and provides a bridge between the ancient and modern worlds in terms of attempts to control fire and in approaches to urban fire prevention and management.[54]

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[52] There are several examples of fire used as a weapon of social and political unrest in ancient Rome. For example, the funeral of Clodius in 52 BC, the Vitellian attack on the Capitol in AD 69 and when the populace came to terms with Praetorians after they (the Praetorians) had begun setting fires between AD 222 and 229. The fires in Cleveland in the 1980s provide a very telling comparison.

[53] Rain in the case of Chicago.

[54] Handbooks of fire-fighting such as DeHaan and Icove 2012; codes of best practice published annually by Departments of the Environment in Ireland, Britain and the US.

## Challenging assumptions: wood and water

Legislative changes on fire prevention in Rome dating from the Twelve Tables in 451 BC (Festus *Ambitus*, 5L and 15L) have referred to the dangers of wood in buildings; Pliny the Elder (*HN* 35.52), Gellius (15.1) and Vitruvius (2.9.16) speak of the least flammable woods and the use of alum as a fire retardant. The role of wood *per se* in the destruction of buildings in Rome has not been examined in detail and the assumption has been that it was a fire risk. In recent decades there has been an increasing focus on wood as a fire retardant rather than risk, a 'ReThinkWood' movement.[55] The function of char as a fire retardant may tell us something about the re-use of material in Rome. Although charred in the devastating fire of 1986, the huge roof beams were reused in the restoration of Hampton Court.[56] Char protects the wood from further degradation, helping to maintain the building's structural integrity and reducing its fuel contribution to the fire, which in turn lessens the fire heat and flame propagation as demonstrated in Chapter 5. A large beam, such as part of the roof of a temple, can retain its load bearing properties for a significant amount of time in a fire.[57] Although we have no empirical evidence, it is very likely that the Romans were aware of this and the roof beams of large structures were recycled. This is a prime example of questions which can be addressed by examining a combination of primary sources and modern fire professional data, and which have not been asked before.

The location of water sources is extremely important in the matter of fire-fighting. Rome was unique in its constant supply of clean water.[58] During the republican and imperial periods, Rome had an abundant supply of clean water thanks to it geological setting and extraordinary engineering.[59] The *FUR* provides some evidence of the location of public fountains and indicates the availability of water in areas of frequent fire. However, the traditional view that water was accessible for dousing fires is challenged in Chapter 6 as, even if water was in abundant supply, the logistics of training it on a fire were beyond the technology of the time. The work of Jan van der Heyden in Amsterdam in the 17th century is used to understand the inefficiency of a bucket-chain and the inefficacy of water unless harnessed properly.

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[55] www.rethinkwood.com/
[56] https://www.academia.edu/1709652/The_restoration_of_Hampton_Court_Palace_after_the_fire_of_1986
[57] Links to sites of modern research on the burning rates of different materials include:
http://www.mace.manchester.ac.uk/project/research/structures/strucfire/materialInFire/Timber/default.htm
http://www.rethinkwood.com/masstimber/mass-timber-and-fire-performance
[58] Comparison with modern urban fires shows the importance of the water supply in the recovery of the city and its inhabitants.
[59] Heiken *et al*. 2005; Dodge 2000.

**Sociological approach**

A central aim of the study is to explore the human experience of fire in terms of its impact on physical and mental health, and to trace an unwritten narrative. Recent research on the immediate and long-term effects of natural disasters on individual and collective human experience is used in Chapter 7 to attempt to reinterpret the experience in Rome. Modern researchers afford innovative ways of understanding the human experience of natural disasters, including fire.[60] However, the examination of the Roman attitude to danger, loss and death comes with a serious health warning: the risk of forcing a modern interpretation on the ancient world. The work of Aldrete on floods in ancient Rome provides a very useful model and he shows what can, and cannot, be done with modern comparative material.[61] There is a clear parallel with the recording and the study of floods, but at a certain point the approaches diverge: the effect of floods is collective whereas fire is often an individual experience. Aldrete's work demonstrates the usefulness of modern comparisons as he has used recent scientific data not just to examine the behaviour of floods in ancient Rome but to re-evaluate the short and long-term psychological and sociological effects of loss, dispossession and stress due to natural disasters. Fire was but part of a suite of urban problems and, unfortunately, frequently attacked the same areas in the centre of the city which were prone to flood: Forum Romanum, Forum Boarium and the Campus Martius (**Fig. 10**).[62]

Recent comparative data from large urban fires is scarce given the success with which fire has been controlled in the last century but there is no shortage of contemporary studies on urban catastrophes.[63] Studies on smoke-inhalation, dispossession, disorientation, grief and issues such as post-traumatic stress help to understand the Roman experience. The challenge is to identify and clearly delineate the dangers inherent in assuming that modern data is universally applicable. It requires the extrapolation of findings from modern studies and their application to the ancient city model. We have a *corpus* of literature which cannot be taken at face value but which sometimes speaks most eloquently by its silence. In this context, the study looks at the interface of fire and other disasters such as earthquake, flood, famine, disease, all against the backdrop of recent re-evaluation of the concept and reality of poverty

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[60] Bankoff *et al*. 2012; Fullerton and Ursano 1997; Drabek 1987. Particularly useful is the *Journal of Traumatic Stress* available at  https://onlinelibrary.wiley.com/journal/15736598
[61] Aldrete 2007.
[62] Aldrete 2007, 43.
[63] The burning of Grenfell Tower in London occurred during the writing of this study.

in Rome.[64] While the poor suffered more in an urban catastrophe, no one was immune to the effects of events such as fires or floods which were sudden and led to loss of income.[65]

Chapter 7 examines whether any speculative findings can be made about the mental health of different strata of Roman society due to the stress and trauma of the danger of fire and the loss of loved ones and of possessions. Comparative modern data and epigraphical data are used to try to extrapolate such information. But we are faced with the 'historical conundrum' of grief which arises when trying to reconstruct the emotional responses of individual members of past societies.[66] Primary sources show that how to grieve appropriately was part of the self-definition of the élite.[67] The legitimacy and usefulness of employing concepts developed by modern sociological theory has its limitations but Chapter 7 argues that it is worth applying such comparative data once aware of its dangers.[68]

Primary sources contain evidence of state intervention in the late republic and early empire in terms of aid, while also providing evidence of the complex attitude to the 'poor'.[69] It is, in fact, difficult to identify a specific group as 'the poor' in ancient Rome. Modern parallels and comparisons are very useful in understanding the attitude in ancient literary sources to the concept of 'structural poverty' as well as the paradoxical leitmotif of romanticising the virtues of hard work while regarding 'wage labour' as unworthy of a gentleman (Cic. *Off.* 1.150).[70] Chapter 7 explores a possible moral disapproval of poverty and how it may have impacted upon the attitude to loss and death by fire.

**Fire as an agent of transformation**

The effect of fires on the city of Rome in terms of destruction and regeneration is explored in Chapters 4, and 5, 6, and 8. Fire as impetus for changes in building materials, techniques, and technology is integral to those chapters. Changes in building materials such as the development of concrete and fired brick, together with changes in building techniques like

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[64] Atkins and Osborne 2006; Aldrete 2007; Whittaker 1993; Scobie 1986; Ramage 1983; Patterson 2000; Osborne 2006; Nutton 2000; Morley 2005; Hope and Marshall 2000.
[65] Aldrete 2007, 43.
[66] Hope 2007, 172.
[67] Hope 2007, 176.
[68] Morley 2007, 300.
[69] State intervention such as the corn dole, Nero's aid after the fire of AD 64, the *alimenta* of Nerva are not, strictly speaking, examples of euergetism but the concept was fundamental in that the whole society was based on benefactions and clientelism. Giardina 1989 and Veyne 1990 have very useful discussions of this topic. Primary sources such as Cicero (*de off.* 1.150) and Sallust (*Cat.* 37) give an insight into the élite attitude to the poor. Cicero's language is particularly loaded – *honestiores, humiliores* – with value judgements (Chapter 7).
[70] The fires of Edo, Chicago and Cleveland (Chapter 7) provide comparative information on the attitude of the establishment to the poor after a disaster.

*opus incertum*, *reticulatum*, *craticium* and brick facing, as well as the industrialisation of building process, are traced to get an indication of the extent to which fire influenced such changes.[71]

More than other urban catastrophic events, including flood and quake, fire acts as an agent of transformation by changing the very shape and streetscape of a city in an ecological cycle of destruction and regeneration. Chapter 8 sets out the manner in which fires transformed the city by way of building programmes, technology and architectural innovation. It also highlights the challenge of assessing the extent of the role of fire in the changing face of the city and the danger of trying to isolate and overplay the effect of fires in the process. While there are specific fires such as AD 64 and 80 which were clearly the catalyst for massive changes, unpicking rebuilding programmes after fires from the great building projects of successive emperors (*eg* Augustus, Nero, Trajan, Hadrian and Severus) could be a fruitless exercise. More central to the concept of transformation is the manner in which fires were used to shape the city ideologically. Fires presented opportunities for self-advertisement as new building and innovative architecture were used for ideological ends in whole areas and in individual buildings. Chapter 8 addresses these themes and concepts within a chronological framework chosen because of the manner in which the dynamics either within or between dynasties meant that the building and reconstruction programmes of one emperor developed in emulation of or distancing from a predecessor.

**Economy**

In the early years of Augustus' reign an Alexandrian Greek with a grudge against Rome commented, 'The only reason I'm sorry about fires in Rome is that I know what has been destroyed will be replaced by something better' (Sen. *Ep*. 91.13.).[72] It costs money to replace with something better. Examples of the effect of financial loss on individuals and the impact on landlords and the rental market as well as the huge cost to the exchequer are interwoven into different chapters of the dissertation. A further discussion of whether a fire was always an economic disaster is treated in Chapter 8. Rebuilding after fires, and changes in technologies and techniques to combat fires must have been an economic stimulant providing labour for the urban population. The cost of rebuilding and the extent of the labour force

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[71] Delaine 2001, 230.
[72] Seneca (*Ep*. 91. 13): *… aiebat Romae sibi incendia ob hoc unum dolori esse, quod sciret meliora surrectura quam arsissent*. Wiseman 2014, 4.

required are looked at but it is beyond the scope of this study to deal with this wide-ranging subject, including the economy of Rome, in detail.[73]

**Cross referencing**

Because of the multi-faceted approach to the topic, cross-referencing between chapters is used throughout and page numbers are included where relevant. The fires in the List of Fires in Chapter 2 are numbered sequentially and those numbers are used subsequently for ease of reference for the reader. The number of the fire appears in brackets and in bold after the date.

**Appendices**

Translations of the significant passage or passages for each fire are contained in Appendix 1. All translations from Latin are the work of the author. Loeb Latin editions have been used for the Latin text. Both translations and text are from Loeb Greek editions.

Figures used for illustrative purposes are found in Appendix 2. Illustrations and graphs are used throughout to clarify discussion and are integral to the analysis in Chapter 3 of the close reading of the texts. Charts to represent the analysis of language, frequency and focus of fires are used by way of impression rather than scientific conclusion. The areas and structures most prone to fire and the three case studies of fires in Chapter 3 are represented graphically.

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[73] Plutarch (*Public*. 15.3); SHA (*Had*. 3); Suetonius (*Vesp*. 18); Josephus (*Ant*. 219-223). Brunt 1980; Delaine 2001, 2000, 1995; Duncan-Jones 1982; Hopkins 1980. Epigraphic evidence can also provide information on building costs in the 2nd century AD. For example, many of the buildings provided by the local élite in North Africa contain inscriptions which record how much money they have spent.

**Chapter 2**                                    **Reading Fire**


**Introduction**

The persistent threat and, at times, catastrophic instances of fire in Rome are mentioned in primary sources of all genres – poetry, drama, correspondence, philosophy, biography and historiography. The presence of fire in its life-giving and destructive forms, and all associated symbolism, is constant and yet the actual number of recorded fires in the many sources, 88 for the period from 460 BC to AD 410, is very small; in addition, this list ranges from major conflagrations to burning of an individual house to a lightning strike where there may have been no subsequent fire. The number of 88 fires is the closest the study of the sources allows but, as will be seen from the discussion under each fire, not all modern commentators agree on the precise number, nor is there agreement on what constitutes a 'fire'. It is likely that specific fires are recorded for specific reasons and that many fires occurred which were not recorded at all. The extent to which the selective nature of records has coloured our perception of fires in Rome has never been explored in detail in modern scholarship, and consequently it is arguable that the actual impact of fires on the city has not been fully examined or understood. It is possible that fires were selected for reporting based more on the symbolic importance of a structure burned or on the context of the fire rather than on the severity or extent of the fire.

To ask questions of our sources, and to better understand the silence of those same sources, this chapter will look at the primary annalistic historiographical sources by means of close reading of the vocabulary and language of fire. Such exploration of the 'language of fire' can identify whether the words used by different authors changed over the period of 500 years during which the sources  wrote and whether the language used can throw any light on why certain fires are recorded in the first place and subsequently selected for 're-recording' by copyists.

Such an approach has the added advantage of simultaneously identifying the causes, frequency, extent and location of recorded fires, and whether some locations were more prone to fire than others; it also highlights the agenda, if any, of the sources and the context in which they are writing.  It also allows a review of the engagement of modern scholars and commentators with the topic.  These scholars have also made decisions on what are deemed 'significant' fires and the basis of such selection must be recognised.  This approach also

allows consideration of the thorny issue of how the language of fire, in both Latin and Greek, has been translated in the past and how those decisions may have coloured the reception of the reality of specific fires.

**Challenges**

*Ancient sources*

One of the greatest challenges facing any student of the past is how to handle primary sources and to evaluate their reliability.  It may be obvious that they are giving skewed reports but they remain the primary source of information. The sources on fires in ancient Rome which have been identified and used by modern scholars span five centuries.[74]  They are in chronological order: Cicero (106 – 43 BC); Dionysius Halicarnassensis (*fl*. 30 BC – after 7 BC); Livy (59 BC – AD 17 or 64 BC – AD 12); Ovid (43 BC – AD 17); Valerius Maximus (*fl*. AD 14 – after 31); Pliny the Elder (AD 23/24 – 79); Tacitus (AD 56/58 – *c*.118); Suetonius (*c*.AD 70 – *c*.130); Florus (*fl. c*.AD 112 – ?); Dio  Cassius (*c*.AD 164 – after 229); *SHA* (*c*.AD 284 – *c*.337?); Ammianus Marcellinus (c.AD 330 – 395); Hieronymus (*c*.AD 347 – 420); Julius Obsequens (4$^{th}$ or early 5$^{th}$ centuries); Orosius (*fl. c*.AD 414 on); *Digesta* (6$^{th}$ century).   Rarely are they recording contemporary fires.[75]  A further complication arises where a later writer is echoing one of the earlier sources. For example, in their descriptions of the fires of AD 188/189 and 191 (**Nos. 72** and **73** in the List of Fires) Orosius and Hieronymus use identical words and phrases which may indicate the influence of one source upon another. All instances of possible influence are noted where relevant in the List of Fires and, for ease of reference, all fires are numbered.

Two other challenges occur within the long time span of the sources: firstly, the amount of extant information is uneven across the timeframe; and secondly, there is a change in manner and purpose of recording. There is an identifiable clustering of information and records of fires in the literary sources in the late republic and early empire (e.g. Livy, Tacitus, Suetonius and Dio provide longer, more detailed and discursive accounts than later sources). This coincides with a period of flowering of literature and writers; it would be foolish to assume that it means there was also a clustering of fires; it represents a distortion of the surviving record as there appears to have been the greatest number of fires at a time when there was the greatest number of writers.

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[74] All dates come from the *OCD* 2012.
[75] The notable exception is Cicero when referring to the activities of Clodius (**Nos. 23, 24, 25** and **26** in the List of Fires).

In the 3rd and 4th centuries, there are fewer sources, the records are more sparse, less clear, difficult to date and different in nature to the earlier more detailed, descriptive records. It is highly probable that later sources such as the Chronographer of 354, Herodian, Aurelius Victor, Ammianus Marcellinus, Florus, Orosius, Julius Obsequens and Hieronymus used the same earlier sources as we have.[76] In some cases, a Christian perspective is discernible and could explain the survival of certain *corpora* of writings.[77] This complexity is exacerbated by the fact that later writers had the benefit of hindsight and may have focussed on catastrophic events and portents in light of the collapse of the empire. And so a further limitation is introduced by the values of the later recorders in what they choose to transcribe for posterity; we are largely at the mercy of the selections made by monks in their *scriptoria*, what they valued and deemed suitable for transcription.

The fire of AD 64 (**No. 59**), the so-called Great Fire, is the most notorious of the fires of ancient Rome. It has entered the consciousness of western thought and coloured the perception of Rome as a flammable city. It is a remarkable example of the need for caution. We have a more complete description of this fire than any other. That in itself raises an important question and even perhaps an obstacle to our understanding of the fire. Why do we have so much information on this one fire? Firstly, the main sources are major literary figures: Tacitus, Suetonius and Dio who, to different degrees, have contributed to the view that Nero was responsible. Secondly, given that the Christians suffered as scapegoats this may have ensured the survival of the lengthy descriptions by the sources and influenced the language of the later writers. It may also have influenced the selection of this fire above all by copyists.

*Reliability of ancient sources*

The fundamental question which arises is the 'reliability' of the sources (Chapter 1, 6). Even when it is obvious that the focus of reports is not fires *per se*, they are frequently all we have: this is particularly problematic where there is only one record of a fire. The burning of imperial property during the reign of Macrinus (**No. 75**) recorded by Dio (79.25.4) is one such example.

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[76] For example, Obsequens' work is a compilation of prodigies taken from Livy.
[77] This is particularly true of the recorders of the fire of AD 64 where the subsequent treatment of the Christians may have influenced the survival of the detailed descriptions of Tacitus, Suetonius and Dio Cassius, already hostile to Nero.

Our sources are not disinterested observers. Even those traditionally considered most 'reliable' have to be treated with caution as this commentary will show. For example, we rely upon Livy for much of our knowledge and understanding of events in early and republican Roman history but his intentional espousal of Augustan values is evident in descriptions such as that of the Sack of 390 BC (**No. 3**). There are gaps in Livy's historical coverage as only 35 of his 142 books of history survive and even his surviving works do not mention fires which we know of from other sources. The fire in the Roman Forum recorded by Julius Obsequens (8. 62) for 178 BC (**No. 14**) is one such instance. We also rely upon Cicero as the eyes through which we see much republican history - after all, he was an 'eye-witness'; but we cannot ignore the one-sided nature of his narrative. It is inevitable that writers advocate the values of their time and of their position in society.[78]

Two of the main sources for this study are Livy and Dio Cassius. Of Livy's 142 books, only 35 are extant but he was heavily drawn upon by later writers such as Orosius, a Christian presbyter, and Julius Obsequens, a chronicler of prodigies. Dio is the source for more fires than any other but of his 80 books we only possess Books 36 to 60 which cover the period 68 BC to AD 47 (and of those there are gaps in Book 36 and 55 to 60). The earlier books are in the heavily abbreviated epitomes of Zonaras and the later books by the 11th century Xiphilinus. Dio is one of the main sources in this study but he tells us that he applied his own judgement when shaping his narrative (53.19.6).[79]

*Focus of sources*

A central issue for modern scholars is the perception of bias in historical narratives. As already discussed (Chapter 1, 6 - 7) more subtle understanding of the purpose and inevitable subjectivity of each source has developed in the past 30 years.[80] However, each modern scholar adds an additional layer of his/her own subjectivity and intention. For this reason, the specific interest or focus of the source report has been made explicit where possible. The author's purpose in recording the event of a fire cannot be ignored. The most obvious reason for recording a fire is that it was a serious fire which destroyed a building or buildings. There are plenty of examples of such fires, a number of them catastrophic. But there are other reasons for the record: disapproval of the actions of individuals or society, miraculous

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[78] See Bispham 2010, 29 and 42, for discussion on the bias of sources.
[79] Bispham 2010, 45 reminds us that Dio's sources are unknown, that he is prone to errors of chronology as well as using his own judgements.
[80] For example, Oakley 1998, Woodman 2004, Hose 2007, Nicolai 2007, Smith 2010.

escapes, punishment by the gods, praise for the virtues of specific leaders, periods of civil unrest – all appear as underlying or overt reasons for, not just the fires themselves, but the recording of them. Where this focus is apparent, it is identified in the commentary on each fire which follows.

References to lightning strikes, frequently cited in the sources as portents, have to be treated with caution. This chapter includes lightning strikes as part of the story of fire although it is not always possible to differentiate between a lightning strike which causes no damage, that which led to the damage or destruction of the building due to the force of the strike, and that which led to an actual fire. Of the listed events, 18 refer to lightning strikes and in half of those cases there is no evidence that a fire ensued (Chapter 3, 126). Any use of formulaic language to describe lightning strikes is also worth investigating, especially where a temple has been struck. It may point to the symbolic nature of the event rather than destruction of the temple. On the other hand, there were areas and buildings, such as the temple of Jupiter Optimus Maximus (Capitolinus) on the Capitoline, which were actually prone to lightning as they were built on an elevated position. The language used may help to differentiate those strikes which were symbolic alone.

The inclusion of fires in lists of portents and natural disasters is a warning shot against the literal interpretation of the fire. This is true of all the sources and becomes particularly obvious in the later Christian writers. For example, the burning of the Domus Aurea in AD 104 (**No. 66**) due to a lightning strike, is put down by Orosius to divine justice after the persecution of Christians.

References to fires in biographical work intending to condemn the actions of individual leaders, especially fires caused by lightning in the context of portents, may also be biased; similarly, references to restoration and building programmes which express approval of an individual are frequently the source of information on fires. The fire of 31 BC (**No. 34**) is a notable example of this.

Fire in the context of arson and civil disorder is very important as a challenge to political power. For example, Cicero's records of the burning of private houses (**Nos. 24**, **25**, **26**) seem at face value a minor record compared to more serious fires but, in fact, he is recording what he perceives as a serious threat to the state. The fires themselves, although confined to private houses, are a symptom of the threat to the republic. These fires receive little attention from modern scholars (they are not mentioned by Canter at all) compared to much larger fires but

Cicero alone of the sources affords us contemporary records of events and may be providing a window on the prevalence of fire at the level of individual houses in a time of political upheaval.

Yet another aspect which needs to be kept in mind is that those fires which the primary sources mention frequently refer to the burning of certain symbolic structures such as the temple of Vesta. Specific buildings may have only been named because of their importance while other contiguous structures may not have been deemed worthy of mention (Chapter 3, 130 - 132).

Some fires are recorded, and possibly exaggerated, because of the miraculous escape of artefacts. Valerius Maximus provides examples of this for 389, 213 and 111 BC (**Nos. 4**, **7** and **19**).

There are instances where only one source records a fire, particularly in the 3$^{rd}$ and 4$^{th}$ centuries. For instance, Pliny (*HN* 35.19) records the burning of the temple of Salus on the Quirinal in the reign of Claudius because of the destruction of works of art it contained (**No. 55**); he records the burning of the *pons Naumachiarius* between AD 31 and 36 (**No. 49**) but only because of his interest in the best time of year to fell timber (*HN* 16.190). In AD 283 (**No. 80**) a significant fire occurred but it is recorded only in the Chronographer of 345; in the reign of Antoninus (**No. 69**) *SHA* alone record the loss of 340 *insulae* and *domus*.

*Silence of the sources*

At the heart of the challenge facing any study of fire in Rome is the relationship between the actual frequency of fires and the frequency with which they are mentioned in the sources. It is an unknown. There are occasions where the intention and potential bias of the primary sources is obvious but very often it is silence which has to be interpreted. At face value, the sources provide much information but uncertainty frequently surrounds the date, location and extent of a fire. For example in AD 283 (**No. 80**) an extensive fire raged and the buildings destroyed are listed by the Chronographer of 354 but the actual extent of the fire is unclear. This is an example of the probable under-reporting of fires in the 3$^{rd}$ and 4$^{th}$ centuries.[81] It also highlights the recurring question of how the perceived symbolic importance of a fire may have influenced the survival of the record of a fire. There are fires where structures in the

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[81] The Chronographer of 354 is also named as the Chronography of 354; the work is also cited as Mommsen's *Chronica Minora*, Berlin 1892. Different commentators choose either *Chron. Min.* or Chronographer(y) of 354. This study uses Chronographer of 354 and the page numbers of Mommsen's edition.

path of the flames must have burned but remain unmentioned.  For example, in the fire of 213 BC (**No. 7**) the topographical distance between the buildings listed in the sources means that other structures must have burned but are not mentioned (Chapter 3, 130 - 132).

Silence surrounds the plight of people in fires that must have affected them.  They are referenced in Livy's emotionally charged description of the Sack of Rome in 390 BC (**No. 3**) and by all sources for AD 64 (**No. 59**). But in 213 BC (**No. 7**) where at the very least people's livelihoods must have been ruined by the fire that swept the Forum Boarium, there is only mention of some notable structures. Private houses are listed as destroyed on the Aventine in 203 BC (**No.11**) and, in 41 BC (**No. 31**), the burning down of private houses during civil unrest and the subsequent capping of rent is recorded as a measure to alleviate hardship. There is one other reference to loss of life in AD 238 (**No. 77**) but apart from that, fires that destroyed homes and lives do not occur in the sources.

## Additional primary sources

### *Archaeology*

In *tandem* with literary evidence, the physical remains of buildings revealed in archaeological excavations are an important, if uneven, source.  Here again, there are serious challenges; fire by its nature has destroyed evidence of its effect.  An additional difficulty arises where the excavations in 19th and early 20th centuries have since been covered and built upon and which may not have adhered to current stringent interpretation. An example of this is found in the 1890s work of Lanciani regarding the temple of Portunus in 213 BC (**No. 7**).  However, corroborating evidence can be seen in the identification of new building techniques as a means of dating the restoration, but also to elucidate the literary evidence, as in the case of the burning of the temple of Magna Mater in 111 BC (**No. 19**).[82]

### *Restoration and epigraphic evidence*

Occasionally, architectural evidence of restorations belonging to a period following a fire exists. This illustrates the importance of epigraphic evidence such as that dating from the reign of Hadrian (**No. 68**) where an inscription (*CIL* VI 979) lists buildings restored after a fire.  In this example, archaeological and epigraphic evidence of restoration exists where there is no literary evidence.  Another example is a fragment of the *FUR* (Slab 18e) (**Fig. 1**)

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[82] Crawford and Coarelli 1977.

which helps to identify the location of the Graecostadium which burned probably in the reign of Marcus Aurelius (**No. 71**).

However, restoration also creates confusion and differences between modern scholars as to when a structure burned and when it was restored.  A fire between 3 BC and AD 3 (**No. 42**) illustrates this as there is little agreement between either topographers or historians on the date of the fire but agreement that the restoration occurred in AD 3.  Likewise, the inscription of *CIL* VI 979 (**No. 68**) has led to disagreement among modern scholars about what had actually been burned and what was subsequently restored.

## Modern commentators

Modern commentators on the fires of Rome present additional challenges. The approach of this study is to build on what the relevant modern commentators have done, to collate their references, to point out differences and discrepancies, and then to provide another level of understanding and analysis.  As already pointed out, (p. 8 above) each modern scholar brings his/her own interest to bear on any commentary and just as the ancient sources cannot be taken at face value, the approach of modern scholars must also be interrogated.  This is done under the List of Fires for each entry. The records of major conflagrations and the burning of specific temples may often be cross-referenced in the sources.  However, occasions where the reference to a fire is merely incidental or dated vaguely, or not at all, and where some primary sources cite dates and others do not, or contradict dates, are common:  all secondary sources have faced the same problem.[83]

The first question for modern scholars is what should be recorded as a fire: the choice ranges from great urban fires to individual buildings to lightning strikes. Different commentators have used different criteria for this choice. Canter's timeframe extends from 390 BC to AD 410 but he includes only what he regards as 'fires of importance' where the sources are 'deemed reliable'. This means that he does not include, for example, the burning of private houses cited by Cicero (**Nos. 25**, **25**, **26**). These are very important fires for political reasons but they do not fit Canter's criterion of size and so he ignores them. Newbold accepts Orosius (7.2.11) and lists the fire of 53 BC (**No. 28**) as 'the greatest of the Republic' where 14

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[83] In the collation of the primary sources, I have relied heavily on Werner 1906, Canter 1932, Newbold 1974, Sablayrolles 1996  and Rubin 2004.  Platner and Ashby 1929, Coarelli 2007, Richardson 1992 and *LTUR* 1993 – 2000 have been used as the main topographical sources to cross-reference the locations of the recorded fires and their effects on specific areas and buildings.  Unless otherwise stated, the dates for these commentaries are as in this note.

districts (*vici*) burned down; Canter makes no reference to this fire as he must have deemed Orosius unreliable. Werner cannot help as he lists only the fires of the empire.  While Werner, Canter and Newbold took the sources largely at face value, Sablayrolles, in his *magnum opus* (*Libertinus Miles: Les Cohortes de Vigiles*), presents a far more analytical approach as well as listing every known fire *ab urbe condita* to the Sack in AD 410. His approach is followed by Rubin.

There are variations in what modern scholars choose to include and exclude; the extent of destruction may not have been commensurate with the symbolic importance of a fire and this has to be made explicit by any commentator.  For example, the fire of AD 69 (**No. 61**) is only mentioned *en passant* by Canter but is dealt with in detail for its symbolic importance by Sablayrolles. In addition, the symbolism of lightning strikes is missed by Canter who puts the frequency down to climate change, thus missing the symbolic importance intimated by the source text. Yet another question arises when dealing with lightning: did a fire follow the strike? It is not always clear from the sources nor is it explicit in all modern commentators. An example of this occurs in AD 96 (**No. 64**) in relation to the temple of Gens Flavia.

Modern scholars do not always agree on dates; for example, the date of the fire of 39 BC (?) (**No. 32**) given by modern commentators ranges from 'before 36' to 36 to 39; the fire between 3 BC and AD 3 (**No. 42**) is a clear example of difference in interpretation of the date of the fire.  A similar pattern can be seen in relation to the fire of 25 BC (?) (**No. 35**). Differences in identifying locations also arise. For example, the burning of the temple of Iuventas in 16 BC (**No. 37**), the Basilica of Pau[l]lus in 14 BC (**No. 38**) and uncertainty whether two fires were conflated by Suetonius for AD 38 (**No. 51**).

The difficulty of identifying the location of some buildings mentioned by the primary sources is very real for all modern scholars. In order to address this, included in the collation of modern commentary under each fire in the List of Fires, is reference to topographical works (Platner and Ashby, 1929; Richardson, 1992; *LTUR,* 1993-2000; Coarelli, 2007).

However, the crux of many of the interpretations both by 'fire' scholars and topographical works is the translation of the original sources.  Did the structure 'burn' or 'burn down'? Was it 'damaged' or 'destroyed' by fire?  Was it 'repaired', 'restored' or 'rebuilt'?   The challenge of translation is discussed under each fire in this chapter and the manner in which modern scholars have tackled the issue.

**Language**

This reading of the sources is an attempt to address some of the assumptions made by previous scholars and to examine whether the actual language of fire used by the sources gives any indication as to how fires were perceived and interpreted by the Romans. The examination of the vocabulary can really only lead to speculation as the choice of vocabulary may be arbitrary and is cross-contaminated by the intention – if any – of the writer. The language may also be 'time-sensitive'. In other words, it may change over time. Addressing this is complicated by the influence of earlier upon later writers but it cannot be discounted.

The study does not claim to collate every word used for fires in all sources but it looks at the vocabulary used for those fires recorded and listed in both Latin and Greek annalistic sources. It also highlights the complex nature of translation of the texts and the manner in which the translation calls for interpretation and decisions regarding the nature and extent of fires. In 1996 Sablayrolles used a critical approach to the primary sources by discussing their reliability.[84] However, his approach is now extended in this study by a detailed exploration and analysis of the actual language used by the sources.[85]

The following questions are posed in the close reading in the List of Fires:

- Do particular writers use different vocabulary to describe or record different fires? For example, is the extent of the fire indicated by the use of specific nouns or verbs in the lexicon of 'fire'?
- Is there a similarity in the vocabulary used by contemporaneous primary sources? On the other hand, do later writers echo the phrases of their sources?
- Does the vocabulary of fire change over the *c*. 500 years of written sources for the time span of this study (460 BC – AD 410)?
- Does the tone and/or content of the passage give any indication of the reasons why the writer is recording the incident in the first place?

The task of translation clearly identifies the answers to some of those questions. However, translation itself is an act of interpretation and mediation, especially where the sources have not been consistent in their choice of vocabulary. In the context of fire, it may be that a building was 'destroyed', not by the fire itself and the flammability of its materials, but by the

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[84] Sablayrolles 1996.
[85] The reference and lexicographical sources used are: *Oxford Classical Dictionary*, *Oxford Latin Dictionary* and *A Greek-English Lexicon* in abbreviations.

weakening of its structural elements. Such subtle distinctions cannot be expected in all, or even a few, sources and pose a challenge to the translator.

The words *incendium* and πῦρ remain throughout the centuries and across the sources as the most commonly used nouns for 'fire'. It is in the interpretation of the verbs where the indication of the extent and/or the importance of the fire lie. The central question remains whether the compound verbs (*eg consumere*, *exurere*, *concremare*, κατακαίω, καταφλέγω) require translation as 'burned down/completely'. As demonstrated in the List of Fires, the use of such compound verbs and of preverbation may imply an extensive fire but could actually be pointing up something else and, thus, even the language becomes an unreliable indicator of the impact of the fire. For example, miraculous escapes of symbolic artefacts, portents in the context of divine disapproval of characters or deeds, arson or threat to the state where fire is used as a weapon, may all be the focus of the source rather than the fire itself and the language of destruction is used to emphasise that focus. Therefore, the interpretation of compound verbs and preverbs has to be nuanced by the distinction between the importance of a fire, for symbolic or political reasons, and the actual severity of the fire. Preverbation, a process in all periods of Latin, generally indicates the completion of the verbal action and modifies the meaning of the simplex verb by adding force to it.[86] When reading 'fire', any translation is further complicated by the fact that the most commonly used Latin verb, *ardere*, has no compound.[87] In addition, differentiation has to be made between verbs for which both simplex and compound exist and those for which the simplex is either lost or has a different meaning.[88]

Close reading shows that Livy's use of the simplex verb *ardere* (to burn) invariably refers to extensive fires; this becomes more important because of Livy's influence on later writers and the possibility that they repeated his words. The use of *ardere* remains consistent throughout the centuries as a descriptor of a destructive blaze. It is found in Seneca, Cicero, Ovid, Tacitus, Suetonius and on the *arae incendiorum arcendorum causa* (*CIL* VI 826) for the fire of AD 64 (**No. 59**); Juvenal, Aulus Gellius, the Chronographer of 354 and *SHA* use *ardere* and in all cases are referring to a serious fire. However, in one very valuable instance, the use of *ardere* and the Greek καταφλέγω (to burn down) can be tested. This is in the fire in the

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[86] Such preverbs include *in*, *ad*, *de*, *ex*, *a/ab*, *prae*, *pro*, *sub*, *ante*.
[87] The compound verb *ex-ardere* exists in ecclesiastical Latin.
[88] Verbs for which both simplex and compound exist include *uro*/*exuro*/etc, *cremo*/*concremo*. Verbs for which the simplex is either lost or has a different meaning include *accendo*/*candeo* (to gleam). See Fruyt 2012, 171.

Flavian Amphitheatre of AD 217 (**No. 74**) where Lancaster has ascertained that while the building was rendered no longer functional it certainly was not reduced to ashes.[89] This serves as a warning against the over-interpretation of *ardere* and καταφλέγω, given that only the upper section burned and had to be rebuilt. On the other hand, the end result was that the amphitheatre was unusable and may as well have burned to the ground. This is a challenge of translation.

The challenge of the interpretation of epigraphic language is notable especially when the fire is only recorded by inscription such as that of AD 203 (**No. 73**) where the Portico of Octavia had burned (*incendio corrupta*) and had been restored (*restituere*) by Septimius Severus. In translating, a decision has to be taken on whether there is a difference between *reficere* (literally 'to remake') and *restituere* (to restore).[90] The decision indicates a view on the severity of the effects of the fire. In this case the verb *corrumpere* is not conclusive either and may best be translated as 'damaged'.

The formulaic linking of words and of phrases creates uncertainty about the extent of a fire. The description of the Sack of 390 BC (**No. 3**) shows Livy linking of the words *incendium* and *ruina*, a phrase which occurs in many sources as will be seen in later examples.[91] There is also a pattern of formulaic phrases (*eg fulmine ictus*) when describing temples struck by lightning; this is noted in the commentary.

**The fires**

The following List of Fires is confined to historical, annalistic sources. The exception is Ovid's *Fasti* which is occasionally referenced. It is important to note that this 'trawl' does not purport to list every reference to flame and fire but it does look at those that are generally recognised as recorded fires. (Translations of the key texts for each fire are in Appendix 1.)

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[89] Lancaster 1998, 146.
[90] Gordon and Reynolds 2003, 244.
[91] This linguistic 'twinning' of *incendium* and *ruina* is an interesting indication of the role of fire in the lists of portents in the sources but also is evidence of a sense of fatalism towards the inevitability of death. See Seneca, *Ep.* 17.103; 2.13.11; 3.30.1; 1.9.18; 2.13.11; 11.86.10.

**List of Fires**

**1.**      **Date:** 460 BC?

**Location:** Capitol.

**Context of fire:** Period of civil unrest during a slave revolt.

**Sources:** Orosius (2. 12.5). Livy (3. 15-18)?; Dionysius Halicarnassensis (10. 14-15)?

**Focus of sources:** Disapproval of the actions of the slaves.

**Language**: *incendere* (Orosius).

**Modern commentators:** Sablayrolles (771) refers to this fire and dates it in 462 or 456 BC.[92] However, Rubin (15) says that there is no record of fires over the course of the 5th century.

Orosius contains the only specific reference to a fire and uses *incendere* (to burn). Livy and Dionysius both refer to civil unrest, give no further information and do not refer to a fire.


**2.**      **Date:** 414 or 415 BC?

**Location:** Capitol.

**Context of fire:** Period of civil unrest during a plotted slave revolt.

**Source:** Livy (4. 45).

**Focus of source:** The heinous nature of a plot by slaves.

**Language**: *incendere*.

**Modern commentators:** None refers to this as a fire.


Livy (4. 45) mentions a plot by slaves to set fire to the city; he does not say that the plot succeeded. He is drawing attention to the heinous plot (*nefanda consilia*) of the slaves and their subsequent punishment. Although Livy cites two separate plots, it is not at all clear that this is not the same fire which Orosius cites for 462 BC.

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[92] In this chapter, the page numbers of the referenced work appear in brackets after the name of frequently cited modern commentators: Werner 1906, Platner and Ashby 1929, Canter 1932, Newbold 1974, Richardson 1992, Sablayrolles 1996, *LTUR* 1993 – 2000, Rubin 2004, Coarelli 2007.

**3.    Date:** 390 BC.

**Location:** Widespread.

**Context of fire:** Sack of Rome by the Gauls.

**Sources:** Livy (5.42; 5. 48); Florus (1.3.17); Orosius (2.19.4-11).

**Focus of sources:** The destruction of Rome and the courage of the ancient Romans.

**Language**: *incendia*, *ignis*, *concremare*, *flammae, urere* (for burning bodies); *incendium*, *cremare* (Orosius).

**Modern commentators:** Canter (271), Sablayrolles (772) and Rubin (18) write in detail about this event. Each discusses the extent of the devastation and the difficulty verifying that devastation posed by the legends which surround the event. Archaeological evidence of the Sack is problematic.  Anderson refers to evidence of burn layers of early 4th date beneath the Comitium while Coarelli (45) says there is almost total absence of evidence.[93]  No other commentator presents evidence.


The most important literary source is Livy who was probably also the source for Florus and Orosius. His vocabulary is no different to that he uses in describing subsequent fires in his works, nor, indeed is it significantly different to used by all sources in the centuries after Livy.   These are basic words without any particular nuance.  The only question is whether *concremare* holds more force than *cremare* and indicates the devastating nature of the fire. It is likely to be the case. However, Livy writes more about this fire than any other in his extant works and it is the development of his description and the use of concomitant words and phrases (*terroris causa, late vagatus est, mulierum puerorumque ploratus, sonitus flammae et fragor ruentium*) which create the scene of widespread disaster and panic.[94] He refers to the reaction of the women and children and the sound of crackling flames and crash of falling buildings. This glimpse of the plight of the ordinary people during an urban fire is unusual and is not seen again until Tacitus and Suetonius describe the Great Fire of AD 64. However, in this instance, Livy's intention is less to draw attention to the pitiable condition of the citizens than to emphasise the character of the older generation – in spite of the anguish of the people, they would still defend the city (*quamvis inopem parvumque quem tenebant collem*

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[93] Anderson 1997, 208.
[94] This pattern is seen later in Tacitus' and Suetonius' description of the Great Fire of 64.  It is one of few examples where the plight of the ordinary people is mentioned.

*liberati relictum virtute defenderent*) – and to this defining period in the telling of the history of Rome.  This is the first instance of the linking of the words *incendium* and *ruina* which occurs in many sources.

Livy (5. 48) also describes a situation which is further explored in Chapter 7:  the hunger (*fames*) of both Romans and Gauls and, more pertinently, the disease (*pestilentia*) which assailed the Gauls due to the effects of inhaling the dust and ash.[95] This is one of the few references in the sources to any medium to long-term effects of fire on human health.

Livy indicates that apart from the Capitoline citadel the entire settlement was destroyed by the fire.[96] However, he does introduce an interesting note in his suggestion that the Gauls may have been using fire as a psychological weapon to force the Romans to surrender. The use of fire as weapon can be seen in later fires, particularly during a period of civil disorder: 194 BC, 88 BC, 52 BC, 41 BC, AD 31, AD 69, AD 222 - 229, AD 238.

This attack on Rome entered the psyche of the Romans and resonates as the backdrop to future attempts to threaten the state, either from within or without, by fire during periods of arson or civil unrest.

**4.      Date:** 389 BC?

**Location:** Temple of the Salii on the Palatine.

**Context of fire:** Unknown.

**Sources:** Cicero (*Div*. 1. 17); Valerius Maximus (1.8.11).

**Focus of sources**: Miraculous escape of the staff of Romulus.

**Language**: *deflagrare* (Cicero) and *deurere* (Valerius).

**Modern commentators:**  Only Sablayrolles (772) lists this fire but says the date is uncertain and the event may have occurred during the Gallic Sack.

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[95] Livy, 5. 48: *Gallos pestilentia etiam, cum loco iacente inter tumulos castra habentes, tum ab incendiis torrido et vaporis pleno cineremque non pulverem modo ferente cum quid venti motum esset. Quorum intolerantissima gens umorique ac frigori adsueta cum aestu et angore vexati volgatis velut in pecua morbis morerentur, iam pigritia singulos sepeliendi promisce acervatos cumulos hominum urebant, bustorumque inde Gallicorum nomine insignem locum fecere.*
[96] See Chapters 4 and 8 for a discussion of the alleged haste with which the city was rebuilt.

In both sources the focus of the reference is not the fire but the fact that the staff of Romulus miraculously escaped injury. The prefix '*de*' suggests that the temple burned completely and thus emphasises the divine properties of the staff as all around it burned to the ground. This emphasis would seem to be corroborated by Cicero who positions *deflagravisset* in the subordinate clause and the *lituus ... inventus est integer* as the main clause. It is even clearer in Valerius Maximus as the incident is recorded among a series of miraculous events where symbolic artefacts were spared while all around was destroyed. But there is no archaeological evidence to indicate whether the temple actually burned down: the literary sources may be misleading. The miraculous properties are all the greater if the destruction of the temple is exaggerated. It is impossible to know but it is a recurring conundrum.[97]


**5.      Date:** 275 BC.

**Location:** Temple of Salus on the Quirinal.

**Context of fire:** Lightning strike.

**Source:** Orosius (4.4.1).

**Focus of source:** Portents (*prodigia*).

**Language**: *ictu fulminis dissoluta* (destroyed by a lightning strike).

**Modern commentators:**  Sablayrolles (773) believes that *dissoluta* means complete destruction by fire. Rubin (25) interprets the same word to mean 'at least partially burned' which demonstrates the challenge of translating *dissolvere*.  Richardson (341) refers to this event but says that the damage was limited. *LTUR* (4. 230) notes that the temple was struck by lightning and damaged.


Orosius (4.4.1) records this lightning strike. Two questions arise: was there an actual fire and does the prefix *dis*(*soluta*) indicate complete destruction? The temple could have been destroyed (*dissoluta*) by the force of the strike without an ensuing fire.[98] Orosius mentions

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[97] 213 BC, 148 BC, 111 BC, AD 3 and AD 363. This Valerius Maximus extract reappears in three more instances in the list of fires, each emphasising miraculous escape: 213 BC, 111 BC and AD 3.

[98] DeHaan and Icove 2012, 216 point out that lightning strikes are usually accompanied by the physical destruction of any poor electrical conductor in their path; pressure shock waves created by the air in the path of the strike can be heated to a temperature of 30,000°c and the resulting pressure shock waves can damage nearby structures with explosive force.

this event in the context of a series of portents, *obscena et dira prodigia*.[99] As in the previous fire, the difficulty of interpreting the use of compound verbs is obvious. At times, it could be that our sources are really writing about the periods of divine disapproval and thus underlining the all-pervasive nature of portents of doom – and so the destruction by fire, or otherwise, is reported to be great, perhaps greater than it actually was. Although Orosius' use of *dissoluta* holds the force of a completed action, the argument in favour of Rubin's translation is stronger than Sablayrolles': we cannot rely on this as a description of destruction.

There are records of the temple of Salus being struck by lightning on two other occasions: in 206 BC (Liv. 28.11.4: *de caelo tacta*) and in 166 BC (Julius Obsequens 12: *aedes Salutis de caelo tacta*).[100] The repetition of the phrase raises the obvious question of the influence of an earlier source upon a later writer.[101]

**6.    Date:** 241 BC.

**Location:** Temple of Vesta in the Forum.

**Context of fire:** Lightning strike.

**Sources:** Livy (*Per.* 19); Pliny (*HN* 7.141); Cicero (*Scaur.* 48); Ovid (*Fasti* 6. 437- 454); Seneca (*Controv.* 4.2); Hieronymus (*ab Abr*. 1775); Dionysius Halicarnassensis (2. 66. 4).

**Focus of sources:** The rescue of statue of Pallas from the temple; the loss and subsequent restoration of the sight of the hero, Caecilius Metellus.

**Language:** *ardere* (Livy, Cicero, Ovid, Seneca); *flagrare* (Ovid); *incendere* (Hieronymus); ἐμπίμπρημι (I burn to ashes) (Dionysius); *incendium* (Livy, Pliny); *ignis* (Cicero); *flamma* (Cicero, Ovid); πῦρ (Dionysius).

**Modern commentators:**  Canter, Sablayrolles and Rubin all agree that the temple was destroyed by fire.  Richardson (412) says it burned at this time, but there is no evidence other

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[99] Fires which are listed in the sources in the context of portents are: 275 BC, 206BC, 166 BC, 111 BC, 49 BC, 38 BC, 23 BC, 16 BC, AD 69, AD 191.
[100] Obsequens is recording the event among many other portents and ill omens.
[101] Pliny (*HN* 35.19) records that this temple burned again in AD 49.

than the literary sources. *LTUR* (5.126) agrees that the temple burned in this year but does not elaborate on the extent of the destruction.

The temple of Vesta is first mentioned as the victim of fire in the sources for 241 BC.[102]   The verb *ardere* always refers to extensive fires in the Livy citations listed in this chapter which holds additional importance because of the influence Livy had on later writers and the manner in which they may have repeated his words. It also probably means that the temple was actually destroyed by fire although in each of the sources the actual burning of the temple serves to illustrate how Caecilius Metellus lost his sight while saving the statue of Pallas from the temple of Vesta.  His sight was later miraculously restored, perhaps as a reward for his *pietas*. This is a clear example where the fire is not the focus of the narrative and certainly not the reason why it is referenced in so many of our sources.

**7.     Date:** 213 BC.

**Location:** Forum Boarium; Forum Holitorium.

**Context of fire:** A serious and extensive fire.

**Sources:** Livy (24.47.15; 25.7.5 - 6); Valerius Maximus (1.8.11); Ovid (*Fasti* 6. 625).

**Focus of sources**: The seriousness of the fire (Liv. 24.47.15); the miraculous escape of a statue of Servius Tullius (Valerius Maximus and Ovid); restoration (Liv. 25.7.5-6).

**Language**: *absumere; consumere; incendium; ignis* (Livy); *conflagrare* (Valerius Maximus); *ardere* (Ovid).

**Modern commentators:** There is disagreement among commentators concerning the exact location of this fire and the buildings affected.  Sablayrolles (774) writes that the fire centred on the Forum Boarium and Forum Holitorium (*ie* between the Salinae and the Porta Carmentalis), adding that it spread to the southeast slope of the Capitoline (the Aequimaelium) and up the Vicus Iugarius towards the Forum.  He believes that the fire also damaged the temples of Janus and Spes in the Forum Boarium.  Ziolkowski says that the

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[102] The temple of Vesta is mentioned in relation to fire on a number of occasions; however, it is frequently in the context of how it escaped although buildings in the vicinity burned.  Examples of this occur for 210 BC, 148 BC and AD 15.  It is recorded as actually having burned in 241 BC, AD 191 and possibly in 14 BC. It can be taken it that it also perished in the fires of AD 64 and AD 80.

Temple of Janus was spared while Richardson (206) points out that the location of the temple of Janus is not established.[103]   *LTUR* (3. 91) discusses the uncertainty of the location of the temple of Janus but says it is more likely to have been in the vicinity of the temple of Spes which was destroyed in this fire and reconstructed the following year (*LTUR* 4. 336).  *LTUR* also notes that one or both of these temples may still be visible in the church of S. Nicola in Carcere (2. 299).  All commentators agree that the twin temples of Fortuna and Mater Matuta were burned in this fire.  The matter is further complicated by a reference in Lanciani to the restoration of the Temple of Portunus (which he calls Fortunus) after a fire in 214 BC.[104] This may be the fire of 213 BC.

This extensive fire burned for two days and one night. Livy (24. 47. 15) uses the common word *incendium* but, as in his description of the fire of 410 BC, he allows an adjective (*foedum,* foul) to qualify the destructive nature of the fire.  He again uses the word *ignis* and the phrase *late vagatus* (spread widely).[105] He adds the phrase *solo aequata omnia* (everything razed to the ground) and uses the verb *absumere*; in this instance the preverb (*ab*) indicates the destructive force of the fire.[106] This interpretation is strengthened by his list of the areas affected: 'everything between the Salinae and the Porta Carmentalis – including the Aequimaelium, the Vicus Iugarius and the temples of Fortuna and Mater Matuta.  Outside the gate the widespread fire also destroyed many sacred and secular buildings.'[107] This list is remarkable for the distances between the locations mentioned and for the fact that dense commercial and, perhaps, residential areas lying in between are not mentioned; nor are other important sacred structures mentioned (Chapter 3, 130).

Livy's second reference is to the restoration in 212 BC of the temple of Spes outside the Severan wall (*extra portam*). He uses the verb *consumere*.  The use of the preverb (*con-*) in both passages adds force to the verb and indicates completion of the action and probably total destruction.

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[103] Ziolowski 1992, 152.
[104] Cubberley 1988, 514.
[105] Livy used similar vocabulary in his description of the fire of 390 BC.
[106] The use of *solo aequata* is seen again in Orosius for the fire of AD 191.  It is very likely that he was influenced by Livy.
[107] Livy (24.47.15): *Solo aequata omnia inter Salinas ac portam Carmentalem cum Aequimaelio Iugarioque uico et templis Fortunae ac Matris Matutae; et extra portam late vagatus ignis sacra profanaque multa absumpsit*. ('Everything between the Salinae and the Porta Carmentalis was razed to the ground – including the Aequimaelium, the Vicus Iugarius and the Temples of Fortune and Mater Matuta.  Outside the gate the widespread fire also destroyed many sacred and secular buildings.')

Valerius Maximus (1.8.11) records the remarkable escape of the wooden gilded statue of Servius Tullius when the temple of Fortuna blazed (*conflagrasset*) in the same fire. In this context he emphasises the miraculous properties of the statue and, as in 389 BC, may be using the verb *conflagrare* to emphasise its survival while the temple around it completely burned. This view is supported by the context of the passage and the fact that Valerius Maximus makes no reference to the devastation caused by this fire to the structures listed by Livy. Therefore, this, like his reference to the temple of the Salii above, does not add to our understanding of the actual nature of the fire. Ovid (*Fasti* 6.625), using *ardere*, also refers to the fire but in reference to the sparing of the statue. This is an example of the difficulty of interpreting the extent of a fire where there is no additional literary or archaeological corroborating evidence. We are at the mercy of the focus of the recorder.

**8.    Date:** 211 BC.

**Location:** A statue of Victory on the pediment of the temple of Concord in the Forum.

**Context of fire**: Lightning strike.

**Source:** Livy (26.23.4).

**Focus of source**: Portents.

**Language**: *fulmine icta*.

**Modern commentators:**    Platner and Ashby (138) simply say that the statue was 'struck down'; no other commentator or topographical dictionary includes the event.

There is no evidence that a fire ensued from this lightning strike. Livy describes how the statue of Victory was struck, fell, and lodged in the antefixes of the temple.

**9.    Date:** 210 BC.

**Location:** Forum region: seven shops, bankers' offices (*Tabernae Novae*), private houses, Fish Market and the *Atrium Regium*; Capitoline region: the quarries used as prisons (*Lautamiae*).

**Context of fire:** Civil disorder fomented by young Capuans seeking revenge for the deaths of their fathers; restoration programme.

**Sources:** Livy (26. 27. 1-9); Livy (27.11.16).

**Focus of sources:** The treachery of arson.

**Language**: *incendium*; *ignis*; *ardere*; *consumere*.

**Modern commentators:** Canter, Sablayrolles and Rubin all list this fire. Richardson (375) refers to the literary evidence that shops (*tabernae circa Forum*) burned in the fire. While he notes (328) that deep stratigraphical excavations in 1964/65 show that the Regia went through different building phases 'always in consequence of a fire', those are fires later than 210 BC. *LTUR* (5.14) says it is clear that the *Tabernae Novae* were destroyed in this fire and restoration work probably began the following year (Liv. 27.11.16). In this, *LTUR* disagrees with Platner and Ashby who attributed the construction of the *Tabernae Novae* to 192 BC. In addition, *LTUR* (1.14) establishes the *Tabernae Novae* and the *Argentariae* as one and the same while (3.186) it is circumspect about the burning of the *Lautamiae* saying that the fire reached the complex but not that it burned. *LTUR* (5. 126) refers to damage suffered by the temple of Vesta in this fire, presumably as part of the *Atrium Regium*.


According to Livy (26. 27. 1-9) a fire broke out in several disparate places at once - the work of young Capuans incendiaries - on the night before the festival of the Quinquatrus on the 18th of March.[108]

Livy uses the verb *ardere*, thus implying significant destruction. The temple of Vesta was saved with the help of thirteen slaves later rewarded by manumission, showing the importance of the temple. Although this was clearly a serious fire, the focus of the narrative is more on the treachery of arson rather than the fire itself, once more highlighting the difficulty of interpretation without a list of buildings affected or further literary corroboration. Livy (27.11.16) refers to this fire again in the context of the restoration of the buildings which had

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[108] This was the chief festival of Minerva which took place between the 19th and 23rd March. In trying to ascertain seasonality of fires this event is of no use as it was apparently arson. Arson is occasionally suggested by the sources as the cause of certain fires. These include the fires of 210 BC, 194 BC, 85 – 80 BC, 58 BC, 57 BC, 30 BC, 7 BC, AD 64, AD 375. The suggestions of arson for AD 64 by Suetonius and Dio act as a caution in accepting that all of these fires were, in fact, deliberately set.

burned in 210 BC and uses the phrase *incendio consumpta*. In this second reference, he is focussing on extensive renovation after widespread destruction.

**10.     Date:** 206 BC.

**Location:** Temples of Ceres (on the Aventine), Salus (on the Quirinal), and Quirinus (on the Quirinal).

**Context of fire:** Lightning strike.

**Sources:** Livy (28.11.4).

**Focus of sources:** List of portents.

**Language:** *de caelo tactae.*

**Modern commentators**: None of the commentators on fire refers to this event, presumably because there is no evidence that it resulted in a fire. Platner and Ashby (439) and Richardson (80) record the events as lightning strikes not fires, with limited damage to the temple of Salus according to Richardson. *LTUR* (4.230) points out the lack of verification of the damage caused by the strike.

There is no evidence that the lightning strikes resulted in the burning or destruction of the temples.

**11.     Date:** 203 BC.

**Location:** Clivus Publicus, west of the Aventine.

**Context of fire:** Unknown.

**Source:** Livy (30.26.5).

**Focus of source:** A serious fire.

**Language:** *exurere* (*ad solum exustus est:* was burned to the ground)*; incendium ingens*.

**Modern commentators:** This is interpreted as complete destruction by Canter (272), Sablayrolles (775) and Rubin (32). The fire is not mentioned in Platner and Ashby; Richardson (90) notes Livy's comment that the *Clivus* burned to the ground in 203 as does *LTUR* (1.284).

The Clivus Publicus was a major thoroughfare which led from the Porta Trigemina (Frontinus *Aq.* 1.5) over the slope behind the Circus Maximus serving the series of temples on the brow of the Aventine and probably joining the Vicus Piscinae Publicae.[109] Always in heavy use, it may have been densely populated at this time and, according to Livy, it burned to the ground in 203 BC. Livy's compound verb *exurere* conveys the notion of the street being burned up or out. Livy records a flood occurring in the same year but there is no suggestion in the passage that it was an ill-starred year. Both the *exurere* and the phrase *ad solum* can be taken at face value and it is likely that the street was completely destroyed. This is a possible reference to the loss of private housing on the Aventine.

**12.  Date:** 194 BC.

**Location:** Disparate locations (unknown).

**Context of fire:** Arson.

**Source:** Livy (29.22.10).

**Focus of source**: The wickedness of Pleminius, the arsonist.

**Language:** *incendere; incendium.*

**Modern commentators:**  Only Sablayrolles (775) lists this fire.

Livy (29.22.10), citing as his source the Roman History of Clodius Licinus, mentions arson committed by Quintus Pleminius in various parts of the city in 194 BC.  He uses the verb *incendere* and refers to the same event later (34.44.6) using the noun *incendia*, pointing out that the fires were set in different parts of the city simultaneously. The focus of Livy's account in both books is the wickedness of Pleminius.[110] This is another example of fire as a weapon of civic disorder and where no locations are mentioned.

**13.  Date:** 192 BC.

**Location:** Forum Boarium.

**Context of fire:** Serious and extensive fire.

**Source:** Livy (35. 40.8).

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[109] Richardson 1992, 90. Temples to Diana, Luna, and Minerva were built on the crest at an early date.
[110] The intention of Pleminius was to cause disorder during which he could escape from prison.

**Focus of source:** Serious fire; divine disapproval?

**Language:** *ardere*; *conflagrare; incendium.*

**Modern commentators:** Sablayrolles and Rubin list this fire while Canter does not. Rubin refers to possible archaeological evidence where a layer of fire detritus was found in excavations under the temple of Portunus by Adam and Gros in 1986.[111] This material from the beginning of the 2nd century BC cannot be dated more accurately and it may or may not relate to the fire of 192. The topographical works do not refer to this fire in the Forum Boarium.

Livy (35. 40.8) records a fire which broke out in the Forum Boarium and which burned for a day and a night. Buildings facing the Tiber burned as well as shops with valuable merchandise. This was an extensive fire for which he again uses the word *incendium* but two different verbs: *ardere* for the buildings facing the Tiber (*aedificia in Tiberim*) and *conflagrare* for the shops. It is likely that he is emphasising the loss of the merchandise with the use of *conflagrare*, as in examples throughout this study, and that the compound verbs indicate devastation. Notably, Livy also employs the verb *ardere* which he regularly uses to describe destruction by fire. Livy says the fire was the second of two frightening occurrences which led to a three day period of prayer; the first was a shaking of the earth which lasted for 31 days. He may be emphasising divine disapproval rather than the extent of the destruction, but that does not negate the ferocity of the fire. This is an example where being included in a list of disasters does not mean that a fire is *not* destructive, as, in this instance, we have definite information on buildings burnt and their location.

This fire took place towards the end of the year (*iam fere in exitu annus*: Liv. 35.41.1) but cannot be used to plot seasonality of fires as it may have been associated with, or indeed caused by, the earth tremors.

**14.    Date:** 178 BC.

**Location:** Forum Romanum; Temple of Venus (unknown location).

**Context of fire:** Unknown.

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[111] Adam and Gros 1986, 47.

**Source:** Julius Obsequens (8.62).

**Focus of source:** Portents.

**Language:** *deurere; incendium; ignis; cremata sine ullo vestigio.*

**Modern commentators**: Platner and Ashby (551) and Sablayrolles (775) point out that the location of the temple of Venus is unknown and, while accepting that it burned down, note that the fire is not mentioned in any other source. Richardson (408) says it was somewhere in the region of the Forum. The fire is listed by Canter, Sablayrolles and Rubin. *LTUR* (5. 113) discusses the location of the temple but as Obsequens testifies to a temple near the Forum it suggests the temple of Venus Calva on the SW side of the Velia.


Julius Obsequens (8.62) records that a very large number of buildings (*plurima*) around the Forum were destroyed by fire. The force of the fire is emphasised by the verb *deurere*; this is corroborated by his subsequent description of the temple of Venus being *cremata sine ullo vestigio* (burnt without trace). This fire does not appear in any other source.


15. **Date:** 169 BC.

**Location:** Sacra Via.

**Context of the fire:** Unknown.

**Source:** Valerius Maximus (8.1.6).

**Focus of the source:** The punishment of the *triumviri.*

**Language:** *incendium.*

**Modern commentators:** Only Rubin refers to this fire.

We have no idea of the extent of this fire on the Sacra Via. The point of the reference made by Valerius Maximus (8.1.6) is the punishment afforded the *triumviri* who came late to extinguish the fire. It is interesting in that it indicates the responsibility of the *triumviri* for putting out fires at that time (Chapter 6, 184).

**16. Date:** 156 BC.

**Location:** Temple of Jupiter on the Capitol; the portico between the temples of Juno Regina and Fortuna in the Circus Flaminius.

**Context of fire:** Lightning strikes.

**Source:** Julius Obsequens (16).

**Focus of source:** A violent storm.

**Language:** *circa omnia quassata; tacta; dissipata.*

**Modern commentators:** Sablayrolles and Rubin list this as a definite fire while Canter does not mention it. Neither Platner and Ashby nor Richardson mentions a fire in these locations for this year. *LTUR* (3. 127) refers to lightning striking and damaging the temple of Juno Regina in the Campus Martius but in 158 BC (Obsequens 75.25: 596 *AUC*). This later date is mentioned by no other commentator.

Obsequens (16) records a violent storm which shook the temple of Jupiter on the Capitol and all around it (*circa omnia quassata*). In the Circus Flaminius the portico between the temples of Juno Regina and Fortuna was struck by lightning (*tacta*) and several adjacent buildings were destroyed (*dissipata*). Sablayrolles is of the view this destruction was caused by a fire following the lightning strike. This is not convincing as the verb used by Obsequens (*dissipata*) does not describe destruction by fire in any primary source; the destruction was more likely caused by buildings collapsing. What we have here is more likely a reference to lightning which led to collapsing buildings and not to destruction by fire.[112]


**17.    Date:** 148 BC.

**Location:** Regia.

**Context of fire:** Unknown.

**Sources:** Livy (*Oxyrh*. 50); Julius Obsequens (19).

**Focus of sources:** The miraculous escape of the shrine of Ops and a (two?) laurel tree.

**Language**: *maximum incendium* (Livy); *urere*; *vasto incendio* (Obsequens).

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[112] See n.98 above on the destructive power of lightning stikes.

**Modern commentators:** Platner and Ashby (441) and Richardson (328) accept that the Regia burned at this time and was immediately restored. Both Sablayrolles and Rubin also believe it was destroyed. *LTUR* (4.190) suggests that this fire necessitated another rebuilding of the Regia.

Livy (*Oxyrh*. 50) records a huge fire in 148 BC in spite of which the shrine of Ops and a laurel 'of the hearth' remained unharmed. Obsequens (19) writes of the same fire (*vasto incendio*) and says that the Regia burned (*ureretur*) but the shrine and two laurel trees remained unharmed *(inviolatae)*. This is yet another fire in the vicinity of the temple of Vesta, but there is no evidence that the temple itself was affected by the fire. As the focus of both writers is the miraculous escape of the sacred trees, it is with caution that we accept this as a 'huge fire'; Livy was probably Obsequens' source and the fire may be exaggerated to emphasise the miracle. The simplex verb *urere* does not confirm complete destruction or burning *down*; it is more likely that the Regia was injured by fire but not completely destroyed.

Confusion arises again in relation to the burning of the Regia from a reference in Obsequens (25) for the year 136 BC where he says almost all of the Regia was consumed by fire. This is probably an error of transcription from Livy by Obsequens and the fire is not referenced in any other sources or modern commentators. It is likely that the reference is to the earlier fire of 148 BC.

**18.     Date:** 126 BC.

**Location:** Capitol?

**Context of fire:** Lightning strike.

**Sources:** Julius Obsequens (29).

**Focus of source**: A storm in the Capitol.

**Language**: *fulmine … deiecta sunt.*

**Modern commentators:** Sablayrolles (776) and Rubin (34) date this as 122 BC but it is clear from Obsequens' list of consuls that the year is 126. Canter does not mention this incident.

Julius Obsequens (29) writes that temples in Rome and its environs were knocked down by lightning (*fulmine deiecta sunt*) due to a storm on the Capitol.  The verb does not relate to burning but rather to collapsing.  As has been seen already, not all lightning strikes end in a fire and it is not safe to assume so; the lightning strike itself is the point of the reference.

**19.     Date:** 111 BC.

**Location:** Temple of Magna Mater on the Palatine; large part of the city?

**Context of fire:** Unknown.

**Sources:** Valerius Maximus (1.8.11); Julius Obsequens (39).

**Focus of sources:** Miraculous escape of the statue of Quinta Claudia; portents surrounding the Jugurthine war.

**Language:** *incendium*; *consumere* (Valerius Maximus); *maxima pars Urbis exusta* (Obsequens).

**Modern commentators**: Platner and Ashby, Canter, Sablayrolles and Rubin all agree that the temple of Magna Mater (Cybele) on the Palatine burned in this year but none suggests that more than the temple burned.   Richardson (420) and *LTUR* (3.206) suggest that the Temple of Victoria may have been near the Magna Mater; the Scalae Caci, on the west corner of Palatine, and the Casa Romuli were also in the vicinity and there is no record of a fire in those locations at that time. *LTUR* (3.206) notes that the temple of the Magna Mater was restored a few years after 111 BC but makes no specific reference to this fire.   Crawford and Coarelli report that excavations of the Magna Mater were conducted 'down to the lowest levels' and they match the development in building techniques to three different phases in the structure, the earliest being *opus incertum* and the second *opus quasi reticulatum*.  This, they say, fits in with the literary evidence of the fire in 111 BC and the subsequent restoration. They argue that the original building used *opus incertum* and that the emergence of *opus quasi reticulatum* at the beginning of the 2$^{nd}$ century would coincide with the restoration post 111 BC.[113] It is a persuasive argument and one which gives corroborating material evidence to the literary sources.

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[113] Crawford and Coarelli 1977, 12.

A fire in 111 BC is attested by Valerius Maximus (1.8.11). As in the previous examples from this citation for 389 BC and 213 BC, the focus is the miraculous properties of a statue; in this instance the statue of Quinta Claudia was untouched (*intacta*) by the flames when the temple of Magna Mater on the Palatine in which it was housed was burned (*consumpta*). The miraculous nature of this event is underlined, not by the noun (*incendium*), but by the verb *consumere*. The question arises whether Valerius is actually describing the destruction of the temple or whether he is exaggerating in order to highlight the miraculous property of the statue. However, Obsequens (39) also refers to this fire and, on the face of it, seems to support the view that the compound verb does indicate complete destruction in this instance. Obsequens says that a very large part of the city was burned out (*maxima pars Urbis exusta*).[114] The focus of Obsequens' writings is on *prodigia*, and he includes this fire within a list of other portents surrounding the outbreak of war against Jugurtha. There is no other literary or archaeological evidence that a 'very large part of the city' burned at that time and for that reason it can be concluded that this fire was confined to the temple and that both sources are using verbs of completed action to make two different points.

The archaeological evidence from Crawford and Coarelli emphasises the value of such corroborating evidence in determining the extent of a fire.


**20.** **Date**: 88 BC**.**

**Location:** Capitol.

**Context of fire:** Civil war.

**Source:** Florus (2.9.7.).

**Focus of source:** Sulla's attack on the Capitol.

**Language:** *incendium*.

**Modern commentators:** Canter has no reference to this fire. Sablayrolles (776) and Rubin (35) list the fire but appear to be mistaken in reference to Florus (3. 21.7).

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[114] Julius Obsequens 39: *Maxima pars urbis exusta cum aede Matris Magnae. Lacte per triduum pluit, hostiisque expiatum maioribus. Iugurthinum bellum exortum …* (A very large part of the city was burned out together with the temple of Magna Mater. It rained milk for three days, and this was atoned for with many sacrifices. The war with Iugutha began …)

Florus (2.9.7.) describes how Sulla seized the Capitol with violence and fire (*incendium*) during the Civil War of 88 BC. There is no reference to any buildings going on fire but rather to burning brands being hurled in order to force a passage to the Capitol. Fire is used by Sulla in his brutal return to the city and provides us with another example of fire as a weapon of attack.

**21.    Date:** 6 July 83 BC.

**Location:** Capitol.

**Context of fire:** Civil War between Sulla and Marius, the first of the civil wars.

**Sources:** Livy (6.4. 3; 25.39.17); Cicero (*Cat*. 3.4.9); Sallust (*Cat*. 47.2); Tacitus (*Hist*. 3.72; *Ann*. 6.12.4); Appian (*B Civ*.1. 83; 1. 86); Plutarch (*Sull*. 27).

**Focus of sources:** Shameful behaviour by Rome's own citizens; the burning of the Sibylline books; portents.

**Language:** *incendere* (Livy); *incensio* (Cicero); *incendere* (Sallust); *ardere*, *exscindere*, *flagrare*, *cremare; incensio* (Tacitus); ἐμπίμπρημι (to set on fire: Appian, Plutarch).

**Modern commentators:**  All commentators accept this as a fire which destroyed the temple of Jupiter Capitolinus. Sablayrolles (777) underlines the symbolic importance of this fire. Richardson (222) notes that the loss included the cult statue, citing Plutarch (*De Is. et Os.* 71) and the Sybilline books (Dion. Hal. 4.62.5-6). *LTUR* (3. 149) refers to the violent fire which led to the complete destruction of the Archaic temple.

The burning of the Capitol in 83 BC during civil war was loaded with symbolism and the idea that it should be burned by its own citizens was particularly shameful. The dedication of the temple of Jupiter Capitolinus was among the most conspicuous and important signs of the birth of the Republic.[115]

This burning of the Capitol is mentioned on two occasions by Livy (6.4. 3; 25.39.17) almost *en passant* as a benchmark in time. He uses the verb *incendere* on both occasions, but the

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[115] Torelli 2007, 81.

extent of the fire is not the point for Livy, it is the impious act which threatened the common weal.

This attack is recorded by Cicero (*Cat*. 3.4.9) writing that the Sibylline books foretold the destruction of Rome in the 20th year after the burning of the Capitol (*ie* 83 BC).[116] Cicero uses the word *incensio*. The Sybilline books burned in the fire; this indicates the power of the fire as the books were housed in a stone chest underground (Dion. Hal. 4. 62.5-6).

The burning of the Capitol is also mentioned by Sallust (*Cat.* 47.2) using the common verb *incendere*. Given Sallust's preoccupation with contemporary moral decline and the superiority of the old *virtus* in the tone of his work, it would be unwise to try to explore the extent of the destruction from this source.

While outlining the Vitellian attack on the Capitol in AD 69, Tacitus (*Hist*. 3.72) recalls that it was also burnt in 83 BC during the civil wars (*arserat et ante Capitolium civili bello*). This is the first reference Tacitus makes to urban fire and his use of language is interesting. While comparing the fire of 83 BC to that of AD 69, he employs the noun *incensio* and verbs *ardere*, *exscindere*, *flagrare* and *cremare* in a relatively short passage. Linguistically, this is the most varied of the sources so far and will be further examined below in reference to the fire of AD 69. Tacitus' point was that the burning of the Capitol in 83 BC was the work of individuals (*fraude privata*) whereas the action of the Vitellians in AD 69 was open anarchy (*palam obsessum, palam incensum*).[117]

In the context of prodigies and not civic unrest, Appian (*B Civ.* 1. 83; 1. 86) says the Capitol was burned (ἐμπίμπρημι) and that the cause of the fire was unknown. Plutarch (*Sull.* 27) also uses ἐμπίμπρημι and gives us the exact date, the 6th July. The verb used by each source indicates destruction by fire.

For all of the writers, it was the impious nature of the attack and the symbolic import of the burning of the Capitol, the cult statue, and the Sibylline books that was remarkable and not the fire *per se*. There is no evidence that the fire was extensive.

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[116] The events refer to the Gaul's plan to set fire to the city in 63 BC on the instructions of Lentulus.
[117] Tacitus as an historian poses an exciting challenge to any reader and translator. His interpretation of facts and the vivid nature of his style are seen clearly in relation to the fire of AD 64 and are commented upon in that context.

**22.** **Date:** Unknown date between 85 and 80 BC.

**Location:** The Tabularium (record office) on the Capitoline?

**Context:** Arson?

**Source:** Cicero (*Nat. D. 3.74*).

**Focus of source:** Nefarious behaviour of Quintus Socius (Cicero); restoration (*CIL* VI 1314).

**Language**: *incendere.*

**Modern commentators:** Sablayrolles (777) and Rubin (47) agree that the date is uncertain as Cicero does not date the fire precisely. All commentators agree that the identification of the *Tabularium* is problematic; *LTUR* (5. 17) points out that this complex, which was thought to have been restored after the devastating fire of 83 BC in the region of the Capitol, has been queried as far back as Mommsen. This cannot be the *Tabularium* overlooking the Forum as that was not built until 78 BC as evidenced by *CIL* VI 1314. There is no reference to this fire in Canter, Platner and Ashby, Richardson, Coarelli or *LTUR*.


The *Tabularium* (record office) burned sometime between 85 and 80 BC according to Cicero (*Nat. D. 3.74*). Cicero uses the verb *incendere* while concentrating, not on the fire, but on the nefarious actions of a Roman knight, Quintus Socius, accusing him of arson. This fire is unlikely to have been extensive and is not mentioned in any of the topographical commentaries.


**23.** **Date:** 58 or 57BC.

**Location:** The temple of the Nymphs in the Campus Martius.

**Context:** Arson?

**Sources:** Cicero (*Har. resp.* 57; *Mil.* 73; *Cael.* 78).

**Focus of sources:** The wickedness of Clodius.

**Language**: *inflammare, incendere, incendium.*

**Modern commentators:** Platner and Ashby (363) say the temple was burned by Clodius but give no date. Sablayrolles (778) repeats Clodius' culpability and gives 58 BC as the date,

while Rubin (48) refers to the 'supposed' burning by Clodius '*circa* 58'.  Richardson (269) says Cicero claimed Clodius set the temple on fire to destroy the records but gives no date. Coarelli (281) says the temple was deliberately destroyed by fire in 57 BC by Clodius.  *LTUR* (3.350) notes that we know from Cicero that agents of Clodius were responsible for the burning of the temple in 57 or 56 (*Cael*.78).

In these extracts Cicero accused Clodius of having burned down the temple of the Nymphs in the Campus Martius in order to destroy the census documents which contained the records of the names of those who had the right to receive *frumentationes*. In this accusation of arson, Cicero uses *inflammare* (*Har. resp.* 57) and *incendere*  (*Mil.* 73). He uses the noun *incendium*. The focus is the claimed nefarious activities of Clodius for which there is no other literary evidence.

**24.    Date:** 58 BC.

**Location:** Cicero's house on the Palatine.

**Context:** Arson; civil strife.

**Sources:** Plutarch (*Cic.* 33.1); Cicero (*Sest.* 54; *Dom.*).

**Focus of sources:** The lawlessness of Clodius; arson and the threat to the state.

**Language**: καταπίμπρημι (Plutarch); *incendere* (Cicero).

**Modern commentators:** Sablayrolles (778) and Rubin (48) list this fire but Canter does not. Richardson (123) says that the house was burned and later rebuilt 'in part'. *LTUR* (2. 85) notes that the house was destroyed and then burned.

Cicero's house on the Palatine was fired by Clodius in 58 BC.  Plutarch (*Cic.* 33.1) uses καταπίμπρημι, the verb to 'burn down'.  The use of the prefix κατά probably indicates that the house was completely burned and this seems to be corroborated by Plutarch's subsequent comment that Clodius erected on its site a temple of Liberty.[118] There is no doubt that the house was set on fire (Cic. *Sest.* 54; *Dom.* 111-112), that Clodius gained possession of the site, and

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[118] Dio employs the prefix κατά when recording the fires of 52 BC, 49 BC, 41 BC, 39 BC, 25 BC, 16 BC, AD 64, AD 80, AD 191 and AD 217.   In each case except 49 BC and 25 BC there is no doubt that he is describing significant destruction by fire.

that Cicero regained the site on his return from exile (Dio, 39.11; Cic. *Dom.*). It is possible that the house was demolished and then burned.

**25.** **Date:** 57 BC.

**Location:** The house of Quintus Cicero on the Palatine.

**Context:** Arson; civil strife.

**Source:** Cicero (*Att.* 4.3.2; *Mil.* 73).

**Focus of source:** The lawlessness of Clodius; arson and the threat to the state.

**Language**: *inflammare; ignes.*

**Modern commentators:** Sablayrolles (778) and Rubin (49) list this fire; Canter does not include it.  Richardson (123) and *LTUR* (2. 204) note that Clodius' gangs set fire to the house in 57.

Cicero (*Att.* 4.3.2) writes that the house of his brother Quintus was set on fire by followers of Clodius on the 3rd November 57 BC.  The house was set on fire by thrown firebrands (*inflammata … coniectis ignibus*).

**26.** **Date:** 57 BC.

**Location:** The house of Milo on the Palatine.

**Context:** Attempted arson; civil strife.

**Source:** Cicero (*Att.* 4.3.3).

**Focus of source:** The lawlessness of Clodius; arson and the threat to the state.

**Language**: *incendere; accendere; faces.*

**Modern commentators:** Sablayrolles (778) and Rubin (49) list this fire but, again, Canter does not as these house fires are not significant fires *per se*.  Neither Richardson nor *LTUR* makes reference to this fire.

Cicero (*Att.* 4.3.3) reports the attempted burning of the house of Milo shortly after the burning of the house of Q. Cicero on the 12ᵗʰ November 57 BC. He uses the verbs *incendere* and *accendere* and the noun *faces*. There is nothing to indicate that the houses of either Q. Cicero or Milo were completely burned. However, these references to fires set by Clodius and his followers are important for the manner in which Cicero portrays the threat posed to the state and the role which arson played in this.


**27.     Date:** 52 BC.

**Location:** Forum - Curia Hostilia; Basilica Porcia?

**Context of fire:** Civil unrest during the funeral of Clodius.

**Sources:** Dio (40.49.2); Cicero (*Mil*. 90); Asconius (*Mil*. 2.33).

**Focus of sources:** Riotous behaviour of citizens.

**Language**: καταπίμπρημι, καταφλέγω, καίω, πῦρ (Dio); *incendere, inflammare, exscindere* (Cicero); *flagrare, cremare, amburere, ignis* (Asconius).

**Modern commentators:** Some debate surrounds the fate of the Basilica Porcia in this fire. In support of extensive damage to the city, Sablayrolles (779) and Platner and Ashby (82) point out that the Basilica Porcia, which stood a little west of the Curia Hostilia, probably burned in the fire as it ceased to exist at this time and was never rebuilt. Coarelli (105) says that excavations in 1940 found remains of a colonnaded building that can be identified as the Basilica Porcia. Richardson (56) follows Coarelli that it definitely burned in 52 BC. Rubin (50) also accepts that it burned. *LTUR* (1.187) refers to the destruction of the Curia Hostilia and the Basilica Porcia in the fire of 52 BC using Asconius (*Mil*. 2.34) as the source.


Dio (40.49) writes that the funeral of Clodius in 52 BC burned nearly the whole city. He uses the verb καταπίμπρημι and the straightforward noun πῦρ. As in Plutarch above (58 BC; **No. 24**), the use of the prefix κατά refers to burning down completely but he gives no details of the structures which burned and must have been exaggerating the extent of the destruction.

Cicero (*Mil*. 90) writes that the Curia Hostilia was burned (*incendere*) by supporters of Clodius and bewails such a heinous deed by which the centre of all civilisation was burned (*inflammari*) and razed (*exscindi*). These are strong words but it is very difficult to assess the

amount of damage done during the funeral.  There was obviously a serious fire but Cicero's (and Dio's) disapproval of the actions of the followers of Clodius coloured the reportage.

Asconius (*Mil*. 2.34) gives additional information when he states that the Basilica Porcia was joined (*iuncta*) to the Curia Hostilia and burned with it.

**28.    Date:** 53 or 50 BC.

**Location:** The fourteen districts of the city?

**Context of fire:** Unknown.

**Sources:** Orosius (7.2.11); Julius Obsequens (65)?

**Focus of sources:** Portents at the outbreak of civil war in 49 BC?

**Language**: *vastare*, *consumere*, *exurere; flamma, incendium* (Orosius); *delere*; *incendium* (Obsequens).

**Modern commentators:** Newbold (862) dates this as 53 BC and regards it as the 'worst fire of the republic'. Canter does not mention it.  Sablayrolles (779) and Rubin (55) believe it to have taken place in 50 BC; they base this on Obsequens list of consuls.[119] Sablayrolles suggests that Orosius may have been exaggerating this supposedly catastrophic fire.  There is no evidence to refute his view as no other source mentions this fire.

Orosius (7.2.11) says that 14 districts (*vicos*) of the city were burnt (*flamma consumpsit*) in 53 BC. This statement may be anachronistic as the 14 administrative regions (*regiones*) were not established until 7 BC, and the number 14 too much of a coincidence not to believe that Orosius was referring to them. There is also confusion about the date of the fire as it is unclear whether it occurred in 53 or 50 BC. Irrespective of which year is meant by Orosius, he uses the compound *consumere* and adds that, according to Livy, the city had never experienced a bigger fire.[120] He notes that Augustus accorded a large sum of money from the treasury some years later to restore the buildings that had been burnt (*exusta*). The use of *exurere* underlines the extent of the devastation claimed by Orosius. The vocabulary used by Orosius to describe the fire, writing in the early 5th century AD, echoes that of his sources, particularly Livy. Orosius (6.14.4-5) subsequently writes that Rome was completely burned

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[119] L. Aemilius Lepidus Paullus and C. Claudius Marcellus.
[120] This reference in Livy is not extant and cannot be verified.

(*concrematur*) by a fire (*incendium*) around the time of the outbreak of the Civil War (49 BC).  He adds that the 14 districts (*vici*) together with the Vicus Iugarius were destroyed (*consumptos*).  It is easy to argue that this is the same fire which he records in 7.2.11 and which is mentioned above.  The confusion seems to arise in Orosius' dating: he writes *septingentesimo conditionis suae anno* (*ie* 53 BC).  It is highly unlikely that all 14 districts were burned down within three years of each other.  This fire is a mystery; we would expect Dio, or the contemporary Cicero, to record it but neither does. It is also unclear whether Orosius was, in fact, referring to the 14 regions as some modern commentators accept.

Orosius' focus is interesting in that although he maintains that the fire destroyed *quattuordecim vicos* he does not give any further detail of this vast fire except to describe the *largesse* of Augustus in repairing buildings years later. In this context the fire is not the focus and would point to Orosius exaggerating.

This may be the same fire to which Obsequens (65) refers when he records a major fire in 50 BC: he says that *maxima pars Urbis deleta est* (the greatest part of the city was destroyed). This reference draws attention to the fire (*incendium*) as a portentous event which presaged the subsequent civil war between Caesar and Pompey (49 – 45 BC). His words echo those he used about the fire of 111 BC and the war against Jugurtha. Such formulaic language casts serious doubt on the extent of the fires.

It is interesting to note that this fire is not mentioned by Dio, a consistent recorder of fires during this period.

**29.    Date:** 49 BC.

**Location:** The temple of Quirinus on the Quirinal.

**Context of fire:** Portents during the civil war; lightning?

**Source:** Dio (41.14.3).

**Focus of source**: Supernatural catastrophic events during the civil war.

**Language**: πῦρ, καταφλέγω.

**Modern commentators:** Sablayrolles (778) suggests a contradiction between the use of καταφλέγω and the damage caused by the fire; he believes the damage to be moderate as the

temple was soon being re-used. Rubin (55) believes that the extent of the damage is unknown as, although it was soon reused (Dio 54.19), it was totally rebuilt by Augustus in 16 BC (*RG* 19). Canter alone (273) writes that it was struck by lightning; there is some merit in his interpretation as Dio writes of fire 'darting across the sky' among the ill omens of the time. Both Richardson (326) and *LTUR* (4.185) agree that the temple burned in 49 BC and was restored immediately; they make no reference to lightning.

Dio (41.14.3) records that the temple of Quirinus on the Quirinal and 'other buildings' were burned down in 49 BC. There is no indication of the location or nature of the 'other buildings'. Dio uses the word he usually applies for fire, πῦρ, and the verb καταφλέγω for 'burning down'. As suggested above in relation to the fires of 58 BC and 52 BC, the prefix κατά probably adds intrinsic force to the verb but this emphasis may be used, not because the damage to the temple was complete, but because of the symbolic importance of the temple and the significance of the context in which it is occurred. The fire is listed last among a number of other portents, including continual earthquakes, during the civil war between Caesar and Pompey.

**30.     Date:** 44 BC.

**Location:** Capitol.

**Context:** Attempted burning of the houses of Brutus and Cassius during Caesar's funeral.

**Sources:** Suetonius (*Iul*. 85.1); Orosius (6.17).

**Focus of sources**: The grief of the populace.

**Language**: *succendere*, *flammae*, *faces* (Suetonius); *incendere* (Orosius).

**Modern commentators:** Both Sablayrolles (780) and Rubin (58) list this event, but it was not a fire as the people were prevented from setting fire to the houses.

Suetonius (*Iul*. 85. 1) writes that during the funeral of Caesar while the people were piling wood and clothing on the burning pyre, some broke away and attempted to set fire to the houses of Brutus and Cassius on the Capitol. Orosius (6.17) says that the people debated whether to set fire to their houses. They were prevented from doing so.

**31.    Date:** 41 BC.

**Location:** Private houses in different locations in Rome.

**Context:** Civil unrest between the urban plebs and veteran soldiers.

**Source:** Dio (48.9.5).

**Focus of source**: Civil strife.

**Language:** καταπίμπρημι (I burn to ashes, to the ground).


**Modern commentators:** Sablayrolles (780) and Rubin (58) list this fire. Canter does not.


In 41 BC houses in different locations in Rome were burned down during the fighting between the urban plebs and veteran soldiers.  Dio (48.9.5) uses the verb καταπίμπρημι and once more the use of κατά probably underlines the complete destruction of the housing.  The verb can only be translated as 'burned to the ground'. This appears to be corroborated by his next statement that the rent of those who lived in the city was entirely remitted up to a maximum of 2000 sesterces. This is one of the few references to loss of private homes and the measures taken to alleviate hardship resulting from the fires.


**32.    Date:** 39 BC?

**Location:** Regia.

**Context of fire:** Unknown.

**Sources:** Dio (48.42.5); *CIL* VI 1301.

**Focus of sources:** Restoration.

**Language**: κατακαίω.

**Modern commentators:** Platner and Ashby (441), Canter (273) and Richardson (328) list this for 36 BC, but Sablayrolles (781) dates the fire to 'before 36 BC' while Rubin (59) says 39 BC. *LTUR* makes no reference to a fire in either of those years. The confusion seems to arise from the date of the dedication of the rebuilding in 36 BC.

Dio (48.42.5) writes of the dedication in 36 BC by Calvinus of the Regia which had previously burned down. The prefix of the verb κατακαίω (to burn down) probably indicates the complete burning of the greater part of the building; this is corroborated by the extent of the restoration work carried out by Calvinus. It is highly unlikely that the rebuilding and dedication took place in the same year as the fire, hence it cannot be 36 BC and Sablayrolles is correct.

**33.      Date:** 38 BC.

**Location:** The hut of Romulus on the Palatine? Capitol?

**Context of fire:** Accidental fire during ritual performed by priests.

**Source:** Dio (48.43.4).

**Focus of source**: Portents before general civil unrest.

**Language**: καίω.

**Modern commentators:** Platner and Ashby (101) and Richardson (74) discuss the survival of the hut into the 4th century where it is recorded in the *Notitia* Regio X but they do not refer to this fire. Both Sablayrolles (780) and Rubin (60) say that it is not possible to know if this is the *Casa Romuli* on the Palatine or on the Capitoline. *LTUR* (1.242) notes the uncertainty about which *Casa* was involved in this fire and in the later fire of 12 BC.

Dio (48.43.4) records the accidental burning of the hut of Romulus on the Palatine in 38 BC during many events of a portentous nature. He uses καίω which gives no indication that that the hut actually burnt down. This hut of wattle and daub with a thatched roof was venerated but was obviously at risk of destruction in any fire. Dio does not focus on the fire but on the portentous import as any damage to the hut was a bad omen.

**34.      Date:** 31 BC.

**Location:** Circus Maximus; the Aventine (the temple of Ceres, Liber and Libera and the temple of Flora); the Forum Holitorium (the temple of Spes? the temple of Janus?).

**Context:** Arson? Civil unrest among freedmen (Dio).

**Sources:** Augustus (*RG* 19); Tacitus (*Ann*. 2.49); Dio (50.10.3-4); Strabo (8. 6.23).

**Focus of sources:** Restoration (Augustus); fire and subsequent restorations (Tacitus); civil unrest among freedmen (Dio); the loss of a painting by Aristeides in the temple of Ceres (Strabo).

**Language***: abolitas, ignis* (Tacitus); πῦρ, φθείρω (to destroy) (Dio); ἐμπίμπρημι (to set on fire) (Strabo).

**Modern commentators:** Discussion and uncertainty surround the buildings affected by this fire. Werner (9) says a great part of the Circus Maximus and the temples of Ceres and Spes were destroyed in the fire. Canter (274) writes that the whole of the Forum Holitorium was destroyed, including the temple of Janus; he based this belief on the subsequent restoration programme. Platner and Ashby (110) and Richardson (81) also say the temple of Ceres, Liber and Libera and the temple of Spes were burned down in 31 BC.[121] *LTUR* (4.336) says the temple of Spes ('in Holitorio') burned in a fire which affected part of the Circus Maximus and the temple of Ceres, Liber and Libera but adds that the temple of Janus probably burned with its neighbour, the temple of Spes (3.91).[122] Sablayrolles (781) writes that the fire started in the Circus Maximus, destroyed the temples of Ceres and Flora, moved to the Forum Holitorium where it burned the temple of Spes and probably the temple of Janus, although he does discuss the uncertainty which surrounds the locations. This is the only reference among commentators to the temple of Flora and Sablayrolles includes it based on its restoration in AD 17. Rubin (67) concludes that the temple of Spes could not have been burned in the fire of 31 BC due to its distance from the Circus Maximus. This is not a convincing argument if it is accepted that the temple of Janus in question is that in the Forum Holitorium (Chapter 3, 132 -133).

Dio (50.10.3 - 4) writes that a fire of 31 BC started in the Circus Maximus, destroyed a large part of the Circus itself, the temple of Ceres, a shrine dedicated to Spes and 'a large number of other structures'. Tacitus (*Ann*. 2.49) refers to the restoration by Augustus of several buildings which had been ruined (*abolitas*) by age or fire (*igni*) and includes the temple of

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[121] The temple of Ceres incorporated Liber and Libera; it had already been twice struck by lightning, in 206 BC (Liv. 28.11.4) and in 84 BC (App. *B Civ*. 1.78).
[122] Both Richardson and *LTUR* refer to the temples of Flora and Janus only in the context of restoration and rededication in AD 17.

Liber, Libera and Ceres 'adjacent to the Circus Maximus' but adds the temple of Flora also adjacent to the Circus, the temples of Janus and of Spes in the Forum Holitorium. This is the source of uncertainty among commentators: how many of the buildings restored by Augustus and rededicated by Tiberius in AD 17 were those destroyed or affected by the fire of 31 BC? Is Tacitus is referring only to temples damaged by fire in 31 BC or were one or more damaged in other fires? What can be included in the large number of 'other buildings' cited by Dio? This presents a complex topographical problem.[123] Dio writes that the fire was deliberately set by 'freedmen' who had rioted on foot of being required to contribute an eighth of their property; Tacitus does not mention the cause of the fire.

Dio uses φθείρω which can only mean destruction. Strabo (8. 6. 23) also refers to the burning of a painting in the temple of Ceres in this fire using the verb ἐμπίμπρημι (to set on fire). This is another example where each of the sources records the fire for a different reason.

**35.** **Date:** 25 BC?

**Location:** The house of Agrippa on the Palatine.

**Context:** Unknown.

**Source:** Dio (53.27.5).

**Focus of source:** Honours bestowed upon Agrippa by Augustus.

**Language**: καταφλέγω (to burn down).

**Modern commentators:** The confusion about this date appears to have its origin in Platner and Ashby (156) who inexplicably put it at 29 BC. Sablayrolles (782), Richardson (114) and *LTUR* (2.34) say it was destroyed by fire in 25 BC. Rubin (67) has 29 or 25.

In 25 BC the house which had formerly belonged to Marc Antony and then belonged to Agrippa on the Palatine burned. Dio (53.27.15) uses καταφλέγω; the prefix probably indicates that the house was completely burned down. This view may be upheld by the fact that Augustus invited Agrippa to stay in his house, but it is impossible to be certain, as Dio's focus is the high regard in which Augustus held Agrippa.

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[123] Rubin 2004, 67 discusses this problem and concludes that the temple of Spes could not have been burned in the fire of 31 BC.

**36.     Date:** 23 BC.

**Location:** Several unnamed buildings in the city.

**Context:** Portents preceding death of Marcellus, nephew of Augustus.

**Sources:** Dio (53. 33.5).

**Focus of source:** Portents.

**Language**: πῦρ, λυμαίνομαι (to inflict damage).

**Modern commentators:** Werner (11), Sablayrolles (782) and Rubin (68) list this fire.


Several unnamed buildings were burned in the city in 23 BC. Dio (53. 33.5) records this in a list of portentous events which included a three day flood.  He uses the common noun πῦρ and the verb λυμαίνομαι. The buildings are not specified and the focus is on the list of portents which preceded the death of Marcellus, nephew of Augustus, and it is not possible to come to any conclusion from the language used.


**Aside**:  In 22 BC Augustus introduced new institutions of urban government; among his innovations he established a body of 600 slaves who were trained to fight fires. These were probably based on the Crassus model and were assigned to the brief of the *aediles* (Chapter 6, 186).  In writing of this development, Suetonius (*Aug*. 30. 1) uses the noun *incendium* and the verb *absumere* for buildings destroyed by fire. Dio (54.2) describes the same innovation using the verb ἐμπίμπρημι (to set on fire).


**37.     Date:** 16 BC.

**Location:** The temple of Iuventas in the Circus Maximus.

**Context:** Portents at the time of the departure of Augustus and Agrippa from Rome for Gaul.

**Sources:** Augustus (*RG* 19); Dio (54.19.7).

**Focus of sources:** Restoration (Augustus); portents (Dio).

**Language**: κατακαίω (to burn down).

**Modern commentators:** Werner (12), Sablayrolles (782) and Rubin (70) list this fire. Debate surrounds the location of the temple. Sablayrolles puts it 'near' the Circus Maximus. Platner and Ashby (308) say it was 'probably … towards the west end of the Circus'; Richardson (228) follows Livy (36.36.5-6) and places it *in Circo Maximo* and says it burned to the ground in 16 BC; *LTUR* (3. 163) says the temple, '*in Circo Maximo*', was reconstructed by Augustus after the fire of 16 BC.

In 16 BC the temple of Iuventas in the Circus Maximus was burned. Dio (54.19.7) says that the temple was burned down completely (κατακαίω). The context was the occurrence of many unfavourable portents around the time of the departure of Augustus and Agrippa from the city. The temple was restored by Augustus (*RG* 19) and it is reasonable to take Dio's language at face value and that the use of κατά does indicate a destructive fire.

**38.     Date:** 14 BC.

**Location:** Forum: the Basilica of Paul(l)us (Aemilia), the temple of Vesta; temple of Castor and Pollux?

**Context:** Unknown.

**Sources:** Dio (54.24.2); Augustus (*RG* 19.2).

**Focus of sources:** Fire (Dio); restoration (Augustus).

**Language**: καίω, πῦρ (Dio).

**Modern commentators:** There is some confusion surrounding the buildings affected by this fire. Sablayrolles (782) writes that the 'Basilica Julia' burned in spite of Dio's clear reference to the Basilica Paulus. Rubin repeats Sablayrolles' reference to the Basilica Julia and makes no reference to the Basilica Paulus. Platner and Ashby (73) and Richardson (50) identify the Basilica Paulus as the renamed Basilica Aemilia located opposite the Basilica Julia in the Forum. Canter (274) writes that the Basilica Aemilia burned and that 'it is thought' that the temple of Castor and the Basilica Julia also burned – the former because it was wholly rebuilt by Tiberius and the latter because it was rebuilt by Augustus and rededicated in the names of his grandsons, Gaius and Lucius Caesar. *LTUR* (1.84) refers to the fire of 14 BC which

destroyed at least an upper storey of the Basilica Pauli (opposite the Basilica Julia) and which extended up to the temple of Vesta but questions (5. 126) whether the temple actually burned given that Dio does not list it in the structures rebuilt.  The confusion surrounding the temple of Vesta probably stems from Van Deman's belief that Dio says it burned; in fact Dio is not specific.[124]

The Forum was again struck by fire in 14 BC.  Dio (54.24.2) says the Basilica of Paulus (Aemilia) was burned (καίω) and the fire (πῦρ) spread from it to the temple of Vesta, so that the sacred objects there were carried up to the Palatine by the Vestal Virgins. The use of the simplex verb, καίω, by Dio could cast doubt on the extent of the fire but it is also probable that the temple of Castor and Pollux was burned in the same fire as it was wholly rebuilt by Tiberius.[125]  The Basilica Julia which was reconstructed by Augustus (*RG* 19.2) may also have been burned in this fire. This is a good example where restoration programmes rather than accounts of fires indicate destruction. It is also a warning against relying on compound or simplex verbs to indicate the severity or otherwise of a fire; there is also confusion identified by modern writers about the date of the burning of the Basilica Julia.

**39.    Date:** 12 BC.

**Location:** The Palatine: many buildings including the hut of Romulus.

**Context of fire:** Portents: lightning, sacrificial burning meat dropped by crows.

**Source:** Dio (54.29.8).

**Focus of source:** Bad omens presaging the death of Agrippa.

**Language**: κεραυνός (lightning), πῦρ, καίω.

**Modern commentators:** Werner (13), Canter (274) Sablayrolles (783) and Rubin (249) all list this fire.  Werner believes that a large part of Region VIII was devastated in this fire but there is no evidence to support his view.

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[124] Van Deman 1912, 393.
[125] The rebuild is attested by Suetonius (*Tib*. 20) and Dio (55.27.4).

Dio (54.29.8) records both a lightning strike and a fire for 12 BC. Lightning (κεραυνός) struck 'the house on the Alban Mount where the consuls lodged during the sacred rites' while many buildings including the hut of Romulus on the Palatine were set on fire (καίω) by crows which dropped upon it some burning meat from an altar. The focus of this passage is on portents around time of the death of Agrippa. The basic verb καίω gives no indication that the hut or the other unnamed buildings were burned to the ground. This serves as yet another warning against over-interpretation of the prefix κατά; the hut may well have been completely destroyed given the vulnerability of its building material already noted in relation to the fire of 38 BC (**No. 33**).

**40.    Date:** 9 BC.

**Location:** Various locations including the temple of Jupiter Capitolinus.

**Context:** Lightning strikes.

**Source:** Dio (55.1.1).

**Focus of source:** Portents.

**Language**: κεραυνός (lightning); κακόω (to injure, distress).

**Modern commentators:** Werner (14) puts this event in 9 BC and discusses whether it was an actual fire. Canter, Sablayrolles, and Rubin do not list it. Platner and Ashby (300) refer to the temple as 'injured by lightning in 9 BC'; Richardson (223) says it was frequently exposed to lightning because of its elevated position but 'was never set on fire'. *LTUR* (3.150) also discusses the vulnerability of the temple to lightning which seems to have resulted in a fire in 9 BC. Coarelli (73) refers to 'the great fire of 9 BC' and describes fire ravaging the area around the Basilica Julia in 9 BC, the Forum. Coarelli's description fits better with the fire of 14 BC.

Dio (55.1.1) records more omens for this year including buildings 'injured' by thunderbolts (κεραυνός). Many temples were damaged including the temple of Jupiter Capitolinus. Dio's language does not indicate whether the buildings were injured by the force of thunderbolts or by an ensuing fire.

**41.    Date:** 7 BC.

**Location:** Forum.

**Context of fire:** Civil unrest by the debtor class.

**Source:** Dio (55.8.5).

**Focus of source:** Funeral games in honour of Agrippa; the behaviour of the debtor class; the reform of the *Vigiles*.

**Language**: πῦρ; καίω, ἐμπίμπρημι.

**Modern commentators:** Werner does not refer to this fire; Canter mentions it in passing while both Sablayrolles (783) and Rubin (72) focus on how it led to a reform of the *Vigiles*.

Dio (55.8.7) writes that in 7 BC the funeral games for Agrippa, who had died in 12 BC, were held in the Saepta Julia in the Campus Martius because the buildings around the Forum had been burned.  He uses the noun πῦρ and the verb καίω.  Once more the use of the verb καίω serves as a warning for the over-interpretation of his use of the prefix κατά. Dio says that the fire was deliberately was caused by the 'debtor class' and that it led to new street commissioners to prevent the setting on fire of buildings (ἐμπίμπρημι, to set on fire) which implies that it was a substantial fire despite the use of the simplex verb. However, this reform of the *Vigiles* set up in 22 BC may have been linked to the Egnatius Rufus affair (Chapter 6, 185) and administrative reforms of the city so it is difficult to gauge the extent of the fire in the context of Augustus' domestic policy.



**42.    Date:** Between 3 BC and AD 3.

**Location:** Domus Augustus and possibly the temple of Magna Mater (Cybele) on the Palatine.

**Context of fire:** Unknown.

**Sources:** Augustus (*RG* 19); Suetonius (*Aug*. 57); Dio (55.12.4); Valerius Maximus (1.8.11).

**Focus of sources**: Restoration programme (Augustus); praise for Augustus (Suetonius); miraculous escape of statue (Valerius Maximus).

**Language**: *incendio absumptae* (Suetonius); διαφθείρω (to destroy), ἐμπρησμός

(conflagration) (Dio); *incendio consumpta* (Valerius Maximus).

**Modern commentators:** There is no reference to this fire in Werner or Canter. Sablayrolles (783) believes that both the Domus and the temple of Magna Mater burned, not just in the same year, AD 3, but in the same fire; he bases this on their proximity and the restorations recorded by Augustus. Rubin (73) agrees with Sablayrolles. Platner and Ashby (157) state that the Domus burned in AD 3 but Magna Mater 'burned and was restored in AD 3'. Richardson is not definite about the date of the burning of the Domus, 'perhaps in 3 AD', but follows Platner and Ashby in relation to Magna Mater, burned and was restored in AD 3. *LTUR* (3.206) refers to the restoration of the temple of Magna Mater after the fire of 3 BC and suggests that the Domus burned in the same fire (2.46). The upshot is that they both burned, probably in the same fire given their proximity, and were restored by AD 3 but the date of the fire is uncertain.

Sometime between 3 BC and AD 3 the House of Augustus on the Palatine burned. Suetonius (*Aug*. 57) uses the phrase *incendio absumpta* which probably indicates that the house was destroyed; however, the point of the reference is not the fire itself but the contributions made by others to rebuild the house thus underlining the popularity of Augustus. This is expanded by Dio (55.12.4) who highlights Augustus' modesty in the financial help he accepts to rebuild after the fire. He uses the noun ἐμπρησμός (conflagration) and διαφθείρω (to destroy) which may emphasise the extent of the damage but it could be that Dio's use of ἐμπρησμός speaks more to his interest in extolling Augustus than describing the fire.

A reference in Valerius Maximus (1.8.11) to the burning of the temple of the Magna Mater in the same year, and perhaps in the same fire, records the fact that the statue of Quinta Claudia remained untouched by the flames when the temple itself was destroyed by fire (*incendio consumpta*) for the second time.[126] As previously noted in relation to this passage from Valerius, he could also be emphasising the miraculous escape of the statue rather than the extent of the fire but the accumulation of evidence seems to indicate that the temple was indeed destroyed. It also is a reminder of the other occasions where Valerius speaks of miraculous escapes and the danger of assuming that he was exaggerating the fires.

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[126] The previous occasion was in 111 BC.

**43.     Date:** AD 6.

**Location:** Many unknown parts of the city.

**Context:** Unknown.

**Sources:** Dio (55.26.4); Ulpian (*Dig*. 1. 15. 2).

**Focus of sources**: Institution of the *Vigiles.*

**Language:**  διαφθείρω (to destroy), πῦρ (Dio); *incendium* (Ulpian).

**Modern commentators:** Werner (15) believes that the fires were 'not small' as they resulted in the reform of the *Vigiles*; Canter (275) regards them as 'catastrophic' and Rubin (74) describes the fires as 'terrible'.  But Sablayrolles (783) points out that there are no details extant for these fires.


Dio (55.26.4) states that in AD 6 many parts of the city had been destroyed (διαφθείρω) by outbreaks of fire (πῦρ) in different locations on the same day and that Augustus organised a 'company of freedmen in seven divisions' to assist in the combating of fires. Ulpian writes that several fires took place on the same day.  In both writers the focus of attention is Augustus' radical reform of the *Vigiles* and we get no information about the locations or the extent of the fires.  The compound verb (διαφθείρω) may be translated as 'destroyed' or 'completely destroyed' and either way would support the view that the impact of the fires was so great that it led to the reform of the *Vigiles*  (Chapter 6, 186 - 188).


**44.     Date:** AD 15.

**Location:** Near the Palatine?

**Context of fire:** Unknown.

**Sources:** Dio (57.14.10); Suetonius (*Tib*. 50.3).

**Focus of sources:** The bad behaviour of Tiberius and the role of the Praetorian Guard in extinguishing the fire.

**Language**: ἐμπίμπρημι (Dio); *incendium* (Suetonius).

**Modern commentators:** Werner dates this fire to AD 16; Canter does not include it. Sablayrolles (784) and Rubin (84) suggest that because of the role of the Praetorian Guard the fire must have broken out near their auxiliary barracks in the imperial palace (*Domus Tiberiana*) on the Palatine Hill, at some distance from the nearest cohort of *Vigiles*.[127] It is a convincing view.

Dio (57.14.10) refers to property that had gone on fire in AD 15 using the verb ἐμπίμπρημι (to burn) but the import of his reference is to the drinking habits of Tiberius.  It is impossible to judge the severity of the fire. Likewise, Suetonius (*Tib*. 50.3) refers to a fire (*incendium*) near the temple of Vesta but it is simply to offer an example of Tiberius' efforts to stop his mother, Livia, from meddling in affairs of importance. This may, or may not, be the same fire.

45.    **Date:** AD 21.

**Location:** The theatre of Pompey.

**Context of fire:** Unknown.

**Sources:** Tacitus (*Ann*. 3.72); Hieronymus (*ab Abr*. 2038); Dio (60.6.8); Velleius Paterculus (2.130.1).

**Focus of sources**: Fire (Tacitus, Hieronymus, Velleius Paterculus); restoration by Tiberius (Dio).

**Language**: *igne fortuito haustum* (Tacitus); *theatrum incensum* (Hieronymus); καίω (Dio); *absumptum igni* (Paterculus).

**Modern commentators:** Werner (16) lists this fire for AD 21; Sablayrolles (784) and Rubin (85) put it at AD 22.  Platner and Ashby (516) and Richardson (384) say that the fire took place in AD 21.   *LTUR* (5.36) agrees and says the theatre partially burned in 21 AD. In fact, Hieronymous places it clearly in AD 21.

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[127] The 7th Cohort covering *Regiones VIII* and *X* (Chapter 6, 194; **Fig. 33**).

In AD 21 the theatre of Pompey burned. Tacitus (*Ann*. 3.72) says that the theatre was burned accidentally (*igne fortuito haustum*). He does not say '*exhaustum*' and this has to be acknowledged in any translation. A reference in Hieronymus (*ab Abr*. 2038) simply says *theatrum incensum* in keeping with the style of his chronicle. Dio (60.6.8) refers to Tiberius' restoration programme and writes of the burning of the temple using the simplex verb καίω. It is probable that the theatre was not burned down but damaged by fire and was restored, not rebuilt from the ground up. This is supported by Tacitus' use of *restaurando* in the same reference.

Velleius Paterculus (2.130.1) refers to the restoration of the theatre which had been destroyed by fire (*absumptum igni*) while extolling the munificence of Tiberius; however, he does not help us clarify the date. The tone of his panegyric makes it difficult to lend credence to his use of *absumptum* to indicate the complete destruction, as he may have wished to exaggerate the munificence of Tiberius.

### 46.    Date: AD 27.

**Location:** Caelian Hill.

**Context of fire:** A very serious fire of unknown origin; Tiberius responsible?

**Sources:** Tacitus (*Ann*. 4.64); Suetonius (*Tib*. 48).

**Focus of sources:** Fire (Tacitus); disapproval by the gods of Tiberius' lack of respect for the auspices; financial loss (Suetonius).

**Language**: *clades ignis deurere* (Tacitus); *deflagrare* (Suetonius).

**Modern commentators:** Both Werner (16) and Canter (275) write of this 'savage' fire and make no suggestion that Tiberius was responsible. Sablayrolles (784) refers to 'rumours' that Tiberius was responsible, while Rubin (87) refers to Tacitus' cynicism in suggesting that the relief effort was undertaken to silence Tiberius' critics. Richardson (63) says the hill was apparently devastated by fire – he is not sure – and thereafter became a residential area for the *domus* of the rich. *LTUR* (1.209) notes archaeological evidence of rebuilding on the Caelian 'probably after the fire of 27'.[128]

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[128] The Regionary Catalogues list 127 *domus* and 3600 *insulae* on the Caelian which gives some indication of its enduring popularity as a residential quarter.

Tacitus (*Ann*. 4.64) attests that in AD 27 the entire Caelian Hill with its many palaces, private houses and *insulae*, was burned (*deusto monte Caelio*). He adds that a bust of Tiberius was the only thing to survive unscathed. Tacitus' use of the word *clades* presages his description of the fire of AD 64 and while he uses the common word *ignis* he qualifies it with *violentia*. The verb he uses, *deurere*, gives the sense of the destruction and the catastrophic nature of the event supports the view that the prefix of the verb denotes the strength of the fire. However, one has again to acknowledge that, for Tacitus, the point seems to be disaster following Tiberius' neglect of the auspices. Tacitus also takes the opportunity to comment on antiquarian matters when he mentions that the hill got its name from (*Ann*. 4.65) an ancient Etruscan ally.

The destruction of the many buildings on the hill intimated by the words used by Tacitus is corroborated by Suetonius (*Tib*. 48) when he refers to the great financial losses incurred by the burning of private houses on the Caelian hill and he uses a verb he does not normally use, *deflagrare*, to describe the destruction. According to Suetonius, Tiberius was more or less forced to make good the losses of owners of blocks of houses. This is an interesting reference to private dwellings, something unusual in itself, but it also indicates the financial risk posed to property owners and landlords by fire. Most notable is the lack of reference to any loss of life and property by tenants (Chapter 7, 208 - 209).

**47.** **Date:** AD 31.

**Location:** Unknown.

**Context of the fire:** Civil unrest; looting and arson by the Praetorian Guard.

**Sources:** Dio (58.12.1).

**Focus of source:** Clash between the Praetorian Guard and the *Vigiles*.

**Language**: ἔμπρησις (burning).

**Modern commentators:** This fire is listed by Werner, Sablayrolles (784) and Rubin (89) but not by Canter.

Dio (58.12.2) writes of civic unrest when soldiers of the Praetorian Guard were responsible for burning (ἔμπρησις) and plundering in AD 31. They resented what they saw as preferential treatment of the *Vigiles* at the time of the downfall of Sejanus. This is one of the occasions when we are certain of a role beyond fire-fighting for the *Vigiles*. During the downfall of Sejanus they replaced the Praetorians guarding the senate house (Tac. *Hist*. 3.64).

Dio's language gives no clear indication of the extent of the fire.

**48.**     **Date:** Undated fire between AD 31 and 36.

**Location:** A house of Claudius, location unknown.

**Context of fire:** Unknown.

**Source:** Suetonius (*Claud*. 6).

**Focus of source**:  Restoration by Tiberius at public expense.

**Language**: *incendio*.

**Modern commentators:** Only Sablayrolles (784) and Rubin (91) list this fire; Rubin writes that the location of the house is unknown. There is no reference to the fire in Platner and Ashby, Richardson or *LTUR*.

A house of Claudius burned at some point within these five years. This is attested by Suetonius (*Claud*. 6).  However, Suetonius is referring to the character of Tiberius who maintained that a house which he had lost by fire (*incendio*) should be restored at public expense. Suetonius has no interest in the fire *per se*.

**49.**     **Date:** Second undated fire between AD 31 and 36.

**Location:** The *pons naumachiarius* on the right bank of the Tiber.

**Context of fire:** Unknown.

**Source:** Pliny (*HN* 16.190).

**Focus of source:** Seasonal timber-felling.

**Language**: *concrematus*.

**Modern commentators:** Werner (17) and Sablayrolles (784 - 5) agree that these fires cannot be dated more accurately. Platner and Ashby (357) and Richardson (265) refer to the fire but cannot offer a date. *LTUR* (3.337) does not refer to the burning of the *pons*.

The burning of the *pons naumachiarius* in the *Naumachia Augusti* of Region XIV is recorded by Pliny (*HN* 16.190). Pliny is writing of the most advantageous time of the year to fell trees for timber when he refers to the *pons* which had been totally burned (*concrematus*). The verb *concremare* probably indicates that it was completely burned as Pliny is simply presenting facts with no additional agenda.

**50.** **Date:** AD 36.

**Location:** Aventine Hill; Circus Maximus.

**Context of fire:** Unknown.

**Sources:** Tacitus (*Ann*. 6.45.1); Dio (58.26.5); Suetonius (*Tib*. 48); *Fasti Ostienses* (*Inscriptiones Italiae* 13.1 no. 5).

**Focus of sources:** Serious fire (Tacitus, Dio); restoration (Suetonius).

**Language**: *gravis ignis, deurere* (Tacitus); πῦρ, φθείρω (Dio).

**Modern commentators:** Werner (17) writes of a *vastum incendium* in this year; Canter, Sablayrolles and Rubin agree on the seriousness of this fire. However, there is disagreement about the reading of the *Fasti* and, therefore, the exact location of fire. All agree that it was on the Aventine near the Circus Maximus but the question remains whether the *Fasti* refer to the origin of the fire '*inter Ultores*'(among the shrines of the avenging divinities) or '*inter Vitores*'(street of the basket makers). Platner and Ashby (116) and Sablayrolles (785) prefer *inter Ultores* while Rubin (90) opts for '*inter Vitores*'. Richardson (85) says that part of Circus near Aventine burned. *LTUR* (5.207) says that it is now accepted as *inter vitores* and the workshop context was more prone to the outbreak of fires.

In AD 36 the southern area of the Aventine Hill was ravaged by a fire which extended to the section of the Circus Maximus bordering the Aventine. The Aventine was thickly populated at that time. Tacitus (*Ann*. 6.45.1) describes it as a *gravis ignis* and uses the verb *deurere*, probably indicating destruction. It is also recorded by Dio (58.26.5) using his usual word πῦρ

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but emphasising the serious nature of the damage with the verb φθείρω (to destroy). According to both Tacitus (*Ann*. 6.45) and Suetonius (*Tib*. 48), Tiberius donated the large sum of 100,000,000 sesterces to the relief effort, specifically for rebuilding houses and *insulae*. This is an important example of imperial aid which does not draw any cynicism from the sources.

**51.   Date:** AD 38?

**Location:** Horrea Aemiliana? Aemiliana?

**Context:** Unknown.

**Sources:** *Fasti Ostienses* (1.1.13.1); Dio (59.9.4)?

**Focus of sources**: Serious fire (*Fasti*); approval of Gaius (Dio).

**Language**: *ardere (Fasti);* ἔμπρησις (conflagration) (Dio).

**Modern commentators:** Two important issues are unclear in relation to this fire – the location and the date. Platner and Ashby (1) designate the Aemiliana as a district outside the Servian wall in the southern part of the Campus Martius and say it was ravaged by a great fire on 21st October, 38 AD citing Suetonius (*Claud*. 18).[129] Richardson (3), citing Livy (35.10.12), says the Aemiliana was probably the area along the Porticus Aemilia which stretched from the Porta Fontinalis on the Capitoline to the Altar of Mars in the Campus Martius and so was a district in the Campus Martius. He believes that it is very unlikely that it was along the Tiber by the Pons Aemilius. Coarelli (306) is of the view that the imperial Horrea by the Pons Aemilius in the Forum Boarium were probably the Aemiliana. He bases this view on a fragment of the *FUR* (24*a*). *LTUR* (1.19) suggests that the location of the Aemiliana destroyed in the fire of 38 AD was at the edge of the Forum Boarium and the Forum Holtorium next to the Porta Flumentana and were the Horrea. However, *LTUR* also suggests that it was probably to this fire and not that of 53/54 Suetonius was referring (*Claud*. 18) when he recorded that Claudius stayed for two nights in the Diribitorium to direct fire-fighting operations; the point being that Claudius had a special responsibility to save the *Annona*. There does not seem to be a definitive answer either to the location or to the number of fires involved: there may have been two districts designated Aemiliana as believed by Rubin (93) and there were probably two different fires as believed by Sablayrolles (785) who

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[129] This citation may be an error as Suetonius is referring to the fire of AD 53/54.

locates the fire in the Horrea Aemiliana but concludes that the fire in the *Fasti* is not that in Suetonius (*Cal*. 18); he believes that Suetonius conflated the two fires.

The burning of the Aemiliana on Oct 21, AD 38, is recorded in the *Fasti Ostienses* (1.1.13.1) where it is stated that *XII K(alendas) Nov(embres) Aemiliana arserunt*. The verb *ardere* is used consistently by Livy and others to indicate destruction.

Dio (59.9.4) also records a fire for AD 38 but we cannot be certain that this is the same fire as that recorded in the *Fasti*. Dio is listing praiseworthy acts performed by Gaius when helping the soldiers to extinguish a conflagration (ἔμπρησις). In this instance, Dio does not use his habitual word πῦρ but this cannot be taken to indicate the severity of the fire as he is really extolling the virtues of Gaius. Dio does not mention a location for this fire but it is likely that he is referring to a fire in the Imperial Horrea given the emperor's personal intervention.

The most likely solution to the puzzle of these fires and the location of the Aemiliana is that the *Fasti* are referring to a fire in the Campus Martius and Dio and Suetonius to two separate fires in the Imperial Horrea.

**52.      Date:** AD 41.

**Location:** House of Caligula, near the theatre of Marcellus?

**Context:** Cremation of Caligula's body and the burning of his house.

**Source:** Suetonius (*Calig.* 59).

**Focus of source**: The cremation and supposed haunting of the house.

**Language**: *semiambustum, crematum, incendio consumpta.*

**Modern commentators:** Sablayrolles (787) puts the house near the theatre of Marcellus based on the comment in Dio (59, 29. 6) that Caligula was assassinated as he emerged from the theatre where the *Ludi Palatini* had been held. According to Rubin (93) the house was in the Horti Lamiani, on the Esquiline, where the body was buried but no source supports that view. Richardson (199) follows Suetonius and says the body was partially cremated and buried in the Horti Lamiani but he makes no suggestion that the house was in the Horti. *LTUR* (3.61) also describes the incident but does not say if the house was in the Horti.

Caligula died on 22<sup>nd</sup> January AD 41. Suetonius (*Calig.* 59) refers to the partial cremation of Caligula, his subsequent proper cremation and the burning of his house. The location of the house is not known but it may have been near the theatre of Marcellus. Suetonius' use of different vocabulary is interesting. For instance, Caligula's body is first *semiambustum,* later it is *crematum* and finally the house is *incendio consumpta*. The verbal adjective *ambustus* is used by no other annalistic source; the verb *cremare* is consistently used for the burning of buildings, and *consumptus* probably indicates that the house was burned down.

**53.    Date:** Unknown.

**Location:** Horti Maiani on the Esquiline.

**Context of fire:** Lightning strike.

**Source:** Pliny (*HN* 35.51).

**Focus of source:** The burning of a huge portrait of Nero which stood in the gardens.

**Language**: *accensa fulmine, conflagrare.*

**Modern commentators:** Neither Canter nor Sablayrolles lists this fire, but it is mentioned by Werner (18). Rubin (93) identifies the Horti Maiani as the Lamiani and discusses the possibility that this might be the same fire as **No. 52** but comes to no conclusion. There is some merit in his argument as the Horti Maiani were adjacent to the Lamiani and perhaps regarded as one (Richardson (199); *LTUR* (3.61)).

Pliny (*HN* 35.51) records a fire that burned a huge portrait of Nero which stood in the Horti Maiani. According to Pliny it was struck by lightning (*accensa fulmine*) and destroyed by fire (*conflagrare*) together with the best part of the Gardens. The location of the Gardens is thought to have been adjacent to the Horti Lamiani on the Esquiline.

**54.    Date:** AD 53 or 54.

**Location:** Horrea Aemiliana.

**Context:** Unknown.

**Sources:** Suetonius (*Claud.* 18); Dio (51. 33.12)?

**Focus of sources:** Claudius' care for the city (Suetonius); the concern shared with her husband by Agrippina, wife of Claudius (Dio).

**Language**: *ardere* (Suetonius); πῦρ (Dio).

**Modern commentators:** The fire of AD 38 raises the issue of the identification of the Horrea Aemiliana. Commentators agree on the location in this instance and identify the Aemiliana in the southern Campus Martius.[130] Werner (18) dates this fire to AD 54 and says that the temple of Felicitas in the Forum Boarium burned in the same fire. Canter (275) agrees that the temple of Felicitas burned.[131] Sablayrolles (787) points out that the Diribitorium from where Claudius directed fire-fighting operations was not in the vicinity of the fire; however, it was near the Porticus Minucia from where the corn dole was distributed. This location may have been chosen to reduce panic among the people. *LTUR* (2.245) notes that it is possible to locate the temple of Felicitas in the Velabrum, 'surrounded by the Forum Boarium' but makes no reference to it burning at this time.

In AD 53 or 54 a second fire occurred in the Horrea Aemiliana.[132] Suetonius (*Claud*. 18) writes of Claudius' administrative qualities and the fact that he stayed for two nights in the Diribitorium as he was concerned about a stubborn fire in the Horrea Aemiliana. Suetonius uses the verb *ardere* which always indicates destruction by fire in Livy, but his emphasis is on the character of his subject and not the fire itself. However, if Claudius did remain there for two nights the fire must have been substantial and the use of *ardere* consistent with that.

This is probably the same fire to which Dio (51. 33. 12) refers when describing how Agrippina accompanied Claudius as a fire was consuming the city; he uses the noun πῦρ. If this is the same fire then he is indeed describing a very serious fire with potentially dangerous consequences for civil disorder.

**55.** **Date:** AD 49? Reign of Claudius.

**Location:** The temple of Salus on the Quirinal.

**Context:** Unknown.

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[130] Rubin 2004, 94.
[131] Only Werner and Canter include the temple of Felicitas in this fire. See below for fire **No. 56** when *LTUR* (2.245) puts the burning of the temple of Felicitas in the reign of Claudius.
[132] The previous fire was in AD 38.

**Source:** Pliny (*HN* 35.19)

**Focus of source:** Loss of work of art.

**Language**: *exurere.*

**Modern commentators:** Werner (18) and Rubin (95) list this fire; neither Canter nor Sablayrolles mentions it. Platner and Ashby (462), *LTUR* (4, 229), Marwood (3) and Richardson (341) all note that Pliny informs us that both painting and temple were destroyed by fire in the reign of Claudius.

A second fire occurred in the reign of Claudius but the year is unproven. Pliny (*HN* 35.19) only tells us that a painting by Fabius Pictor perished when the temple of Salus on the Quirinal burned down.[133] He uses the verb *exurere* and, as we have no corroborative evidence as to the severity of this fire, it is speculative to declare that the prefix means it was burned down. Platner and Ashby say it 'burned' and was later restored but give no indication of the extent. Marwood is of the view that both painting and temple were destroyed by fire and takes *exurere* as *burnt down*.[134] Unless there is evidence to the contrary, a translator must accept 'burned down.'

**56.**     **Date:** AD 50? Reign of Claudius.

**Location:** The temple of Felicitas, location uncertain.

**Context:** Unknown.

**Source:** Pliny (*HN* 34. 69)

**Focus of source:** Loss of work of art.

**Language**: *incendio cremata*.

**Modern commentators:** Canter (275) believes that this was not a separate fire from the second last one (**No. 54**). Platner and Ashby (207) say there are no details regarding the site of the temple but that it lay in the Velabrum on the line of triumphal processions; they add that it was burned early in the reign of Claudius and not rebuilt.  Richardson (150) agrees and says that it was in front of this temple that the axle of Caesar's chariot broke during his

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[133] The temple of Salus was struck by lightning in 275 BC, 206 BC and 166 BC.
[134] Marwood 1988, 3.

triumphal procession in 46 BC. *LTUR* (2.245) notes that it is possible to locate the temple of Felicitas in the Velabrum.

Pliny (*HN* 39. 69) writes of what is probably another fire in the reign of Claudius in reference to the destruction of a statue of Venus sculpted by Praxiteles. He says the temple of Felicitas was burned down (*incendio cremata*) and the work of Praxiteles was destroyed. Given that the temple was not rebuilt and that a new site was found for Felicitas it is likely that the simplex *cremata* means it was burned beyond easy restoration. It is not clear if these are indeed separate fires in the reign of Claudius.

**57.    Date:** AD 62.

**Location:** The Gymnasium Neronis in the Campus Martius.

**Context:** Lightning strike.

**Source:** Tacitus (*Ann*. 15. 22. 2).

**Focus of source:** The melting of the statue of Nero.

**Language**: *ictu fulminibus, conflagrare*.

**Modern commentators:** Werner (19), Sablayrolles (788) and Rubin (97) list this fire. Canter does not. Platner and Ashby (249) suggest that the Gymnasium was near or connected to the Thermae Neronis near the Pantheon. Richardson (183) is definite about the location as part of Thermae Neronis, as evidenced by statue of Nero. *LTUR* (2.374) says the Gymnasium, part of the Thermae burned in this fire.

Tacitus (*Ann*. 15. 22. 2) refers to the burning of the Gymnasium Neronis in the Campus Martius due to being *ictu fulminibus* and uses the verb *conflagrare*. The fire must have been severe if, as he writes, as a bronze statue of Nero melted. It is difficult to judge as he says it was reduced *ad informe aes* (to ugly or misshapen bronze) – a pejorative adjective aligned with Tacitus' view of Nero.

**58.    Date:** AD 62.

**Location:** Ships on the Tiber.

**Context:** Accidental burning of ships and loss of another 200 ships in a storm at Portus.

**Source:** Tacitus (*Ann.* 15. 18. 8).

**Focus of source:** The retention of the price of grain.

**Language**: *conflagrare.*

**Modern commentators:** Neither Werner nor Canter lists this event.  Sablayrolles (788) and Rubin (96) describe the fire in detail and note the vulnerability of corn to combustion.

In that same year (AD 62) Tacitus (*Ann.* 15.18.8) records an accidental fire (*fortuitus ignis*) destroying 100 grain ships on the Tiber.  He again uses *conflagrare*. This was a very serious event as 200 more ships had lost their cargo of grain in a violent storm at Portus and would have led to a shortage of grain in Rome.  It is probably safe to conclude that *conflagrare* refers to complete loss. However, Tacitus' focus is on the fact that the price of grain was not increased.

**59.    Date: AD 64**

**Location:** Regions II, III, IV, VII, VIII, IX, X, XI, XII, XIII.

**Context:** Accidental outbreak of catastrophic fire.

**Focus of sources:** Catastrophic fire (Tacitus, Suetonius, Dio); incrimination of Nero (Suetonius, Dio, Hieronymus, Orosius); Arson? (all sources).

**Sources:** Tacitus (*Ann.* 15. 38 – 43); Suetonius (*Ner.* 38.); Dio (*Epitome,* 62. 16-18);

*CIL* VI 826, 30837; Hieronymus (*an. 64*); Orosius 7. 7. 4 - 6

**Language:** *clades*, *ignis*, *flamma*, *incendium*,  *flagrans urbis*, *semusta* (Tacitus); *incendere*, *incendium* , *flamma, saevire* (Suetonius); *incendium, ardere* (Arae); *incendere*, *ardere* (Hieron.); *incendium, flamma, incendere, ardere* (Orosius); πῦρ, ἐρῆμος (destroyed, laid waste), φλέγω ( to set fire to) ὑποπίμπρημι (to set fire to),  καίω, ἐμπίμπρημι (to burn), καταπίμπρημι (to burn to ashes), ἐκκαίω ( to burn out) (Dio).

**Modern commentators:** All modern commentators deal with this fire at length and a very great body of work exists analysing the source, the path, the extent and the aftermath of the fire. Werner (19 - 21) discusses the sources and the manner in which the blame falls increasingly on Nero from Tacitus through Suetonius to Dio. Canter (276) speaks of doubtless exaggeration in the sources of all that remained in the aftermath of the fire. Sablayrolles (788 – 793) discusses this fire which 'has caught the imagination of the ancients as much as moderns' but which is also highly controversial and which has been skewed by the fixation on the origin and aftermath of the fire (Chapter 3, 133-135; Chapter 8, 242-246).

This is the most notorious of the fires of ancient Rome. The bias against Nero and his persistent portrayal as an arsonist makes our literary sources suspect but we do know that this was a terrible fire and, in theory, could be used to test any interpretation of the language of fire used by the three main sources, Tacitus, Suetonius and Dio.[135] But in reality there existed only so many words for fire and there is not that much discrimination between them. It is the narrative that conveys the movement, power and effect of the fire. Tacitus is at his highest powers of descriptive writing as he conveys the swift, destructive movement of the fire, the horror of it all, the pitiful state of the people, the confusion. He personifies the fire as a sweeping enemy force and uses the vocabulary of siege and devastation while using the ordinary vocabulary of fire.

Tacitus (*Ann.* 15. 38 – 43) opens his description with the word *clades* and moves on to use *ignis*, *flamma*, and *incendium* multiple times; he speaks of the *flagrans urbs* and *semusta*. Suetonius (*Ner.* 38.) accuses Nero of setting fire to the city using relatively 'tame' words: *incendere*, *incendium* and *flamma*. The ferocity of the fire is emphasised by *saevitum est*.

Dio also uses the vocabulary at his disposal, words which he has used before for far less dramatic events such as καίω and ἐμπίμπρημι.

The altars erected by Domitian *incendiorum arcendorum causa* thought to mark the spots where the Great Fire finally halted but now reinterpreted use *incendium* and *ardere*.[136]

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[135] Griffin 1982, 129 sets out a persuasive argument on the bias created by the strong hostility felt toward the Domus Aurea among the main literary sources. See also Elsner 1994. Note that we are relying on an *epitome* of Dio as one of our main sources for the fire of AD 64.

[136] *CIL* VI 826, 30837. See Chapter 3, 135-6 for a discussion on the purpose of these altars. *LTUR* (1. 76) says we know little about the number of them and about the locations. Darwall-Smith 1996; Cline 2009; Closs 2016.

It is undisputed that this was a catastrophic fire and close reading of the language does not add anything to our understanding of the fire *per se*.

While Tacitus (15.40) provides us with a vivid description of the outbreak, progress, extent and the destruction caused by the fire he does not specify the exact regions affected. Modern scholars agree that only four (I, V, VI, XIV) of the 14 regions remained intact, three regions were badly burnt (III, IV and X) and the remaining seven regions were severely damaged (Chapter 3, 133-134; **Fig. 14**).[137] The fire started in shops beside the Circus Maximus, spread into the area of the Forum Boarium and moved onto the Aventine and the Palatine; it stopped at the foot of the Esquiline mainly due to a fire-break created by demolishing a wide area of housing including the only part of the *Domus Transitoria* which remained unaffected by the fire. The oldest and most populous parts of the city were completely burned. Tacitus (15.41) writes of the countless *domus* and *insulae* destroyed. This is one of the few occasions when the dwelling places of the non-élite are mentioned in the context of fires. It is also unusual in that Tacitus describes the pitiful population.


**60.     Date:** AD 68?

**Location:** The temple of Augustus on the Palatine.

**Context of fire:** Lightning.

**Sources:** Suetonius (*Galb*. 1); Pliny (*HN* 12.94)?

**Focus of sources:** Portents surrounding the end of the Julio-Claudian line (Suetonius); the importance of cinnamon (Pliny).

**Language**: *tacta de caelo* (Suetonius); *incendio consumptum* (Pliny).


**Modern commentators:** There is disagreement about the date of this fire, uncertainty about the location of the temple of Augustus and debate whether two separate fires are involved. Werner (23) and Sablayrolles (793) give the date as 68 AD; Rubin (149) puts it as either 67 or 68 which is a reasonable position given that Suetonius says it was in the last year of Nero's reign. Platner and Ashby (62) suggest that the *aedes Caesarum* may be identified with this

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[137] Scholars differ on the regions worst affected: Canter 1932, Grant 1970, Griffin 1982, Hibbert 1985, Newbold 1974, Sablayrolles 1996 all discuss the possibilities and the final upshot is that regions III, IV and X are the most likely to have been worst affected.

temple of Augustus and say it was destroyed by fire at some time before AD 79; Richardson (41) repeats this possibility but regards the location of the *aedes Augusti* as one of the thorniest problems in Roman topography. Sablayrolles (793) and Rubin (149) are not convinced that the building can be properly identified. Platner and Ashby and Sablayrolles believe that the fires cited by Suetonius and by Pliny are one and the same. But it is difficult to accept that Suetonius would refer falling statues while Pliny writes that the temple was *consumptum*. It is more likely that they were two separate events, one of which destroyed the temple. *LTUR* (1.143) reckons that the *aedes Augusti* founded by Livia burned at an unknown date between AD 42 and 79 while the fire which struck the *aedes Caesaris* – a different building – might be a separate event.


Among the many portents cited by Suetonius marking the manner in which the Julian line ended with Nero, he notes (*Galb.* 1) that in Nero's last year (AD 67/68) the temple of the Caesars (*aedes Caesarum*) was struck by lightning (*tacta de caelo*); he does not indicate that the lightning strike was followed by a fire, but rather by the collapse of all the statues on the roof. While discussing the properties of the spice cinnamon Pliny (*HN* 12.94) writes that the temple was *incendio consumptum* but is unclear about the date. The use of the compound *consumptum* does probably mean that the temple was destroyed.


**61.    Date: AD 69.**

**Location:** The temple of Jupiter Capitolinus.
**Context of fire:** Civil unrest and arson during fighting between the Vitellians and Flavians.

**Sources:** Tacitus (*Hist.* 1.2; 3.72); Suetonius (*Dom.* 1.2; *Vit.* 15); Dio (54.17.3); Aurelius Victor (*Caes.* 8.5); Hieronymus (*ab Abr.* 2285); Orosius (7.8.7).

**Focus of sources:** Shameful destruction of revered site (Tacitus); behaviour of Vitellius (Suetonius, Dio, Orosius); destruction of the temple in fighting (Aurelius Victor, Hieronymus).

**Language**: *incensio, incendiis vastata, consumptis incenso; exscindere*, *ardere*, *flagrare, cremare* (Tacitus); *incendium, succendere, ardere* (Suetonius); πῦρ (Dio); *cremare* (Aurelius Victor); *incensus* (Hieronymus); *succendere*, *flamma* (Orosius).

**Modern commentators:** This fire, and its symbolic importance, is discussed by Werner (28), Sablayrolles (794), and Rubin (141); Canter references it briefly. Richardson (223) points out that it was burned at this time and restored on the foundations and to the plan of its predecessors (Tac. *Hist*. 4.53). *LTUR* (5.17) indicates that the Tabularium, on the slope of the Capitoline, was burned in this event.

In AD 69 the temple of Jupiter burned when Vitellius attacked Sabinus on the Capitol. Tacitus (*Hist.* 1.2) refers to the destruction of ancient shrines by the hands of the citizens themselves using the phrases *incendiis vastata* and *consumptis incenso*. While this is a clear description of serious destruction, the question arises whether Tacitus is actually writing about the impiety of citizens destroying such an important structure.  Tacitus (*Hist.* 3.72) also bemoans the most foul (*foedissimus*) nature of the firing of the Capitol in the civil wars of 83 BC when describing similar impiety by the Vitellians in 69 AD.  In this passage he uses the verbs *exscindere*, *ardere* which generally indicate complete destruction.

Suetonius (*Vit*. 15) refers to this same event focussing on how Vitellius feasted as he watched the blaze and his subsequent repentance; he uses the noun *incendium* and the verb *succendere.*

The fire of AD 69 is also recorded in Hieronymus (*ab Abr*. 2285) where it is simply stated that the temple of Jupiter at Rome burned (*Capitolium Romae incensum*).  This is an example of the difference in the nature of the writing of fire and in the purpose of the different writers over the passage of time.

The fact that the temple was rebuilt by Vespasian may indicate that it was actually burned down.[138] But given the symbolic importance of this building and of what was effectively arson by Rome's own citizens it is impossible to know the extent of the destruction.  Also Vespasian embarked on the restoration of many structures in a city which had been damaged by civil war (Chapter 8, 246-248).

During the reign of Vespasian (AD 69 -79) we have no recorded fires but we do have references to restoration of buildings damaged by fire.  For example, Suetonius (*Vesp*. 8.5) describes the restoration of buildings in a city unsightly (*deforma*) from earlier fires

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[138] Tacitus (*Hist*. 4. 4. 9); Suetonius (*Vesp*. 8); Dio (65.7.10).

(*incendia*) and Aurelius Victor (*Caes*. 8.8) writes that Vespasian restored the Capitol, the temple of Peace and the monuments of the Claudii which had been disfigured (*deforma*) by earlier fire (*veteribus incendiis*). This reference to the temple of Peace is problematic: its construction was begun by Vespasian in AD 71 and dedicated in AD 75 and cannot have been among structures which were victims of earlier fires. The only possible explanation is that Aurelius Victor has confused restoration and construction *de novo*.

## 62. Date: AD 80.

**Location:** Campus Martius and the Capitol.

**Context of fire:** Divine origin.

**Sources:** Dio (*Epit.* 66.24); Suetonius (*Dom*.5.1, 5.7, 20; *Tit*. 8.3); Hieronymus (*ab Abr*. 2096); Orosius (7.9.14).

**Focus of sources:** Catastrophic fire of divine origin (Dio); catastrophic fire, portents and solicitous nature of Titus; restoration by Domitian (Suetonius); portents presaging the death of Titus.

**Language**: πῦρ, κατακαίω (Dio); *ardere* (Suetonius); *concremare, incendium* (Hieron.); *concremare, incendium, flamma* (Orosius).

**Modern commentators:** Werner (30) regards this as equal to the fire of 64, while Canter (276) and Sablayrolles (794) say it is second in importance only to 64; Sablayrolles comments on the remarkable list of buildings furnished by Dio while Rubin (152) points out that a great number of additional buildings, both public and private must have burned. *LTUR* (1.223) says that the whole plain of the Campus Martius within the bend of the Tiber lent itself to be densely populated and repeats the list of buildings provided by Tacitus while adding the stage of the Theatre of Pompey (5.37).[139]

At the beginning of AD 80 a fire broke out that lasted three days and three nights in Rome. There is no doubt about the severity of this fire and the extent of the destruction. According

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[139] In AD 397 Honorius and Arcadius were forced to legislate against the erection of *casae seu tuguria* (huts or shanty structures) in the Campus Martius (*Codex Theod*. 14.14); this indicates the density of population in the Campus. See Jacobs and Conlin 2014 for the development of building on the Campus Martius.

to Dio (66.24) the fire destroyed a large section of the city; using the common noun πῦρ he lists the buildings destroyed in this catastrophic fire while adding κατακαίω (to burn down). He lists the temple of Serapis, the temple of Isis, the Saepta, the temple of Neptune, the Baths of Agrippa, the Pantheon, the Diribitorium, the theatre of Balbus, the stage building of Pompey's theatre, the Octavian buildings together with their books, and the temple of Jupiter Capitolinus with the surrounding temples. It appears to have started in the Campus Martius, moved southerly, and must have destroyed many buildings other than the public ones cited by Dio (Chapter 8, 248-9). For example, Statius (*Silv.* 1.1.35) seems to indicate that the fire reached the Palatine.[140]

Describing the restoration by Domitian of many buildings which had been destroyed in the fire Suetonius adds to our knowledge of the extent of the fire. He writes (*Dom.* 5.1) that among those that had been destroyed (*incendio absumpta*) was the Capitolium which had burned (*arserat*). Once more the meaning of *ardere* as burnt down is supported by *absumpta*.

In a reference to the achievements of Domitian, Suetonius (*Dom.* 20) adds his restoration of libraries which had been destroyed by fire (*incendio absumptas*). The verbs indicate serious destruction and may refer to the libraries destroyed in the fire of 80.

This fire is also recorded by Hieronymus (*ab Abr.* 2096) stating that many buildings were burned to the ground (*concremantur*) by the fire (*incendio*). This may support the view that the prefix can be used to describe a fire which is above the ordinary but it is unsound to rely upon the language of Hieronymus to ascertain the extent of fires. There are occasions where significant fires are recorded simply by *incensus*.[141] In general, Hieronymus records are lists without elaboration.

Unlike the fire of AD 64 we do not have Tacitus as a source; nor do we have a Nero to blame, or Christians to mourn. But this fire appears to be second only to AD 64 in terms of severity. The fire prompted Titus simply to remark 'I am ruined' (Suet. *Tit.* 8) (Chapter 8, 257).[142]

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[140] This is a reference to an equestrian statue of Domitian gazing upon the ashes of the Domus Aureus. The number of temples destroyed prompts Dio to say that the fire may have been of divine origin (66.24.2).

[141] Hieronymus uses *incensus* for fires we know to be serious in 241 BC, AD 21/22, AD 69, AD 217. It is also used for the fires of AD 247 and AD 252 when it is not possible to say definitely that the fires were serious.

[142] Suetonius (*Tit.* 8): … *urbis incendio nihil publice nisi periisse testatus.*

**63.** **Date:** Reign of Domitian (81 – 96).

**Location:** Circus Maximus.

**Context of fire:** Unknown.

**Source:** Suetonius (*Dom*. 5.1; 5.7; 20).

**Focus of source:** Restoration.

**Language**: *incendio absumpta, ardere*, *deustis*.

**Modern commentators:** Neither Werner nor Canter lists this fire. Sablayrolles (795) suggests that it occurred sometime before AD 100 while Rubin (165) dates it to *c*.100; both use Suetonius as the source. There is uncertainty about the extent of the fire among topographers: Platner and Ashby (117) say that in the reign of Domitian, both long sides of the Circus Maximus were injured by fire but that the extent is not known. Richardson (85) says the Circus 'burned' and 'was repaired' but does not specify date or extent. *LTUR* (1.274) refers to a fire in the reign of Domitian which necessitated restoration of the Circus. Suetonius (*Dom*.5.7) refers to a fire in which both sides of the Circus Maximus were previously destroyed by fire (*deustis*). This may have occurred in the fire of 80 but it is not clear.

**64.** **Date:** AD 96.

**Location:** The temple of Gens Flavia on the Quirinal.

**Context of fire:** Lightning strike.

**Source:** Suetonius (*Dom*. 15).

**Focus of source:** Portents surrounding the bad behaviour of Domitian.

**Language**: *tactum de caelo*.

**Modern commentators:** No commentator includes this event as a fire. Platner and Ashby (247), Richardson (181) and *LTUR* (2.368) say the temple was struck by lightning but do not refer to an ensuing fire.

In AD 96 the temple of Gens Flavia on the Quirinal was struck by lightning. The source is Suetonius (*Dom*. 15) who uses the familiar phrase *tactum de caelo*. There is no evidence of

fire and the extent of damage, if any, is unknown as there is no record of restoration but of probable enlargement in 268 - 270 AD.

**65.** **Date:** Reign of Nerva (AD 96 – 98).

**Location:** Uncertain.  Theatre of Pompey? Theatre of Balbus?

**Context of fire:** Unknown.

**Sources:** Aurelius Victor (*Caes*.13.12); Juvenal (3.197 - 202).

**Focus of sources:** List of disasters (Aurelius Victor); vulnerability of Rome to fire (Juvenal).

**Language**: *incendia* (Aurelius); *incendia*, *ardere, fumare* (Juvenal).

**Modern commentators:** Werner (34) accepts Aurelius Victor but says that there is no way of knowing the dates of the fires. He suggests that the theatre of Pompey was burned down and the theatre of Balbus damaged by fire during the reign of Nerva.  He interprets this from Martial (10.51.11). No other modern scholar corroborates this view, nor is there reference to these fires affecting the theatres of Balbus or Pompey in any of the main topographical works.

Aurelius Victor (*Caes*.13.12) lists disasters which occurred during Nerva's reign: floods, earthquakes, plague, famine and fires (*incendia*). Juvenal's description of the dangers of fires (3.197 - 202) in which he uses the words *incendia*, *ardere* and *fumare* may be contemporaneous with Nerva's reign.[143]

**66.** **Date:** AD 104.

**Location:** Domus Aurea; Pantheon?

**Context of the fire:** Lightning strike?

**Sources:** Hieronymus (*ab Abr*. 2120); Orosius (7.12.4).

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[143] This is a general reference to the vulnerability of Rome to fire, and not to a specific fire. See Chapter 6, 206 for a brief discussion of the reliability of Juvenal as a source in this study.

**Focus of sources:** Disapproval of Nero, divine justice after the persecution of Christians (Orosius).

**Language**: *incendio conflagravit* (Hieronymus); *conflagravit incendio, fulmine concrematum* (Orosius).

**Modern commentators:** Platner and Ashby (170), Sablayrolles (796), Rubin (167), Richardson (121) and *LTUR* (2.49 - 64) refer to the manner in which Trajan used the demolished Domus to create a platform on which to build his Thermae and by so doing preserved extensive remains of the lower storey.


In AD 104 the remaining structures of the Domus Aurea burned down. Hieronymus (*ab Abr.* 2120) states *incendio conflagravit*. Orosius (7.12.4) uses the same words, *conflagravit incendio*. It is likely that the description, and the use of *conflagrare*, implies significant destruction especially given the implication by Orosius that the buildings were being punished for the profligacy of Nero. This is probably a reliable description and not one designed simply to criticise Nero; that view is supported by modern commentators' assertion that the Domus was covered over and filled in by Trajan (Chapter 8, 252). Orosius continues to describe other disasters at the same time, including a reference to the Pantheon being burnt by a lightning strike (*fulmine concrematum*) but he may be referring to the event of AD 110.


**67.    Date:** AD 110.

**Location:** Pantheon.

**Context of the fire:** Lightning Strike.

**Sources:** Orosius (7.12.5); Hieronymus (*ab Abr.* 2126).

**Focus of sources:** List of disasters (Orosius); record of event (Hieronymus).

**Language**: *fulmine concrematum* (Orosius); *fulmine concrematum* (Hieronymus).

**Modern commentators:** Sablayrolles (796) believes that the Saepta Julia, the Basilica of Neptune, the Baths of Agrippa and the Forum of Augustus probably burned in the same event. His view is based on the statement in *SHA* (*Hadr*.19. 10) that Hadrian restored those buildings as well as completely rebuilding the Pantheon. Rubin (169) agrees with Sablayrolles and writes of 'circumstantial evidence' of restoration that the fire was more

extensive than reported in the sources – both of which are noted for their brevity. Among the 'circumstantial evidence' he cites the topographical proximity of the list of buildings restored by Hadrian. Richardson says the Pantheon is associated topographically with the Basilica Neptuni (54), Saepta (340) and and Baths of Agrippa (386) but does not suggest that any of those structures burned at the same time as the Pantheon although all were restored by Hadrian. *LTUR* (4.54) says that, under Trajan, the Pantheon was struck by lightning and destroyed but points only to the restoration of the Saepta Julia by Hadrian without any reference to a fire (4.228); nor does *LTUR* list any fire for the Basilica Neptuni at this time.

Orosius (7.12.5) wrote that among other calamitous events throughout the empire in this year, the Pantheon was *fulmine concrematum*. This is corroborated by Hieronymus (*ab Abr.* 2126) using the same expression, *Pantheon Romae fulmine concrematum*.[144] There is no reason to doubt the import of *concrematum* and not to accept that the Pantheon was destroyed. The usual phrase *fulmine ictu* is not used and the use of *concrematus* indicates a clear difference. The only question that remains is whether the sources are serving us badly and that many more buildings burned in this fire.

**68.    Date:** Reign of Hadrian (117 - 138).

**Location:** Forum Holitorium (temples of Spes, Janus and Juno Sospita? Forum Boarium: temples of Mater Matuta and Fortuna?).
**Context of fire:** Unknown.

**Source:** *CIL* VI 979.

**Focus of source:** Restoration.

**Language**: *incendium* [*consumptas*].

**Modern commentators:** Werner dates this as AD 114 but in fact the date is unclear; neither Sablayrolles (797) nor Rubin (175) can give a specific date. Sablayrolles suggests that a number of temples in the vicinity of the Forum Holitorium may also have burned given that they were later restored by Hadrian (*ie* the temples of Spes, Janus and Juno Sospita). Rubin

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[144] Orosius uses the same phrase as Hieronymus but they were writing around the same time as each other and, more importantly, using the same sources.

(175) goes further and suggests that the nearby temples of Mater Matuta and Fortuna (in *Area Sacra di Sant'Ombono*) were also affected as brick-stamp evidence shows the latest restoration of those temples to be Hadrianic. Coarelli (311) points out the wealth of archaeological evidence in the *Area*, including the Hadrianic brick stamps. He also confirms that the surviving restored podiums of the temples of Janus and Juno Sospita are Hadrianic. Richardson (165) makes no reference to a fire at this time. *LTUR* (3.91; 3.128; 2.281) writes of a fire under Hadrian which affected the Forum Holitorium and the Forum Boarium as evidenced by restorations recorded by *CIL* VI 979. *LTUR* names the temples of Janus, Juno Sospita, Fortuna, Mater Matuta as restored, does not mention a specific fire but does note the Hadrianic brick stamps in the latest restoration of Mater Matuta.


An inscription (*CIL* VI 979) found near the church of *San Nicola in Carcere* refers to the restoration of a number of temples in the Forum Holitorium which had burned during the reign of Hadrian. The forum was notable for the number of temples and porticoes by which it was enclosed and it is reasonable to assume that many would have been damaged in this fire. The fragment of inscription refers to the restoration of *has aedes incendio [consumptas]* (these temples which were [destroyed] by fire). It is safe to accept that *consumptas*, although supplied by later epigraphists, can be taken to mean that significant destruction was involved. The contiguous temples of Spes, Juno and Juno Sospita probably burned; this is corroborated by the fact that they lay beneath the church of San Nicola where the inscription was found. Archaeological evidence suggests that the temples of Mater Matuta and Fortuna also burned in this fire, as shown by Coarelli, Rubin and *LTUR*. In this instance there is no literary evidence: epigraphy and archaeology provide the information.


**69.    Date:** Reign of Antoninus Pius (AD 138 – 161).

**Location:** The Cispian Hill.

**Context of fire:** Portents and disastrous events.

**Sources:** *SHA* (*Ant*. 9); Aulus Gellius (*NA* 15.1.2)?

**Focus of sources:** Portents (*SHA*); the risks of urban property investment (Gellius).

**Language**: *incendium, absumsit* (SHA); *ignis*, *flagrare*, *vasto incendio* (Gellius).

**Modern commentators:** This fire is listed by Werner (36), Sablayrolles (797) and Rubin (177). Sablayrolles regards the fire recorded by *SHA* (*Vit. Ant.* 9) in which 340 *insulae* and *domus*, perished as a separate fire during the reign of Antoninus Pius; Rubin suggests that only one fire may be involved which is a reasonable argument given the reference to residential buildings by Aulus Gellius.

During the reign of Antoninus Pius a fire (*incendium*) occurred in Rome which destroyed (*absumsit*) 340 *insulae vel domus* (*SHA Ant*. 9) and is one of the few mentions of domestic buildings.[145] The fire is one of a number of disasters listed. Aulus Gellius (*NA* 15.1.2) probably refers to the same fire when he describes a block of houses (*insula*) and all its neighbouring buildings ablaze on the Cispian Hill. The words used are *ignis*, *flagrare* and *vasto incendio*. This was a significant fire, in spite of *flagrare* and not *conflagrare*, not only because of the description by Gellius of a block built high with many stories and the fire spreading to other buildings, but also because it led to a discussion between Gellius and his companions about the risks of property investment due to fire in Rome. The friends discuss the financial returns on urban versus rural property and while the former are greater the dangers are far in excess of those on rural property.[146] A discussion about the use of *alum* smeared on wood as a fire retarding substance also ensued.[147]

In this discussion Gellius uses the verb *ardere* to indicate the loss of property through fire. But it is in the context of the loss of investment that the demise of dwellings is noted. The silence around loss of life or homes of tenants is palpable.

**70.    Date:** Reign of Marcus Aurelius? AD 161 – 180.

**Location:** Graecostadium.

**Context of fire:** Unknown.

**Source:** *SHA* (*Ant*. 8.2).

**Focus of source:** Restoration.

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[145] There are references to domestic buildings being burned down in the fires of 203 BC, 210, BC, 41 BC, AD 27 and AD 64.

[146] The discussion presents echoes of the fire of AD 27.

[147] Alumen *(alum)* likely refers to potash alum, which is a crystalline powder with astringent and fireproof qualities; Rubin 2004, 177.

**Language**: *incendium*.

**Modern commentators:** Sablayrolles (797) and Rubin (178) mention this fire. The location of the Graecostadium is subject to scholarly debate. Sablayrolles says it was probably to the south of the Basilica Iulia. Platner and Ashby (248) conclude, from evidence of the Marble Plan and the *Notitia* and *Curiosum*, that it lay to the south of the Forum. Richardson (182) points to a discrepancy and says it was listed in the *Notitia* between the 'Vicus Iugarius et Unguentarius et Porticus Margaritaria' while the *Curiosum* puts it between the Vicus Iugarius and the Basilica Iulia. Coarelli (74) refers to the fragment of *FUR* which identifies an area in the Forum as the Graecostadium.[148] The fragment (**Fig. 1**) situates the building with great probability behind the Basilica Iulia and between the Vicus Iugarius and the Vicus Tuscus and this is accepted by *LTUR* (2. 372). The Graecostadium contained the *templum novum Divi Augusti*, which is probably the temple depicted in this fragment (*LTUR* 1. 145 -46; 2. 372; Richardson, 182). *LTUR* (4.337) suggests that the temple of Spes may also have burned in this fire as it is mentioned (*CIL* VI 979) as restored following a fire at that time.

SHA (*Ant*. 8.2) comments that Antoninus Pius restored the Graecostadium, south of the Forum, after it had burned (*post incendium*).


**71.    Date:** AD 188 or 189.

**Location:** Temple of Jupiter Capitolinus; the Capitol, the library (location uncertain) and nearby buildings.
**Context:** Lightning strike.

**Sources:** Hieronymus (*ab Abr*. 2205); Orosius (7.16.3).

**Focus of sources:** Disapproval of Commodus (Orosius).

**Language:** *fulmine ictum*, *inflammatio*, *concremare* (Hieronymus); *inflammatio, rapaci turbine, concremare* (Orosius).

**Modern commentators:** Werner and Canter date this fire at AD 189.  Sablayrolles and Rubin (179) say AD 188 as Hieronymus lists it in that year. Rubin suggests that the library

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[148] The fragment itself is lost but is reproduced in Renaissance drawing *Cod. Vat. Lat*. 3439 available on https://digi.vatlib.it/view/MSS_Vat.lat.

mentioned by Hieronymus was probably that housed in the Porticus Octaviae as it is known to have burned before AD 203 because an inscription (*CIL* VI 1034) on the *propylaeum* records restoration by Septimius Severus in 203 after a fire.[149] Sablayrolles (798) differs and regards the burning of the Porticus Octaviae as a separate fire which occurred a little before 203. Richardson (317) says the Porticus burned and was restored in AD 203.

During the reign of Commodus, there were two recorded fires. The first was in AD 188 when lightning struck (*fulmine ictum*) the Capitol and the ensuing fire destroyed (*ruit*) the library and nearby buildings (Hieron. *ab Abr.* 2205). This fire of 188 and the following of 191 are recorded by Orosius (7.16.3) in the context of punishment inflicted on the city as a result of Commodus' depravity and excesses. In the case of this fire, Orosius uses the same vocabulary and phrases as Hieronymus (*fulmine ictum*, *inflammatio*, *concremare*). This raises the question once more of the influence of one source upon another but it is not possible to be definitive.

For the first time the word *inflammatio* is used, together with the verb *concremata,* and by both sources.[150] The lightning strike definitely resulted in a fire and it was probably the combination of the force of lightning and subsequent fire which destroyed the buildings. There is no further information from the literary sources about any other buildings which may have burned. If, as Rubin suggests, the Porticus Octaviae also burned in this fire, then a number of other buildings would also have burned on the path from the Capitol to the Porticus Octaviae in the Campus Martius. There is no evidence on which to base Rubin's belief; in fact Sablayrolles regards the burning of the Porticus as a completely separate fire which took place a little before AD 203.

**72.    Date:** AD 191.

**Location:** The temple of Vesta and the 'larger part of the city' (Hieronymus).

**Context:** Lightning strike.

**Sources:** Hieronymus (*ab Abr.* 2208); Orosius (7.16.3); Dio (*Epit.* 73.24); Herodian (1.14.2-6).

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[149] Richardson 1976.
[150] The noun *inflammatio*, usually 'inflamation' in the medical sense, is used only by Orosius and Hieronymus in the context of fire.

**Focus of sources:** Disapproval of Commodus (Orosius); wrath of the gods (Orosius, Herodian); portents surrounding the imminent death of Commodus (Dio).

**Language**: *incendium* (Hieronymus); *fulmine ictum*, *inflammatio, concremare* (Orosius); πῦρ, κατακαίω (Dio); καταφλέγω, πῦρ (Herodian).

**Modern commentators:** Werner (37) dates this at AD 192. Platner and Ashby (262), Canter (272), Sablayrolles (798), Rubin (180) and *LTUR* (5.141) all agree on AD 191. Scholarly discussion surrounds the extent of the fire and location of buildings burned. Lanciani says it began in a house near the temple of Peace after the shock of a slight earthquake.[151] Platner and Ashby refer to the temple of Vesta injured by fire in 191 and also to the burning of the Horrea Piperataria during the reign of Commodus. Sablayrolles says the temple of Peace, part of the Forum and of the Palatine burned. Coarelli (85) says the extant temple of Vesta belongs to the last restoration, undertaken after the fire of 191; Rubin (182) points out that not only is this fire well attested by the literary sources but there is much the material record shown by the ensuing Severan building programme. *LTUR* (4.192) discusses the uncertainty surrounding whether the Regia was also affected by this fire which damaged the temple of Vesta.


The second fire of the reign of Commodus occurred in AD 191 and all accounts point to a devastating fire. Hieronymus (*ab Abr*. 2208) records that the palace and the temple of the Vestals together with the larger part of the city (*plurima Urbis pars*) were levelled to the ground (*solo coaequatur*) by fire (*incendium*).

As in the case of the previous fire, Orosius uses exactly the same words as Hieronymus: *incendium plurimamque Urbis partem solo coaequavit*. It is most unlikely that there is no link between the accounts.

Dio (73.24) describes a fire (πῦρ) in the reign of Commodus which is probably this fire of AD 191. In the context of ominous portents preceding the death of Commodus it began in a private house and spread to the temple of Peace, the temple of Sacra Urbs (Urbis Fanum) and the Horrea Piperataria; he writes that it moved from the Velia to the Palatine destroying the temple of Vesta, it then entered the palace (Atrium Vestae), burned completely (κατακαίω) extensive portions of it and, moving on, nearly destroyed all the state records in the temple of

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[151] Lanciani 1898, 238.

Apollo on the Palatine. (The temple of Vesta and the House of the Vestals was a single complex, Atrium Vestae.)

In the context of natural disastrous events Herodian (1.14.2-6) gives an extensive description of this fire and suggests that an earthquake or lightning strike may have started it. He uses the verb καταφλέγω several times and the noun πῦρ. The destruction is emphasised by the prefix κατά. The blame for the destruction of the beautiful buildings lies in the depraved character of Commodus and the disaster was regarded as a portent of worse to come. He describes how many rich people were reduced to poverty by the loss of their precious possessions which they had lodged in the temple of Peace. By all accounts this was a catastrophic fire which raged for several days and was only finally defeated by the rain, according to Herodian.

## 73.     Date: AD 203

**Location:** Porticus Octaviae; theatre of Pompey?

**Context of fire:** Unknown.

**Focus of records:** Restoration programme.

**Sources:** *CIL* VI 1034; *CIL* VII 1439?

**Language**: *incendio corruptam.*

**Modern commentators:** Werner (41) refers to buildings restored at this time. Platner and Ashby (427) refer to the restoration of the Porticus by Severus and Caracalla after a fire in 203 citing *CIL* VI 1034. Sablayrolles (798) lists this fire but Rubin does not. Richardson (317) says the Porticus Octaviae burned and was restored in AD 203. *LTUR* (4.142) believes that it was burned 'probably in the fire of 191' and was restored and dedicated to Severus in AD 203 (*CIL* VI 1034).

In 203 (or sometime prior) the Portico of Octavia burned (*CIL* VI 1034).[152] The inscription refers to the restoration by Septimius Severus of the Portico which had been *incendio corruptam.*[153] It is unsafe to interpret this word (*corruptam*) to mean that the portico actually burned down as we have no other use with which to compare; it may mean that it was damaged. We also have a reference to the restoration of the theatre of Pompey by Caracalla

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[152] This is the Portico of Octavia (Porticus Octaviae), sister of Augustus.
[153] Sablayrolles 1996, 798 discusses the placing of this fire in AD 203 given that Coarelli 2007, 272 says that the restoration followed the burning of the Portico in AD 191.

(*CIL* VII 1439) which may indicate that it had burned either in his own reign or when he was co-emperor with Septimius Severus (193 - 217).

**74.     Date:** AD 217.

**Location:** The Flavian Amphitheatre.

**Context of fire:** Lightning during the Vulcan Games.

**Sources:** Dio (*Epit.* 79.25. 2-3); Chronographer of 354 (p.118); *SHA* (*Elag.* 17.8); Hieronymus (*ab Abr.* 2234).

**Focus of sources:** Portents and divine disapproval (Dio); restoration (*SHA*); fire (Chronographer of 354).

**Language**: βάλλω (to strike), κεραυνός, καταφλέγω, πυρόω, κατακαίω, σκηπτός, ἐμπίμπρημι (Dio); *ardere* (Chronographer of 354); *exustio* (*SHA*); *incensum* (Hieronymus).

**Modern commentators:** Both Werner (41) and Sablayrolles (799) note that Dio regarded this fire as an indication of divine disapproval. However, Canter (283) says 'the intensity of this fire and the inability of the firemen to extinguish it is in itself an indication of the great quantity of wood used in the building', ignoring Dio's focus on ill omens. It is true that the upper section would have been particularly vulnerable given the quantity of flammable wood, cloth and ropes located there but Canter has missed the central point.  An archaeological analysis is provided by Lancaster which shows the great value of the cross referencing of material and literary evidence where it is available.[154]

On 23 August AD 217 during the Vulcanian Games the Flavian amphitheatre was burned. Dio (79.25. 2-5) has a detailed and loaded description in the context of the destiny of the emperor Macrinus who had not long to live.  He gives a list of prodigies which culminate in the amphitheatre being struck (βάλλω) by lightning (κεραυνός) and the entire upper section and everything in the arena burned down (καταφλέγω).  He says that the entire structure was burned (πυρόω) and reduced to ruins (κατακαίω) and that it could not be used for several years. There can be no doubt about the language Dio is using – it is that of destruction by fire;

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[154] Lancaster 1998, 146.

however, he is indicating that the destruction was confined to the upper section of the theatre. He says that human effort could not prevail against the blaze although every aqueduct was emptied (which has to be regarded as exaggeration) and there was a downpour of rain; his point is that nothing could defeat the divine power of the thunderbolts (σκηπτός) which set the amphitheatre on fire (ἐμπίμπρημι). He adds that there were numerous other fires in the reign of Macrinus. We have no other references to numerous fires at this time and given that Macrinus reigned for only two years it is likely that, although a section of the amphitheatre was definitely destroyed by a serious fire such that it could not be used for several years, Dio is exaggerating the wider impact of the fire. As the fire took place on the day of the Vulcanalia there would have been many bonfires in the city as part of the celebrations.

This is one of the few instances where a literary source can be tested against recent archaeological evidence of fire. Lancaster has investigated the extent of the restoration of the amphitheatre after the fire of 217 and has concluded that the re-building extends down to ground level. She notes that brick stamps of Caracalla (AD 212 - 216) have been found along with traces of ash and melted lead above one of the reconstructed vaults. Her findings are consistent with Dio's account  in that progressively less damage has been found toward ground level and she concludes that, when Dio spoke of the building reduced to ruins, he most likely had in mind that it was no longer functional, as the archaeological evidence indicates that the majority of the building was still standing.

We have three other references to this fire.  The first is the Chronographer of 354 (p.118) where it is stated that the amphitheatre *arsit*. It is with caution that the verb *ardere* can still be accepted as describing actual destruction as late as the Chronographer of 354. The second reference is *SHA* (*Elag*.17.8) where the restoration after burning of the amphitheatre is noted (*post exustionem*).  As with *ardere*, *exurere* has indicated 'completely burned' in earlier writers and although Hieronymus (*ab Abr*. 2234) simply says *incensum*, Dio was probably right in essence in his use of καταφλέγω but only for the upper section of the structure.


**75.**    **Date:** The reign of Macrinus (217 – 218).

**Location:** Imperial property in the city.

**Context of fire:** Unknown.

**Source:** Dio (*Epitome,* 79. 25. 4).

**Focus of source**: Divine disapproval of Macrinus.

**Language***:* ἐμπίμπρημι (I set on fire).

**Modern commentators:** Both Werner (42) and Sablayrolles (799) see Dio's focus as divine disapproval by Vulcan because his games had been interrupted by the previous fire; there is no evidence that this is the case and they may be reading too much into Dio.

Dio (79. 25. 4) says that among the numerous fires in the short reign of Macrinus was one which burned his property, an ill-omen. No other references corroborate this event.


**76.  Date:** Between 222 and 229 during the reign of Severus Alexander (222 – 235).

**Location:** Unknown.

**Context of fire:** Civil unrest; arson?

**Source:** Dio (*Epit.* 80. 21. 4).

**Focus of source**: Fire as weapon and means of control.

**Language**: ἔμπρησις (conflagration).

**Modern commentators:** Neither Werner nor Canter mentions this fire. Sablayrolles (799) and Rubin (194) say that the Praetorians burned some houses and posed a great risk to the entire city.[155]

Dio (80. 21. 4) describes conflict between the Praetorian Guard and the people.   The Praetorians began setting fire to buildings and so the people came to terms with them to prevent their homes being burnt.  He uses ἔμπρησις (conflagration).  In this instance, the import is fire as a means of control and wielding of power and, while the noun is forceful, it is possible that Dio is really alluding to the heinous nature of arson and the threat to the state.


**77.  Date:** AD 238.

**Location:** Unknown.

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[155] Sablayrolles seems to be incorrect in his reference to Dio 80.2.4.

**Context of fire:** Civil unrest; riots.

**Sources:** Herodian (7.12.5-7); *SHA* (*Maxim.* 20.6; *Max. et Balb.* 9.1).

**Focus of sources:** Major fire; conditions in the city (Herodian).

**Language**: πῦρ (Herodian)*; incendere* (*SHA*).

**Modern commentators:** Werner (42) gives the date as 237 and believes that the greater part of the city was burned down in this fire; he concludes that the whole of Region VIII was destroyed.[156] Newbold (860) regards this as a very serious fire. Sablayrolles (799) gives the date as 238 and is hesitant saying that if we have to believe *SHA* then a large part of the city did burn. Rubin (199) raises an interesting point when he says that it was probably private residences burned and not public buildings; he adds that the chronology of the different sources is 'hopelessly confusing.'

A reference occurs in Herodian (7.12.5-7) to a very extensive fire (πῦρ) during the reign of Maximinius Thrax (AD 235-238) probably in 238 as a result of a power struggle between Maximius and Maximinius which created civil unrest where the Praetorians were again opposed to the people. Herodian's description provides an interesting insight into the conditions in the city which engendered fires as well as describing a very extensive conflagration; again, he uses the basic noun πῦρ.[157]

The same fire is recorded in *SHA* (*Maxim.* 20.6) where it is stated that a great part of the city was burned (*magna pars urbis incensa est*); *SHA* (*Max. et Balb.* 9.1) says that a very great part (*maxima pars*) of the city was burned (*incenderetur*). It is difficult to evaluate the gravity of this fire given that the locations are unknown. On the other hand, if this resulted in a very great part of the city being burned, it clearly underlines the difference between the recording process for earlier major conflagrations such as AD 64 and AD 80; it shows an increasing lack of information in the primary sources on what burned. On the other hand, what Herodian provides is an insight into the impact of the fire on the population and the behaviour of looters in its aftermath; many people lost their lives and others were impoverished by the loss of rental income. It is clear from this that many residential buildings were destroyed.

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[156] *Romam maiorem partem incendi concrematam esse*.
[157] Herodian (7.12.5-7): 'So they set fire to the wooden balconies of such houses that possessed them (of which there were a lot in the city). Because the buildings adjoined each other very closely, and a great number of them in a row were made of wood, the fire very easily burned down most of the city.'

**78.**     **Date:** AD 247.

**Location:** The Theatre of Pompey and the nearby Hecatostylon.

**Context of fire:** Unknown.

**Source:** Hieronymus (*ab Abr.* 2263*e*).

**Focus of source:** Record of fire.

**Language**: *incensum.*

**Modern commentators:**   Canter (277), Sablayrolles (799), Rubin (196) record this. Richardson (385) cites *ab Abr.* 2263 that the theatre of Pompey and Hecatostylon burned in 247 but on the other hand he says that the Hecatostylon may have been linked to the Thermae Agrippae rather than the Theatre of Pompey and that 'it is not clear'. *LTUR* (5.37) refers to the restoration of the theatre of Pompey after the fire of 247 while it notes that this is the only literary allusion to the Hecatostylon but that the *FUR* (Fragments 39*ac*) allows it to be placed along the Pompeian complex (3.9) (**Fig. 2**).

Hieronymus (*ab Abr.* 2263 *e*) records the burning (*incensum*) of the Theatre of Pompey and the Hecatostylon in AD 247. We cannot extrapolate any information on the extent of the fire from the reference as *incensum* is commonly used by Hieronymus; it is possible that the fact that it was recorded at all meant that it was burned down. This highlights the decreasing sources as we move into the third and fourth centuries.  It is unlikely that this means there were fewer fires; they are simply not recorded.

**79.**     **Date:** AD 252?

**Location:** Flavian Amphtheatre.

**Context of fire:** Unknown.

**Source:** Hieronymus *ab Abr.* 2268.

**Focus of source:** Record of fire.

**Language**: *incensum.*

**Modern commentators:** The exact date of this event is in doubt.  Werner (43) puts it in the reign of Decius (249-251) Platner and Ashby date it to c.AD 250; Richardson (7) says the theatre was restored in 250 after a fire caused by lightning citing  *ab Abr.* 2268.  However,

that reference is clearly to AD 252. Both Sablayrolles (799) and Rubin (199) agree the date as 252. *LTUR* (1.31) is more circumspect and says that it burned either in 250 or 252.

We read (Hieron. *ab Abr*. 2268) that the amphitheatre in Rome burned (*incensum*). It is not possible to form any view on the extent of this fire. There is no material evidence of it.

**80.** **Date:** The reign of Aurelian (270 – 275).

**Location:** Baths of Caracalla (Thermae Antonianae).

**Context of fire:** Unknown.

**Sources:** Chronographer of 354 (p. 148); *CIL* VI 1173b.

**Focus of sources:** Record of fire (Chronographer of 354); restoration (*CIL*).

**Language**: *ardere* (Chronographer of 354).

**Modern commentators**: Werner (48) states that the Baths burned down. Sablayrolles (799) also believes the Baths were burned but Rubin (200) suggests only the outer area such as the *palaestra* or the portico burned. Platner and Ashby (521) say that 'some porticoes connected with the baths were destroyed or damaged by fire.' Richardson does not refer to this fire. *LTUR* (5.42) cites the Chronographer of 354 that the baths burned but adds that there is no agreement as to whether it was just the portico which burned.

In the reign of Aurelian, the Chronographer of 354 (p. 148) records the burning of the *porticus* of the Baths of Antoninus (Caracalla). Although the verb used is *ardere* it is with caution that one interprets this as meaning that the actual Baths 'burned down'; it is not possible to assess the extent of the damage. The fact that *CIL* VI 1173b refers to the restoration of the Baths by Diocletian and makes no reference to a fire does not help our understanding of the import of the verb *ardere*.[158]

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[158] *CIL* VI 1173b: Florent[issimo]/et piissi[mo]/d (omino) n (ostro) Vale[ntiniano]/maxim[o principi]/(5) semper [Augusto]./C (aius) Ceioniu[s Rufius Volusianus]/v (ir) c (larissimus) prae[ f (ectus) praetorio]/praef (ectus) urb[i iterum vice sacra (rum) ]/iudic (ans) d (evotus) n (umini) [ m (aiestati) q (ue) eius].

**81.    Date:** AD 283.

**Location:** The Theatre of Pompey.

**Context of fire:** Accidental burning of stage machinery.

**Sources:** *SHA* (*Carin*. 19); Chronographer of 354 (p. 148).

**Focus of source:** Novel spectacles provided for the entertainment of the people.

**Language**: *conflagravit* (*SHA*).

**Modern commentators:** Based on the reference in the Chronographer of 354, Werner (44) says the Porticus Pompeia burned along with the stage in the Theatre of Pompey. Canter (277) also believes the whole theatre and the adjoining 'portico of Pompey' burned. This is reasonable as the portico was behind the *scaena* (stage). Richardson (319) and *LTUR* (4.148) say 'Porticus Pompeii' evidently burned in the fire of Carinus because of its restoration by Diocletian. Sablayrolles (800) says the Porticus actually may have been the Hecatostylon which bordered the Porticus Pompeia, and suggests that this fire may have damaged neighbouring buildings as Diocletian restored the Hecatostylon also.[159]   Rubin writes of the limited utility of the literary sources at this time in recording the damage done by fires such as this one.

During the reign of Carinus in AD 283 the first of two fires is recorded in *SHA* (*Carin*. 19). A mechanical scaffold in the Theatre of Pompey burst into flames and burned up the stage (*conflagravit*). When faced with the verb *conflagravit*, and without evidence to the contrary, the translator is obliged to accept that it is 'burned up.'  The Chronographer of 354 (p. 148) records the restoration by Diocletian of the stage (*scaena*) of the theatre, the *porticus*, and other unnamed nearby buildings.   The Porticus Pompeia was located directly behind the stage and was contiguous to the the Hecatostylon which previously burned in AD 247.  This fire was probably not confined to the stage and, in fact, the damage may have been far more extensive than recorded in *SHA*.  This is another example of the lack of information in the 3rd century and where a fire was probably under-reported and there are limited literary sources.

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[159] Apart from the differences between the commentators, this is a very good example of the manner in which different scholars use different terminology for structures.

**82.** **Date:** AD 283.

**Location:** North of the Forum.

**Context:** Unknown.

**Sources:** Chronographer of 354 (p. 121); *CIL* VI 89; VI 937?

**Focus of sources:** Record of a devastating fire (Chronographer of 354); restoration (*CIL* VI 89; VI 937?).

**Language**: *arserunt* (Chronographer of 354); *incendium* (*CIL* VI 937).

**Modern commentators:** Although it is evident that this was a destructive fire there is uncertainty about which buildings actually burned. Werner (44) lists the buildings mentioned by the Chronographer of 354 as having burned in this extensive fire but, citing epigraphic evidence of restoration (*CIL* VI 89 and VI 937), he adds the temple of Saturn. Platner and Ashby (234) write that a great fire raged in the Forum in AD 283 and suggest that the temple of Concord (NW corner of the Forum) may also have burned given the reference to its restoration on *CIL* VI 89. Canter (77) says the fire raged from one end of the Sacra Via to the other, devastated the Forum Julium, and destroyed wholly or partially seven, and perhaps a greater number, of the city's great public monuments. Sablayrolles (800) disagrees with Platner and Ashby that the temple of Concord was affected, saying – correctly - that there is no reference to a fire in *CIL* VI 89. Richardson (173) says the fire of Carinus in AD 283 wrought widespread destruction in the Forum but makes no reference to a possible fire of the temple of Concord in this year. Rubin (201) says the epigraphic evidence of *CIL* VI 937 suggests the temple of Saturn burned in 383 while Sablayrolles lists the burning of the temple of Saturn as a separate fire of 284. *LTUR* (2.301) refers to the restoration of the Forum Julium and the Curia due to the fire of 284 and also that the Basilica Paulli was seriously damaged in the same fire (1.186).

A second, more serious, fire for AD 283 is recorded by the Chronographer of 354 (p. 121) where a number of buildings are listed as having burned (*arserunt*): Curia, Forum Caesaris, Basilica Iulia, and Grecostadium burned. The fire was obviously extensive and the verb used is *ardere*. The path of this fire must have enveloped other structures on the northern side of the Forum and it is likely that the temple of Concord, among other structures, burned. But we have no corroborative evidence: *CIL* VI 89 refers to the restoration of these buildings which

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had collapsed due to age (*collapsam vetustate*) and makes no reference to a fire. On the other hand, the inscription on the architrave of the nearby temple of Saturn records that it was restored after a fire: the only question is was this fire of 283? It is possible but there is no certainty, hence the disagreement among modern commentators.

**83.    Date:** AD 307.

**Location:** Temple of Venus and Rome in the Forum.

**Context:** Unknown.

**Sources:** Chronographer of 354 (p. 122); Aurelius Victor (*Caes*.) 40.26.

**Focus of sources**: Record of fire (Chronographer of 354); restoration (Aurelius Victor).

**Language**: *ardere* (Chronographer of 354).

**Modern commentators:** Werner (44) includes this fire but Canter does not. Platner and Ashby (553) write that the temple was 'injured' by fire and 'restored' by Maxentius. Richardson (409) says it 'burned' in 301 and was then restored by Maxentius. Coarelli (99) refers to a restoration undertaken by Maxentius after a fire in AD 307 and points out that the current form of the *cellae* date from that restoration; thus we have archaeological and architectural evidence of the restoration. Sablayrolles (801) writes that the temple was destroyed and rebuilt (*rebâti*). Rubin (206) alone suggests that the fire was more extensive: the Velia, Horrea Piperataria and the Templum Pacis, citing the work of Cullhed.[160] Cullhed says that it is known from the Chronographer of 354 that there was a fire on the Velia during the reign of Maxentius, which damaged the temple of Roma; he suggests that because the basilica of Maxentius was erected on ground previously occupied by the Horrea Piperataria, as well as shops and warehouses dating from the late first century AD, these had probably suffered destruction either in this fire of 307 or in the previous fire of 283. *LTUR* (5.121) confirms that the temple was destroyed by a fire in 307 and restored by Maxentius.

In AD 307 the temple of Venus and Rome in the Forum burned. The Chronographer of 354 (p.122) records that the *Templum Romae* burned (*arsit*) and was rebuilt (*fabricatum*). It is likely that *ardere* again indicates destruction and *fabricatum* significant restoration. The only question is whether the fire was confined to the temple. Although both Cullhed and Rubin

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[160] Cullhed 1994, 50.

believe the fire to have been more extensive, in fact, the Chronographer of 354 makes no reference to the Velia.[161]  Once more a rebuilding or restoration programme, in this case by Maxentius, is the only clue to a possible serious, extensive fire. The construction of the Basilica Maxentius on the site of the Horrea Piperataria and other 1st century structures would indicate the aftermath of a devastating fire that cannot have been confined to the temple of Venus and Rome.

**84.     Date:** 308 – 309.

**Location:** An unknown temple of Fortuna.

**Context of fire**: Unknown.

**Source:** Zosimus (2. 13).

**Focus of source**: Civil unrest: the slaying by the mob of one of the soldiers charged with fighting the fire.

**Language:** πῦρ.

**Modern Commentators:** The only discussion of this fire by commentators concerns the location of the temple of Fortuna in question. Platner and Ashby, Richardson, *LTUR* and Sablayrolles all agree on at least 29 temples and shrines of Fortuna but none can identify the location of this one.

Zosimus (2.13) is the only source for this fire.  He records the burning of a temple of Fortuna 'whether by celestial or earthly forces'. The location of the temple is unknown but any attack on it would have been serious and frightening given the symbolic importance of Fortuna in Rome.  The manner in which the crowd fell upon and killed a soldier (στρατιώτης), charged with quenching the fire, because he insulted the divinity is the focus of Zosimus.  He also points out that the soldiers would have destroyed the city on foot of this incident were they not appeased by Maxentius. But what we are really hearing from Zosimus is the breakdown of law and order and difficulty facing the Emperor Maxentius in uncertain times. It is also interesting that Zosimus uses the word στρατιώτης which may indicate that the *Vigiles* had been disbanded at this stage (Chapter 6, 183). On the other hand, Dio (59.9.4) also uses στρατιώτης in the context of extinguishing a fire so there is no certainty.

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[161] Cullhed 1994, 51.

**85.**    **Date:** Reign of Constantine (AD 306 – 337).

**Location:** Baths of Helena on the eastern part of the Caelian Hill.

**Context:** Unknown.

**Source:** *CIL* VI 1136.

**Focus of source**: Restoration.

**Language**: *incendium, destruere*.

**Modern commentators:** Neither Werner not Canter refers to this fire. Sablayrolles (801) and Rubin (211), Platner and Ashby (530) point out that all we have is the inscription recording restoration but, in fact, the inscription clearly refers to a fire; Richardson (393) and *LTUR* (5.59) set the record straight pointing to restoration between 323 and 326 after a fire. During the reign of Constantine, the Baths of Helena situated on the eastern part of the Caelian Hill burned on an unknown date.  An inscription (*CIL* VI 1136) records its restoration after the destruction by fire (*incendio destructas*).


**86.**    **Date:** AD 363.

**Location:** The temple of Apollo on the Palatine.

**Context of fire:** Portent of calamity in dreams.

**Source:** Ammianus Marcellinus (23.3.3).

**Focus of source:** Dreams of Emperor Julian.

**Language**: *conflagrare, consumere, flammae.*

**Modern commentators:** There is some confusion about the date of this fire although it is clear in Ammianus Marcellinus. Werner (45) writes *a.d. XV kal. Mai* (*ie* 19th April).   Platner and Ashby (18) say 18th March as does Richardson (1992, 14).  Sablayrolles (802) and Rubin (212) identify the day as the 19th March.  *LTUR* says the 18th March.  No commentator suggests that the temple actually burned down.


According to Ammianus Marcellinus (23.3.3) on the 19th March (*diem secutum, qui erat quartum decimum kalendas Aprilis*: 'the following day which was the 14th day before the

Kalends of April') AD 363 the temple of Apollo on the Palatine was burned but the Sibylline books were saved with great effort. He says the temple blazed (*conflagrare*) and the books would have been destroyed (*consumere*) by the flames (*flammae*) had they not been saved. Marcellinus records it in the context of troubled dreams of the emperor Julian. This is a familiar pattern: the escape of highly symbolic artefacts. It is unclear whether *conflagrare* is to be interpreted as 'burned down' or just 'burned'.

**87.    Date:** AD 375.

**Location:** House of Symmachus.

**Context:** Arson and civil unrest.

**Source:** Ammianus Marcellinus (27.3. 4); Symmachus (*Epit*. 1.2.38).

**Focus of source:** Feckless behaviour of a 'pleb' and the destruction of a beautiful house.

**Language**: *incendere* (Ammianus Marcellinus).

**Modern commentators:** There is confusion about the date of this event. Sablayrolles (802), Rubin (212) write 375. Platner and Ashby (191) say 367; Richardson (135) says burned by a mob in AD 367.

Ammianus Marcellinus (27.3. 3) records the burning of the house of Symmachus in the Transtibertine district using the verb *incendere* in 375. This was arson committed by an angry crowd.[162] The recording of this individual house appears on face value to throw into sharp relief the far more serious fires which must have been a regular occurrence, but which are not mentioned at all. However, there is a suggestion of a political reason (Symmachus had been *preafectus urbi*) for this fire and therefore this is an act of civil unrest.

**88.    Date:** AD 410.

**Location:** Diverse locations in the city; Horti Sallustiani in Region VI (Procopius).

**Context:** Sack of Rome by Alaric.

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[162] Symmachus had said that he would willingly extinguish lime-kilns with his own wine rather than sell it at the price which the people hoped.

**Sources:** St. Augustine (*De civ. D.* 1.34); Zosimus (5.38-50; 6.1-6); Orosius (2.19.13; 7.39); Procopius (*Vand.* 1.2.24).

**Focus of record:** Punishment by God (Orosius); reconciliation of city of God and earthly dwelling (St. Augustine).

**Language**: ἐμπίμπρημι (Procopius); *incendium* (Orosius).

**Modern commentators:** Neither Werner nor Canter lists this as an individual fire; Sablayrolles, like Canter, regards it as part of the overall intentional destruction of the city by Alaric. Archaeological and epigraphic evidence of the extent of destruction by fire forms the greater part of the modern discussion about this event.   Lanciani says that as well as the Gardens of Sallust (mentioned by Procopius) many aristocratic houses on the Aventine and the Thermae Decianae (on the Aventine) burned.[163] His excavations of houses on the Aventine appear to show that the hill must have suffered more than any other part of the city in the Sack. He records 'traces of flames which blackened the red ground of the frescoes, and caused the roofs to fall on the mosaic or marble pavements of the ground floor;  coins scattered among the ruins, belonging, with rare exceptions, to the 4th century …. Christian symbols on lamps and domestic utensils.  These indications fix the period and point to the same historical event – the capture and pillage of Rome by the Goths in August 410.' He uses the evidence of *CIL* VI 1703 that the Thermae Decianae burned in the Sack.  The inscription, found *in situ* in 1725, records the restoration of the Thermae in 414.

On the other hand, it is not safe to rely entirely on excavations of the late 19th and early 20th century. Neither Platner and Ashby (526) nor Richardson (391) makes reference to evidence of fire in the Thermae Decianae. Platner and Ashby (75) refer to fragments of architecture, statues, bricks  and pottery found within a layer of ash suggest that that the wooden roofs of the nave and aisle of the Basilica Aemilia (Paulli) were destroyed  - 'perhaps in the Sack'. Richardson (55) simply says that a fire destroyed the roof in early 5th century and does not refer to the sack at all. Rubin (214) suggests that the Thermae Diocletianae, the Basilicae Julia and Aemilia were also destroyed in the Sack given that their restoration in AD 416 is recorded in *CIL* VI 1131, 1156, 1156 and 1718.  The only location that all commentators agree on is the Horti Sallustiani which is attested by Procopius (*Vand*. 1.2.24).

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[163] Lanciani 1899, 57- 61.

The taking of the city by Alaric is a watershed moment in the history of Rome. All sources say that the city was looted and burned for three days. The damage must have been extensive but the one source to give specific locations, Procopius, mentions only houses, including the house of Sallust near the Salarian Gate by which the Visigoths entered the city. Very few words for fire are used in the sources. Orosius (7.39) uses *incendio* and refers to the burning of *aliquantarum aedium* ('some houses'). He writes of the enemy 'camping upon the ashes of the city for almost a year' (*continuo paene anni spatio incensae eversaeque urbis adtritos cineres possederunt*). However, his tone indicates a preoccupation with the fall of Rome as punishment by a Christian god 'to chastise the proud, wanton, and blasphemous City'. He also says that it was not nearly as bad as that started (*excitare*) by Nero. St Augustine makes the same comment (*De civ. D*. 1. 34).

Chapter 3 contains an analysis of the findings of this study of the recorded fires.

**Chapter 3**    **Analysis of Reading Fire**

**Introduction**

One of the aims of close reading sources in Chapter 2 was to examine whether the actual language of fire gives any indication how fires were perceived and interpreted by the Romans. It also aimed to test the focus of the sources and to ask if there are occasions when there is something at play apart from straightforward reportage. Why are some fires recorded by some sources and not by others? Did fires occur which are not recorded? Are events recorded as fires which may not have been fires at all? The commentary in the List of Fires has suggested some answers to those questions in each of the 88 fires. This chapter analyses and discusses those suggested answers.

**Findings**

While the vocabulary of fire (both Latin and Greek) is largely, but not always, straightforward and devoid of shades of meaning, the recording of fires is certainly not so and does not purport to be. The agenda or intention of the literary source, or of a later copyist, is frequently clear in both language and context. The nouns are mainly neutral but the verbs are often chosen for an indication of the impact, or sometimes more importantly, the significance of the fire; compound verbs and preverbs are frequently used and they pose a challenge for the translator. Occasionally the extent of a fire cannot be interpreted from the language and it is unreasonable to expect the words used by the source to stand up to such scrutiny. The danger of over-interpreting the language of different sources, in different genres, with different agenda over a span of 500 years is obvious. However, there does appear to be a trend where compound verbs have been used by sources not only to describe the extent of a fire but also the seriousness and significance of that fire for reasons unrelated to the fire itself. Minor fires assume an importance and have been recorded for a complex spectrum of reasons.

Another finding is that the extent of the Latin vocabulary used by the primary sources over a period of more than five centuries remains constant and relatively limited.[164] The vocabulary of fire does not differ in any significant way from writer to writer, even across time. In fact, there is some indication that later writers echo the phrases of their earlier sources.

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[164] The findings for Greek vocabulary are less clear because the main source is one writer, Cassius Dio.

There is evidence that the vocabulary used by different sources sheds some light on why certain fires are recorded but while this is straightforward in a number of instances it is far more complex and not at all definitive in other cases. The vocabulary does give a clue to the nature of the fire and to the reason why it was recorded. However, language, particularly the use of simplex and compound verbs, is not always a reliable indicator of the extent of the fire but rather may be evidence of another purpose or agenda of the source.[165]

**The vocabulary**

The following is a compilation of the Latin and Greek words used by the sources in the context of fires; a translation is provided but with an understanding that nuances of translation must also be appreciated in the context of each passage. The number of times a word occurs in the sources is included after each translation while footnotes identify the number of attestations in each author.[166]

*Latin*

**Nouns:** *incendium* (**1** A destructive fire, conflagration (accidental or deliberate); 44).[167] *ignis* (**1** The process of combustion, fire, or a particular manifestation of this; 14).[168] *flamma* (**1** (usu. pl. or collect. sg.) A flame; 10).[169] *fax* (**5** An incendiary torch, firebrand; 2).[170] *incensio* (the act of setting on fire; 3).[171] *inflammatio* (**1** The action of setting ablaze, **2** (med.) Inflammation; 2).[172] *exustio* (Consumption by fire, burning; scorching; 1).[173] (**Fig. 3**)

**Verbs and verbal adjectives:** *ardere* (*intr.* (*tr.*) **1** To be or catch alight, burn; 20).[174] *flagrare* (*intr.* (*tr.*). **1** To be ablaze, burn, flame; 5).[175] *deflagrare* (*tr. intr.***1** To destroy by fire; burn

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[165] It must be emphasised again that the most commonly used Latin verb for a significant fire, *ardere*, has no compound except *ex-ardere* which only appears in ecclesiastical Latin.

[166] Translations, conventions and abbreviations (Latin) are from *OLD*, 2nd Edition, 2012. Translations and conventions (Greek) are from *LSJ*, 1996.

[167] *Incendium* appears in almost all sources beginning with Cicero and ending with Orosius; the number of instances is set out under each source on pages 117 – 125 below.

[168] *Ignis* is used by the following authors: Cicero (2); Livy (3); Velleius Paterculus (1); Asconius (1); Tacitus (5); Aulus Gellius (1); Julius Obsequens (1).

[169] *Flamma* is used by the following authors: Cicero (1); Livy (1); Ovid (1); Tacitus (2); Suetonius (1); Amianus Marcellinus (1); Orosius (3).

[170] *Fax* is used by the following authors: Cicero (1); Suetonius (1).

[171] *Incensio* is used by the following authors: Cicero (1); Tacitus (2).

[172] *Inflammatio*, always in the context of a fire and not in the medical sense, is used by the following authors: Hieronymus (1); Orosius (1).

[173] *Exustio* is found only in *SHA*.

[174] The uses of *ardere* span the period from Cicero to the Chronographer of 354. The number of instances is set out under each source on pages 117 – 125 below.

[175] *Flagrare* is used by the following authors: Ovid (1); Asconius (1); Tacitus (2); Aulus Gellius (1).

down. **2** To be burnt down, be destroyed by fire; 2).[176] *conflagrare* (*intr.* **1** To be destroyed by fire, be burnt down. **3 a** To be utterly destroyed or ruined; 9).[177] *incendere* (*tr.* **1** To set on fire, kindle; 15).[178] *accendere* (*tr.* **1** To set on fire, kindle, ignite. **b** to cause to blaze up; (pass.) to flare up; to burn with a flame; 2).[179] *succendere* (*tr.* **1** To apply fire to, set alight (below; at the base); also, to heat from below; 3).[180] *inflammare* (*tr.* To set on fire, ignite, kindle; (pass.) to be in flames; 3).[181] *cremare* (*tr.* **1** To destroy or consume by fire, burn. **2**. To cremate (a corpse); 11).[182] *concremare* (*tr.* To consume by fire, burn completely, burn down; also to burn together; 6)[183] *urere* (*tr.* **1** To destroy by fire, burn; 2).[184] *deurere* (tr. to burn thoroughly, burn down; 5).[185] *exurere* (*tr.* **1** To destroy by fire, burn completely; 4).[186] *amburere* (*tr.* **1** To burn around or superficially, scorch, char. **3 b** to cremate (a corpse); 1).[187] *semustus* (semiustus *a*. Also semustus. Half burnt, scorched, singed; 1).[188] *semiambustus* (*a*. Half consumed by fire, scorched or charred; 1).[189]*absumere* (*tr.* **4** (of fire) To destroy, consume; also, to consume by fire; 5).[190] *consumere* (*tr.* **1** To destroy, wear away, consume (a material object); 9).[191] *ardescere* (*intr.* **1** To catch fire, become ignited; 1).[192] *fumare* (*intr.* **1** To emit smoke or fumes, smoke; 1).[193] (**Fig. 4**).

**Verbs relating to destruction in the context of fire**: *dissolvere* (tr. **1** To break up into component parts, disintegrate, undo; to dismantle, take to pieces; 1).[194] *dissipare* (*tr.* **1** To cause to separate in different directions, disperse, scatter; 1).[195] *exscindere* (*tr.* **1** To demolish,

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[176] *Deflagrare* is used by the following authors: Cicero (1); Suetonius (1).
[177] *Conflagrare* is used by the following authors: Livy (1); Valerius Maximus (1); Pliny the Elder (1); Tacitus (2); *SHA* (1); Ammianus Marcellinus (1); Hieronymus (1); Orosius (1).
[178] *Incendere* is used by the following authors: Cicero (1); Sallust (1); Livy (3); Suetonius (1); *SHA* (1); Hieronymus (6); Orosius (2).
[179] *Accendere* is used by the following authors: Cicero (1); Pliny the Elder (1).
[180] *Succendere* is used by the following authors: Suetonius (2); Orosius (1).
[181] *Inflammare* is used only by Cicero (3).
[182] *Cremare* is used by the following authors: Asconius (1); Pliny the Elder (1); Tacitus (1); Suetonius (1); Obsequens (2); Orosius (5).
[183] *Concremare* is used by the following authors: Livy (1); Pliny the Elder (1); Hieronymus (3); Orosius (1).
[184] *Urere* is used by Livy (1) and Orosius (1).
[185] *Deurere* is used by the following authors: Valerius Maximus (1); Tacitus (2); Suetonius (1); Obsequens (1).
[186] *Exurere* is used by the following authors: Livy (1); Pliny the Elder (1); Orosius (2).
[187] *Amburere* is used only by Asconius (1).
[188] *Semustus* is used only by Tacitus (1).
[189] *Semiambustus* is used only by Suetonius (1).
[190] *Absumere* is used by the following authors: Livy (1); Velleius Paterculus (1); Suetonius (2); *SHA* (1).
[191] *Consumere* is used by the following authors: Livy (2); Valerius Maximus (2); Pliny (1); Tacitus (1); Suetonius (1); Ammianus Marcellinus (1); Orosius (1).
[192] *Ardescere* is used only by Tacitus (1).
[193] *Fumare* is used only by Juvenal (1).
[194] *Dissolvere* (*dissoluta*) is used only by Orosius (1).
[195] *Dissipare* (*dissipata*) is used only by Obsequens (1).

destroy (towns, buildings; 5).[196] *quassare* (*tr.* **1** To move vigorously to and fro, shake, rock, agitate or similar **2** To cause (a building, something fixed or stable) to tremble or shake; 1).[197] *vastare* (*tr.* **1** To make (a place) desolate or untenanted, leave without signs of life; 3).[198] *deicere* (*tr.* **1** To throw (a thing) down towards a lower position, cause to fall; 1).[199]

**Phrases referring to lightning and arson**: *tactus de caelo* (**4 c** *pf. pass.* touched with lightning; 5).[200] *ictus fulmine* (*pf. pass.* **2** (of natural forces, etc) To affect, impinge upon; 4).[201] *fulmine tactus* (**4 c** *pf. pass* touched with lightning; 2).[202] *fulmine accensus* (set on fire from above by lightning; 1).[203] *coniectis ignibus* (*pf. pass.* **2** To put, cast, throw; 1).[204] *accensis facibus* (set on fire by torches; 1).[205]

*Greek*

**Nouns**: πῦρ (fire; 17).[206] κεραυνός (thunderbolt; 3).[207] ἔμπρησις (a burning; 3).[208] ἐμπρησμός (conflagration; 1).[209] σκηπτός (thunderbolt; 1).[210] (**Fig. 5**).

**Verbs:** ἐμπίμπρημι (to kindle, set on fire; 10).[211] καίω (to kindle; 7).[212] κατακαίω (to burn completely; 5).[213] ἐκκαίω (to burn out; 1).[214] φλέγω (to burn, burn up; 1).[215] καταφλέγω (to burn up, consume; 5). καταπίμπρημι (to burn to ashes; 3) ὑποπίμπρημι (to set fire to; 1), πυρόω (to set on fire; 1). (**Fig. 6**).

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[196] *Exscindere* is used by Cicero (1) and Tacitus (4).
[197] *Quassare* (*quassata*) is used only by Obsequens (1).
[198] *Vastare* is used by Tacitus (2) and Obsequens (1).
[199] *Deicere* (*deiecta*) is used only by Obsequens (1).
[200] *Tactus de caelo* is found in Livy (1); Suetonius (2); Obsequens (2).
[201] *Ictus fulmine* is used by Livy (1); Orosius (1); Tacitus (1); Hieronymus (1).
[202] *Fulmine tactus* is used by Obsequens (2).
[203] *Accensa fulmine* is found in Pliny (1).
[204] *coniectis ignibus* is used by Cicero (1).
[205] See *accendere* above (p. 112).
[206] πῦρ is used by Dionysius Halicarnassensis (1); Dio (14); Herodian (2).
[207] κεραυνός is used by Dio (3).
[208] ἔμπρησις is used by Dio (1).
[209] ἐμπρησμός is used by Dio (1).
[210] σκηπτός is used by Dio (1).
[211] ἐμπίμπρημι is used by Plutarch (2); Appian (2); Dio (6).
[212] καίω is used by Dio (7).
[213] κατακαίω is used by Dio (5)
[214] ἐκκαίω is used by Dio (1).
[215] φλέγω is used by Dio (1).

**Verbs relating to destruction in the context of fire**: ἐμπρήθω (to destroy; 1).[216] λυμαίνομαι (to inflict damage; 1).[217] διαφθείρω (to completely destroy; 2).[218] φθείρω (to destroy; 4).[219] κακόω (to injure, distress; 1).[220] βάλλω (to strike; 1).[221]

**Analysis of language**

The most commonly used noun for 'fire' which affected a building or a section of the city in Latin is *incendium*. Its use spans the centuries ranging from republican writers through imperial writers to Christian writers and copyists. It also appears in inscriptions recording fires or restorations after fires. It is not surprising that a word for something as basic and ubiquitous as fire remained unchanged even over such a time span and this finding is not significant. The noun *ignis* is less commonly used and less frequently applied to fires where destruction is described or implied. Again, this is not significant as they express two different types of fire. *Incendium* is generally a fire which occurs either deliberately or accidentally and is destructive. *Ignis* is fire or flame which lives in the hearth; it is also 'fire' in the abstract. This distinction is usually maintained in the sources but *ignis* occasionally is used to denote a destructive fire (*eg* **Nos. 3**, **34**, **59**). The noun *exustio* (a burning up, conflagration) appears only once, in *SHA* (**No. 74**), while *inflammatio* is found only in Hieronymus and Orosius (**No. 72**).[222]

The most commonly used noun in Greek is πῦρ and is used irrespective of the size or nature of the fire. There is no qualitative difference between its use and the far less common word ἔμπρησις.

The Latin verbs used by different authors and by the same authors on different occasions are more varied than the nouns, as one would expect, but there is only a slight change across time. For example, while the most common verb *ardere* increases in frequency in the later chroniclers it is widely used by all sources. It is used by Livy for the fires of 241 BC (**No. 6**), 213 BC (**No.7**), 210 BC (**No. 9**) and 192 BC (**No. 13**). Seneca uses *ardere* for the fire of 241 BC (**No. 6**), as do Cicero and Ovid. Tacitus uses it for the fires of 83 BC (**No. 21**) and AD 69 (**No. 61**); Suetonius uses it for 54/53 BC (**No. 28**) and for a fire in the reign of Domitian (**No.**

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[216] ἐμπρήθω is used by Dionysius Halicarnassensis (1).
[217] λυμαίνομαι is used by Dio (1).
[218] διαφθείρω is used by Dio (2).
[219] φθείρω is used by Dio (4).
[220] κακόω used by Dio (1).
[221] Βάλλω is used by Dio (1).
[222] *Inflammatio* normally means 'inflammation' in the medical sense.

**63**).  It is found on the *arae incendiorum arcendorum causa* for the fire of AD 64 (**No. 59**); Juvenal uses it for fires in the reign of Nerva (**No. 65**) while it is found in Gellius for the major fire in the reign of Antoninus Pius (**No. 69**).  It is the only verb used in the Chronographer of 354 for fires; *SHA* use *ardere* for the fire of AD 217 (**No. 74**).  In all cases the sources are referring to a serious fire and not to the symbolic importance of the fire.

The second most common verb, *incendere*, is used by Livy, Cicero, Tacitus, Sallust, Suetonius, *SHA*, and Ammianus Marcellinus, but appears most frequently in Hieronymus in the terse recording of fires ranging from the minor to the very serious; he uses it for the fire of AD 64 (**No. 59**) and for the burning of the Theatre of Pompey in AD 247 (**No. 78**).

While there is no significant change in the verbs over time and between authors, there is an identifiable trend in Latin and, less obviously, in Greek where the compound verb rather than the simplex is generally used to indicate severity of damage by fire *or* the significance of the fire.  It is not at all clear in a number of instances whether this is an accurate report of the fire; sometimes it is apparent that the vocabulary used by individual authors to describe different fires is illustrating not the extent or nature of the fire but its significance in a different context, and the fire is exaggerated for a variety of reasons which have no bearing on the fire itself.  The burning of the Capitol during the civil disturbances of 83 BC (**No. 21**) is a striking example of this; another example is Cicero's description of the burning of his house by Clodius in 57 BC (**No. 24**).  It is the threat to democracy which demands the forceful language (*inflammare*) and not the extent of the fire. In many cases, it is the sinister nature of portents surrounding events rather than the destruction which is the narrative and sources frequently use preverbation (*eg consumere*, *conflagrare* and κατακαίω) although not necessarily describing a completed action.  There are also occasions where the simplex verb is used to describe probable total destruction and this serves as a warning against the over-interpretation of the compound. Dio's use of the prefix κατά is a case in point: he uses it when recording the fires of 52 BC (**No. 27**), 49 BC (**No. 29**), 39 BC (**No. 32**), 25 BC (**No. 35**), 16 BC (**No. 37**), AD 64 (**No. 59**), AD 80 (**No. 62**), AD 191 (**No. 72**) and AD 217 (**No. 74**).  In each case except 49 BC and 25 BC he is describing significant destruction and the prefix gives the weight of 'burned *down*' to the translation but we have to be cautious:  he uses the simplex καίω on a number of occasions in his description of the greatest fire, AD 64.

**Formulaic language**

Formulaic linking of words and of phrases can create uncertainty about the extent of a fire. Livy's description of the Sack of 390 BC (**No. 3**) introduces the 'twinning' of the words *incendium* and *ruina*, a phrase which occurs in many sources, especially Seneca (n.91). A pattern of formulaic phrases (*eg fulmine ictus*) when describing temples struck by lightning has also been noted in the commentary (*de caelo tactae*, *ictus fulmine*, etc.) to the List of Fires.

**Language and purpose of sources**

Extant literary evidence is uneven across the timeframe of this study; there is more information in the sources for the late republic and early empire. Moving into the 3$^{rd}$ and 4$^{th}$ centuries, when we have correspondingly fewer sources, the records are more sparse, less clear, difficult to date and different in nature. The sources also differ in focus and genre. Livy, Tacitus, Suetonius and Dio are more in-depth and discursive than the factual listing of the Chronographer of 354 or Hieronymus who record isolated incidents for different reasons. Urban fires are probably under-reported in 3$^{rd}$ and 4$^{th}$ centuries and there is far less information on the structures which burned even when fires are recorded. For example, the fire of AD 283 (**No. 82**) would have been widely reported had we writers such as Tacitus, Suetonius and Dio. There is an observable shift towards a Christian perspective in the later writers and they record fires dating back to mid-republican times through the lens of the disapproval of the Christian God.

Has too much been expected of the written sources? They have been taken at face value and the different purpose in the records of fires has not always been recognised in the collation of fires. The fact that the sources are frequently not all that interested in the fire in the first place has not been fully appreciated. A prime example is how the sources vary from the detailed description of the behaviour of fire in an urban context in AD 64 (**No. 59**) by Tacitus, Suetonius and Dio, interwoven with a commentary on Nero, to the perfunctory reference in Hieronymus who simply says Nero set fire to most of the city of Rome (Hieron. *ab Abr.* 2080).[223] Modern scholars have made assumptions and deemed sources as 'reliable' when it is clear that some other agenda is at play; they too have taken decisions and made assumptions based on what they consider important (Chapter 1, 8).

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[223] Hieronymous (*ab Abr.* 2080): *Nero, ut similitudinem ardentis Trojae inspiceret, plurimam partem Romanae urbis incendit.*

**Chronological list of sources**

The following list presents each source in chronological order and identifies the language used, the fires recorded, and the focus of the record.[224] The frequency of each word is noted in brackets if used more than once. Although it cannot claim to be a definitive list, it does allow the selection and variety of words used by each source to be seen at a glance; the chronological order illustrates any changes in the use of language over time while simultaneously looking at any preference in different authors for specific vocabulary. It also provides a summary of the focus of each source; whether the same focus is persistent through each record of fire can easily be seen, highlighting the importance of keeping this in mind when evaluating the reliability of the source. The timespan covered by each source and how close in time or distant from the event is explicit. In doing this, the extent to which a source depends on an earlier chronicler becomes more obvious. (**Fig. 7** shows the chronological order of sources recording five or more fires.)

**Cicero** (106 - 43 BC)

**Language:** *incendium, incensio, ignis (2), fax, flamma; accendere, ardere, deflagrare, incendere, exscindere (1), inflammare (3)*

**Fires: 9** (389 BC (**No. 4**), 241 BC (**No. 6**), 83 BC (**No. 21**), 85-80 BC (**No. 22**), 58 BC (**No. 23**), 58 BC (**No. 24**), 57 BC (**No. 25**), 57 BC (**No. 26**), 52 BC (**No. 27**))

**Focus:** Seven fires (83 BC to 52 BC) relate to civil unrest and arson; five of those fires involved Clodius and three of those refer to the firing of the houses of Cicero, his brother Quintus, and his ally Milo. This is unique in that they took place in his lifetime and affected him directly. The burning of the houses of Quintus Cicero and Milo are recorded only in Cicero's correspondence and yet traditionally they are included in the list of fires with catastrophic fires. This is a distorted record if looking for the flammability of Rome at that time, but it is an interesting insight into the perception of arson as a threat to the state.

**Sallust** (86 - 35 BC)

**Language:** *incendere*

**Fire**: **1** (83 BC (**No. 21**))

**Focus**: the behaviour of the mob

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[224] All dates for primary sources are based on *OCD* 2012.

**Livy** (59 BC – AD 17 or 64 BC – AD 12)

**Language**: *incendium (8), ignis (3), flamma; absumere, ardere (3), concremare, conflagrare, consumere (2), exurere, incendere (3), urere; fulmine icta, de caelo tactae*

**Fires: 13** (460 BC (**No. 1**), 414 BC (**No. 2**), 390 BC (**No. 3**), 241 BC (**No. 6**), 213 BC (**No. 7**), 211 BC (**No. 8**), 210 BC (**No. 9**), 206 BC (**No. 10**), 203 BC (**No. 11**), 194 BC (**No. 12**), 192 BC (**No. 13**), 148 BC (**No. 17**), 83 BC (**No. 21**))

**Focus:** Livy, the main source for republican Rome, provides detailed records but of the 142 original books, only books 1-10 (the foundation to the Third Samnite War, 289 BC), books 21-45 (218-167 BC), and several later summaries survive, including Obsequens' compilation of Livy's prodigies.  Because of these *lacunae* the record is uneven.  The practical didactic value of history, praising virtuous conduct and discouraging vice, sometimes colours his account.[225]  One such example is his description of the Sack of Rome (**No. 3**).


**Dionysius Halicarnassensis** (*fl*. 30 BC – after 7 BC)

**Language**: ἐμπρηθω (to blow up, inflate); πῦρ

**Fire: 1** (241 BC (**No. 6**))

**Focus:** temple of Vesta/ miraculous escape


**Seneca the Elder** (*c*.50 BC – *c*.AD 40)

**Language**: *ardere*

**Fire: 1** (241 BC (**No. 6**))

**Focus**: temple of Vesta/miraculous event


**Fasti Ostienses** (49 BC - 175 AD)

**Language**: *ardere*

**Fires: 2** (AD 36 (**No. 50**), AD 38 (**No. 51**))

**Focus**: record

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[225] Bispham 2010, 36.

**Ovid** (43 BC - AD 17)

**Language**: *flamma*; *ardere* (2), *flagrare*

**Fires: 2** (241BC (**No. 6**), 213 BC (**No. 7**))

**Focus**: temple of Vesta/miraculous escapes


**Velleius Paterculus** (20/19 BC – AD 31?)

**Language:** *ignis*; *absumere*

**Fire**: **1** (AD 21 (**No. 45**))

**Focus**: restoration


**Asconius** (AD 3 - 88)

**Language**: *ignis*; *flagrare*, *cremare*, *amburere*

**Fire**: **1** (52 BC (**No. 27**))

**Focus**: civil disorder


**Valerius Maximus** (*fl*. AD 14 – after 31?)

**Language:** *incendium* (3); *conflagrare*, *consumere* (2), *deurere*

**Fires: 5** (389 BC (**No.4**), 213 BC (**No.7**), 169 BC (**No.15**), 111 BC (**No.19**), 3 BC- AD 3 (**No. 42**))

**Focus:** miraculous escape of artefacts in four fires; the punishment of the *triumviri*


**Pliny the Elder** (AD 23/24 - 79)

**Language**: *incendium* (2); *concremare, conflagrare, consumere, cremare, exurere; accensa fulmine*

**Fires: 6** (241 BC (**No. 6**), AD 31-36 (**No. 49**), Unknown (**No. 53**), AD 49? (**No. 55**), AD 50? (**No. 56**), AD 68? (**No. 60**))

**Focus**: the temple of Vesta/miraculous event (241 BC).  The other five fires of unknown date relate to tree-felling, cinnamon and the loss of works of art.

**Plutarch** (before AD 50 – after 120)

**Language**: ἐμπίμπρημι (2)

**Fires: 2** (83 BC (**No. 21**), 58 BC (**No. 24**))

**Focus**: Civil strife and portents


**Tacitus** (AD 56/58 – *c*.118)

**Language**: *flamma (2), incendium (2), incensio (2), ignis (5); abolire (2), ardere (2), conflagrare (2), deurere (2), exscindere (4), flagrare (2), consumere, cremare, haurire, vastare (2); semustus; ictu fulminis*

**Fires: 9** (83 BC (**No. 21**), 31 BC (**No. 34**), AD 21 (**No. 45**), AD 27 (**No. 46**), AD 36 (**No. 50**), AD 62 (**No. 57**), AD 62 (**No .58**), AD 64 (**No. 59**), AD 69 (**No. 61**))

**Focus:** These fires are extensive, particularly AD 64, and caused great damage; the only doubt lies in the fire of AD 62 which reduced the statue of Nero *ad informe aes*.  In general, Tacitus focuses on the devastation caused by the fires but does imply a pejorative view of Nero.


**Suetonius** (*c*.AD 70 – *c*.130)

**Language**: *incendium* (7), *flamma, fax; ardere* (4), *absumere* (2), *succendere* (2), *cremare, consumere, deflagrare, deurere, incendere; semiambustus; tacta de caelo* (2)

**Fires: 14** (44 BC (**No. 30**), 3 BC - AD 3 (**No. 42**), AD 15 (**No. 44**), AD 27 (**No. 46**), AD 31 - 36 (**No. 48**), AD 36 (**No. 50**), AD 41 (**No. 52**), AD 53 or 54 (**No. 54**), AD 64 (**No. 59**), AD 68? (**No. 60**), AD 69 (**No. 61**), AD 69 - 79, AD 80 (**No. 62**), AD 81 - 96 (**No. 63**).

**Focus**: As a biographer, Suetonius' main interest was in the behaviour of individual characters.  His references to fires are the backdrop to either denigrating or praising the emperor in question and to indicating the attitude of the gods to his subject; his view of the characters colours his accounts.

**Florus** (*fl. c*.AD 112)

**Language**: *incendium*

**Fires**: **2** (390 BC (**No. 3**), 88 BC (**No. 20**))

**Focus**: destruction of the city


**Juvenal** (*fl*. late 1st and early 2nd century AD)

**Language**: *incendium; ardere, fumare*

**Fires:** not specific

**Focus**: dangers of fires in Rome


**Appian** (*c*. AD 95 – 160s)

**Language**: ἐμπίμπρημι (2)

**Fire: 1** (83 BC (**No. 21**))

**Focus**: impious behaviour of citizens


*CIL* **VI 979** (reign of Hadrian AD 117 - 138)

**Language**: *incendium*

**Fire**: **1** (reign of Hadrian (**No. 68**))

**Focus**: restoration


**SHA** (*c*.AD 284 – *c*.337)

**Language**: *exustio, incendium* (2); *absumere, conflagrare, incendere*

**Fires**: **2** (AD 110 (**No. 67**), reign of Antoninus Pius AD 138-161 (**No. 69**))

**Focus**: restoration


**Aulus Gellius** (AD 125/8 - ?)

**Language**: *ignis, incendium; flagrare*

**Fire**: **1** (reign of Antoninus Pius AD 138-161 (**No. 69**))

**Focus**: risks of urban property investment

**Dio** (AD 164 – after 229)

**Language**: πῦρ (14), κεραυνός (3) (lightning), ἔμπρησις (3) (conflagration), σκηπτός (thunderbolt); καίω (7) (to burn), κατακαίω (5) (to burn down), ἐκκαίω (to burn out), φλέγω (to burn), καταφλέγω (4) (to burn down), ἐμπίμπρημι (6) (to set on fire), καταπίμπρημι (3) (to burn to ashes, to the ground), ὑποπίμπρημι (to set fire to), πυρόω (to set on fire); λυμαίνομαι (to inflict damage), κακόω (to injure, distress), διαφθείρω (2) (to destroy), φθείρω (4) (to destroy), βάλλω (to strike).

**Fires: 28** (52 BC (**No. 27**), 49 BC (**No. 29**), 41 BC (**No. 31**), 39 BC? (**No. 32**), 38 BC (**No. 33**), 31 BC (**No. 34**), 25 BC? (**No. 35**), 23 BC (**No. 36**), 16 BC (**No. 37**), 14 BC (**No. 38**), 12 BC (**No. 39**), 9 BC (**No. 40**), 7 BC (**No. 41**), 3 BC – AD3 (**No. 42**), AD 6 (**No. 43**), AD 15 (**No. 44**), AD 21 (**No. 45**), AD 31 (**No. 47**), AD 36 (**No. 50**), AD 38 (**No. 51**), AD 53 or 54? (**No. 54**), AD 64 Epitome (**No. 59**), AD 69 (**No. 61**), AD 80 Epitome (**No. 62**), AD 91Epitome (**No. 71**), AD 217 Epitome (**No.74**), AD 217-218 Epitome (**No. 75**), AD 222-229 Epitome (**No. 76**))

**Focus:** We have more records of fires in Dio than in any other source, but his history covers almost 1000 years and a considerable portion of his 80 books of history are extant. We possess Books 36 - 60 (36 and 55 - 60 have gaps) which cover the years 68 BC to AD 47. He records 20 fires during the periods from 65 to 12 BC and from AD 9 to 54 and is the only source for nine of those. This is an example where the list of fires depends upon the survival of the records, and where any 'clustering' of fires in the time frame of this study cannot be taken as evidence of periods when fires were more prevalent than others. Six of the fires (**Nos. 59**, **62, 71, 74**, **75** and **76** dating from, and including, AD 64 to AD 222 -229) are recorded in epitomes. For example, the account of AD 64 (**No. 59**) comes from the Christian epitomist of the 11th century, John Xiphilinus.


**Ulpian** (*Dig.*) (? – *c*.AD 223)

**Language**: *incendium*

**Fire: 1** (AD 6 (**No. 43**))

**Focus:** reform of the *Vigiles*

**Herodian** (early to mid 3<sup>rd</sup> century AD)

**Language**: καταφλέγω, πῦρ (2)

**Fires**: **2** AD 191 (**No 72**), AD 238 (**No. 77**)

**Focus**: wrath of gods (**No. 72**); conditions of the city, loss of life and wealth (**No. 77**)


*CIL* **VI 1034** (AD 203 (**No.73**)), *CIL* **VI 937** (AD 283 (**No. 81**)), *CIL* VI 1136 (AD 306 - 337 (**No. 84**))

**Language**: *incendium* (3)

**Fires**: **3?**

**Focus**: restoration


**Aurelius Victor** (*fl*. AD 360)

**Language**: *incendium*

**Fires: 3** (AD 69 (**No. 61**), reign of Nerva AD 96 - 98 (**No. 65**), AD 307 (**No. 82**)

**Focus**: list of disasters in reign of Nerva and restoration in the other two cases


**Ammianus Marcellinus** (*c*.AD 330 - 395)

**Language**: *flamma; conflagrare, consumere*

**Fire: 1** (AD 363 (**No. 85**))

**Focus**: miraculous escape of Sibylline books


**Chronographer of AD 354**

**Language**: *ardere* (5)

**Fires**: **6** (AD 217 (**No.74**), reign of Aurelian AD 270 - 275 (**No.79**), AD 283 (**No. 80**), AD 283 (**No. 81**), AD 307 (**No. 82**))

**Focus**: specific buildings including the Flavian amphitheatre, Baths of Caracalla, Theatre of Pompey, list of buildings in the area of the Forum, and the temple of Venus and Rome. The Chronographer comprises a list of emperors and notable events, with a focus on building

activity and natural disasters such as fires.  It contains a lot of valuable information but little or no detail.

**Hieronymus**  (*c*. AD  347 - 420)

**Language**: *incendium* (2), *inflammatio; incendere* (6), *concremare* (3), *conflagrare; fulmine ictum*

**Fires: 13** (241 BC (**No. 6**), AD 21 (**No. 45**), AD 64 (**No. 59**), AD 69 (**No. 61**), AD 80 (**No. 62**), AD 104 (**No. 66**), AD 110 (**No. 67**), AD 188 or 189 (**No.71**), AD 191 (**No.72**), AD 217 (**No.74**), AD 247 (**No.77**), AD 252? (**No. 78**))

**Focus**: specific structures. The first, and only fire BC, is the fire in the temple of Vesta in 241 BC. Fires are recorded thus: the temple of Vesta (241 BC and AD 191), the theatre of Pompey (AD 21 and 247), Pantheon (AD 104 and 110), Domus Aurea (AD 104), Capitol and surrounds (AD 189), Flavian Amphitheatre AD 217 and 252).  The remaining fires are AD 62, 69, and 80 where there are references to the loss of 'many buildings'.  There is much valuable information but it is uneven. Hieronymus' sources are not known although it is likely that they included Livy and Suetonius.

**Julius Obsequens** (*fl*. 4th or early 5th centuries)

**Language:** *incendium* (3), *ignis; cremare, deurere*; *cremata sine ullo vestigio, circa omnia quassata; tacta* (2)*; dissipata.*

**Fires: 6** (178 BC (**No. 14**), 156 BC (**No. 16**), 148 BC (**No. 17**), 126 BC (**No. 18**), 111 BC (**No. 19**), 53 or 50 BC (**No. 28**))

**Focus**: As Obsequens' purpose was to list the portents and prodigious events in Livy's history, it is not surprising that all six involve portents, lightning, and a miraculous escape. It is not at all clear whether some of the events resulted in actual fires.   His use of language is very similar for each event and this casts added doubt on the extent of the fires.

**Orosius**   (*fl. c.*AD 414 and on)

**Language:** *flamma* (3), *incendium* (5), *inflammatio* (2); *cremare* (5), *concremare, conflagrare, consumere, exurere* (2), *incendere* (2), *succendere, urere, vastare*; *fulmine ictum*

**Fires: 13** (460 BC? (**No. 1**), 390 BC (**No. 3**), 275 BC (**No. 5**), 53 or 50 BC (**No. 28**), 44 BC (**No. 30**), AD 64 (**No. 59**), AD 69 (**No. 61**), AD 80 (**No. 62**), AD 104 (**No. 66**), AD 110 (**No. 67**), AD 188 or 189 (**No.71**), AD 191 (**No.72**), AD 410 (**No. 87**))

**Focus:** Portents, lightning, fires and floods, disapproval by a Christian God and divine justice colour the accounts.


## Fires: temporal distribution

It is essential to emphasise that any statistical analysis of fires in ancient Rome is of the records of fires and not the occurrence of fires.  It has been argued that the actual number of fires recorded has no statistical value as it reflects the sources' emphasis on the city's monumental centre.[226] However, it is precisely because such statistics capture the focus and limitations of the sources that they are so valuable. They offer a glimpse of what is *not* recorded.

**Figure 8** shows the temporal distribution of recorded fires together with a broad breakdown of what burned: individual structures, known areas and unknown locations. Distribution has been divided as closely as possible to 100 year periods. These figures demonstrate the limitations of the information upon which such charts are constructed.  They show fires that have been recorded by the sources but are distorted by the survival of the records and by the bias of the recorders.  Such a chart also hides the difference in the nature of the fires from putative lightning strikes to private homes to temples to vast swathes of the city. The distribution peaks between 31 BC and AD 69.  It is wrong to regard this chart as a true reflection of the occurrence of fires but it is a valuable glimpse of extant records; what is also indicated is that many fires must have occurred and are absent from the overall record.

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[226] Taylor 2000,  213,  n.39.

**Reasons for recording**

The most obvious reason for recording a fire is that it was a serious fire which destroyed a building, buildings or sections of the city. But there is a clear pattern in the sources of fires recorded for other reasons: arson, civil unrest, inclusion with other disasters such as floods in lists of portents, disapproval by the gods, extolling an emperor – all form part of the complex spectrum of the extant records of fires. Nor are these reasons always discrete: a catastrophic fire may be ascribed divine origin, or a prodigious event might accompany an act of impiety. **Figure 9** collates the focus of the sources for each fire, but, because different sources sometimes record a fire for different reasons and with a different focus, these are general statistics designed to give an overall impression.

*Portents including lightning (c. 28 fires)*

Of the listed events 18 refer to lightning strikes, and of those, there is evidence that fire ensued in nine cases.[227] This poses a problem of translation. A word like *cremFatus* makes it clear that there was a fire but *tactus* and *ictus* are far more widely used and formulaic phrases such as *tactus de caelo* remain constant over the centuries, and unless expanded, leave it uncertain whether the damage was caused by fire or by the impact of the strike.

In 22 cases fires are listed in the context of portents.[228] Such *prodigia* frequently accompany the impious behaviour of rulers. In ten of those cases, portents are referenced without any mention of lightning.[229] In all, 28 fires are recorded in the context of portents and/or lightning.

*Disapproval of individual/collective behaviour, including arson/civil unrest (c. 21 fires)*

The author's purpose and bias in extolling or condemning the actions of individual leaders, blaming them for a fire either directly or because of the bad omens, is a frequent reason for recording a fire. The implication may be that bad emperors are responsible for bad fires. This is particularly true of the biographer, Suetonius, and the later Christian writers. Again, it can be impossible to tell the extent of fire damage. The most obvious example of this is the fire of AD 64.

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[227] The fires attributed to lightning by the sources are **Nos. 5, 6, 8, 10, 16, 18, 29, 39, 40, 53, 57, 60, 64, 66, 67, 71, 72, 74**. There is no evidence that fires resulted from the lightning strikes in **Nos. 5, 8, 10, 16, 18, 39, 60, 64, 66**.

[228] Fires which are listed in the sources in the context of portents are **Nos. 7, 8, 10, 16, 19, 21, 28, 29, 33, 36, 37, 40, 60, 62, 64, 66, 67, 69, 71, 74, 75, 86.**

[229] **Nos. 7, 19, 21, 28, 33, 36, 37, 62, 75, 86.**

Of the 88 fires, 21 are blamed upon civil disorder, civil war, arson and/or portents in the context of civil war.[230] Civil disorder and arson represented a threat to the state and an internal challenge to political power; the disapproval of such impious behaviour is apparent in these cases.[231] The burning or attempted burning of private houses as attested by Cicero shows a skewed focus in the context of more serious fires but only if the significance of arson is ignored. Fire as a weapon is noted frequently during a period of civil unrest including the assault on the Capitol in AD 69 (**No 61**) and when, sometime between AD 222 and 229 (**No.76**), the Praetorian Guard began setting fires in the city.

*Approval of an individual including restoration programmes (c. 20 fires)*

Records of restoration and building programmes are prominent where the achievements of an individual are praised. The focus of the sources is occasionally extolling an individual's concern for the wellbeing of the city and its people. Of the 88 fires, 20 refer to restoration but are not always focussed on that alone.[232] Five fires are referenced as part of Augustus' restoration programme.[233] Five more are recorded only epigraphically.[234]

*Serious fires (c. 15 fires)*

Fires are recorded in 15 cases by sources because of the extent and seriousness of the devastation they caused. Of those, four are also recorded in the context of restoration.[235] The context is usually accidental or unknown.

*Miraculous escapes    (c. 6 fires)*

There are six examples of recorded fires which emphasise the miraculous escape of a symbolic artefact.[236] Unless there are other sources for such fires it is impossible to know if the writer is exaggerating the fires to draw our attention to the miracle.

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[230] **Nos. 1, 2, 9, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 31, 41, 47, 61, 76, 77, 87, 88.**
[231] The attempt to burn the Capitol by slaves in 414 or 415 BC (**No. 2**), the funeral of Clodius in 52 BC (**No. 27**) where the mob nearly burned the whole city, civil unrest among freedmen in 31 BC (**No. 34**), burning of the Capitol in 83 BC (**No.21**) and AD 69 (**No 61**) are all mentioned by a number of sources as examples of improper, impious behaviour.
[232] **Nos. 22, 32, 34, 35, 37, 38, 42, 45, 48, 50, 51, 54, 62, 68, 70, 73, 80, 82, 83, 85**.
[233] **Nos. 34, 35, 37, 38, 42.**
[234] **Nos. 68, 80, 82, 83, 85.**
[235] **Nos. 7, 11, 13, 14, 38, 45, 46, 50, 51, 59, 79, 80, 81, 82, 83.** Restoration is also referenced in **Nos. 38, 45, 82, 83.**
[236] **Nos. 4, 7, 17, 19, 42, 86.**

*Loss of works of art (c. 5 fires)*

Works of art are main focus of the record in five fires.[237]

*Distress of populace (c. 4 fires)*

Reference to the distressing effect of fire on the people occurs in four fires.[238]

*Vigiles (c. 3 fires)*

Reference to the *Vigiles* occurs in three fires, and none in the context of actually extinguishing or containing a fire.[239] This is a remarkable statistic (Chapter 6, 183).

## Locations

Undoubtedly certain areas in a densely populated city where residential and commercial areas mingled (Chapter 4, 150) were more prone to fires than others. **Figure 10** shows the areas of the city where most fires are recorded. Areas such as the Forum Romanum, Forum Boarium and the Campus Martius suffered the most recorded fires and also suffered from periodic floods.[240] Records of fires in those areas repeatedly mention temples and shrines and the locations of those structures are illustrated in **Figure 11**; an overall total of 51 incidents of recorded fires affected temples and shrines.

The following is the list of fires in each named area in **Figure 10**; the temples and shrines which were affected in each area (**Fig. 11**), and the number of times they were impacted, are also listed:

*Forum Romanum*

**Fires** in the Forum or in the vicinity of the Forum: 390 BC (**No. 3**), 241 BC (**No. 6**), 210 BC (**No. 9**), 178 BC (**No. 14**), 169 BC (**No. 15**), 148 BC (**No. 17**), 52 BC (**No. 27**), 39 BC? (**No. 32**), 14 BC (**No. 38**), 7 BC (**No. 41**), AD 64 (**No. 59**), AD 80 (**No. 62**), Reign of Marcus Aurelius (**No.70**), AD 191 (**No. 72**), AD 283 (**No. 82**), AD 307 (**No. 83**). **Total: 16**

**Temples and Shrines**: temples of Vesta (4 probable impacts), Concord (2 impacts), Castor and Pollux, Venus and Rome, Venus (?), Saturn, Peace, Shrine of Ops.

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[237] **Nos. 34, 53, 55, 56, 57**.
[238] **Nos. 3, 59, 72, 77.**
[239] **Nos. 41, 43, 47.**
[240] Aldrete 2007, 43- 44.

*Palatine*

**Fires**: 389 BC (**No. 4**), 111 BC (**No. 19**), 58 BC (2) (**Nos. 23** and **24**), 57 BC (2) (**Nos. 25** and **26**), 38? BC (**No. 33**), 25 BC (**No. 35**), 12 BC (**No. 39**), AD 3 (**No. 42**), AD 15 (**No. 44**), AD 64? (**No. 59**), AD 68? (**No. 60**),  AD 80 (**No. 62**),  AD 191 (2?), (**No. 72**), AD 363 (**No. 86**).
**Total: 17**

**Temples and shrines**: temples of Apollo (2 impacts), Salii, Magna Mater (2 impacts), Augustus, the hut of Romulus (2 impacts).


*Capitoline*

**Fires**: 460 BC (**No. 1**), 415 BC (**No. 2**), 390 BC (**No. 3**), 156 BC (**No. 16**), 88 BC (**No 20**), 83 BC (**No. 21**), 9 BC (**No. 40**), AD 64 (**No. 59**), AD 69 (**No. 61**), AD 80 (**No. 62**), AD 189 (**No. 71**). **Total: 11**

**Temples**: the temple of Jupiter Capitolinus (6 probable impacts),


*Campus Martius.*

**Fires**:  156 BC (**No. 16**)**,** AD 21 (**No. 45**), AD 62 (**No. 57**), AD 64 (**No. 59**), AD 80 (**No. 62**), AD 110 (**No. 67**), AD 203? (**No. 73**), AD 247 (**No. 78**),  AD 283 (**No. 81**). **Total: 9**

**Temples**: the temples of Nymphs, Serapis, Isis, Neptune, Juno Regina (2 probable impacts).


*The Aventine and Circus Maximus*

**Fires**: 206 BC (**No. 10**), 203 BC (**No. 11**), 31 BC (**No. 34**), 16 BC (**No. 37**), AD 36 (**No. 50**), AD 64 (**No. 59**), AD 80 (**No. 62**), Reign of Aurelian (AD 270-275) (**No. 80**). **Total: 8**

**Temples**: temples of Ceres, Liber and Libera (2 impacts), Iuventas, Flora.


*Forum Holitorium*

**Fires:** 213 BC (**No. 7**), 31 BC (**No. 34**), AD 64 (**No. 59**), AD 80? (**No. 62**),  Reign of Hadrian (**No. 68**). **Total: 5**

**Temples**: temples of Spes (3 possible impacts), Janus (2 impacts), Juno Felicitas (2 impacts)

*Forum Boarium*

**Fires:** 213 BC (**No. 7**), 192 BC (**No. 13**), AD 38? (**No. 51**), AD 64 (**No. 59**), AD 80 (**No. 62**). **Total: 5**

**Temples**: temples of Fortuna (2 impacts), Mater Matuta (2 impacts), Felicitas (2 possible impacts).

*Quirinal*

**Fires:** 275 BC (**No. 5**), 206 BC (**No. 10**), 49 BC (**No.29**), AD 49? (**No. 55**), AD 96 (**No. 64**).
**Total: 5**
**Temples**: temples of Salus (3 impacts), Quirinus (2 impacts), Gens Flavia.

*Valley of the Colosseum*

**Fires**: AD 64? (**No. 59**), AD 80 (**No. 62**), AD 217 (**No. 74**), AD 252 (**No. 79**).  **Total: 4.**

**No temples.**

*Caelian*

Fires in AD 27 (**No. 46**), Reign of Constantine (**No. 85**).  **Total: 2.**

**No temples**

**Case Studies**

This analysis so far suggests that the number of fires found in the sources over the time-span (460 BC – AD 410) is a misleading record of the subject of fire and fires in Rome. The records are unevenly distributed and many of them incidental; important public, especially sacred, buildings are mentioned time and again; the reasons for the record are many and complex but rarely for their effect on the life of the people except in the case of the major conflagrations.[241] Many fires occurred which were not recorded at all and other means must be found to understand their impact on the city and on the lives of the citizens. Detailed records of some fires exist (*eg* AD 64) but even they can be misleading, inaccurate and biased. Three fires (213 BC (**No.7**), 31 BC (**No. 34**) and AD 64 (**No. 59**)) are now examined to explore the reliability of the traditional understanding of the extent of these fires. The same methodology could profitably be applied to other fires, for example, AD 80 (**No. 62**), 188 (**No. 71**) and 191 (**No. 72**).

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[241] Johnstone 1992, 53.

**213 BC**

Livy (24.47.15) provides detailed information on the fire of 213 BC (**No. 7**): 'everything between the Salinae and the Porta Carmentalis - including the Aequimaelium, the Vicus Iugarius and the temples of Fortuna and Mater Matuta - burned, while outside the gate the widespread fire also destroyed many sacred and secular buildings.' He also records (25.7.5-6) the restoration in 212 BC of the temples of Fortuna, Mater Matuta and adds the temple of Spes outside the Severan wall. **Figure 12** shows the area and the buildings listed by Livy. The distances between the locations mentioned is remarkable as is the fact that dense commercial and, perhaps, residential areas lying in between are not mentioned.

The Salinae (1) were possibly the warehouses for salt situated near the Porta Trigemina (2) at the southern end of the Forum Boarium.[242] The Porta Carmentalis (3) was on the northern side of the Forum as were the temples of Fortuna and Mater Matuta (4) and the Vicus Iugarius (5) which contours round the south eastern slope of the Capitoline Hill. The Aequimaelium (6) was an open space on the lower part of the south-eastern slope of the Capitoline Hill above the Vicus Iugarius. The Temple of Spes (7) was in the Forum Holitorium.

If we are to believe Livy, this fire swept across the Forum Boarium but there is no mention of what it may have burned in its path. No reference is made to the ancient structures associated with one of the oldest and most venerable cult centres of Hercules in Rome. The Ara Maxima Herculis (12) was supposedly built following Hercules victory over Cacus.[243] The Aedes Herculis Invicti (13) was also called the temple of Hercules ad Portam Trigeminam which would corroborate its location (Macrob. *Sat*. 3.6.10). Both the temples of Hercules Victor (10) and Hercules Pompeianus (11) were associated with the Ara Maxima and are likely to have existed in 213 BC.[244] The Horrea (8) and the temple of Portunus (9) may have existed at this time; we cannot be certain.[245] The Forum played a crucial role in the settlement's evolution: markets for livestock, on the bank of the river, near a crossing point

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[242] Richardson 1992, 341 suggests it was a place name by this period and that it was unlikely to have been the site of warehouses for salt as the location would have been inconvenient.
[243] Richardson 1992, 186. Coarelli 2007, 308 points out that it was traditionally considered by the Romans to be older than the city itself.
[244] Coarelli 2007, 319; Richardson 1992, 189; *LTUR* 1993 - 2000, 3. 15 - 23.
[245] Richardson 1992, 320 says Portunus was mid 1st century but Claridge 2010, 286 points out that excavations have found traces of an earlier temple dating from the late 4th or 3rd centuries BC. *LTUR* 1993 - 2000, 4. 153- 4 discusses the uncertainty surrounding the date of the temple. See Chapter 5 for a discussion of *Horrea*.

and port where the Via Salaria ended; the Via Salaria was used for the transport of salt from the mouth of the Tiber.[246] A number of roads intersected it and two important bridges led into it. Three gates of the Servian Walls (Carmentalis, Flumentana and Trigemina) served the Forum at that time. There must have been many buildings and temporary structures in the Forum in 213 BC, not least workshops, many with open fires. Evidence of this comes from a strange story told by Livy describing how in 218 BC a cow climbed to the 3rd storey of a building in the Forum Boarium (Liv. 21.62.3).

The buildings listed by name are important, symbolic temples located at a questionable distance from each other; there is no mention of other buildings which may, or may not, have burned while silence surrounds the lives, and livelihoods, destroyed by the fire. Other very important sacred buildings are not mentioned either (**Fig. 12**). What appears to be a detailed account of a fire actually raises more questions than answers.

## 31 BC

Similar observations can be made about the fire of 31 BC (**No. 34**) also located in the Forum Boarium. Uncertainty surrounds the extent and location of this fire. According to Dio (50.10.3-4), it started in the Circus Maximus, destroyed a large part of the Circus itself, the temple of Ceres, a shrine dedicated to Spes, and 'a large number of other structures'. Tacitus (*Ann.*2.49) suggests that other buildings burned at that time writing that Augustus restored several buildings which had been ruined (*abolitas*) by age or fire (*igni*) and including those mentioned by Dio (the temple of [Liber, Libera and] Ceres 'adjacent to the Circus Maximus') but adding the temple of Flora 'on the same site', and the temples of Janus and Spes in the Forum Holitorium (**Fig. 13**).

Dio and Tacitus agree the fire started in the Circus Maximus (1) and moved in two directions, towards the Aventine where it destroyed the joint temple of Ceres, Liber and Libera (2) and the adjacent temple of Flora (3), then north towards the Forum Holitorium where it burned the temple of Spes (4) and possibly the temple of Janus (6). The temples of Janus and Spes lay on either side of the temple of Juno Sospita (5), and it must have been affected by this fire. The most striking aspect of the fire is that it travelled from the Circus Maximus to the

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[246] Coarelli 2007, 308.

Forum Holitorium apparently without leaving its mark on the Forum Boarium. It is accepted by modern commentators that these buildings so far apart burned in the same fire (Chapter 2, 58). The agreed stance (*LTUR* 4.336) is that the temple of Spes (*in Holitorio*) burned in a fire which affected part of the Circus Maximus and the temple of Ceres, Liber and Libera and that the temple of Janus probably burned with its neighbour, the temple of Spes (3.91).[247] If this is the case, as in the record of the fire of 213 BC, there is no mention of the *Horrea* (7), temple of Portunus (8), temple of Hercules Victor (9), temple of Hercules Pompeianus (10), Ara Maxima Herculis (11), Aedes Herculis Invicti (12) or Mater Matuta (13). Apart from these structures which existed in the first century BC, the Forum would have been a much larger commercial and residential centre than in 213 BC but there is no reference to this in the sources. As in the case of the fire of 213 BC, the path of the fire must be mapped to see the inconsistencies and selective nature of Livy's account of the fire.

## AD 64

More has been written, both by ancient sources and by modern commentators, about this fire than any other in Rome. It has entered the consciousness of western society even as a catch phrase 'Nero fiddled while Rome burned'. The sources (mainly Tacitus, Suetonius and Dio) describe a catastrophic fire which destroyed large swathes of the city but the search for the truth is fraught with difficulties as it is clear both from inconsistencies in the sources and from archaeological evidence that its impact was exaggerated; that exaggeration was accepted at face value until scholars of the later 20th century. The almost immediate *damnatio memoriae* of Nero and the subsequent Christian perspective of the narrative add further problems of interpretation. For example, Dio's epitome was the work of John Xiphilinus a Christian copyist of the 11th century. The view of Nero as an arsonist, the greatest of all, which has lasted millennia since the outbreak of the fire itself is deep-rooted in the perception of the fire and chimes with the Roman horror of incendiarism.

Tacitus, Suetonius and Dio give long accounts of the fire and each includes aspects of contemporary popular gossip and the desire to blame someone for such a catastrophic fire.[248] Tacitus does not directly blame Nero but he introduces a note of uncertainty, while both Dio and Suetonius have no hesitation in blaming him.

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[247] Rubin 2006 alone demurs from this view (Chapter 2, 59).
[248] This is a common reaction to a major conflagration. (See Chapter 4, 158).

According to Tacitus and Suetonius, the fire blazed for six days and completely burned the oldest and most populous parts of the city.[249] The *arae incendii Neronis* (see below 135-136) refer to nine days. Tacitus wrote that only four regions escaped, three were completely destroyed and the remaining seven severely damaged, but he does not identify the regions. Scholarly debate surrounds the identification of the regions which were damaged.[250] It is probable that the four regions which remained untouched were peripheral, I, V, VI, XIV, in spite of presence of an *ara incendii* found *in situ* on the Quirinal in Region VI.  This means that those damaged were probably II, VII, VIII, IX, XI, XII and XIII and that the central regions of III, IV and X were those worst affected (**Fig. 14**).

*Path of the fire*

The path of the fire can be traced from Tacitus' account. It started at the east end of the Circus Maximus, swept through the Circus, on to the Forum Boarium and the Velabrum, jumped to the  Caelian, Aventine, Capitoline, and Palatine Hills. Having traversed the Velia it was stopped by fire breaks at the foot of the Esquiline.  It broke out again on Tigellinus' estate in the Aemiliana district of the southern part of the Campus Martius. Tacitus includes a list of specific buildings burned:  the temple of Luna on the Aventine, altar of Hercules in the Forum Boarium, temple of Jupiter Stator in the east of the Forum, temple of Vesta, the Regia and the temple of the Penates in the Forum, all with the ideological import of dating from antiquity.  Suetonius gives no information on what buildings burned while Dio (62. 18.2) simply writes 'the whole Palatine hill, the amphitheatre (θέατρον) of Taurus, and nearly two-thirds of the remainder of the city were burned, and countless persons perished.' The amphitheatre of Statilius Taurus was in the Campus Martius and must have stood near the Aemiliana mentioned by Tacitus.[251]  The remainder of the Campus Martius probably remained unscathed as it was used subsequently by Nero to provide shelter for the tens of thousands of homeless.  Dio's selection is odd: the outrageous impiety of Nero suggested by the destruction of the Palatine is understandable but it is equated with the amphitheatre of Statilius Taurus. We are relying on an epitome of Dio (Book 62), a selection of a selection. In fact, the whole of the Palatine (Region X) did not burn: in AD 69 Galba offered sacrifice in front of the temple of Apollo on the Palatine (Tac. *Hist*. 1.27). Dio was obviously

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[249] Dio says 'several days'.
[250] Scholars differ on the regions worst affected: Canter 1932, 276, says the three regions were probably III, X and XI. Newbold 1974, 858 agrees with Canter but Sablayrolles 1996, 791 says regions III, IV and X. Claridge 2010, 16 says three regions were razed to the ground but does not name them; Dyson 2010, 164 says seven regions were totally destroyed and three others badly damaged which must be a typographical error.
[251] Richardson 1992, 11.

exaggerating and the western side of the Palatine survived. Modern commentators believe that Tacitus was also exaggerating. Sablayrolles says that none of the three central regions (III, IV and X) was actually burned to the ground and that literary evidence as well as archaeological evidence shows that Dio and Tacitus are exaggerating.[252]

The number of *insulae* and *domus* which perished has also been debated.  Tacitus (*Ann*.15.41) writes that they were innumerable.  The apocryphal letter from Seneca to Saint Paul (11.12) gives 4,000 *insulae* and 132 *domus*. Canter believes this is an exaggeration but the ratio of *c*.30:1 corresponds with the ratio for the whole city in the Regionary Catalogues.[253] Newbold reckons that *c*.200,000 inhabitants were made homeless as at least 10,000 to 12,000 *insulae* plus several hundred *domus* burned.[254] It is impossible to ascertain numbers but as Nero opened his gardens and the large buildings in the Campus Martius, as well as building temporary shelters, the numbers must have been great.[255]   Lack of consistency in the sources and disagreement among modern scholars about what constitutes an *insula,* an individual unit or a block, adds to the confusion.[256]

### *Arae Incendii Neronis*

Commentators long believed that these altars marked the boundaries of the area affected by the fire and that their location gave some sense of the maximum spread.[257] Three have been found but only one survives which was found *in situ* on the SE side of the Alta Semita adjacent to the Church of St Andrea al Quirinale (**Fig. 14**).  Two more were excavated in the 16th and 17th centuries, one presumed to have been found on the Vatican plain and the other (*CIL* VI 30837c) uncovered in 1618 on the SW side of the Circus Maximus at the foot of the Aventine. Elements of the latter have been preserved in historical record and the consistency of design of all three seems to indicate a connection between them and that they were,

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[252] Canter 1932, 276, Newbold 1974, 854,  Richardson 1992, 21, Sablayrolles 1996, 788-793,  all discuss the need to be wary of the literary sources in relation to the extent of the fire.

[253] Beaujeu 1960, 69, Canter 1932, 276, Newbold 1974, 858,  n.3.

[254] Newbold bases this on the assumption that the population was between 750,000 and 1 million and on the number of *insulae* and *domus* in the Regionary Catalogues.

[255] Tacitus (*Ann*. 15.39): *Sed solacium populo exturbato ac profugo campum Martis ac monumenta Agrippae, hortos quin etiam suos patefecit et subitaria aedificia exstruxit, quae multitudinem inopem acciperent*. The 'buildings of Agrippa' in the Campus included the Pantheon, Diribitorium and Saepta Julia, all of which were huge.

[256] Packer 1967, 83.

[257] Griffin 1984 269, n39: '[*arae*] were established by Domitian along the edge of the area destroyed in the Fire.'   See also Dyson 2010, 164, Rubin 2004, 102.  Richardson 1992,  21 says 'they probably stood along the limit of the area devastated'.

perhaps, a series of unknown number.[258] The original suggestion by Lanciani, followed by later commentators, that there was one in each region and therefore 14 in all makes little sense as not all regions burned.[259] In addition, the surviving *ara* found *in situ* was in Region VI which was apparently untouched by the fire.

Although the view that they marked the boundary of the fire and that they were erected in fulfilment of a vow made by Nero has persisted in much the same way as the image of Nero projected by the sources has persisted, we do not know why they were erected by Domitian. Long held assumptions about their purpose, based on Lanciani's notes, have now been challenged in the work of *LTUR*, Darwall-Smith, and particularly Cline and Closs. The inscription in the enclosure of the extant altar (*CIL* VI 826) does *not* say that it was a vow 'made by Nero'; it says that it was in fulfilment of a vow made as the city burned in the time of Nero (*Neronianis temporibus*).[260] The use of the adjectival *Neronianis* is interesting in that it references Nero but only indirectly, perhaps as a deliberate distancing from him by the Flavians (Chapter 8, 244).[261]

Far from marking the boundary of the fire of AD 64, the altars may be a religious gesture by Domitian who had just endured the fire of AD 80 and who wished to project his own image as the protector of the city.[262] Ultimately, these altars cannot reliably provide information on the extent of the fire of AD 64. Although this fire is that which is most reported by the ancient sources, most commented upon by later scholars, and about which it is generally assumed we know most, it is impossible to quantify its real extent. The uncertainty of the facts of this fire serves as an illustration of the need to go back to the sources and re-evaluate assumptions.

The findings of the Reading of Fire (Chapter 2) and the analysis of the recording of fire by the sources in this chapter strongly suggest that far more fires than recorded occurred in Rome and that certain types of buildings and homes are not mentioned in the sources. The next chapter investigates how flammable the city was and whether this suggestion can be upheld.

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[258] Richardson 1992, 21; *LTUR* 1. 76; Cline 2009, 15. See Closs 2014, 102 for a full discussion on the evolving debate surrounding the *arae*.

[259] Lanciani 1888, 83- 84; Platner and Ashby 1929; Coarelli 2007.

[260] *Haec area, intra hanc/definitionem cipporum/clausa veribus, et ara/ quae/est inferius, dedicata est ab/ imp. Caesare Domitiano Aug./ Germanico ex voto suscepto,/quod diu erat neglectum nec/redditum, incendiorum/arcendorum causa,//quando urbs per novem dies/arsit Neronianis temporibus ....*

[261] Closs 2016, 110 conducts a close reading of the text of the inscription.

[262] Darwall-Smith 1996, 236; Cline 2009, 19.

# Chapter 4        Characteristics of Fires in Rome: an urban fire régime

## Introduction: the ancient city as a fire régime

Sources record a total of 88 fires from 460 BC to AD 410 (Chapter 2).[263]  There can be no doubt that this number does not reflect the fact that in Rome, as in most preindustrial cities, fires, ranging from small domestic fires to conflagrations, were a central fact of urban life.[264] Cities, just as bush, forest and agrarian land, are habitats of fire. In the modern city, fire protection saturates the streetscape and individual buildings, and a city is, in fact, a fire-driven ecosystem best described as a 'fire régime' (Chapter 1, 1).[265] Given the 'flammability' of Rome, the  awareness of the danger, the constant efforts made to prevent, contain and control outbreaks of fire, and the manner in which this was interwoven with political, religious and ritual life of the city, the model of the city as a fire régime fits ancient Rome.

Rome differed from all other ancient cities in scale and in population. It faced social and administrative issues familiar to any modern city. A political and social system devised to sustain concentrated settlement, it had all the ingredients of a flammable city: the steep slopes of its topography, dense large population, occasions of thriving economy and booming construction, all interspersed with naked flame.[266] Legislative, technological and architectural innovations to counter fire, the revival of the cult of Stata Mater by Augustus, and particularly the existence of a very large 'fire-brigade', *Vigiles* organised on para-military lines, all point to a system of urban management with an eye to the constant struggle to control fire (Chapters 5 and 6).  The testimony of the sources underlines this struggle as in republican and into imperial times they reference the threat and the reality of fires as an everyday occurrence in Roman life.  Strabo (5. 235) wonders how such a large city with a continuously increasing population and constant building could be maintained in spite of fires and building collapses.[267] Vitruvius (*De arch*. 2.9.16) recommends larch wood to stop fires spreading frequently from one building to another.[268] Juvenal (3.7) writes of living in dread

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[263] All fires will be referred to by their number, in bold and in brackets, as listed in the Chapter 2.

[264] Aldrete 2007, 104 makes the same point about floods affecting the city of Rome where he says not all were recorded as it was primarily major public buildings which were deemed worthy of recording.

[265] Pyne 2012, 72.  In the modern world it is typically war or earthquakes that cause conflagration in cities.

[266] Bankoff  2012, 8.

[267] Strabo (5. 235):   δι᾽ ἣν ἐπὶ τοσοῦτον αὐξηθεῖσα ἡ πόλις ἀντέχει τοῦτο μὲν τροφῇ, τοῦτο δὲ ξύλοις καὶ λίθοις πρὸς τὰς οἰκοδομίας, ἃς ἀδιαλείπτως  ποιοῦσιν αἱ συμπτώσεις καὶ ἐμπρήσεις καὶ μεταπράσεις, ἀδιάλειπτοι καὶ αὗται οὖσαι.

[268] Vitruvius (*De arch*. 2.9. 16):  *Cuius materies si esset facultas adportationibus ad urbem, maximae haberentur in aedificiis utilitates, et si non in omne, certe tabulae in subgrundiis circum insulas si essent ex ea*

of fires and collapsing buildings.[269] Suetonius (*Aug*. 28) describes a city exposed to flood and fire.[270] Seneca (*Ben.* 4.6.2; 6.15.7; *Ira* 3.35.4-5) draws lessons about the ephemeral nature of life from the collapse of flimsy buildings and fires. Ulpian states that not a day passed in imperial Rome without several outbreaks of fire and that, in most cases, fires could be attributed to the negligence of householders (*Dig.* 1. 15. 3). Fire does not respect status and affected all levels of society, but while the poor were more likely to burn or die of smoke inhalation, the rich had more property to lose. The rich man trembled for his mansion and in his anxiety kept buckets of water on hand to save his precious objects (Juv. 14. 305).

**What made Rome flammable?**

The individual elements which made Rome a flammable city did not in themselves constitute fire hazards; it was the combination of a number of factors which conspired to make the danger of fire constant in Rome. The natural topography of the city which led to the housing of an increasing population in confined, narrow, steep terrain together with the mix of residential buildings, shops and factories, all contributed to the vulnerability of the city. The flammable materials with which the city was constructed: from the wattle-work (*opus craticium*) of the multi-storeyed *insulae*, traditionally, and perhaps incorrectly (p. 143-149 below), regarded as flimsy and 'jerry-built', to wooden upper tiers of public buildings like the Colosseum, to cross-beams and scaffolding of monumental temples. Added to all of this was the pervasive presence of naked flames in a commercial, ritual and residential context. This chapter explores the 'flammability' of Rome and investigates whether assumptions have been made by modern scholars about the nature of that flammability.

**Topography**

Fundamental to Rome's vulnerability to fire and flood, was the topography of the site of Rome with its valleys, hills and marshes (**Fig. 15**) which dictated the settlement pattern of the city. There were only so many areas which lent themselves naturally to habitation and, from the first settlement, people tended to cluster in those areas. The earliest evidence for settlement comes from the slopes of the Palatine, the site of the Forum Romanum and the

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*conlocatae, ab traiectionibus incendiorum aedificia periculo liberarentur, quod ea neque flammam nec carbonem possunt recipere nec facere per se.*

[269] Juvenal (3.7): *... ut non deterius credas horrere incendia, lapsus tectorum adsiduos ac mille pericula saevae Urbis.*

[270] Suetonius (*Aug.* 28): *Urbem neque pro maiestate imperii ornatam et inundationibus incendiisque obnoxiam excoluit adeo, ut iure sit gloriatus marmoream se relinquere, quam latericiam accepisset. Tutam vero, quantum provideri humana ratione potuit, etiam in posterum praestitit.*

Forum Boarium.[271] The first *pomerium* circled the Palatine (Tac. *Ann*. 12.24) and evidence of huts dating to the 8th century can be seen there today.[272] The continued political and ideological importance of the Forum Romanum, together with attempts to pave it before the end of the 6th century BC, point to its importance from the beginning.[273] The Forum Boarium was effectively the first port of Rome on the Tiber.[274] When Aeneas visits the early site of Rome he comes ashore at the Forum Boarium, makes sacrifice at the Ara Maxima Herculis (**Figs. 12** and **13**), and walks up the Via Sacra to the future site of the House of Augustus on the Palatine (Verg. *Aen*. 8. 337-347). This poetic tour pinpoints what the Romans regarded as the oldest and most venerable parts of the city.

In addition to the steep slopes and summits of the hills, low-lying areas such as the Campus Martius, which were marshy and prone to flood from the Tiber, limited areas suitable for habitation and commerce. The ritual constraints of the *pomerium* also dictated settlement patterns and expansion of the city. The Palatine Hill became imbued with a sacred and symbolic topography which made it the preserve of élite and sacred buildings. Augustus made sure to build his house there adjacent to the Casa Romuli.[275] The large area of the Campus Martius, dedicated to Mars (Livy 2.5.2), was *ager publicus* not built upon for much of the republican period; it was not until after the Punic Wars that it attracted development of sacred precincts funded by foreign conquests and, in the economic crisis following upon the Social War (91- 88 BC), that *loca publica* were sold for private ownership and development (Oros. 5.18.27).[276] In all of these circumstances it made sense that anyone owning land in Rome would wish to build upward to maximise the potential of the site. This, coupled with the circumstances of the growth of the city which was characterised by sudden spurts due to migration from other parts of Italy and increases in wealth resulting from foreign conquests, made any systematic scheme of planning very difficult to adopt. For example, the Roman conquest of Italy in the period from 340 to 270 BC, victory in the First and Second Punic Wars (264-241; 218-202 BC), the widespread conquest throughout the Mediterranean from early in the 2nd century BC, and the victory of the Social War (91- 88 BC) led to an influx of war booty and wealth as well as of people, including large numbers of slaves (Livy 7.16.7).[277] Thus the main lines of the streets were dictated from very early days, and remained

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[271] Smith 2000, 18.
[272] Smith 2000, 23; *LTUR* 1993-2000, 1. 241.
[273] Smith 2000, 25; *LTUR* 1993-2000, 1. 310.
[274] Smith 2000, 27; *LTUR* 1993-2000, 2. 295-7.
[275] Smith 2000, 31.
[276] Jacobs and Conlin 2014, 2.
[277] Cornell 2000, 46.

unchanged although there were attempts at different times to impose more ordered planning. For example, the building programmes of Sulla (Plut. *Sull*. 35), of Caesar after the fire of 52 BC (**No. 27**) (Suet. *Caes*. 44; Plut. *Caes*. 58), and of Nero after the fire of AD 64 (**No. 59**) (Chapter 5, 168) did result in discrete public ceremonial spaces, but the teeming residential and commercial zones remained commingled.[278]  Although the haste to rebuild after the Sack of 390 BC was blamed (Liv. 5.55), it is far more likely that the gradual, and unplanned, development from remote beginnings dictated the lasting confusion of the streetscapes mentioned in the sources (Chapter 8, 237 - 238).[279]  For example, Juvenal (3. 6 - 8) comments on perpetual dread of fires and falling houses and the crowded streets, while Tacitus describes narrow, twisting lanes and formless streets typical of old Rome (*Ann.* 15.38). Although fires were occasionally the catalyst for urban renewal (Chapter 8), still, after generations of conflagrations, the *vici* of Rome remained worlds of curved streets flanked by shops and doorways and overhung by balconies.[280] Varro's description, in the late republic, of *fundulae* (dead-end streets) and *angiportae* (alleyways) (*Ling*. 5.143) is reflected on the *FUR*, carved between AD 205 and 208, which shows dense, confused streetscapes in parts of the city. For example, fragment 10g (**Fig. 16**) shows part of the *subura* with its alleys, shop-fronts and *insulae* in a dense conglomeration of residential and commercial activity.[281] Further evidence of the persistence of the streetscape comes from Herodian's (7.12.5-6) description of the fire of AD 238 (**No. 77**), where the confined spaces between buildings, the intermingling of homes and shops, the flammability of the wooden balconies and buildings, all meant that people were unable to survive because any escape route was cut off by flames.

Added to the winding narrow streets were the steep slopes resulting in the classic topographical conditions for a firestorm should a fire go unchecked.  Tacitus' account of the fire of AD 64 mirrors eye-witness accounts of the fire of Lisbon in 1755, a city similar to Rome in topographical terms. In Lisbon the fire rushed up its barely navigable, sloping, narrow streets and was communicated from one street to another by the flakes of fire driven by the self-generated wind.[282]  Accounts of the 1906 fire of San Francisco testify to flames rushing up the slopes of the city faster than downhill.[283] The fire of London in 1666 is detailed in the diaries of Samuel Pepys and John Evelyn who give graphic descriptions of

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[278] See Favro 1996, 55-78, for a comprehensive description of the building programmes of Sulla and of Caesar.
[279] See Cornell 2000, 43, for a discussion on the lack of archaeological evidence of the Gallic Sack of 390 BC.
[280] Dyson 2010, 216.
[281] The *FUR* is the best evidence we have of the ordinary, typical residential and commercial districts of imperial Rome.
[282] Nozes 1990, 150.  A British eyewitness account quoted by Molesky 2012, 152.
[283] Pyne 2001, 109.

how the fire became a conflagration in the immense warren of overcrowded, combustible wooden houses, thatched hovels, and narrow streets in a city with primitive water supplies.[284] As it did in those cities, a fire thrives in closed spaces creating its own self-sustaining wind system; once a blaze is established, especially outdoors, the hot air becomes less dense than the surrounding air, rises, creates circulation and generates winds. A firestorm then develops where there is an overwhelming progression of fire caused by a combination of convective and radiative processes.[285] In firestorms, drafts are created that can suck lighter fuels at ground level into the fire, the buoyant current lifts masses of burning gases and solid débris hundreds of feet into the air - débris that falls as burning brands among other fuels downwind. The intensity of the fire produces radiative heat of such magnitude that fuels some distance away are heated to their ignition temperatures and burst into flames. The firestorm is the mechanism responsible for the terrible damage in infamous fires such as those in Dresden (1945), Edo/Tokyo (1657) and Chicago (1871).[286] The effect of such radiated heat is described by an eye-witness who saw a whole wooden block nearby 'flash into flame' in Chicago.[287] The 'jumping' behaviour of the fire in Chicago where fire-fighters found the fire breaking out behind them is recorded by several witnesses.[288] The same pattern of fire-generated wind was observed by Pepys and Evelyn in the fire of London (1666), repeated in Baltimore (1904), and San Francisco (1906).[289] Tacitus' description of the movement of the fire of AD 64 (**No. 59**) is all too familiar:

> The fire with increasing force moved first along the low land, it then moved uphill, only to descend again and destroy the low areas. Any attempt to stop the fire was overwhelmed by the speed of the conflagration, and by the vulnerability of the city due to its narrow winding roads; it moved hither and tither in the huddled labyrinthine districts of which old Rome comprised. (*Ann.* 15.38.)

Tacitus' account is the earliest accurate account of the behaviour of fire in an urban setting and is remarkable for the manner in which it is echoed by eye-witness accounts recorded for all subsequent urban conflagrations.

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[284] Pepys 1996; De Beer 2006.

[285] DeHaan and Icove 2012, 47. Radiation is the transfer of heat; convection is the process of transferring heat by the movement of air or gas.

[286] Molesky 2012, 151; Lowe 1979, 31; Sand and Wills 2012, 44;

[287] Mrs Alfred Hebard quoted in Lowe 1979, 32.

[288] Lowe 1979, 10.

[289] De Beer 2006; Pepys 1996; Porter 2009; Molesky 2012, 151; Rees Davies 2012, 279.

Such must have been the behaviour of all the great fires of Rome where the wind, coupled with intense radiated heat, sent sparks and ash from one building and one street to another. Even before a fire reached this stage, movement along steep, narrow, twisting inclines, especially if fleeing or fighting to contain the flames with fire-fighting equipment, would have been impossible. Contemporary accounts of the fire of Lisbon describe high winds, intense radiated heat and ash cloud but also streets that were difficult to navigate and becoming impassable as they were clogged with fallen masonry, broken carriages, and rotting bodies.[290] This has serious repercussions for fire-fighting and, in fact, after many subsequent reforms to Lisbon's fire-fighting policy, the difficulty of moving water pumps up steep inclines remained.[291]

The persistence of the jumbled configuration of Rome in spite of imperial building programmes is easily understood, given the increasing population and the limited area of the city.  However, Favro suggests a different perspective on the persistence of the 'unplanned' evolution of Rome.  She argues that even in his desire to upgrade the city of Rome, Augustus reverentially preserved the labyrinthine streets, irregular public spaces and mean residential facilities.  The ideological and political framework in which the vulnerability is actually preserved is one which echoes through the ages (Chapter 8). While the city remained awkward, conceptually its form affirmed Rome's identity as capital of the Romans and Augustus deliberately intended the city to continue as a physical representation of Roman history.[292] Even prior to Augustus, the struggle for power in the second half of the first century BC resulted in prominent men coveting the opportunity to erect great public buildings in their name. This clamour for notoriety resulted in the footprint of commercial and residential buildings being squeezed even closer together.[293]

The frequent references to building collapses and to tremors in lists of prodigies already seen in the List of Fires (Chapter 2) highlight the geological instability in the regions of Latium and Campania.  This instability of volcanic terrain still causes earthquakes and tremors today.[294] The seven hills of Rome owe their existence to volcanic activity and the city is

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[290] Letter from E. Turnville (November 19, 1755), manuscripts, Add. 46362, British Library, London, quoted in Molesky 2012 167.
[291] Molesky 2012, 167.
[292] Favro 1996, 116. The argument surrounding the political and sociological reasons why some buildings and some areas are more flammable than others in a city has arisen again with the destruction of Grenfell Tower in June 2017.  Other examples include Edo (Tokyo) during the Shogunate military government (1600 – 1868) and in Cleveland in the 1970s.  This topic is discussed in Chapters 7 and 8.
[293] Carter 1995, 43.
[294] Stoddart 2007, 102.

flanked by two large, geologically young, volcanic fields: the Alban Hills to the southeast and the Sabatini to the northwest.[295] While there is no record of a major conflagration in Rome resulting from an earthquake, as in the case of Lisbon and San Francisco, shaking buildings, knocked braziers and lamps would certainly have caused fires.

**Size and Density of the Population**

At the end of the republic, the population was probably some 750,000 living within the legal boundaries of the city. Although it is a contested topic, modern scholars are of the view that the population of Rome may have risen from around 180,000 in 270 BC to 375,000 in 130 BC and to 1,000,000 under Augustus.[296] The widely accepted estimate is around 800,000 to 1,000,000 at the time of Augustus but this will always be debated as there is no direct evidence for the numbers. The Regionary Catalogues have been used to estimate population size but for all figures the interpretation of an *insula* is key: it is unclear whether it is a single unit or a block of dwellings and '*insula*' remains a very controversial term.[297] The controversy is exacerbated by the implication in the *Digest* (7.8.16.1; 50.16.166) that it may be a legal term of ownership rather than an architectural definition.[298] For the purposes of this study, the interpretation of the term as meaning a block of residences is accepted. The Catalogues give a total of around 46,500 *insulae* but while the numbers in the *Notitia* and *Curiosum* closely correlate, they do not completely match.[299] Morley estimates the probable ratio of the *plebs frumentaria* to the *plebs urbana* (Suet. *Caes.* 41; *Aug.* 40) and concludes that the population of Rome from the age of Augustus ranged from 650,000 to over 1,000,000. That is as close to a figure as one can profitably argue.[300]

As the population grew with the expansion of the power of Rome and increasingly more people were attracted to the capital city, there was a concomitant need for increased housing from the 2nd century BC. Given the topographical constraints of the site, building upwards in multi-storeys was the only solution. Early evidence comes from reference to a cow climbing to the 3rd storey of a building in the Forum Boarium in 218 BC (Liv. 21.62.3). In his play

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[295] Heiken, Funicello, De Rita 2005, 28.
[296] Particularly useful discussions are found in Rickman 1980, 8, Garnsey 1988, 191, Mattingly and Aldrete 2000, 142. Sporadic increases in population would have exacerbated the fire hazards but a counter-balancing effect was created by the increased use of concrete and fired brick in housing the population from the late republic into the early empire described in Chapters 5 and 8.
[297] See Storey 2013, 151 for a discussion on the 'controversial term *insula*'.
[298] Wallace-Hadrill 1994, 132 accepts this view as definitive.
[299] Nordh 1949.
[300] Caesar reduced the number from 320,000 to 150,000 (Suet. *Jul.* 41.3); Augustus reduced a later list to 200,000 (*RG* 15). See Morley 2013, 29-32, for a discussion on the possibility of establishing reliable figures.

*Amphitruo* (863-4) dated to around 200 BC, Plautus has Jupiter say 'I live in an upstairs apartment (*cenaculo*)'; Vitruvius wrote that the increase in population in limited terrain led to an increase in the height of houses (*De arch.* 2.8.17), and, by the 20s BC, Rome was turning increasingly into a city of high-rise apartment buildings.[301]  Juvenal describes smoke pouring out of a 3rd floor attic (3. 195). With the rise in population came an increase in industry, commerce and construction and a growing demand for fuel for cooking, heating, lighting, baths, industry and cremation, all involving naked flame.[302] Blacksmiths, cobblers, bakers, metal-workers, tanners, with open fires among the bustle of commercial and residential life, added to the potential for the easy spread of an outbreak of fire, loss of life or at least damage to adjoining houses and apartments as warehouses and workshops lay cheek by jowl with *insulae* and *domus*.   While this continued as the normal pattern for European cities into the Middle Ages, and represented fire hazard for all urban settings, the sheer scale of the city of Rome made the threat much greater.

## Height of *insulae*

The actual height of the *insulae* in Rome is much debated. For example, Storey argues that staircase evidence on the *FUR* (*eg* Fr.11) indicates the number of floors in Rome and, based on that, he reckons the vast majority of buildings had only two.[303] That seems far too conservative especially if the upper storeys were made of a lighter *opus craticium* and may even have been illegal. Aldrete believes *insulae* were typically much higher and debates whether the height can be calculated by staircases and number of steps per floor in Pompeii and Ostia; on that basis *insulae* could have risen to 10 or 12 storeys.[304] Even allowing for satiric exaggeration, Martial's 200 steps (7.20: *ducentas scalas*) to the upper garret implies implies 13 -14 floors; Vitruvius (2.8.17) writes of walls rising to a great height by means of different storeys (*moenibus e contignationibus variis alto spatio multiplicatis*); Gellius (15.1.2) describes a block rising to great heights with many lofty floors (*insulam … multis arduisque tabulatis editam*).  Most telling is the reiteration over time of legislation curtailing the height of *insulae* which indicates that it was a recurring problem (Chapter 5, 170-173). Allowing for 10 Roman feet per storey means that buildings were officially capped at six or seven storeys and therefore must have periodically risen dangerously higher.[305]  While the

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[301] Anderson  1997, 313.
[302] Meiggs  1982, 237.
[303] Storey 2013, 156.
[304] Bergmann 2012, 238;  Aldrete 2007, 4;  106 n.17.
[305] Aldrete 2007, 107; Packer 1971, 75-76.

increased use of concrete (*opus caementicium*) would suggest the safe construction of multiple floors, in fact the load-bearing capacity of brick-faced concrete was unlikely to have allowed more than three or four storeys although wooden floors would have alleviated weight.[306] Examples from Ostia show lower storeys extremely well-built and, while there is evidence of buildings up to four storeys, most do not survive beyond the first floor.[307] Holes for wooden joists have been found on the 3rd floor of House of Diana in Ostia while carbonised wood found in Herculaneum indicates 3rd and 4th floors.[308] Where an *insula* was built against a hill, it could support more storeys. The remains of the second century *Insula Ara Coeli* set against the western slope of the Capitoline show five levels (**Figs**. **17** and **18**).[309] The likelihood is that three to five storeys was probably the norm while many buildings rose higher with the upper storeys constructed of lighter material.

### The building material of *insulae*

The earliest houses in Rome were most likely made of wattle and daub with a thatched roof. The post-holes of the *Casa Romuli* on the Palatine, which have survived alongside later imperial homes and palaces, indicate that the walls were preserved with filling of reeds and brushwood coated with clay between the wooden posts as this was perceived to be its original condition; it was maintained like that over the centuries although we read of it burning on a number of occasions.[310] Although attempts were made (Chapter 5) to make the growing city more fire resistant, mud-brick remained common until the end of the Republic except for the very rich.[311]

By the imperial period high-rise blocks of apartments became the standard living quarters of the majority of the population. Multiple storeys inevitably led to upper structures being made of lighter, more combustible, materials which, in turn, remained outside the reach of water used in fire-fighting.[312] It would have been very tempting for a landlord to add a storey or two

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[306] Mogetta 2015, 1 - 40. The spread of the technology is usually dated to the fourth or third centuries BC. Mogetta argues for a later date *ie* mid 2nd century development of structural concrete. Storey 2013, 158.

[307] The *Casa a Giardino* rose to four storeys. See Packer 1971, 172.

[308] Packer 1967 and 1971; Storey 2013, 158.

[309] Packer 1967, 80; Claridge 2010, 263; Dyson 2010, 219. Connolly and Dodge 1998, 143 suggest six storeys.

[310] Meiggs 1982, 219; Bergmann 2012, 238. The Hut of Romulus burned in 38 BC (**No. 33**) and 12 BC (**No. 39**).

[311] Meiggs 1982, 221.

[312] Dyson 2010, 217.

on top of an existing *insula*, in spite of legislation restricting the height of the buildings (Chapter 5, 170 - 173). These additions would affect the load-bearing capacity causing stress fractures and a subsequent fire, even minor, could be the tipping point of collapse.[313]  There was higher density of occupation on the upper floors where rent was cheaper; the poorer one was, the higher the storey one occupied, and the smaller the unit one rented (Juv. 3.193 - 96).[314]  The *Insula Ara Coeli* is an example where the rooms become progressively smaller and the ceilings lower in the upper floors and gives an insight into the crowded conditions (**Fig. 18**).[315] Entire families could occupy one room at those levels, thus increasing the weight on the floors while adding to crowded conditions and the danger of knocking over lamps and braziers. It also led to the practice of jettying where the upper storeys projected outwards above the street thus narrowing the distance between building and increasing the risk of the fire spreading. Evidence of jettying survives in Pompeii and Herculaneum (**Figs.  19** and **20**) and it is highly likely that it was a feature in Rome. Martial (1.86) and his neighbour could shake hands from windows on opposite side of the street, which, although probably an exaggeration, would certainly indicate a breach of regulation.  The fact that laws concerning the distance between buildings are repeated over the centuries, beginning with the Twelve Tables (Festus *Ambitus,* 5L and 15L), indicates that this was a recurrent problem (Chapter 5, 170). The practice of jettying exacerbated the fire of London in 1666 where, like Rome, it was banned by legislation but, again as in Rome, the law was flouted.[316]

Originally, *insulae* were built of a material often referred to as *opus craticium* (**Fig. 20**), a timber framework filled with rubble and mortar.  It was cheap but in essence it was ready fuel for fire and even where the building did not burn to the ground, once the timber was compromised, the building would collapse.[317] The frame was likely to have been lighter, thin-cut wood which would ignite easily in a fire. Such thin-cut wood burns quickly because it is exposed to heat from both sides and has no underlying mass into which the excess heat can be conducted.[318]  The Romans were aware of the inherent dangers of *opus craticium*: Vitruvius wrote:

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[313] Aldrete 2007, 107
[314] Packer 1967 and 1971.  Patterson, 2000, 276 .
[315] Boersma 1985, 233; Connolly and Dodge 1998, 143; Patterson 2000, 276; Coarelli  2007, 41.  See n.64 above to Anderson's similar findings in Ostia.
[316] Porter 2009, 10.
[317] Connolly and Dodge 1998, 138;  Garnsey 1998, 68.
[318] DeHaan and Icove 2012,  139.

> … walls of *opus craticium* … are a public misfortune, because they are like torches ready for kindling. It seems better to be at greater expense by the cost of burnt brick than to be in danger from the convenience of wattle-work walls. (*De arch*. 2.8.20).

The use of *craticium* probably persisted because of its cheapness and also because as a light material it put less stress on the lower structure of a building. The loss of such flimsy flammable buildings would be borne lightly by wealthy property speculators who could cheaply re-build on the same site (Cic. *Att*. 14. 9). Crassus (115 - 53 BC) would arrive at the scene of a fire with his private fire-fighters and hold them off as the price of the building lowered until he bought at 'fire-sale' prices; he then got his 500 slave architects and builders to reconstruct the buildings (Plut. *Crass.* 2.4).[319] Plutarch makes the point that the conflagration and collapse of buildings was natural and familiar because of their height and close proximity to each other (*Crass.* 2.4.5). Crassus cannot have been the only such property speculator who would be tempted to re-build in the same material; nor can Cicero have been the only landlord who saw the collapse of his property as an opportunity to turn a profit.

## Flammability of *insulae*

The traditional view of *insulae* as tinderboxes is not fully justified. Not all *insulae* were made of *opus craticium* or, at least, made entirely of such cheap material. After the fire of AD 64, brick-faced concrete was standard for public buildings in Rome and the probability of *insulae* being constructed of a combination of materials must at least be considered. Evidence from the relatively well-preserved remains of the *Insula Ara Coeli* indicates that in at least some *insulae* brick-faced concrete was used (**Fig. 21**). The facade of another brick-faced concrete *insula* can be seen incorporated into the Church of SS. Giovanni e Paulo. It ran along the Clivo di Scauri which ascended the north slope of the Caelian Hill and was at least four storeys high. The original two-storey *domus* dates to the early 2nd century AD while the conversion to multiple units dates to the beginning of the 3rd century.[320] A similar structure constructed in late 3rd or early 4th century lies on the NE slopes of the Palatine in the

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[319] Anderson 1997, 77 does not think this oft-repeated story rings true because if Crassus had to have such a large force of builders on hand the cost would have been astronomical. He argues that either fires were a more regular occurrence than seems likely or that Crassus had deliberately set them and was prepared for action. This is not convincing as Crassus could easily have owned a very large force of slaves who had, among other skills, been trained to fight fires.

[320] https://www.caseromane.it/en/the-visit.

Velabrum.[321] Embedded in the Aurelian Wall just south of the Porta Tiburtina are the remains of a four-storey brick building of the 3rd century AD. Scholars believed this to be an apartment block containing apartments whose plans varied from floor to floor.[322] However, this is now disputed and Dey identifies the structure as a *castellum aquae*.[323]

It is most likely that an *insula* in Rome, especially in the post-Neronian period, was constructed of mixed material, the lower storeys in fired-brick and upper storeys and 'extensions', such as jettying (**Figs. 19** and **20**), in *opus craticium*. It is impossible to say how typical of Rome brick-faced concrete *insulae* were but it is unlikely that it differed greatly from Ostia, frequently the model for understanding arrangements in Rome. The traditional view that Ostia was solid and Rome flimsy is misleading. In Ostia the upper storeys have generally not survived, even in the House of Diana (**Fig. 22**), suggesting they were made of lighter material.[324] The use of mixed material is supported by literary evidence. Vitruvius (*De arch*. 2.8.17-20) states that it was common practice to build the upper floors in wood or *craticium* because of the weakness of the main walls adding that 'brick walls of a foot and a half, not being two or three bricks thick, cannot sustain more than one storey' but because of the 'unlimited crowding of citizens' and the need for housing by means of 'stone pillars, walls of burnt brick, party walls of rubble, towers have been raised, and these being joined together by frequent board floors produce upper stories with fine views over the city.'

Wooden floors ease the stress load. The excavated site of the *Insula Ara Coeli* shows the roof of the ground floor and probably the first floor made of brick-faced concrete but the higher – most likely wooden - floors have not survived.[325] The wooden floor of one room was the ceiling of another; the ceiling is particularly vulnerable because hot gases rise and fires burn upwards preferentially and a floor was likely to be breached from beneath in any extensive fire, spreading the fire upward from floor to floor.[326] Where brick-faced concrete *insulae* had concrete floors, the spread of fire was retarded giving time to douse the flames but, under sustained heat, the floors could buckle and crack causing the building to collapse. Fire could also spread upward by a process called entrainment. **Figure 23** illustrates what could have happened if a fire broke out on the ground floor workshop of an *insula*. The ceiling would

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[321] *LTUR* 1993-2000, 1.37-38.
[322] Packer 1967, 80 ; 1971, 25. Todd 1978, 27.
[323] Richardson 1992, 261; Dey 2011, 79.
[324] Anderson 1997, 307 points out that apartments of ever decreasing size and cost as one proceeded higher in Ostia.
[325] Coarelli 2007, 41.
[326] DeHaan and Icove 2012, 73.

not need to have been breached for the fire to spread to the next level. Once the flame plume moves outside through an open or breached door or window and rises vertically, the process of entrainment can pull it back against the vertical wall above, especially if there is no balcony or other horizontal projection to push it away from the wall. Flames like this can breach the windows above and set fire to the rooms overhead. This is the mechanism by which many high-rise fires inflict damage on multiple storeys.[327] In this scenario, the horizontal projections above the mezzanine level on the House of Diana (**Fig. 22**) would have protected the higher storeys from entrainment of flames from a fire on the ground floor shops.

Concrete will crumble for a number of reasons if exposed to enough heat. As an aggregate of sand and gravel held together by a crystalline matrix (mortar) it contains a considerable quantity of water. When exposed to heat, some of this water is released and the material loses its integrity and crumbles. Moisture trapped in the porous structure of concrete or masonry also evaporates into steam when heated in fire and this also causes it to crumble. Heating may cause some types of sand or gravel aggregate to expand more than others, which puts the mortar mix into tension, resulting in failure of the structure.[328] Facing it with fired-brick is the best way of making concrete as fire-proof as possible (Chapter 5, 179). *Insulae* were not only prey to fire, however. If constructed shoddily, their concrete foundations could be threatened after days of soaking in floodwater and the entire building could collapse perhaps even triggering fire (Tac. *Hist*.1.86).[329]

## Commercial ground floors

The common existence of shops on the ground floor of *insulae,* as attested by the *FUR* and evidence recorded by Packer from Pompeii and Ostia, increased the risk of fire and underlined the constant need for vigilance. Of the 13 units represented in fragments 165*abc* of the *FUR* (**Fig. 24**) ten had shops or factories on the ground floor.[330] Packer's work on the *insulae* in Ostia shows a number with shops on the facades facing the street while a small number of *insulae* had luxurious apartments on the ground floor. Given the pressure on space in Rome, it is reasonable to assume that commercial ground floors would have been the

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[327] DeHaan and Icove 2012, 64. Examples include the Madrid Windsor building (2005) and Grenfell Tower (2017).
[328] DeHaan and Icove 2012, 283.
[329] Jacobs and Conlin 2014, 118.
[330] Packer 1967, 81.

norm; it is still the norm in many Italian cities.[331] The lower floors of *Insula Ara Coeli* were used for shops whose proprietors were housed in mezzanines above their places of business.[332] The three storeys above the mezzanine comprise a series of apartments, still largely intact.[333]  Recent study on the *insula* of Clivo di Scauri shows ground floor shops.[334]

In the central densely populated sections of the city, Rome's social differentiation was, in general, vertical not horizontal.[335]  The higher the apartment the lower the wealth of the tenants; the poor lived in the less desirable, and more dangerous, upper 'garrets' of the *insulae* (Juv. 3.193-96; Mart. 2.53); heat and smoke rise and fire spreads faster up than down. Another feature of the *insulae* which increased fire risk was that the layout of these dwellings probably varied from floor to floor, hampering any rescue or escape route from fire in smoke-filled unfamiliar corridors.[336]  In her research  on housing in the Roman world, Bergmann found that the upper storeys show a variety of arrangements, usually of three to five rooms and that rooms opened onto each other, so that people would have to pass through one room to arrive at another.  Packer points out that the varied position of windows indicates differences in layout of rooms and apartments at different storeys in Ostia.[337] Such arrangements could have serious consequences in the event of a fire starting in one room as tenants, or fire-fighters, would be unfamiliar with an escape route.

On the other hand, if the variety of design meant that an internal stairwell did not extend for the height of the building, it was a blessing in disguise. An open stairwell which provides ventilation can act as a huge flue spreading fire through upper storeys. Upward vertical spread is enhanced when the fire finds chimney-like configurations while downward spread is far less likely.[338] In the poor and overcrowded  Dorothy Mae Apartments (a four-storey brick tenement built in 1927) in Los Angeles a  blaze on the first floor in 1982 quickly burned through to the stairwell and within seconds became a miniature fire-storm. It moved at a velocity of five feet per second and at each landing 'back-drafted' down the hallways. Having started on the first floor, the upward movement of the fire caused 24 deaths and numerous

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[331] Packer 1967, 84 - 86; 1971, 27.
[332] There was direct access from the *tabernae* on the ground floor to the rooms on the mezzanine level. Coarelli 2007, 41.
[333] Connolly and Dodge 1998, 143; Claridge 2010, 263; Packer 1967, 80; Packer 1971, 75.
[334] https://www.caseromane.it/en/the-visit; Packer 1971, 75.
[335] Patterson 2000, 276 describes it as 'horizontal zoning'.
[336] Packer 1967, 80.
[337] Packer 1971, 24 - 27; Bergmann 2012, 238.
[338]DeHaan and  Icove 2012, 251.

injuries on the second and third floors where the fire doors between the stairwell and the corridors were open.[339]


## Fire: interiors

The fact that so few traces of *insulae* exist today in Rome has been interpreted as testament to the flimsy nature of the building material used. *Insulae* and later urban tenements have traditionally been regarded as 'fire traps' but more recent research on fire risk has found that reasons often relate more to the interior construction, finish and content, and that the shell is rarely the point of fire initiation, regardless of what material is used for its construction.[340] The vast majority of urban fires are anthropogenic: it is human agency within each room which creates a blaze. Up to the present time interior fires make up the vast majority of all structural fires and the room is seen as the basic fire unit. Fire engineers conclude that structures burn room by room or from the roof down. By being more or less confined, a room can trap gases and smoke; heat can amass quickly, even explosively.[341]

Surfaces of walls are especially subject to attack by fire, both because of their vertical orientation and because of their large surface. Next to ceilings, walls constitute the most vulnerable portions of the main structure of any building. In Rome, the use of plaster and paint over interior walls, including *opus craticium* or timber framed construction, was common (Vitr. *De arch*. 2.8.20) and, for example, can be seen today on the upper storey of the *Casa del Bicentrio* in Herculaneum.[342] Plaster does not burn and may have been viewed as a fire retardant but it conducts heat and even a small crack will allow flames to enter the wall cavity and immediately ignite the already heated combustible *craticium*.[343] Vitruvius (*De arch*. 2.8.20) described precisely how cracks were formed in the plaster: the uprights and cross-pieces of the frame for *craticium* soak up the moisture from the plaster when it is applied, swell, then contract and break the plaster.

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[339]  Davis 1998, 120; Los Angeles Fire Department Archive Material  1982 available on http://www.lafire.com/famous_fires/1982-0904_DorothyMaeFire/090482_DorothyMae.htm
[340] DeHaan and Icove 2012, 71.
[341] DeHaan and Icove 2012, 62- 69; Pyne 2001, 104.
[342] Wallace-Hadrill 1994, 110.  See Aldrete 2007, 109 for the effect of water on plaster.
[343] DeHaan and Icove 2012, 77.

**Human agency: anthropogenic fires**

An *insula* could potentially house many hundreds of tenants with, as we have seen, the conditions becoming more cramped and flimsy as one ascended.[344] The higher the population density in any city the greater the opportunity for ignition through inadvertent human agency and the same holds true for a block of apartments. Historically, most fires are the deliberate or inadvertent result of human agency.[345] Rome, a city teeming with naked flame, was an accident waiting to happen.  As well as blazing furnaces which were employed in the workshops on the ground floor, within the rooms above naked flames were commonplace during the day and greatly increased at night. Seneca (*Ep.* 104) described the air pollution in the city caused by the poisonous fumes emanating from smoking cookers in Rome. Apart from two instances identified by Packer at Ostia, there is no other evidence of dedicated kitchens in *insulae,* and movable charcoal braziers were set up in the most convenient spot in a room, in a private dwelling or in the numerous bars and eateries in the city.[346]  It is highly unlikely that these were doused when not in use, given the effort needed to relight them. Smouldering charcoal is intensely hot, far hotter than most flaming fires.[347]  Olive oil which has a flash point significantly lower than boiling point was commonly used for cooking.[348] It was also used for lighting and bathing and, together with animal fats, formed part of the stored fuel in the flammable city. In winter, braziers were used for heating which meant an increased seasonal risk.

New hazards were added at night.  The three main means of illumination were torches (*taedae, faces*), tapers (*candela*), and oil lamps (*lucernae*). These were not permanent fixtures and were constantly on the move in the household. Torches were generally carried by slaves accompanying their masters at night (Juv. 3. 285-288) while, for domestic lighting, tapers and oil lamps were used (Petron. *Sat.* 63.10).  Oil lamps were more common than candles and torches, and were probably used in every room. In the dim and smoky rooms a more brilliant light was obtained by increasing the number of nozzles on lamps. There is evidence from

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[344] See Packer 1967 for a discussion of methods – including his own – traditionally used to calculate the ratio of inhabitants per square metre in an *insula.* However, Boersma 1985, 233 says Packer's calculations of inhabitants of buildings in Ostia must be taken with extreme caution as they are based exclusively on the remains of the ground floors.  See also Aldrete 2007, 107 and 274 *n*.20. (See p. 143 above for the number suggested based on the Regionary Catalogues).

[345] Bankoff 2012, 10.

[346] Packer 1971 identifies two kitchens in the Casa delle Volte Dipinto in Ostia but can identify none in any other structure. Pompeii is a prime example of the number of public eateries.

[347] DeHaan  and Icove 2012, 39, 137.

[348] The boiling point of olive oil (570°F) is much higher than the smoking point (375 - 400 °F) and would be a very dangerous temperature to try to achieve on a home stove. The spontaneous ignition or flash point is 405°F. Unattended pans of oil continue to be a common cause of domestic fires to this day.

Pompeii that water for mixing with wine was heated by decorative braziers (αὐθέψης) on the table.[349] There was a perpetual risk of fire in those conditions should one be knocked over or left unattended.

Even today a source of fires which is often underestimated is juvenile fire-setting: curious children too young to understand the consequences of playing with fire.[350] It is estimated that nearly 7% of those arrested for arson in the United States in 1994 were under the age of ten and studies have found that they are usually boys between the ages of three and ten. In 2017 a fire in a New York apartment block which killed 12 people was started by a three year old child playing with a stove. It is difficult to imagine that Roman boys were any different; while it is easier for the modern boy to actually strike a light, Roman boys were surrounded by more temptation.

On the other hand, the risk posed by such naked flames should not be exaggerated. It was part and parcel of life and open flame did not recede from daily life until the invention of electricity. The risk was mitigated by a society where the tendency was to avail more of daylight by arising at dawn and retiring at dusk and by a society which ate out a lot, as evidenced by the number of bars and eating places in Pompeii. The danger was due to the accumulative effect of all the factors listed above: teeming population, cramped living quarters, construction material plus the permanent presence of flame.

**Social mix**

Social stratification within the *insulae* was vertical. Apartment blocks were not the preserve of the poor but neatly reflected the hierarchical nature of Roman society below the élite.[351] A distinctive feature of Rome was the general lack of horizontal social divisions especially in the residential and commercial layout of the more densely populated sections of the city, such as the Subura. It is possible to identify some regional variability: the Palatine in republican Rome was very much the preserve of the élite while the Caelian Hill became so after the fire of AD 27 (**No. 46**). Although some areas might have a better reputation than others, defining neighbourhoods, spatially or socially, is a particularly difficult task. Lott believes that ancient Rome was not segregated by class as apartment buildings for the poorer residents existed

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[349] Mau 1902, 370; Paoli 1940, 82; Carcopino 1941, 44.
[350] DeHaan and Icove 2012, 665.
[351] Purcell 1994, 667; Patterson 2000, 275 - 276.

alongside the houses of more affluent residents in almost every quarter of the city.[352] The *FUR* (**Fig. 16**) shows private *domus* scattered among *insulae* in the region of the Subura. Fragments 40c-h show a similar mix in the SW area of the Campus Martius. The *Notitia* and the *Curiosum* closely correlate the numbers of *insulae* and *domus* per region, and there is no great variation in the ratio of *insula* to *domus* between regions.[353] Corroborating evidence from Ostia reflects this social mix not only within the *insulae* but within neighbourhoods.[354] Rich, including those living in *domus*, and poor alike were at risk of fire. This is unlike cities such as Chicago, San Francisco and Los Angeles where residential areas were sharply defined by income level, and still are in most modern cities, and where the poor suffered disproportionately in great fires.[355] In Rome, residential and commercial areas were not sharply defined either and combustible districts with wharves and vast granaries meant that all were subject to the same dangers but not, of course, to the same losses. The frequency of devastating fires in the Forum Boarium as it became heavily built up with *horrea* and *insulae* is testament to this.[356] The abundance of fuel and scattered flame occurs again as a factor in the great fires such as London 1666, Moscow 1812, and Tokyo 1923. It was simply impossible to keep the two elements apart.[357]

## Horrea

Chief among the districts which were highly combustible unless controlled were those that housed the *horrea*. As early as *c*.200 BC a large proportion of the grain needed by the city was being imported and the port facilities along the Tiber began to develop rapidly.[358] The urgent demands of the urban population, particularly the group receiving the dole, depended on grain distribution. In 193 BC the colossal Porticus Aemilia was erected to store vast quantities of combustible materials such as grain and oil and became the prototype of the great mercantile warehouses which grew more numerous in the late republic.[359] In design and construction an appreciation of their inherent fire risk is apparent. Grain was stored in

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[352] Lott 2004, 22, 178.
[353] Lott 2004, 18.
[354] For example, the Domus delle Muse (III, IX, 22) in Ostia is an élite dwelling within a complex of apartments.
[355] Aldrete 2007, 212 makes the same point in relation to floods.
[356] Richardson 1992, 163. The Forum Boarium was affected by fire in 213 BC (**No. 7**), 192 BC (**No. 13**), 38 BC (**No. 33**), 12 BC (**No. 39**), AD 38 (**No. 51**), AD 53 or 54 (**No. 54**), AD 64 (**No. 59**) and AD 117-138 (**No. 68**).
[357] Pyne 2001, 106.
[358] For example, the vast Porticus Aemilia was built in 193 BC, the Horrea Sempronia was built by Gaius Gracchus in 122 BC and the Horrea Galbana can be attributed to Galba, the consul of 108 BC. *LTUR* 1993 – 2000, 4. 116 - 117 (Porticus Aemilia); 3. 47 (Horrea Sempronia); 3. 40 - 42 (Horrea Galba).
[359] Torelli 2007, 98.

optimum conditions with temperatures carefully controlled to prevent spontaneous combustion.[360] Under-floor ventilation, walls of striking thickness and solidity, originally built of great tufa blocks and in the 1st century AD to be built partly in brick-faced concrete, created these conditions (Chapter 5, 178).[361] Spontaneous combustion occurs when heat accumulates, not from some exterior force, but from chemical processes within the mass of grain. It heats faster and faster and once it starts to heat at all, if there is no intervention, it will rise to the point of ignition. Basically, grain ignites throughout its mass.[362] As the Romans knew, if fire did break out, the warehouses burned fiercely.

Self-heating does not usually occur in olive oil but 'drying oil' such as linseed, when exposed to air, can trigger self-ignition in a few hours.  Rags soaked in linseed oil are always a significant fire hazard and are thought to have been responsible for the fire which destroyed the Meridian Plaza 38-storey office building in Philadelphia in 1999.[363] Linseed oil was used by the Romans for lighting and in frescoes (Vitr. *De arch*. 7.9.3) and had to be carefully stored. Charcoal, widely used in Rome, also self-heats in hours in a confined space and begins to smoulder which may go undetected for days. If it then suddenly comes into contact with fresh air, flaming combustion can result.[364]

**Baths**

Baths and bathing were a characteristic feature of Roman culture; by the 4th century AD Rome had 856 *balnea*.[365] The amount of wood and brush needed to satisfy their needs was enormous and, for logistical purposes, must have been stored all over the city in the vicinity of the bath buildings.[366] The fire risk of commercial premises on the ground floor of *insulae* has already been discussed (p. 149 above) and archaeological evidence of a *balneum* has been found on the ground floor of the *domus* fused with the *insula* of Clivo di Scauri in the 3rd century AD.[367]  This may have been an unusual arrangement given the number of public *balnea* available but it does make sense in the context of *domus* and *insulae* sited together,

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[360] Rickman 1980, 134.
[361]  The sections of the Horrea Galbana which have been excavated show it to have been constructed entirely in tufa in one of the oldest examples of *opus reticulatum*.
[362] DeHaan and Icove 2012, 207.
[363] DeHaan and Icove 2012, 209 – 211.
[364] DeHaan and Icove 2012, 132.
[365] Nordh 1949, 73 - 98.
[366] Heiken, Funiciello and De Rita 2005, 157 estimate that the Baths of Caracalla needed 85 kilograms of wood for initial heating and 18 kilograms per hour to maintain.
[367] https://www.caseromane.it/en/the-visit Packer 1971, 75;  *LTUR* 1993-2000, 2. 102-3; Patterson 2000, 275.

and the social mix found within blocks of *insulae*. If not carefully managed, the furnaces of hypocausts, especially in cramped residential surroundings, posed a significant threat.

## Lightning

Of the 88 fires recorded over the period 460 BC to AD 410, lightning is blamed by the sources for 18 (Chapter 3, 126). It is impossible to assess the reality of these statistics given the symbolic and complex aspect of the role of the gods in the attribution of causation in the sources, but it is possible to look again at this with the help of fire science.

The role of lightning in starting fires has been scientifically studied in recent years, especially in relation to wildfires, and this may elucidate the 'truth' of the role of lightning in starting fires in Rome. The odds of lightning kindling fires are very low: it must hit something combustible and have the right properties to convert electrical charge into combustion (only one in five has that) in order to be a source of ignition.[368] Added to that is the heavy rain which frequently accompanies a lightning storm. Apparently, rain doused the fire of AD 191 (**No. 72**) and heavy winter showers are credited with finally ending the last vestiges of the fire of Lisbon (1755).[369] And yet, fires due to lightning occur often enough to matter.[370] Urban fires are occasionally attributed to lightning; for example, 3.8% of urban building fires in Slovenia were recorded as started this way in 1997.[371]

Was Rome particularly susceptible to lightning? It was a city of temples and monumental buildings of considerable height standing on hills - and it is to temples that the sources most frequently refer - in a climate which still has thunderstorms throughout the year. Metal statues on roofs would have attracted lightning. In Augustus' building programme vertical dimensions were increased and Augustan temples towered above others in Rome as he ignored limitations on building heights, thus making them more prone to lightning strikes.[372] But even if lightning creates the spark, it does not follow that the roofs of temples were readily combustible. The terracotta tiles which generally covered the huge roof beams were fire resistant but they could be shattered by a blast of lightning. The subsequently exposed wood is splintered by the force of the flow of current (which is usually around 20,000 amperes) and is therefore much easier to ignite, especially when the splinters are dry. It is not

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[368] Pyne 2001, 6.
[369] Molesky 2012, 155.
[370] Pyne 2001, 6. Between 1946 and 1973 created more than 100 fires a day in the Northern Rockies.
[371] Bankoff 2012, 10.
[372] Favro 2005, 249.

clear if lightning started fires in all instances and sources frequently used the language of destruction and not of fire (*eg* **No. 16**). This makes sense when one considers that lightning strikes are usually accompanied by the physical destruction of any poor electrical conductor in their path.  The air in the path of the main strike can be heated to a temperature of 30,000°C and is expanded at a supersonic speed as a result.  The resulting pressure shock wave can damage nearby structures with explosive force.[373]

**The gods**

To some minds, fire may be the mere motion of molecules. For the Romans, the gods, aroused by the impiety of man, justly brought destruction by fire - as well as flood, plague and famine - upon them. The sources invariably refer to lightning strikes as prodigious and portentous events and the buildings struck are charged with symbolism. In the theoretical framework of the urban fire régime the role of the gods cannot be dismissed given the lengths to which the Roman population went to propitiate them, including those relating to fire (Chapter 5, 180-181).[374] The view that gods are either to blame or can alleviate the situation is seen in the human reaction to urban fires down through the millennia (**Fig. 39**).  The vengeful hand of God was blamed by some for the fire of London (1666) and a national day of fast was held on 10th October.[375] The earthquake and subsequent fire of Lisbon (1755) was seen by many as a divinely instigated tragedy caused by the intolerable sins of the people.[376] In an added twist, where it was obvious that fires were anthropogenic the perpetrators were seen as the instruments of an avenging god or gods.  Bankoff sees this as a religious problem difficult to reconcile with the notion of an accident or a deviant group or individual being responsible for a fire.[377]  In fact, human behaviour as an instrument of god's punishment is generally compatible with religious beliefs. Even where the actual cause of the fire can be identified it does not rule out the divine element either in causing or dousing the fire.  Divine punishment, not necessarily for religious offences against the gods directly, but rather for political actions of which the gods disapproved is seen again and again in the records of fires in Rome.  The efforts expended to prevent fire were great (Chapters 5 and 6) but an

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[373] DeHaan and Icove 2012, 216.
[374] Chapter 5 looks at the cult of Stata Mater. Vulcan and Vesta were major deities in the Roman pantheon.
[375] Porter 1996, 49.
[376] The Jesuit Gabriel Malagrida in a sermon quoted in Molesky 2012, 154.
[377] Bankoff 2012, 14; see Allemeyer 2007 for a discussion of the complexity of this issue.

ambiguity lies at the heart of the relationship between those efforts and the view of fires as divine acts which could not be prevented.[378]

**Arson and fire as a weapon of war**

Deliberate acts of fire-setting are part of the human condition. Periods of civil unrest when there appears to be a collapse of social restraint are particularly vulnerable to arson. For example, protests against tax levies when debtors deliberately set fires (Dio 55.8.) (**No. 41**) and the firing of the Palatine in AD 69, perhaps by the Vitellians (Tac. *Hist.* 3.83-84.).  An owner may set fire to his own property (Mart. 3. 52) to sell the site for five times what he paid for the building.  As evidenced by legislation (Chapter 5, 167-170), the seriousness with which the Romans regarded arson showed an acute awareness of the potentially catastrophic consequences of an outbreak of fire. Arson often stands as the image of malicious unrest and for the Romans to be an arsonist was to be an enemy of the state.  Cicero's excoriating attacks on Clodius as a fire-setter (**Nos. 23**, **24**, **25** and **26)** accuse him of just that.

The search for someone to blame is a familiar pattern in the aftermath of a fire. Social scapegoats such as minority religions, gypsies, vagabonds or other people on the margins of society have been blamed throughout history.[379] It seems part of the human psyche to regard fire-setting as the activity of the 'other' and Christians fitted the bill in AD 64. Much work has been done in recent years on arson profiling and understanding motives; fire is one of the oldest human weapons for revenge and retaliation.[380] It would be foolish to suppose that personal grievances were not settled by arson in unrecorded cases in Rome as in any habitation. The lack of liquid fuels may have helped lower the instances compared with modern cities.

The risk of fire-setting increases in any city as it grows in population and as unsocial and criminal activity expands while deliberate fire-setting to turn a profit (Mart. 3. 52) or as covert official policy to create a green field site (as was suggested of Nero) is a known phenomenon.   It was legitimised in Cleveland Ohio in the 1970s and 80s where the

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[378] Aldrete, 2007, 221 - 3 discusses this same ambiguity regarding floods.  However, the situation is more complex in relation to fires which, unlike floods, are frequently anthropogenic.
[379] Bankoff  2012, 14. Examples of scapegoating  after fires include Christians in Cairo (1321), Jews in Istanbul (1660), Papists in London (1666) and African-Americans in Cleveland (1970s).
[380] Wood  2000, 208 ; DeHaan and Icove 2012, 666.

authorities turned a blind eye to landlords of tenements with largely African-American tenants using arson to create vacant lots for more profitable development.[381]

**Public buildings and flammability**

The list of recorded fires refers mainly to public, monumental buildings: temples, basilicas, palaces, theatres, warehouses (**Fig. 11**).  Rarely are *insulae* or *domus* mentioned and yet it is very likely that they suffered fires regularly. But great public and monumental structures definitely burned in Rome as seen in the List of Fires in Chapter 2. By the early empire, kiln-dried brick replaced sun-dried brick and with concrete and stone were the standard construction materials for public buildings (Vitr. *De arch.* 2.3.2).[382]  It is reasonable to assume that such buildings were more fire-proof than the *opus craticium* of the *insulae*, yet more recent documented and filmed urban fires are testament to the vulnerability even of brick and stone in a conflagration.

Ironically, ceremonial enclosed spaces which were increasingly part of the monumentalisation of the ritual and political heart of the city probably created the circumstances for fire-whirls to develop. In other words, because of the lack of air in the confined area within a precinct such as in front of a temple, masses of flames detach from the main body of a fire and rise up into the air.[383] The radiation produced by such intense heat will cause combustible material to burst into flames. Canter found it difficult to believe that fire could have destroyed or even seriously damaged the monumental structures of Rome.[384] Yet, John Evelyn gazing upon the ruins of St Paul's wrote that it was 'rent in pieces, flakes of vast stone split in sunder … it was astonishing to see what immense stones the heat had in a manner calcined, so as all the ornaments, columns, friezes, capitols and projectures of massive Portland stone flew off, even to the roof.'[385] Further evidence that stone does indeed burn comes from eye-witness accounts and photographs of the fire of Chicago where some of the buildings had boasted of being fire proof as they were built of iron and stone.   The First National Bank was one such building (**Fig. 25**). An eye-witness asks why the fireproof buildings succumbed and adds that no stone ever used in the business part of a city 'is worth a farthing in such a fire, as brick is the only thing which comes out whole'.[386] An account of

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[381] Kerr 2012,  333.
[382] Aldrete 2007, 234; Anderson 1997, 121; Robinson 1995, 35.
[383] DeHaan, and Icove 2012, 126;  Pyne 2001, 102.
[384] Canter 1932, 270 - 1.
[385] De Beer 2006,  451.
[386] Horace White quoted in Lowe 1979, 52.

the burning of the Town Hall in Amsterdam in 1652 says that although the building was stone, the fire was so uncontrollable that money from the exchange was melted into great lumps.[387] In fact, Vitruvius (*De arch.* 2.7.2) had already observed that travertine stone turns to an ashy substance when exposed to intense fire; as calcium carbonate it turns to lime. He wrote that while such stones can withstand injury from heavy loads and storms, as soon as they are touched by fire, they crack and break up. Once the stability of a building is compromised in this way it will collapse.

There is a technical explanation for the effect of fire on stone and masonry.[388] In buildings constructed of non-flammable stone and masonry, much of the framework - floors, ceilings, roofs - are made of wood while the furnishings are also combustible and act as a fuel. A fire that develops within such a masonry shell may actually be more intense because of the insulation effect: the large thermal mass of masonry walls holds in the heat produced by the fire within and these sustained high temperatures can in turn lead to the collapse of the exterior supporting walls.[389] This adds to our understanding of the destruction of monumental structures in Rome and provides some explanation for the language of fire and destruction used by the sources: buildings collapsed due to weakening of the structure rather than actual consumption by fire. A further pertinent point is that hollow masonry walls offer an opportunity for flames and hot gases to travel upward within a building and actually create a chimney effect.[390] Nero's legislation forbidding party walls may have introduced a further hazard rather than fire retardation (Chapter 5, 172).

## Wood and timber in the city

Wood was central to many aspects of life in ancient Rome and the timber industry was not just an industry connected with constructing Rome, but with sustaining Rome.[391] Not only was wood needed for cooking, heating and crafting, until the gradual shift from cremation to inhumation came in the course of the 2nd century AD, piles of wood must have lain in designated areas in the city. Just as mass graves (*puticuli*) existed (Mart. 8.75.9 - 10; Hor. *Sat.*1.8.14; Luc. 8. 736 - 8) there also must have been areas of mass cremation as the standard

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[387] Kuretsky 2012, 24 quoting van der Heyden, *Brandspuitenboek* 2.1.9.
[388] Masonry includes stone, concrete, tile, brick, and even adobe.
[389] DeHaan and Icove 2012, 69 and Bankoff 2012, 10 discuss the vulnerability of seemingly fire-proof building material.
[390] DeHaan and Icove 2012, 71.
[391] Graham 2013, 289.

means of disposal of the dead poor.[392] However, the ban in the Twelve Tables (10.1) on both burials and cremations within the city cannot be down purely to fire risk. Equally, a later law on cremation in the city when pyres were forbidden within 60 feet of another's building, except with the owner's consent (Cic. *Leg.* 2.23.58; 2.24.61), may have been an attempt to curtail ostentatious funerals rather than indicate fear of fire.[393]

**Wood: Construction**

Periods of rapid urban growth made for a very volatile environment with flammable construction material accumulated in densely packed areas as, for example, during the building programmes of Augustus, the Flavians and Hadrian (Chapter 8). Ironically, after major fires such as AD 64 and 80, the city was a building site which led to greater risks of fire as fuels accumulated in densely packed areas.[394] This period of greater risk is recognised in building regulations today. The International Building Code (IBC) emphasises that the construction phase of building presents particular risk scenarios that make any building more vulnerable regardless of material. Extensive safety precautions are provided as construction site fire safety includes some unique challenges.[395]

Until the advent of steel in the 17th century, wood excelled other construction materials in transportability, flexibility, ease of workmanship, and, in most cases, cost.[396] Rome's consumption of wood for construction was voracious. Strabo (5.3.7) stresses the need for a continual flow of supplies of timber and stone to the city in order to replace the incessantly collapsing buildings. Pliny devoted books XII to XVI of *Historiae Naturales* entirely to trees and their importance for human existence, including the best timbers for use in the different elements of construction. Timber was used extensively for scaffolding and framing, including vaulting, and as areas of the city were constantly being rebuilt due, among other factors, to fire damage, there must have been much scaffolding in the city.[397] Since stone and brickwork are generally all that survive from the *insulae* in Ostia and Rome, the amount of

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[392] Bodel, 1994, 114, n.194; Patterson 2000, 267. Rutgers 2013, 514 makes the point that the Romans always practised both cremation and inhumation with one being preferred over the other at different periods in the city.
[393] Robinson 1992, 24 discusses this at some length.
[394] Kerr 2012, 334 makes this point in his discussion of the fires in Cleveland in the 1970s.
[395] https://codes.iccsafe.org/public/document/IBC2018; http://www.rethinkwood.com/masstimber/mass-timber-and-fire-performance
[396] Dyson 2010, 254 - 6; Bankoff 2012, 8.
[397] The burning of St Paul's Cathedral in London in 1666 is a case in point. It would probably have survived had it not been surrounded by wooden scaffolding at the time.

wood originally used can be underestimated. Door and window fittings, partition walls, furniture and, sometimes, staircases would have been timber.[398]

Wooden structures were a feature of temporary constructions for public entertainment such as theatrical performances and gladiatorial shows in the Forum. These were increasingly large structures to accommodate the burgeoning population. According to Pliny, the theatre built by the aedile Scaurus in 58 BC was the greatest building, temporary or permanent, up to then (*HN* 36. 114-115). What ever about exaggeration, a huge amount of timber would have been required.[399] In fact, Vitruvius (*De arch*. 5.5.7) regretted the passing of the temporary wooden theatre as the wooden floors were excellent for acoustics. Rome had no stone amphitheatre until that of Statilius Taurus in 34 BC which was destroyed in fire of 64 and not rebuilt. By the time of Augustus, the Circus Maximus could accommodate 150,000 but although the first tier was stone, timber was used for the two upper tiers (Dion. 3.68).[400] The upper wooden structure of the Flavian Amphitheatre burned in AD 217 (**No. 74**) making the building unusable for a long period, possibly indicating the challenge of sourcing and replacing the timber of the required quality and quantity.[401]

After the defeat of Carthage in 201 BC led to an expansion of territory outside of Rome and wealth within, the homes of the élite became more grandiose. Larger *atria* and *peristylia* meant that the timber requirements for supporting the roofs became more demanding.[402] The increasingly complex activities demanded by public life led to the development of new types of public buildings and spaces such as large porticoes and basilicas in addition to temples.[403] The development of concrete construction in 2$^{nd}$ century BC did reduce the demand for timber framing but the actual rise in building of all kinds meant that there was no diminution in the use of wood for shuttering and scaffolding. While tufa columns and walls were used in these monumental buildings, the standard Roman system for roofing basilicas and temples was by a ridge-beam and a series of tie-beam trusses. Vitruvius (*De arch*. 3.3.5) prescribed continuous wooden beams rather than stone architraves in araeostyle buildings such as the majority of temples in Rome; stone was simply too heavy. Strabo (5. 222) also referred to

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[398] Frier 1980, 18.
[399] Ironically, Scaurus used surplus timber for his villa which was later burnt by his slaves. Pliny regards this as a 'degrading use of timber.' *Aufert animum et a destinato itinere degredi cogit contemplatio tam prodigae mentis aliamque conectit maiorem insaniam e ligno*. (*HN* 36 . 116).
[400] Meiggs 1982, 228.
[401] Lancaster 1998, 146.
[402] Meiggs 1982, 223.
[403] Torelli 2007, 97.

the requirement for very long and very straight beams for such roofs. As the demand for good quality timber grew, the main problem was sourcing suitable beams, generally pine, the straightest and tallest of which were best found in the Apennines.[404] Between the late 50s BC and the death of Augustus in AD 14 the unprecedented building activity in Rome meant that public buildings, including temples which had become both wider and longer since the middle republic, required roof beams of quality and length in great quantities.[405] The roof of the Diribitorium finished in 7 BC had the widest span of any building erected in Rome before AD 230 and was supported by beams of larch 30.48 metres long and a half metre thick (Dio 55.8).[406] The Diribitorium burned in AD 80 and remained unroofed after that, possibly because the beams could not be replaced (Dio 66. 24.2). In another example, Augustus rebuilt the Basilica Julia in an enlarged form with a central area of 82 metres long and 16 metres wide covered with a wooden roof (Stat. *Silv*. 1.1.29; Mart. 6.38.6).[407] The roof of the great temple of Jupiter Capitolinus, built in the first year of the republic, was made entirely of wood and was restored as such each time it burned (83 BC, AD 69, AD 80).

The presence of vast quantities of wood in the city made it very vulnerable once fire took hold; but it did not *per se* make it a flammable city. The Romans were aware of the need to manage the choice and use of wood. Vitruvius (*De arch*. 2.9.15-16) wrote about the fire retardant properties of larch which 'does not admit flame from fire nor can it burn of itself … It has no open pores by which the fire can penetrate, and repels its force and prevents injury being quickly done to itself by fire.'[408] Pliny (*HN* 16.18) compared the behaviour of fir and larch in a fire, saying that 'larch does not waste away from the action of fire any more than do stones.' Both Vitruvius (*De arch*. 2.9.16) and Pliny (*HN* 16) wrote of the best season in which to cut different species of trees; such attention to detail is a hallmark of a city concerned with fire management.

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[404] Meiggs 1982, 235. Vitruvius (*De arch*. 3.3.5 ) writes of the need for wooden architraves. According to Pliny (*N.H*. 16) the temple of Jupiter Capitolinus dedicated had wooden architraves requiring 15 beams of 24 feet and ten of 32 feet.

[405] Meiggs 1982, 220-221

[406] Richardson 1992, 110. *LTUR* 1993 – 2000, 2. 17-18.

[407] Platner and Ashby 1929, 79 and Richardson 1992, 53 give the dimensions as 82 metres by 16 metres while *LTUR* 1993 – 2000, 1, 177 describes the central area as 75 metres by 16 metres.

[408] Vitruvius (2.9. 15-16): *larix vero…. non solum ab suco vehementi amaritate ab carie aut tinea non nocetur, sed etiam flammam ex igni non recipit, nec ipse per se potest ardere, nisi uti saxum in fornace ad calcem coquendam aliis lignis uratur; nec tamen tunc flammam recipit nec carbonem remittit, sed longo spatio tarde comburitur.. Quod est minima ignis et aeris e principiis temperatura, umore autem et terreno est spisse solidata, non habet spatia foraminum, qua possit ignis penetrare, reicitque eius vim nec patitur ab eo sibi cito noceri, propterque pondus ab aqua possit ignis penetrare, reicitque eius vim nec patitur ab eo sibi cito noceri.*

As Pliny knew (*HN* 16), all wood is a chemically and physically complex fuel with a variety of constituents that undergo pyrolysis (the destruction of material by burning) at different temperatures. The thermal conductivity of wood varies with orientation, as does its permeability to air, both being significantly higher in the direction of the grain than across it because the production of volatile oils and resins is faster along the grain than at right angles to it. **Figure 26** shows Douglas pine exposed to a fire temperature of between 1500°F to 1900°F. The pyrolysis and the accompanying charring occur at 350°F to 550°F. The depth of the pyrolysis depends on the moisture content, density of the wood, and the intensity and duration of the fire.[409] All of these factors are important when considering the combustibility of cross-beams and trusses of structures of Roman monumental structures: flame was more likely to attack from below and so reach the rafters and cross beams across the grain. However, if the fire started in the roof due to sparks or ash falling upon it or due to the splintering of the beams and the ignition from lightning, the fire would have behaved differently.

It is easy to assume that the presence of wooden roof beams made combustion more likely, but this assumption must be questioned with regard to how these beams were affected by fire and whether they were destroyed.[410] The Romans could predict how different timbers would behave in a fire. It is likely that they knew that the thermal insulation properties of timber are such that the timber just a few millimetres inside the burning zone is only warm. Recent studies of the behaviour of wood in fire have confirmed this predictability and shown that during the process of burning a layer of charcoal forms on the burning surface of the timber and it is this charred layer that is the key contributing factor in timber's fire resistance (**Fig. 27**). The layer acts as an insulator protecting the inner core, enabling it to continue to carry its load. Initially, the rate of charring is fast but as the char depth increases it provides a stronger protective layer to the timber, slowing the overall combustion rate to the extent that the uncharred inner core remains unaffected, maintaining its strength and with it the structure's stability.[411] Recent research in fire retardation has shown that the rate of charring is little affected by the severity of the fire.[412]

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[409] DeHaan and Icove 2012, 128. ASTM E119 is the test number in compliance with the standard enforced by the American society for Testing Materials (International).

[410] For instance, the huge roof beams were reused in the restoration of Hampton Court after the devastating fire of 1986.

[411] https://www.woodsolutions.com.au/Articles/Why-Wood/product-performance-fire; https://www.eh-resources.org/the-role-of-wood-in-world-history/; http://www.trada.co.uk/images/onlinebooks/3B2DB1AE-

This is in contrast to high thermal conductivity of materials such as steel which heat up more uniformly than timber, so giving rise to problems of expansion and loss of strength over the whole section, and which failed so catastrophically in the Twin Towers in 2001.[413] The structural failure of steel in New York gave a new impetus to research on the inherent fire resistance of timber. In her address to Irish engineers in 2007, Dr Barbara Lane said: '9/11 was an extreme event but caused substantial analysis and deepened understanding of real fire behaviour and real structural behaviour that applies to anything we work on today.'[414] Several world-wide projects have provided data on the safe use of timber while, in recent years, a 'reThinkWood' movement has begun.[415] The consensus of reThinkWood is that timber has a proven record for safety, evidenced by its use not only in 90 percent of all U.S. home construction but in some of today's most innovative non-residential architecture. While most people are familiar with the basics of an active fire suppression system, including the use of sprinklers and fire extinguishers, passive fire protection is what actually contains a fire at its point of origin. Passive fire protection, despite its name, is always at work. The predictable behaviour of different types of wood plus the protection of charring are the two factors which result in wood products such as the large beams used in heavy timber construction performing better in a fire than non-combustible materials.

These findings mean that any of assumptions about the role of timber in fires involving monumental structures in Rome must be re-evaluated. It is possible that in the event of a fire, the integrity and stability of monumental structures were enhanced rather than weakened by the use of large beams and that stone and concrete elements of a building were at least as vulnerable to fire as wood.

491E-4DDC-B1AD-F3D6B8B3255F/. See Stone and Tyree 2015 for a discussion on recent research on the suitability of wood for structures.
[412] http://www.trada.co.uk/images/onlinebooks/3B2DB1AE-491E-4DDC-B1AD-F3D6B8B3255F/ ; http://www.mace.manchester.ac.uk/project/research/structures/strucfire/materialInFire/Timber/default.htm
[413] http://www.trada.co.uk/images/onlinebooks/3B2DB1AE-491E-4DDC-B1AD-F3D6B8B3255F/
[414] https://www.engineersireland.ie/EngineersIreland/media/SiteMedia/cpd/training/Seminars%20temp/New%20Developments%20and%20Challenges%20in%20Fire%20Safety/Barbara-Lane.pdf
[415] www.rethinkwood.com/CEU; The results of these projects (2012) are found at: https://www.nist.gov/sites/default/files/documents/el/fire_research/NIST-Timber-Report-v4 ; further results of research are found at http://www.mace.manchester.ac.uk/project/research/structures/strucfire/materialInFire/Timber/default.htm. FPInnovations (2013) has recently published a report of the "Technical Guide for the Design and Construction of Tall Wood Buildings in Canada." It is available on https://fpinnovations.ca/

The next chapter (Chapter 5), which looks at the efforts made by the Romans to counteract and contain fires, explores this suggestion further.

**Chapter 5       Counter Measures**

**Introduction**

Measures to prevent, retard, or manage fire shape the life of a city in any era. Attempts to minimise the risks and to make such attempts part of the fabric of the city are an inherent part of an urban fire régime.  Rome was a city fully aware of the constant danger of fire and understood the measures needed to prevent and contain outbreaks; however, as in all cities up to the present day, the challenge is consistent implementation of those measures.  In addition to flood and plague, fire was an urban nightmare with extreme personal, political and economic repercussions (Chapters 7 and 8). In the modern city, fire management continues to impact on the everyday lives of the citizens, and on the work of administrators and legislators. In the wake of the Grenfell Tower disaster in London (2017) it became immediately obvious that the political context of any fire starts with the systems put in place to prevent it, and the decisions regarding who, or what, is in most need of protection.[416]

Throughout history, specific fires, especially major conflagrations, have focused minds on the need for reforming existing practices.[417] Attention to legislation, building regulations, and innovations in building materials and urban design, are all modern concerns but Rome was no different. Just as now, the role of firefighting and the water supply of a city were core infrastructural issues in Rome. Rome seemed to differ in one important matter: the part played by the gods in the cause of fire meant their role in fire prevention was woven into the life of the citizens in the matter of prayer and dedication. Rome also differed from a modern city in that it lived closer to naked flame, tended it constantly in daily life, and knew its capacity to destroy and create.[418]

**Legislative measures**

*Public safety, arson and fire-setting*

For the Romans, arson was an act of treason which warranted punishment up to, and including, execution.  Regulations referring to arson are traditionally believed to date back to the time of the Twelve Tables which, according to legend, were devised in 451 BC (Livy 3.31.8; 3.34) and, while not constituting a systematic legal code, seem to have provided laws

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[416] Shenker 2017.
[417] Bankoff 2012, 12.
[418] Pyne 2012, 110.

in the main areas of Roman life: slavery and freedom, family and property, the economy, and society.[419] Surviving fragments are found in writers of the last century of the republic and in writers of the imperial period, and it is not possible to say if the law governing arson (8.10) is original or was added later.[420] In the early 3rd century BC, the law of damage to property was regulated by the *lex Aquilia* (*Dig.* 9.2) which dealt with 'loss caused contrary to the law', including destroying another's property by 'burning or breaking.'[421] Prior to the first standing criminal court (*quastio perpetua*) established in 149 BC, the *tresviri capitales* provided summary justice for servile or lower-class freeborn malefactors such as those responsible for fire-setting (*Dig.*1.15.1).[422] The *Lex Julia* (*Dig.* 48.6.5), of uncertain date but probably after the Social War (91- 88 BC), dealt with the use of arson by mobs. The *lex Cornelia de sicariis et veneficis* (*Dig.* 48.8.1pr), passed in the time of Sulla, provided for malicious damage caused by fire. Sulla's reinforcement of legislation meant that as of 80 BC criminal law courts were well established and one, *de iniuriis*, was probably that which dealt with arson.[423]

Legislation concerning deliberate or accidental fire-setting evolved and changed over the period covered by this study (460 BC - AD 410) and was not at all straight-forward in its enforcement and its impact on the life of citizens. Like all Roman criminal law, enactment and enforcement of laws against arson was neither uniform nor blind. The first of the laws, Table 8.10, recognised different degrees of culpability in causing a fire: 'any person who destroys any building by burning shall be bound, scourged, and put to death by burning at the stake provided that he has committed the misdeed with malice aforethought; but if he has committed it by accident, that is, by negligence, it is ordained that he repair the damage; or, if he is too poor to be competent for such punishment, he will receive a lighter chastisement.'

Where a fire was caused deliberately, death could be the penalty but, if by negligence, punishments ranged from public admonition to whipping (*Dig.* I.15.3.4).[424] The *Lex de incendio ruina naufragio rate nave expugnata* ,which predated the time of Augustus, dealt with the distinction between taking advantage of the confusion caused by fire when looting

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[419] Alexander 2007, 239; Cornell, 1995, 272.
[420] Warmington 1979, xxix suggests that it may have been from an edition of the Tables, with interpretation and commentary, which was included by Sextus Aelius Paetus (consul in 198 BC) in his *Tripertita*, that most later writers drew their quotations.
[421] Crook 1967, 162.
[422] Robinson 1992, 105.
[423] Robinson 2007, 33, 184.
[424] Lanciani 1898, 223; Robinson 1995, 35.

and actual fire setting (Livy 3.31.8). The revision of laws over time shows in the Roman psyche a desire to find a balance between *humanitas* and what was necessary for public safety.[425] It is in philosophy rather than legislation that the debate between imposing a fixed statutory penalty and those who wished to make the punishment fit the circumstances is to be found.[426]

Another distinction in punishment was based on social status. Put simply, it was thought natural that upper-class individuals should receive fundamentally different legal treatment than their lower-class contemporaries. Although the formal distinction between 'more honourable people' (*honestiores*) and 'more humble people' (*humiliores*), with milder punishments for the former, did not achieve official status until the mid-2nd century AD, already during the Republic differing social status generated a different system of criminal justice for upper- and lower-class citizens (*Dig.* 48.19.11*pr* and 2; 48.19.13; 48.19.16).[427] Enforcement of the law, including that relating to arson, was linked to social status.[428] Ironically, it is probably those with most to lose in a fire, on the wrong side of the social divide, who suffered most from the loss but also by the punishment of the law.

Crimes that threatened the state may have been viewed differently from crimes that affected an individual.[429] Cicero's excoriation of Clodius as an incendiarist (**Nos. 23**, **24**, **25**, **26**) focusses on his threat to the state rather than to any personal loss by those whose houses he burned. [430] Nor, indeed, is Clodius actually punished for his apparent arson. In short, in a city very aware of the threat of fire, the treatment the law meted out to the arsonist depended on the circumstances (accidental or deliberate), who he was, and what he set fire to. This highlights the political nature of fires and the manner in which one section of the population can be played off against another.[431] Throughout history it is frequently the outsider, the 'other', who has been punished for suspected arson. An example of social distinction in the matter of punishment is seen in the 18th century feudal regime of the city of Edo/Tokyo. The most flammable sections of Edo housed the poor and marginalised in badly constructed, cramped wooden buildings. When a fire in 1722 was caused by suspected arson, 101 accused

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[425] Robinson 2007, 180.
[426] It is best illustrated by Seneca (*Ira* I. 19. 5-7): 'to grant impunity where it neither injures the receiver or the giver'.
[427] Alexander 2007, 243; Robinson 2007, 105 - 108.
[428] See Robinson, 2007, 105 for a discussion of this point.
[429] Alexander 2007, 242 discusses Mommsen's (1899) and Kunkel's (1962) points of view on this distinction.
[430] Robinson 2007, 62.
[431] Shenker 2017.

men were burned at the stake, nearly half of whom were outcasts or vagrants.   In a more recent example, the young black incendiarist became part of the false narrative of blame for the devastation of Cleveland's eastside neighbourhoods in the 1970s and 80s. In 1965 the mayor introduced a policy of controlled burns of buildings in rundown African-American neighbourhoods to create more valuable vacant lots. In response, young African-Americans rioted and used fire in protest against this policy. Subsequent public memory has focussed on the fires set by the rioters and it has taken decades to remember that the city and landlords were using fire for the purpose of capital accumulation in the first place.[432] These examples show how it can be challenging to unpick the nexus of social control, perceived bad behaviour, and bad urban management in a period when a city is prey to fires.

### *Preventive Building Regulations*

As in all modern cities, much of the legislation relating to fires in Rome dealt with building regulations. Although definitive information is sparse, there is some evidence that the Twelve Tables provided for a space of five Roman feet between all adjacent buildings (Festus *Ambitus*, 5L and 15L) but we do not know if this was an original law or a later addition.[433]   In any case, that provision would not have lasted long once the city began to grow.

Due to the rapid expansion of the city from the 3rd century BC onwards, it is very likely that general rules on height, ambit, materials and distance from other buildings were updated (Varro, *Ling.* 5.22). Given the topographical constraints of the site (Chapter 4, 138-139; **Fig. 15**), at that time the city began to grow upwards with buildings of two or more storeys.[434] Certainly, there were laws on the construction of houses quite early on in the history of the city's administration which showed a concern for fire prevention.  For example, roofs had wooden shingles until the war with Pyrrhus (280 - 275 BC) when they were to be replaced with terracotta tiles (Plin. *HN* 16.15.36). The motive for the change must have included fire prevention and such a sudden and complete change from shingles to tiles was consequent upon a law. The clay, from which the tiles were made, was relatively resistant to fire due to the presence of alumina and silica in its properties.[435] The risk of fire may not have been the only reason for such a sudden shift: the supply of clay needed for terracotta tiles was much easier to access and make than the wooden shingles in the rapidly growing city.[436]   This is

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[432] See Kerr 2012 for a discussion of this narrative.
[433] Cornell 1995, 278.
[434] Robinson 1995, 33.
[435] Blake 1947, 49.
[436] Patterson and Millett 1998; Patterson *et al.* 2000.

not the first practical example of state intervention in building materials which included fire control, as the state was prepared to provide tiles after the Sack of 390 BC. However, it gives an insight into the resistance to change and the inability of the state to enforce its policies as Rome continued to be roofed with shingles long after the sack of 390 BC (Plin. *HN* 16.36). Not only that, but, while the least flammable were made from oak, thatch probably continued to be used in poorer areas. Meiggs suggests that economy in materials and labour seems to have been the reason for the resistance to change.[437] This is unlikely to have been the only reason for resistance. In a period of rapid expansion it would have been difficult to access the recommended materials in the quantities required.[438] Just as there are interrelated causes for change, resistance to change is equally complex. To issues of economy and availability of materials the phenomenon of 'prisoner's dilemma' can be added. In this scenario, a citizen is unlikely to embrace costly change unless his neighbour will do the same.[439]

Paucity of evidence surrounds building controls until specific information in the time of Augustus and later. The *Lex Julia de modo aedificiorum*, a building regulation which set maximum heights for houses and minimum thicknesses for walls, is attributed to Augustus and was probably promulgated about 18 BC (Strabo 5.3.7). However, Augustus himself reminded the senate that a consul of 105 BC had already dealt with this matter (Suet. *Aug.* 89). It is likely that Augustus was reinforcing legislation that was already in place but was being flouted. He put a limit of 70 Roman feet on the height of new buildings erected on public streets (Strabo 5.3.7). It is unclear what Strabo meant by 'public streets' (ὁδοῖς ταῖς δημοσίαις) and this casts doubt on how much of the city the regulation affected. For instance, back alleys probably remained unchanged. The desperate need for regulation, or enforcement of existing legislation, is seen in Seneca's words of the early 1st century AD where he describes the teetering high rise blocks of homes which were now a danger not a protection: 'so great is the height of the buildings and such the narrowness of the streets that they offer no protection against fire, nor is there a means of escape in any direction if they collapse' (Sen. *Controv.* 2.1.11).

Augustus' legislation and good intentions probably suffered the same fate as previous laws and were eventually ignored. There were always ways of getting around the law; for example, one could build higher further back from the street line; lighter, wooden structures may have

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[437] Meiggs 1982, 222.
[438] See Delaine 2000 for a description of the challenges of accessing both material and manpower in the continuing process of maintaining, repairing, rebuilding – let alone building anew – in imperial Rome.
[439] Sand and Wills 2012, 45.

topped many an *insula* (Vitr. *De Arch.*2.8.17). Land was scarce and expensive but resourceful builders almost doubled the floor space between ground and top storeys by projecting each additional storey out over the one below, jettying. (Chapter 4, 146; **Figs. 19** and **20**). This inability to maintain the legal building line above street level is seen again in the great fire of London (1666).[440]

The fire of AD 64 proves the point that a major conflagration focusses the mind on the need to reform practices. Nero introduced a list of measures, a lot of it not unlike earlier legislation but with some notable innovations. Minimum spaces between buildings were laid down, shared walls were banned, and heights were restricted (the Augustan height limit must have fallen into disuse).[441] Rules were laid down against timber construction and the hard, fire-resistant, peperino tufa stone from the Alban or Gabine Hills was to be used ((Tac. *Ann.*15.43). Streets were to be wider and regularly laid out and congestion within *insulae* was to be reduced by the provision of both internal courtyards and porticoes on the ground floor facing the street. The porticoes could also serve as protection against falling débris in the event of fire. Imperial funds paid for these porticoes along the facades of the new apartment blocks so that fire-fighters could have swift access to upper floors (Suet. *Ner.* 16). It is not clear from the sources exactly how these porticoes worked. The reconstruction in **Figure 28** shows a portico based on the remains of the 2nd century *Insula Ara Coeli* set against the western slope of the Capitoline. As required by Neronian law, it ran along the front of the building apparently to allow the *Vigiles* access from one building to another. Hermansen also illustrated two possible designs (**Fig. 29 (a)** and **(b)**): (a) is based on Suetonius' description and (b) on the excavations on the Clivo di Scauri in Rome and a number of examples from Ostia. The second-century AD *Insula Clivo di Scauri* which ascended the north slope of the Caelian Hill extends to the fourth floor and has a portico built into the façade where the third and fourth storeys projected out over an arcade and rested on its arches.[442] A similar configuration is seen today on the ground floor of the *Insula Ara Coeli* (**Fig. 30**). Excavations of the Hadrianic *Caseggiato del Serapide* and the Antonine *Casa degli Aurighi* in Ostia, both estimated to have been five storeys high, show that the portico was built into those *insulae* in the same way as the *Insula Clivo di Scauri*.[443] It is difficult to imagine how the portico in **Fig. 29 (a)** helped in fire-fighting, although Suetonius (*Ner.* 16) wrote that they

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[440] Milford 1998, 21.
[441] Griffin 1982, 130. See Chapter 4, 157 for the possibility that cavity walls may have created a chimney effect.
[442] Packer 1967, 77; *LTUR* 1993 – 2000, 1.286; Hermansen, 1982, 219; https://www.caseromane.it/en/the-visit
[443] Hermansen, 1982, 219; http://www.ostia-antica.org

were built so that fires could be controlled by bringing the *Vigiles* close to where the fires were. Even if fire-fighters were to stand on top of the porticoes they would still be unable to reach the upper storeys, they were in danger of being trapped if the building collapsed overhead, and they had the added difficulty of bringing water up to the roof of the portico. If, on the other hand, the porticoes are regarded as a way of keeping the streets clear of falling débris they make more sense. An eye-witness account of the fire in Lisbon in 1755 describes such clogging of narrow, winding, sloping streets, similar to those in Rome which made the streets impassable.[444] It is also likely that they could prevent entrainment of flames coming from workshops on the ground floor (**Fig. 23**) and so retard the vertical spread of fire.

In AD 92 Domitian decreed the widening of narrow streets but it is not clear if this was just by forbidding stallholders and shopkeepers from encroaching on the street (Mart. 7.61). Trajan reduced Augustus' building height from 70 Roman feet to 60, probably only for new buildings fronting onto public streets, in order to prevent collapse and the ensuing expense of rebuilding (Aur. Vict. *Caes.* 13.13). A limit of 60 feet would allow for four to six storeys (Chapter 4, 145).[445] Pliny applauded Trajan's restraint over new buildings as walls and roofs had stopped shuddering and collapse no longer threatened (*Pan.* 51). There is no evidence in the sources for further legislation until AD 326 when Constantine restricted residential units to 100 feet from state-owned *horrea* (*Cod. Theod*. 15.1.4.). Taylor suggests that this was because *horrea* were considered a fire hazard. However, it could equally be that there was also a risk that fire would spread from a residence and threaten the vital food supply.[446] In AD 368 Praetextatus removed walls of private buildings where they abutted temple structures (Amm. Marc. 27.9.10).[447] In a repetition of earlier legislation he again banned jettying.

### *Legislation and personal responsibility*

Fire-inspired building regulations date back at least to the Babylonian code of Hammurabi in 1754 BC and have been ignored ever since; change only came in modern times with fire insurance and when fire strategy focussed directly on prevention.[448] The limited technology of fire-fighting which remained unchanged until the 18th century highlights the need for the

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[444] Letter from E. Turnbull of November 19, 1755 quoted in Molesky 2012, 157.
[445] Robinson 1995, 36.
[446] Taylor 2000, 213.
[447] It is more likely that this was done on religious grounds rather than fire safety because of the language used by Ammianus: *Discrevit ab aedibus sacris privatorum parietes, eisdem inverecunde conexos* ('He separated from sacred temples the party walls of private dwellings which had been irreverently attached to them'). Rubin 2004, 237 suggests that concern for fire safety was part of the rationale for this legislation.
[448] Code 25; Pyne, 2001, 109.

cooperation of the citizenry to abide by regulations and keep fire-dousing equipment on hand, and, above all, the need to enforce these regulations.  While the technology of fire management remained primitive for millennia, it was community and individual responsibility which checked most fires during that period.[449]

The role and responsibility of citizens has long been an integral part of urban well-being, including fire management. The *lex locationis* (*Dig*.19.2.13.3) which included a clause limiting a tenant's right to have a fire (*ignem ne habeto*) could imply liability for any accident (*Dig*. 19.2.11.1).  But the nature of the 'fire' in question is not clear and the restriction may only apply to a farm tenant.[450] If the ban referred to the urban tenant it would include fire for cooking and heating which is unlikely.  Certainly, the urban tenant had a publicly imposed duty to exercise extreme care in the handling of fire and failure to do so was a criminal act (*Dig*. 1.15.3.4.5).[451] After the fire of AD 64, Nero decreed that householders keep fire-fighting equipment on hand (Tac. *Ann*. 15.43), while part of the duty of the *Vigiles* was to check that fire-fighting equipment was in homes and they could beat with clubs (*fustibus*) those urban dwellers who were negligent (*Dig*. 1.15.3.1). Trajan's reply to Pliny (*Tra.* 9.34) in the aftermath of a fire in Bithynia shows what was expected of able-bodied citizens. The need to enlist the cooperation of householders is not confined to one location or time. In the wake of a fire in 1648 in Moscow,  reforms included a requirement for residents to provide fire-fighting equipment.[452] Before the fire in Lisbon (1775) all housewives were required to bring pots to the scene of a fire to carry water from the city fountains.[453] Even before the fire of London (1666) households were charged with taking care of their own fire prevention and advised on how to deal with an outbreak.[454] An ordinance issued by the common council in Dublin in 1304 fined a householder 20 shillings if the fire did not go beyond the house, 40 shillings if the fire was visible from outside the house, and 100 shillings or be cast into the fire, if the street was affected.[455] This echoes the differentiation in the scale of culpability listed in the Twelve Tables (p. 168 above).

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[449] Pyne 2001, 110.
[450] Frier 1980, 141.
[451] Frier 1980, 75, 141.
[452] Frierson 2012, 106.
[453] Quoted by Molesky  2012, 156, from Ferreira de Andrade, *Lisboa e seus serviços de incêndos*, Vol. 1, 1395 – 1868 (Lisbon: Camara Municipal de Lisboa, 1969), 9.
[454] Milford 1998, 43 quotes from a pamphlet posted in London by the City Father in 1643.
[455] Geraghty and Whitehead 2004, 1.

**Prevention and building technology**

*Building materials***:** *Wood*

Vigilance and innovation in building materials characterise the Roman attitude to fire retardation and prevention. Modern assumptions concerning the combustibility of wood have already been challenged and the Romans' knowledge of the properties of different woods used for construction and their behaviour in fire has already been discussed (Chapter 4, 163 - 164). Vitruvius (*De arch.* 2. 9.16) lists every type of wood used for building and rates each on its combustibility.[456] About 100 years later both Pliny the Elder (*HN* 35.52) and Gellius (15.1) were still discussing how easily woods caught fire and how *alum* could be used to make woods more fire-resistant. As it was almost impossible to avoid wooden floors and joists in buildings, still the case today, the continued concentration on this issue is not surprising.

*Building materials: stone, concrete and brick*

In the context of a quickly growing population, the expansion of the building trade from the 2nd century BC and the requirement for faster building techniques and materials, considerations of fire-prevention must have formed part of the revolutionary changes in both technique and choice of materials such as stone, concrete and fired-brick (Vitr. *De arch.* 2.3.2). [457] However, as noted in relation to the switch from shingle to terracotta tiles for roofs (p. 170 above), fire prevention was only one of a number of interrelated factors at play. Practical and economic considerations, the ease and cost of accessibility, manufacture and transportation, were paramount in a burgeoning city self-conscious of its place in the world.

**Stone**: In Rome the choice of stone for building played a significant role, not just in the aesthetic appearance of the city, but in its resistance to the attack of quake, flood and fire. That choice changed at intervals over the centuries. It was ancient practice to use local stone which was relatively soft and easy to quarry. Local volcanic tufa (*opus cappellaccio*), which capped all the hills of Rome, was used for building from the 7th to the 5th BC at which time a higher quality tufa became available with the conquest of Fidenae in 426 BC and Veii in 396 BC. Fidenae tufa and *Grotta Oscura* tufa, found 15 kilometres from Rome, were used

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[456]Vitruvius (2.9.16): 'And if there were a provision for bringing this timber to Rome, there would be great advantages in building; and if such wood were used, not perhaps generally, but in the eaves round the building blocks, these buildings would be freed from the danger of fires spreading. For this timber can neither catch fire nor turn to charcoal, nor burn of itself.'

[457] Anderson 1997, 121; Robinson 1995, 35.

extensively until the end of the 2$^{nd}$ century BC when the harder Anio and Monteverde tufas came into use, both of which were quarried nearby, Monteverde from the Janiculum and Anio near the eighth milestone of the via Tiburtina.[458] This change coincided with the great increase in construction, particularly public building, following on widespread Roman conquests throughout the Mediterranean from early in the 2$^{nd}$ century BC and the resulting increase in wealth.[459] Both remained in regular use into the imperial period. The arrival of peperino tufa (*lapis Albanus*), quarried from Alba Longa 24 kilometres from Rome and widely used in 1$^{st}$ century BC, was significant because of its fire resistant properties. It was combined with Gabine tufa (*lapis Gabinus*) which, though softer, also had fire resistant properties, in the towering fire-wall of the Forum of Augustus (**Fig. 31**). The wall is a perfect example of the interface of fire and fire-prevention, innovation and ideology. It is also an example of how the monumentalisation of the city squeezed the residential and commercial footprint of central areas. It rose to nearly 36 metres and survives almost to full height. The interior surface of the wall was smoothed for a facing of marble below and stucco above.[460] Given that Gabine tufa is coarse and difficult to smooth for facing, its choice would indicate a prioritising of its fire-resistance. This wall may have saved the Forum from devastation during the fire of AD 64. Constructed at the back of the Forum, the wall served the double purpose of protection against the spread of fire from the more fire-prone commercial and domestic quarters of the Subura while shutting off the view of that part of the city.[461] The Subura was a mixture of commercial and residential premises. Caesar and other élites had houses there (Suet. *Iul.* 46; Mart. 12.3, 12.21) but it is likely that those houses were at the upper end of the Clivus Suburanus away from the main commercial, less savoury, activity which was directly behind the fire-wall and closest to the Forum.[462] Information on the disreputable nature of this quarter with its noisy, dirty trades and brothels comes from epigraphic and literary evidence of different trades, small artisan shops, brothels and collapsing buildings.[463]

Dark grey peperino was regularly combined with off-white travertine (*lapis Tiburtinus)* in almost all the major architectural monuments of the time from the 1$^{st}$ century BC and into the imperial period. The combination was probably not for visual effect as such stone masonry is

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[458] Blake 1947, 22; Anderson 1997, 142.

[459] Blake 1947, 22. Anderson 1997, 122.

[460] Blake 1947, 167.

[461] Platner and Ashby 1929, 222; Blake 1947, 39; Anderson 1997, 143.

[462] *LTUR* 1993 – 2000, 4. 379 - 383.

[463] *CIL* VI 1953, 9284, 9399, 9491, 9526, 33862. Juvenal 3.5 - 7, 5. 106, 11.51, 11.141; Martial 2.17, 6.66, 7.31, 9.37, 10.94, 11.61, 11. 78; Persius 5.32; Propertius 4.7; Horace *Ep*. 5.58.

thought to have been plastered.[464] Vitruvius (*De Arch*. 2.7.2) and Pliny (*HN* 36.167) both wrote that travertine stone could withstand injury from heavy loads and storms but, as soon as it was touched by fire, it cracked and broke up (Chapter 4, 160). Travertine, a calcareous sedimentary rock, was often used in load-bearing positions within a building and was used extensively, for example, in the Flavian amphitheatre. While travertine calcined if exposed to fire, its ability to withstand buffeting by storms, and perhaps tremors, would be a significant aid in the prevention of fires. The popularity of Alban peperino and Gabine stone was revived by the regulations of Nero after the fire of 64 (Tac. *Ann*. 15. 43). While the Romans knew the strengths and liabilities of different stones used for building and that their choice was often based on a variety of factors (Vitr. 2.7.2), it is clear that on some occasions and in specific structures such as the fire wall, fire resistance was a priority.

**Concrete:** Although concrete is compromised if exposed to enough heat in a fire (Chapter 4, 149), its development as a construction material was arguably the single most important innovation in building technology in ancient Rome. This shift to the use of *opus caementicium* in large structures indicates the adoption of industrial methods of building, stimulated by the demand generated by the booming Roman economy and suited to execution by a slave or unskilled free labour force (Chapter 8, 259).[465] It reduced the need for timber framing and hence lessened the risk of fire.[466] Mortar had long been used as a bonding agent between stone blocks (Vitr. *De arch*. 2.5.1) but as early as the end of the 3rd century BC elevations of facing masonry made up of cut tufa or ashlar blocks were filled by pouring a mixture of mortar and stone rubble between them. This technique is found in the substructure of the temple of Magna Mater on the Palatine which was dedicated in 191 BC.[467] The innovation meant cheaper, faster, and local production of material that created strong, solid structures. The key factor in the fire-resistance of concrete was not the material itself but the fact that it gave a smooth, stable, surface which could be faced with uniform diamond-shaped blocks of tufa (*opus reticulatum*) as in, for example, the theatre of Pompey. *Opus reticulatum* remained the preferred method of facing concrete walls under Augustus but was replaced in the early 1st century AD by fired-brick.[468] The role of concrete in fire prevention can best be

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[464] Anderson 1997, 143. Packer 1971, 21 points out that Casa di Diana, Caserma dei Vigili, Casseggiato del Serapide and Casa delle Muse in Ostia show evidence of stuccoed brick exterior. See Richardson 1989, 376 for evidence of stucco in Pompeii.

[465] Coarelli 1977, 1 - 19; Anderson 1997, 88 - 95; DeLaine 2000, 135; Broekert and Zuiderhoek 2013, 328.

[466] Anderson 1997, 132.

[467] Anderson 1997, 146; Carter 1995, 37. *LTUR* 1993-2000, 2, 295 - 7; 3. 207. The temple of Magna Mater burned in 111 BC (**No. 19**) and possibly in 3BC - AD 3 (**No. 42**).

[468] Anderson 1997, 150.

seen in the design and materials of *horrea*. These huge warehouses and granaries, storing vast quantities of combustible materials such as grain and oil, were inherently a fire risk (Chapter 4, 154). In AD 326 Constantine restricted residential units to 100 feet from state-owned *horrea* (*Cod. Theod*.15.1.4) (p. 173 above). The potential for spontaneous combustion was fully recognised both in the choice of building material and the design of the structures. *Horrea* were built first of great tufa blocks with thick, solid walls. For example, the original construction of the *Horrea Agrippiana* situated on the NW slope of the Palatine dating from the late republic was built entirely of *opus quadratum* of tufa with flags of travertine, while a later Domitianic rebuilding of the north wall comprised brick-faced concrete based on blocks of travertine.[469] The *Horrea Galbana* on the Aventine, probably dating from the first century AD, housed the *annona publica* (public grain supply) and as such would have required maximum security either from fire within or to remain resistant if a fire broke out in the region (**Nos. 51**, **54**, **83**).[470] Excavations have shown walls of concrete faced with *opus reticulatum*.[471] The whole structure of the vast *Porticus Aemilia* running from the Porta Trigemina to the slopes of the Aventine which can be dated to 174 BC (Livy, 41.40) **(No. 51)** is concrete faced with *opus incertum*. Fifty barrel vaulted bays are divided from each other by arcades of seven arches providing ventilation.[472] The manner in which grain was stored in the *horrea* - in sacks, in bins, or loose in heaps on the floor - is unknown but would have played an important part in avoiding overheating. Lack of archaeological evidence for bins would indicate either sacks or heaps. The latter would require very careful drying and cooling before storage to avoid local hotspots in the middle of the heap (Chapter 4, 155).[473] Temperature was carefully controlled by under-floor ventilation and plastered walls. Remains of *horrea* at Ostia show that they were made of the finest material of the day, with floors raised on dwarf walls with perfect drainage, secure doors and few or small windows admitting little light in order to maintain a steady cool temperature (Pliny *HN* 18. 301-9).[474]

**Brick:** It is unclear when fired brick began to be used and the earliest that can be attested is in the tomb of Caecilia Metalla (30-20 BC?) where they are used in a small area to face concrete in the walls of the upper and lower corridors and in the *cella*. Pieces of cut off flanges found in the concrete behind the brick facing of the upper corridor confirm that they

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[469] Richardson 1992, 192; Rickman 1971, 92; 1980, 134; *LTUR* 1993 – 2000, 3.38.
[470] Richardson 1992, 193.
[471] Rickman 1971, 103.
[472] Carter 1995, 37.
[473] Rickman 1971, 85 - 86.
[474] Rickman 1971, 5.

were made of recycled roof tiles.[475] The earliest use of brick-faced concrete for an entire structure was in the Castra Praetoria built by Tiberius in AD 21-23.  The *insula* of second-century AD Ostia, the so-called House of Diana, is a neat, orderly, robust building using brick-fired concrete (**Fig. 22**) and the likelihood is that it reflected the type of structures being built in Rome at the same time.

Extensive use of fired-brick in Rome seems to date from Augustus but once adopted it became a central commodity in the building programmes of Nero, the Flavians, Trajan and Hadrian.[476]  The practice of date-stamping bricks has provided more information than on any other manufacturing industry in Rome.[477] The importance of the brick industry is demonstrated by the fact that during the course of the 2nd century brick production centres came increasingly under the control of the political class imperial house. By the time of Caracalla the emperor controlled all the great urban brickyards. In a blend of public and private interests, private production during all of this period probably also existed.[478]

It was the facing of concrete, in itself solid but vulnerable to fire (Chapter 4, 149), with fired-brick which created a new scenario: solidity plus fire resistance.  Already fired, these were far more fire resistant than sun-baked brick and when correctly made are also extremely durable and resistant in flood water.[479] Above all, bricks had the huge advantage of being easy and much cheaper to mass produce than stone revetments (Chapter 8, 261). Walls of brick-faced concrete can be built quickly and relatively cheaply without the need for specialised skills. This standardised production meant that buildings were erected in modular form more swiftly and efficiently, especially in a time of crisis and need for housing, (such as in the aftermath of a conflagration), and were also more fire-resistant.[480] In an additional use of brick, by the 3rd century AD the Romans countered the fire hazard of roof rafters by building a brick moulding, supported by stone corbels, around rafter ends. In this way no wood was exposed to flames. An example is still to be seen on the apse of San Saba in Rome.[481]

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[475] Gerding 2002, 15, 49.
[476] Anderson 1997, 151.
[477] Boatwright 1987, 9, 22; Anderson 1997, 151-165;  Dyson 2010, 255; DeLaine 2000, 134.
[478] Dyson 2010, 256 and Steinby 1986, 157 are of this view.  Steinby 1986, 112-114 provides the list of senators and emperors as *domini* of brickyards.
[479] Aldrete 2007, 108; Jacobs and Conlin 2014, 118.
[480] Anderson 1997, 151.
[481] Nash 1960, *fig*. 203, Harmensen 1982, *fig*. 135.

## Prevention and the Gods

Just as the disapproval and anger of the gods was seen as a primary cause of fires in Rome, so, by appeasing and honouring the gods, fires could be prevented. There was a general consensus among Romans that besides mortal beings, a class of immortal, powerful, caring, and intervening agents existed and had to be dealt with.[482]

While much effort was put into fire prevention and fire-fighting on a practical level in Rome, prayer was an aspect of all parts of Roman life and deities were invoked for almost all circumstances; it would have been surprising if Romans did not do so in this matter of life and death. It is not possible to ascertain to what extent the Romans used prayer against fire in the early republic, but the cult of Stata Mater, the goddess of urban conflagrations, was introduced when Aurelius Cotta installed her image in the Forum Romanum around the time of the death of Sulla to protect the Forum's new pavement from fire (Festus 416).[483] Stata Mater was a goddess who stopped fires, worshipped on the spot where a spreading fire stood (*stata*) still.   A shift in the role of ritual and prayer in many aspects of local social life can be detected from the time of Augustus' systematic reorganisation of the city's neighbourhoods in 7 BC when leaders of the neighbourhoods (*vici magistri*) were given responsibility for local services, including firefighting, and public religious observances were expanded at local level.[484] In this context, Stata Mater was added to the Roman pantheon in the complex mix of local and imperial that characterised the Augustan *vici*.[485] This is an insight into the impact of fire and fire prevention on the fabric of ordinary life in Rome as this goddess was extremely popular with the lower classes from the beginning; they had most to fear and lose from fire. In the wake of Augustus' reorganisation, dedicatory plaques for Stata Mater (**Fig. 32**) were erected in places where neighbourhoods successfully stopped a fire and became an everyday part of the cityscape.[486] The prior existence of a Vicus Statae Matris on the Caelian suggests that Rome's neighbourhoods adopted the goddess as a patron before the reign of Augustus and that the reforms of Augustus sparked an extensive expansion of her presence in Rome's

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[482] Rupke 2007, 215.

[483] Festus 416: *Statae Matris simulacrum in Foro colebatur; postquam id Cotta stravit, ne lapides igne corrumperentur … magna pars populi in suos quique ucos rettulerunt eius deae cultum.* ('An image of Stata Mater was worshipped in the Forum after Cotta paved it, so the pavement would not be damaged by fire .. and a large section of the populace  transferred  the goddess's cult  to their own neighborhoods ).

[484] See Lott 2004, 2. The worship of Vesta as representing the positive hearth fire and of Vulcan who embodied fire's destructive element is beyond the scope of this study but would add to our understanding of the role of prayer in this context.

[485] Lott 2004, 98.

[486] Lott 2004, 3.

*vici,* but this is not at all certain.[487]   The survival of four complete dedications, and many incomplete fragments, provides evidence of the popularity of the cult.[488] Dio suggests that the impetus for Augustus' reforms of the administration of the city in 7 BC was the need to combat fires generally in the city due to damage to the Forum Romanum in that same year (Dio 55. 8. 6 -7), and the large number of compital dedications may prove that the neighbourhood officers were determined to invoke the aid of the goddess.[489] This tangible impact on community life points up the complexity of Augustus' reforms.  In another indication of that complexity we see that the compital dedicatory plaque (**Fig. 32**) refers to both Stata Mater and Volcanus, a deity more popular at imperial level, while Stata Mater became closely woven into the fabric of local life. This is an interesting vignette of Augustus' successful orchestration of the blend of the imperial and local and of the personal and political impact of fire-prevention.

These dedications were erected by local magistrates proudly commemorating for a local audience the suppression of a fire.[490]   Such locally based fire-fighting responsibilities gave *magistri* prestige and power leading to an enhanced political career. Their role after the establishment of the *Vigiles* in AD 6 (Chapter 6, 186) is unclear; the task of fire-fighting given to the *vici magistri* in 7 BC may have been a temporary arrangement (Dio 54.2) but there is evidence that they retained some duties even after the establishment of the *Vigiles*. In the fire of AD 38? (**No. 51**) Claudius enlisted the aid of the *vici magistri* (*magistratus ex omnibus vicis convocavit*)  when the body of soldiers and his own slaves could not deal with the burning of the Aemiliana (*deficiente militum ac familiarum turba*) (Suet. *Claud*. 18.1).

The ideology at the heart of Augustus' reforms is seen in the strengthening of the cult of Stata Mater. Augustus set out to consciously contrast the civil strife that characterised the late republic by focussing on revitalising the city's neighbourhoods (*vici*) and nurturing social cohesion by transferring responsibility for the embellishment and maintenance of neighbourhoods to local organisations which were thus diverted from previous partisan political activity. Central to his motivation was the alignment of every level of society and every place in the city behind his rule and he did this by focussing on local communities and organisations.[491] The worship of Stata Mater was one of many compital cults revived in the

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[487] See *LTUR*  1993 - 2000, 5. 191 for doubts concerning the location of Vicus Statae Matris.
[488] *CIL* VI 802; VI 763;  VI 36809a-b; VI 766.
[489] Lott 2004, 98.
[490] Lott 2004, 168.
[491] Lott 2004, 5, 98; Dyson 2010, 50.

Augustan system of neighbourhood religion and ritual. The official state holiday of *Compitalia* dated back to the early republic and was primarily organised and celebrated by Rome's lower classes (Cato *Agr.* 57.1). The proliferation of dedications to Stata Mater is tangible evidence of the revival of neighbourhoods and neighbourhood associations in the different sections of the city.[492] It also, very importantly, shows the impact of Augustus' reforms on the lives of individuals and urban communities and very probably enhanced the flow of information on discontent and subversion. The concept of *pietas* which pertained to Romans' interaction with the gods also reflected and shaped their social control.[493] The concept of personal responsibility, including an element of fire prevention, and filial duty to the 'father of the nation' were inextricably linked and required enforcement.


The next chapter examines another of the reforms of Augustus: the institution of the *Vigiles*, a large para-military force stationed in the city to combat fires and to control negligence and malfeasance.

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[492] Lott 2004, 98. *CIL* VI 761; VI 763; VI 764; VI 766;  VI 802; VI 36809 a-b.
[493] Rupke 2007, 216.

**Chapter 6    Counter Measures: *Vigiles***


**Introduction**

Any study of the *Vigiles* of the ancient city of Rome is particularly complex and challenging for two main reasons: we are hampered by the modern concept and expectations of a 'fire-brigade' and also by the conflicting and fragmentary evidence of the actual role of the *Vigiles* in Rome. Although more has been written by modern scholars about the *Vigiles* than any other aspect of fires in Rome, there has been a lack of consensus about everything from their numbers, policing role, quarters, and methods of fighting fire. This force evolved over centuries and the *Vigiles* of Augustus were not those of the 2nd century AD, nor those of Severus the same as those of the late empire.[494] Most of the evidence of their formation comes from the Augustan period while subsequent information is Severan and mainly epigraphic.[495] Bizarrely, in the many records from the period of their establishment to their disappearance sometime between AD 362 (when they paraded in the annual festival of the Kalends of March (*CIL* VI 3744) and AD 384 when Valentinian suppressed the urban cohorts) they are rarely mentioned in historical accounts of fires. Of the 88 fires listed they are mentioned in three, **Nos. 41**, **43** and **47**, but never in the context of extinguishing a fire. Not only that, Dio (59.9.4) refers to Caligula helping the soldiers (στρατιωτῶν), not watch-men (φρουροὶ), to extinguish a fire but gives no further detail. Suetonius (*Claud*. 18.1) describes how Claudius called upon help from the *magistratus* when the complement of soldiers (*militum*) and slaves (*familiarum*) were unable to cope with the fire in AD 53 or 54 (**No. 54**).  Zosimus (II. 13) uses the same word (στρατιωτῶν) as Dio when describing how a soldier fighting a fire in AD 308-309 (**No. 84**) was killed by a mob.  From AD 6 they constituted a force of *c*.3,500 and from the time of Severus of *c*.7,000 patrolling armed men as part and parcel of the days and, especially, nights of the city and yet they remain elusive.

**Republican structure of fire-fighting**

Groups of fire-fighters existed in some form or another from the mid-republican period, but due to a lack of reliable data from that period the status of those groups is unclear; no doubt their role also changed over time. One of the main sources, Paul the Jurist (*Dig*. 1.15), wrote in general terms of the situation in the republican period as his focus was the role of the

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[494] Sablayrolles 1996, 3 emphasises this point.
[495] For example, imperial dedications, funerary inscriptions and *graffiti*.

*praefectus vigilum* at the end of the 2nd century AD. He recorded that in previous generations the *triumviri* were in charge of preventing fires by virtue of the fact that they patrolled at night. This reference must be to the *triumviri nocturni*. However, Paul added that sometimes the aediles and the tribunes of the plebs intervened in the matter of fires and that both gangs of state slaves (*familia publica*) and of privately owned slaves (*familia privata*) could also be called upon.[496] Referring to the years 290 - 287 BC and to 186 BC, Livy (39.14. 9 - 10) indicates that the *triumviri capitales*, overseen by the curule aediles, were responsible for placing *vigiliae* (night watches) throughout the city and had the duties of watching for nocturnal fires.[497] They seem to be the ancestors of the imperial *Vigiles* and were organised on an *ad hoc* basis; they may have been identical with the *tresviri nocturni* who played a part in fire control and who had charge of a gang of a few hundred slaves of the *familia publica* (Val. Max. 8.1).[498] The danger of fire was, and still is, associated with night, and the answer to the confusion of identification might be that the *triumviri capitales* fulfilled duties in shifts as magistrates by day and watched for fires by night.[499] The dual title, *capitales/nocturni*, could indicate that they were responsible for crime prevention and for overseeing execution of those convicted of capital crimes, as well as for fire prevention.

Sources also occasionally indicate that the consuls were responsible for fire control. For example, in 210 BC when Capuans were blamed for a serious fire in the region of the Forum (**No. 9**) the consul was directly involved in the compilation of evidence against them (Liv. 26. 27.14). During the Bacchanalian affair in 186 BC, the consuls themselves ordered the aediles to prevent fires in the city (Liv. 39.14.10).[500] Referring to the burning of his own house in 58 BC (**No. 24**), Cicero (*Pis*. 11. 26) asks what important conflagration ever happened in the city without the consul coming to help. The involvement of the consul appears to add to the confusion of responsibility for fire-fighting but may simply be indicative of the hierarchy of responsibility: gangs of slaves under minor magistrates (*triumviri*) answerable to higher

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[496] Paul the Jurist (*Dig*. 1.15) : *apud vetustiores incendiis arcendis triumviri praeerant, qui ab eo, quod excubias agebant nocturni dicti sunt: interveniebant nonnumquam et aediles et tribuni plebis. erant autem familia publica circa portam et muros disposita, unde si opus esset evocabatur: fuerant et privatae familiae, quae incendia vel mercede vel gratia extinguerent, deinde divus augustus maluit per se huic rei consuli.*

[497] Livy (39. 14. 9 -10): *... triumviris capitalibus mandatum est, ut vigilias disponerent per urbem servarentque, ne qui nocturni coetus fierent, utque ab incendiis caveretur.*

[498] See Robinson 1992, 175, Lintott 1999, 105, and, particularly, Sablayrolles 1996, 13 for a discussion of the *tresviri*.

[499] Lintott 1999, 104.

[500] This scandal, and subsequent court case, involving an élite young man and a prostitute, provoked the Senate into legislation to control the cult of Bacchus in the city. Robinson 2007, 7- 29 details the case.

magistrates (aediles and tribunes of the plebs), and all accountable to the consul.[501] This hierarchy fits with the important point made by Robinson that the *tresviri* were young men hopeful of a senatorial career.[502] Charge of fire management was a job with prospects, one of a number of administrative jobs where ambitious young men could gain experience leading to higher office in the *cursus honorum*.

The efficacy of the fire-fighting in the Republic is unclear. Much of the information is too vague to reconstruct a unified approach by the authorities. The reference in Paul the Jurist (*Dig*. 1.15) seems to indicate that fire control was the responsibility of public slaves stationed on the periphery of the city (*familia publica circa muros et portas disposita*) but it is impossible to discern any actual organisation or system and, in this scenario, the Transtiberim region would have been left unattended as the Severan wall did not enclose it. In addition, it is impossible to know whether the existing members of the *publica familia* were incorporated into Augustus' body of 600 slaves (Dio 54.2.4) established in 22 BC (p. 186 below). The fact that there was a 'gap in the market' for private enterprise indicates a weakness in any official system of fire management in the republic.[503]

**Private Enterprise**

In *tandem* with this system of municipal responsibility in the late Republic, there were privately owned slave brigades and some of the business of fire-fighting was left to private enterprise. The most notorious example was the slave brigade of Crassus (115 - 53 BC) in the late republic (Plut. *Crass.* 2. 3-5). Crassus bought property at 'fire-sale' prices and acquired a valuable property portfolio. This wealth allowed him to forward his political career to the very top as a member of the First Triumvirate. The political, and financial, capital to be gained by private fire-fighting is also seen in the story of Egnatius Rufus (Dio 54.2.4; Vell. Pat. 2.91.3). Egnatius gained great popularity as an aedile (26 BC?) by extinguishing fires with his own gang of slaves and his popularity resulted in his illegal election as praetor the following year; the *cursus honorum* demanded an interval of a year between the two offices, a condition he breached. He soon had his sights on the consulship and plotted to assassinate Augustus, but unable to conceal his plan, he was arrested and executed. The examples of Crassus and Egnatius indicate how fire-fighting and political ambition were linked. It is possible, but not at all certain, that the threat to civic order represented by the opportunism of

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[501] See Sablayrolles 1996, 8 for a discussion of this hierarchy.
[502] Robinson 1992, 175.
[503] Sablayrolles 1996, 21 discusses what he regards as the failure of the Republican fire-fighting system.

Egnatius Rufus was on the mind of Augustus in his subsequent reform of the fire service, in 22 BC and 7 BC, into a structure which allowed for careful line management and monitoring.[504]

## Augustan changes in 22 BC and 7 BC

On his accession, Augustus planned to modernise Rome by tackling the maintenance of the city, in a sorry state after decades of civil war (Suet. *Aug.* 28.3). Up to then, the maintenance of the city (*cura Urbis*) was a loosely defined duty belonging to the aediles (Cic. *Leg.* 3.7). Augustus may have seen the republican system of fire-fighting as inadequate and, after a blaze consumed large part of the city in 23 BC (**No. 36**), in 22 BC he established a body of 600 slaves who were trained to fight fires. These were probably based on the Crassus model and were assigned to the brief of the curule aediles (Suet. *Aug.* 30. 1; Dio 54.2). It is impossible to ascertain whether this was a substantial increase or an extension of the *publica familia* that already existed. The fact that fires continued to beset the city (**Nos. 37**, **38**, **39** and **40**) and that he was to change this arrangement again 15 years later, could indicate that the aediles, and the numbers assigned to them, did not adequately fulfil the responsibility for fighting fires. However, this is an unreliable supposition: firstly, clusters of fires could just as easily indicate clusters of records (Chapter 2, 20; **Figs. 7** and **8**) and secondly, the change may have been part of Augustus's evolving policy on local governance (Chapter 5, 181-182). Whatever his motivation, after a fire in 7 BC (**No. 41**) which destroyed a large number of buildings around the Forum, Augustus made another change (Dio 55.8.6-7). Tied in with his reorganisation of Rome into 14 districts, he transferred responsibility for the 600 fire-fighting slaves to the newly created *vicorum magistri*. This was an important change in the status of fire-fighting as, in this new hierarchical system for urban care, there was now a direct connection between supreme authority and those responsible for fire management.[505] It also indicates Augustus' interest in keeping a personal eye on local government of the 14 regions; 'the Divine Augustus preferred that this matter be dealt with personally' (*Dig.* 1.15.1).[506]

## Augustan changes in AD 6

Sometime between 3 BC and AD 3 Augustus' own house on the Palatine burned (**No. 42**). Sources (Suet. *Aug.* 25; Dio 55.26.4; *Dig.* 1.15.2) indicate that he was motived by that event and a fire or a series of fires in AD 6 (**No. 43**) to create a professional fire-fighting force of

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[504] Favro 1996, 114.
[505] Sablayrolles 1996, 25.
[506] *Digest* (1.15.1): *Divus Augustus maluit per se huic rei consuli.*

seven cohorts in the city under the command of a tribune.[507] Each cohort was responsible for two of the 14 regions of the city (Suet. *Aug.* 49; *Dig.* 1.15.3). It is difficult to see how one fire of AD 6 warranted an increase in numbers from 600 to *c*.3,500. The number is debated by modern commentators but each cohort likely comprised 500 or 560 men.[508] Dio (55.24.6) adds further confusion when he refers to 6000 watchmen (φρουροὶ) organised in four divisions in the city under Augustus but, while he may be including the *Vigiles*, he is not referring exclusively to them. This underlines the important point that our sources do not always make a clear distinction between the Praetorian, Urban and Vigil cohorts.[509] The numbers established in AD 6 may reflect Augustus' view of the danger of fire, but it is difficult to accept that this large *corps* was purely to combat fires. The expense of maintaining such a large number also supports the view that their function went beyond that of fire-fighting: a tax of 2% on the sale of slaves was needed to part-fund them (Dio 55.31.40). Whatever Augustus' reason for the increase, it represented a radical change to official policy which now saw a permanent patrolling presence of possibly 3,500 men stationed in different locations in the city.

A further radical innovation was the change in the status of the fire-fighters: they were no longer slaves but freedmen (Strabo 5.3.7; Suet. *Aug.* 25) who seem to have been originally Latini Juniani, slaves informally manumitted and of a lower status than freedmen who had been officially manumitted.[510] The new cohorts were commanded by a *praefectus vigilum* of

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[507] *Digest* (1.15.2): *pluribus uno die incendiis exortis* ('several fires having broken out in one day …'). Dio (55. 26)*:* 'When many parts of the city were at this time destroyed by fire, he [Augustus] organized a company of freedmen, in seven divisions, to render assistance on such occasions, and appointed a knight in command over them, expecting to disband them in a short time. He did not do so, however; for he found by experience that the aid they gave was most valuable and necessary, and so retained them. These night-watchmen exist to the present day, as a special corps, one might say, recruited no longer from the freedmen only, but from the other classes as well. They have barracks in the city and draw pay from the public treasury.'

[508] Baillie Reynolds (1926, 71) believes there were 1000 per cohort from the beginning; Rainbird 1986,151 suggests 80 men per century, seven centuries per cohort and seven cohorts in total in AD 6, giving a total of 3,920 men. See Sablayrolles 1996, 27 - 31 and Coulston 2000, 76 - 81 for a discussion of the numbers in AD 6; both agree that the number of each cohort was more likely to be c. 500 in keeping with the other urban cohorts.

[509] Dio (55.24.6) : καὶ εἴκοσιν ὄντα, ἐτρέφετο, καὶ συμμαχικὰ καὶ πεζῶν καὶ ἱππέων καὶ ναυτῶν ὁσαδήποτε ἦν· οὐ γὰρ ἔχω τὸ ἀκριβὲς εἰπεῖν· οἵ τε σωματοφύλακες μύριοι ὄντες καὶ δεκαχῇ τεταγμένοι, καὶ οἱ τῆς πόλεως φρουροὶ ἑξακισχίλιοί τε ὄντες καὶ τετραχῇ νενεμημένοι· ('When many parts of the city were at this time destroyed by fire, he organized a company of freedmen, in seven divisions, to render assistance on such occasions, and appointed a knight in command over them, expecting to disband them in a short time. He did not do so, however; for he found by experience that the aid they gave was most valuable and necessary, and so retained them. These night-watchmen exist to the present day, as a special corps, one might say, recruited no longer from the freedmen only, but from the other classes as well. They have barracks in the city and draw pay from the public treasury.' Loeb).

[510] The *Lex Junia,* probably 17 BC, gave statutory freedom to slaves who had been informally manumitted by a Roman citizen, *OCD* 1979, 582.

equestrian rank appointed by and answerable directly to the emperor (*Dig*.1.15.3).[511] This assured the direct link between the *corps* and Augustus.  Their establishment must have enhanced Augustus' local control, a form of micro-management possibly designed to obviate social unrest. The deliberate choice of freedmen to implement state intervention in fire-fighting is interesting and marks a clear distinction between the *Vigiles* and the other urban cohorts, the Praetorians, Horseguard and *Cohortes Urbanae*.[512]  Fear of slave revolt was one of the traditional fears of ancient Rome; there had been three Servile Wars (135-132 BC, 104-100 BC and 73 -71 BC) which were not easily forgotten, so Augustus was not going to have *c*.3,500 slaves patrolling the city to control fire especially if, as is likely, they had additional policing duties, even if he did have clear oversight of their activities. But as fire-fighting had traditionally been the role of slaves it would not have been appropriate for free citizens especially as it was originally meant to be a temporary measure (Dio 55. 26). On the other hand, freedmen, who were barred from military service, would have been glad of the opportunity for advancement within para-military ranks, and offered the ideal solution of a willing force. This was a dangerous job which demanded the loyalty of the fire-fighters; the prospect of citizenship and a *cursus* of advancement would ensure that loyalty. As a para-military *corps*, the *Vigiles* possessed some military honours, such as the right to leave a military will and entitlement to free grain after three years of service (*Dig.* 37.13.1; *CIL* XIV 4499; VI 220). However, there may have been difficulty recruiting men for this dangerous job as Tiberius introduced an inducement in the *Lex Visselia* of AD 24 which granted citizenship to a Junian Latin *Vigil* following the completion of six years of service, a term reduced to three by a decree of the senate probably in the 2nd century AD (*Dig.* 3.5). Tiberius' changes may also have been the part of the gradual promotion of the *corps* to a point of equalisation with the other urban cohorts in the 3rd century.[513] With time the *Vigiles* were no longer drawn from the *liberti* and were free-born by the 3rd century (Dio 55.26.4). Epigraphic evidence comes from the majority of extant dedications of loyalty erected by the *Vigiles* to the members of the Severan imperial family, specifically between AD 193 and 235.[514] This is likely to point to a special relationship between the *corps* and Severus dating from the turbulent year of the five emperors (AD 193) when Severus defeated Didius Julianus to become emperor with the support of the *Vigiles*.

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[511] *Digest* (1.15.3):*Nam salutem rei publicae tueri nulli magis credidit convenire nec alium sufficere ei rei, quam caesarem. itaque septem cohortes oportunis locis constituit, ut binas regiones urbis unaquaeque cohors tueatur, praepositis eis tribunis et super omnes spectabili viro qui praefectus vigilum appellatur.*
[512] Coulston 2000, 81.
[513] Baillie Reynolds, 1926, 65.
[514] *CIL* VI 220, 643, 1055 - 1059, 1063, 1064, 30960; XIV 4381, 4386 to 4389.2

**Augustan concept of modernity**

Uncontrolled and uncontrollable fire remains a symbol of defiant primitivism for modern urban régimes.[515] The ability to tame the open flame forms part of the notion of the civilisation and the modernity of a city.[516] This historical self-consciousness of modernity and its relationship with controlling urban fire could be seen as European cities grew as centres of global trade in the 17th century.[517] The main example is Amsterdam which in the 1660s became the prime trading and financial centre of Europe as it underwent a spectacular growth in terms of population and economy similar to Augustan Rome.[518] After centuries of unchanged fire-fighting practices in Europe, a self-conscious view of the importance of Amsterdam's place in the world and concern for improving the safety and well-being of its citizens resulted in a revolution in fire technology which created the origins of modern fire-fighting.[519] Fire-fighting and fire prevention as state initiatives historically have been most effective where the state's presence was strongest. For example, in Imperial Russia the concentration of state authority and the 'modern' building programme in the new capital of Saint Petersburg from 1712 to the end of the Romanov rule made the city more fire-proof and officials more likely to enforce fire and building decrees.[520] Witnesses to the burning of Grenfell Tower in London (2017) asked repeatedly how such an uncontrolled fire could happen in a modern sophisticated city.[521] In Rome, the strength of the state's presence is seen in Augustus' establishment of a continuous administration in the city – a 'police force', a 'fire department', an efficient water supply, an office of the annual grain supply, and the Praetorian Guard.[522] The establishment of the *Vigiles*, while being pragmatic, was also political and ideological as Augustus' determination to make Rome a capital worthy of the empire was imbued with the concept of modernity.

*Vigiles* **- hiding in plain sight**

The numbers of the *Vigiles* remained at *c*.3,500 until they were increased under Severus in AD 205 to *c*.7000 (1,120 per cohort).[523] If regarded purely as a fire-brigade, it is one of the

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[515] Pyne 2001, 154.
[516] Garnsey and Saller 2014, 25.
[517] Zwierlein 2012, 82 - 102.
[518] Bankoff 2012, 8 presents several examples of this pattern of the emergence of fire services.
[519] Jan van der Heyden was the genius behind the revolution. Donahue Kuretsky 2012, 23 - 45.
[520] Frierson 2012, 105.
[521] O'Hagan 2018.
[522] Garnsey and Saller 2014, 38.
[523] According to Rainbird 1986, 150 a cohort of the *Vigiles* increased in AD 205 to 1,120. Coulston 2000, 81 estimates the *cohortes vigilum* to have remained at 3,500 during the reigns of Augustus, Tiberius, Claudius,

largest relative to the ground area of all time, even in the modern world.[524] It is therefore all the more surprising that we know so little about them. Tacitus does not mention them in his outline of the Augustan army (*Ann*. 4.5). However, Tacitus may have been anachronistic or reflecting their status in his own time when they may not have been seen as a discrete para-military force.[525] They are never depicted actually putting out a fire in the sources, but we do read of them as best left unprovoked by smoky cooking (Sen. *Ep*. 64.1; Tert. *Apol.* 39.15 and Petron. *Sat*.79). Perhaps their invisibility reflects their humble status as *liberti* or, as Sablayrolles suggests, 'les vigils n'avaient pas le profil des héros.'[526] Their derogatory nickname *sparteoli* gives the impression that they may have been figures of fun at some stage (Scholiast of Juvenal 14. 305).[527] Another explanation could be that the *Vigiles* were hiding in plain sight in the midst of the other urban cohorts. Coulston points out that from the time of Augustus to that of Maxentius (30 BC to AD 306) the number of urban soldiers fluctuated but tended to increase steadily, reaching its peak under the Severi. He calculates a minimum of 7000 urban cohorts under Augustus increasing to 25,000/30,000 under Septimius Severus.[528] He estimates the proportion of soldier per civilian at the lowest end at 1:125 under Augustus increasing to 1:45 under Septimius Severus. This is an astonishing number which had to have impacted upon urban life in Rome as a 'military city'.[529] It also highlights how misleading it is to view the *Vigiles* in terms of a modern fire-brigade and to search for them in that context.

**Fire-fighters and/or police force?**

The lack of clarity in the roles and responsibilities of the *Vigiles* in the republican period and the modern debate surrounding it continues into the imperial period. Obviously, the *Vigiles* had fire-fighting duties but, given the scarcity of reliable data and the lack of discrimination in the sources between the *Vigiles* and the other urban cohorts, their job specification is not clear-cut (Dio 55.24.6). Ulpian (*Dig* 1.12.1-11) described the function of *cohortes urbanae* as assisting the criminal and civil jurisdiction of the Urban Prefect and generally protecting of the rights and safety of citizens. However, it is not clear whether Ulpian was including the

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Trajan and Marcus Aurelius, and possibly increased to 7,000 under Septimius Severus. Sablayrolle 1996, 50 believes the numbers were doubled by Severus citing the lists of 205 and 210 (*CIL* XV 1057, 1058).

[524] The Fire Department of New York together with the Police Department and medical emergency services now constitutes the largest response unit in history. See Hoffer 2006, 329.

[525] Rubin 2004, n.318 suggests this possibility.

[526] Sablayrolles 1996, 1.

[527] Their derogatory nickname *sparteoli* comes from *spartum* (broom) probably because the buckets they carried were made of straw or broom material.

[528] Coulston, 2000, 76 and 81. The troops comprised Praetoriani, Horseguards, Cohortes Urbanae and Cohortes Vigilum.

[529] Coulston 2000, 76.

*Vigiles* and whether they had policing duties and, if they had, how much power of enforcement of the law they possessed. This uncertainty is exacerbated as elements of their role must have changed over time and we are not studying one model at one time. The issue is also dogged by debate among modern commentators who continue to argue the point. Dyson believes that the *praefectus vigilum* had powers to deal with arsonists, housebreakers, and minor cases of robbery and cites the *Digest* (1.15.3.4) as evidence.[530] Robinson says their organisation was para-military but they were not normally concerned with problems of law and order, though they could be called upon in emergency.[531] Rainbird believes the *Vigiles* were fully occupied with their fire-fighting duties and suggests that there may be a tendency to assume that the duties of the *praefectus* were also those of the men.[532] In other words, the *praefectus* had powers of enforcing law and order by administering punishment but the rank and file *Vigil* did not. However, they had the right of entry into private properties by using their axes if necessary and Coulston suggests that this may have made them 'a local police-force in a city with endemic nocturnal crime, such as mugging and burglary.'[533] This view fits with Petronius (*Sat.* 78) and Seneca (*Ep.* 64.1) where the smell of smoke at a dinner party could bring the *Vigiles* bursting in. It is very likely that the emphasis of much of the earlier 20th century studies on Roman *Vigiles* displays an error of perspective clouded by a modern expectation of the role of a fire service and Coulston is correct.[534]

**Political power**

While we rarely read of the *Vigiles* actually putting out a fire, their political interface is more easily found in the sources as they appear at key moments of political crisis, not as a fire-brigade, but as a military force.[535] For example, during the fall of Sejanus in AD 31 the *Vigiles* surrounded the senate on the orders of the *praefectus* Laco (Dio 58.12.7). As one *corps* of urban cohorts was set against the other, the *Vigiles* opposed the Praetorians and proved they could be called upon in political emergency. Tiberius' military adviser, Macro, was a former *praefectus vigilum* and Tiberius' will included largesse to the *Vigiles* (Suet. *Tib.* 76; Dio 59.2.3). In a politically expedient move, rivalry between the Praetorians and the *Vigiles* was suspended when both groups supported the accession of Claudius, thwarting the

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[530] Dyson 2010, 152.
[531] Robinson 1992, 185. The most notable example which would support Robinson's view is that during the downfall of Sejanus the *Vigiles* replaced the Praetorians guarding the senate house (Tac. *Hist.*3. 64).
[532] Rainbird 1986, 151.
[533] Coulston 2000, 89.
[534] See also Sablayrolles 1996, 44-46.
[535] Sablayrolles 1996, 45.

Senate (Joseph. *AJ* 19, 253).[536] Rivalry was resumed in AD 69 in the struggle between the Flavians and the Vitellians when the *Vigiles* supported Vespasian and were directly involved in the armed power struggle against the Praetorians who supported Vitellius (Tac. *Hist*. 3. 64).[537] As a result, the *Vigiles* were favoured by the Flavians. Trajan also seems to have been favourably disposed to them, establishing the post of *sub praefectus* (*procurator vigilum*).[538] They supported Septimius Severus in AD 193 and during his reign enjoyed a privileged period as evidenced by the epigraphic body of dedications to Severus and by the increase in their numbers.[539]

**Physical impact on Rome – *Castra* and *Excubitoria*.**

While the *Vigiles* were woven into the social and political life of the city, they also made a physical impact on the city, not least in terms of barracks (*castra*) (*CIL* XIV 4381 and 4387) and fire-stations (*excubitoria*).[540] The sparse and scattered nature of the physical evidence of the barracks and fire-stations in Rome has led to difficulty interpreting certain aspects of their role including the nature of the stations from which they operated. Speed of intervention was most important so the position of stations was paramount, especially in relation to regions which were more prone to fire (**Fig. 33**).

*Castra*

Each of the seven cohorts of the *Vigiles* had its own barracks (*castra*) (Dio 55.26.4, 57.19.6). Dio does not give the location of the *castra* but Paul the Jurist (*Dig*. 1.15. 3) states that Augustus stationed seven cohorts in opportune places and that each cohort was responsible for two regions.[541] The location of the *castra* of the 5th Cohort has been verified in Region II as two inscriptions (*CIL* VI 1057 and 1058) were found *in situ*. The first inscription is dated AD 210 while the second is dedicated to the 5th Cohort and contained the names of 1027 men

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[536] Josephus calls them οἱ νυκτοφυλακοῦντες (the soldiers of the night watch).

[537] Tacitus uses the word *vigiles*.

[538] *CIL* VI 221.

[539] Sablayrolles 1996, 51, n.128. The dedications are: *CIL* VI 220, 643, 1055 to 1059, 1063, 1064, 30960; *CIL* XIV 4381, 4386 to 4389, 4393; *AE* 1983, 45. The Praetorians had supported Didius Julianus whom Severus defeated in AD 193 in the 'year of the five emperors'. See *CIL* XIV 4381 dated AD 207 from Ostia and dedicated to Septimius Severus. See also Sablayrolles 1996, 52 , n.130.

[540] Rainbird 1986 and Sablayrolle 1996 are clear in their view that the *castra* were barracks and *excubitoria* 'watch-houses' or depots for equipment and shelter for those on patrol. *Castra* are categorised as *stationes* in *LTUR* 1, 292 and Richardson 1992, 92. This is an example of the different terminology used by different scholars in respect of *castra*, *stationes* and *excubitoria*. This inconsistency has its roots in the lack of precision in the sources but is also understandable given the period of *c*. 300 years involved and it would be unreasonable to assume that the same arrangements obtained in the living and working quarters of the *Vigiles* over that time span.

[541] *Digest* (1.15. 3): *septem cohortes oportunis locis constituit ut binas regiones urbis unaquaeque tueatur* ('He positioned seven cohorts in appropriate places so that each cohort would watch over two regions of the city').

half of whom were recruited in AD 205; this supports the belief that the numbers were doubled in that year by Severus. Inscriptions (*CIL* VI 233, 1092, 1157, 1226) pertaining to the 1<sup>st</sup> Cohort have been found in what was Region IX. The *Notitia* and *Curiosum,* dating respectively between AD 337 and 354 and between AD 354 and 403, list the following: Cohort 1, Region VII; Cohort 2, Region V; Cohort 3, Region VI; Cohort 4, Region XII; Cohort 5, Region II; Cohort 6, Region VIII; Cohort 7, Region XIV. Based on this evidence and on logistical and practical considerations there is some consensus on the probable regions of responsibility of each cohort but it is not possible to be sure and the locations may have changed over time (**Fig. 33**).[542]

Understanding of the nature of the *castra* and the organisation of the *Vigiles* is greatly enhanced by information from the Caserma dei Vigili (II, V, 1-2) in Ostia dated to Domitian's reign (81-96 AD).[543] However, exact points of comparison of scale remain problematic, as a vexillation was posted to Ostia, and the size of the *castra* in Rome remains unresolved. As seen above, *CIL* VI 1057 lists an estimated 1027 men in the 5<sup>th</sup> cohort in AD 210. The impact such numbers would have had on the capacity of the seven *castra* must have been significant or, more likely, required the acquisition of additional or extended premises. The *castra* were likely the sleeping quarters of the *Vigiles* and each cohort lived separately (Dio 57.19.6). Rainbird believes that when established they either lived at home or in lodgings giving as evidence that they were unlikely to get barracks before the Praetorians who first got barracks under Tiberius (Suet. *Tib*. 37; Tac. *Ann*. 4.2).[544] However, speed of response is fundamental to the work of any fire-fighter and rallying the cohorts from different houses and locations would be impractical. *Vigiles* were probably in barracks or quarters of some kind from the very beginning but not necessarily those *castra* listed in the Regionary Catalogues.

*Excubitoria*

The *excubitorium* (watch house) was the depot for equipment and for providing shelter for *Vigiles* when on patrol. The *Breviarium* of the Regionary Catalogues state that there were 14 *excubitoria* and it is surmised that there was one per region (**Fig. 33**).[545] It is likely that they

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[542] *LTUR* 1993-2000, 1. 292, Richardson 1992, 92-3, Sablayrolles 1996, 263 - 6, are among those who agree with these locations. Sablayrolles 1996, 269 describes the arguments around the site of the 1<sup>st</sup> cohort and concludes that the site is on the *Via Lata.*
[543] http://www.ostia-antica.org/regio2/5/5-1.htm
[544] Rainbird 1986, 156.
[545] *cohortes .. vigilum VII … quorum excubitoria XIIII*.

were needed from the outset by the *Vigiles* of Augustus.[546] Apart from the obvious need for depots, this view is supported by Suetonius' (*Aug*. 30.1) use of the words *excubias nocturnas* ('a staying awake at night') for the establishment of the *corps*. The partial excavation of *excubitorium* of the 7th Cohort in Region XIV in Trastevere is our main source of information on *excubitoria* in Rome (**Fig. 34**).[547] In the building, 97 *graffiti* were found (now all lost but described shortly after their discovery in 1886) dated between AD 215 - 245. These provided names, references to equipment such as poles, ladders, ropes and fire-blankets used in the *Vigiles'* working life, and included an *ex voto* dedication to the *genio excubitori*. One *graffito* refers to *sebaciarii* who were probably makers of tallow candles or night-watchmen patrolling through the city at night with tallow-candles (**Fig. 35**). It was a periodic duty (*sebaciaria fecit mense Julio:* 'he made the tallow candles in the month of July'). In another *graffito* a *sebaciarius* gives evidence that *Vigiles* worked in shifts and had duty rosters: 'I am tired. Arrange a new shift!'[548]  Excavations dating back to the 19th century which found a hypocaust system in one of the rooms containing a pool decorated with multi-coloured marble concluded that this was originally a private dwelling transformed into an *excubitorium* in the 2nd century AD.[549]

An *excubitorium* had essential requirements: sufficient rooms to accommodate resting *Vigiles* on a shift basis as well as ground area for training, assembling, and maintaining and repairing equipment after a fire, and, most likely, an *aedicula* (shrine) to the Genius of the cohort such as existed in the *excubitorium* of the 7th cohort.  The need to accommodate worship of relevant cults is also seen in Ostia where the *castra* of the vexillation had an *Augusteum* for worship of the Imperial cult.

The distinction between *castra* and *excubitoria* appears neat in theory but, in practice, it is unlikely to have been so or remained the case over the centuries. This lack of distinction is mirrored in modern commentary. For example, *LTUR* refers to *stationes* but discusses the different uses of the terms; Sablayrolles refers to *castra* as 'casernes' but leaves *excubitorium* untranslated, and conflates 'casernes ou *excubitoria*' in his discussion of the terminology; Claridge identifies *excubitoria* as 'watch-houses'; Coarelli refers to them as 'barracks' and states that the rooms that open onto the central courtyard of the 7th cohort were

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[546] Rainbird 1986, 147.
[547] *LTUR* 1993-2000. 1, 293-4.
[548] http://www.ostia-antica.org/dict/topics/caserma/excubit.htm.
[549] Rainbird 1986, 153; Evans 1994, 188; *LTUR* 1, 293. Sablayrolles 1996, 254 notes the traces of a hypocaust which would indicate a private building.

dormitories.[550]. More importantly, it is not possible to say with any certainty, even in the case of the *excubitorium* in Trastevere (**Fig. 36**), if at some point the *castra* and *excubitoria* were amalgamated and came to serve both purposes.

**Training and danger**

The military lines along which the *Vigiles* were organised and the evidence from the *castra* in Ostia shows that drill was very much part of their training.[551] The large internal courtyard in the *castra vigilum* provided the area for drills, maintaining equipment, and for ceremonies with a focus on the Augusteum on one side of the rectangular space.[552] Fire-fighting continues to be a very dangerous job and today the same precision of procedures can save lives, including those of the firemen themselves. With the birth of modern fire-fighting in Amsterdam in the late 17th century the treatise of Jan van der Heyden, published in 1690, gives an invaluable insight into the work and procedures of fire control that existed throughout Europe from the Romans to that time. Van der Heyden emphasised the need for constant training and drill for the different ranks. In this context, it is worth looking again at Pliny's letter to Trajan (*Ep*. 10.33) where he uses a word which has been largely ignored by commentators. Pliny guarantees that nobody but a *faber* (a tradesman, craftsman, workman, skilled worker) would be admitted to the *corps*.[553] In his reply (*Ep*. 10.34), Trajan repeats the word *faber* and calls the suggested group a *collegium fabrorum*. The translation of *faber* in this context is challenging. If a 'workman' or 'tradesman' it may mean someone who has already been apprenticed to a trade and perceived as more easily trained in fire-fighting techniques. If it is to be translated as 'a genuine fireman', as in Loeb, it must mean someone who has already been trained or, at least, has technical competence in fire-fighting. The word appears also in the *Codex Theodosianus* (14.8.1) for the year AD 315 in a reference to the need for additional *centonarii* (tailors, dealers in rags) and *fabri*, probably to fight fires.[554] These references indicate that the numbers of *Vigiles* could be augmented by members of other professions already in a *collegium* (guild) when needed. However, there is no evidence

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[550] *LTUR* 1, 292; Sablayrolles 1996, 250; Claridge 2010, 407; Coarelli 2007, 352. This is an area of discussion which would benefit from further study of the epigraphic evidence for the exact terminology.
[551] Coulston 2000, 89.
[552] Rainbird 1986, 165; 1976, 342. See Sablayrolles 1996, 293 – 310 for a detailed discussion of the *castra vigilum*.
[553] Pliny (*Ep*. 10.33): *Attendam, ne quis nisi faber recipiatur neve iure concesso in aliud uta[n]tur* ('I will ensure that nobody but a faber will be enlisted and that will be used for no other purpose'). Loeb translates *faber* as 'genuinely a fire-man.'
[554] Sablayrolles 1996, 63, n.169.

of this occurring in Rome and Trajan did refuse because such a *collegium fabrorum* might foment political unrest.

The dangers involved in firefighting are myriad. A reference to four *medici* (doctors) appears on an inscription containing an administrative list of the 2nd cohort (*CIL* VI 1059) dated 210 AD and dedicated to the emperor Caracalla. While four doctors is higher than in any other units of the regular army, it is not clear that numbers can be extrapolated from a dedicatory inscription. It is impossible to know how representative the numbers on this inscription are of every cohort of the *vigiles* and it is unsafe to estimate the numbers of *medici* as this is such a rare dedication.[555] The function of the *medici* is unclear: Baillie Reynolds believed that they were fully employed in dealing with civilian casualties but it is more likely that while they were charged with treating injured civilians they would also have to treat their own injured colleagues.[556] Whatever the specific role of the *medici,* their numbers indicated the dangerous nature of the job. Apart from the obvious danger of flame, smoke and collapsing buildings, radiant heat makes fire-fighting very difficult. Close proximity to a large fire heats up the men and their equipment, making operations difficult if not impossible to carry out safely.[557] A number of recent studies have shown that sudden cardiac incidents are the leading cause of fire-fighter line-of-duty deaths. The combination of the high levels of exertion required, exposure to heat and potentially smoke, creates the highest risk for cardiovascular death due to coagulation or thickening of the blood.[558] In the Twin Towers in 2001 where fire-fighters battled their way up 100 flights of stairs dragging hoses and heavy equipment, there were many reports of firemen suffering severe angina due to lack of oxygen.[559]

**The daily routine and efficacy of the *Vigiles***

One of the primary duties of the V*igiles* was to detect fires early and in that way engage in active fire prevention. Unlike a modern fire-service, this was done by assiduous patrolling all night and probably less so during the day 'wearing proper shoes and carrying hooks and axes' (*Dig.* 1.15.3.4). One can only speculate on the impact on nocturnal law and order of shifts of sub-groups from 3,500 (7,000 from the reign of Severus) patrolling armed men but it would

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[555] Sab 1996, 227 n.167.
[556] Baillie Reynolds 1926, 73; Sablayrolles 1996, 665-6; Rubin 2004, 338.
[557] DeHaan and Icove, 2012, 50.
[558] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3493856/
[559] Hoffer 2006, 338.

be safe to infer that, apart from detecting and fighting fires more effectively, by their very presence, they would discourage disorder whether they had specific policing duties or not.[560] The limited equipment at their disposal which remained unchanged until the 17th century was probably one reason for the high concentration of manpower.[561] Of paramount importance then, as now, was the need to address a fire from within the building.[562] As always, the primary unit of fire, and the hottest, remains the individual room (Chapter 4, 151) and the *Vigiles* could break in using their axes.  It is likely that once a fire broke out and the *Vigiles* reached the source early, they were able to extinguish it (Petron. *Sat*. 78; Sen. *Ep*. 64.1) and they did just that as they patrolled night and day.[563]  However, the greater the fire the less effective they were. They had manpower, but they did not have the equipment or the technology to harness and train water with hoses. The equipment consisted mainly of rag mats, poles and ladders, sponges, buckets, syphons and brooms (*Dig*. 33.7.12.16). The buckets, of which there must have been thousands needed, and which they probably carried with them on patrol, were made of rope treated with pitch.

Fire-fighting is effected in two basic ways: wet fire-fighting and dry fire-fighting. The former uses water to douse the flames while the latter mainly uses demolition. The Romans knew that once a fire reached a certain size, demolition was the only means of controlling it. Seneca writes that a conflagration that had already ruined many homes could only be stopped by the demolition of 'half of the city' (*Clem*. 1.25.5).[564]  The *Vigiles* therefore had some means of demolishing buildings, be it to create firebreaks or to knock down walls that had been compromised by fire. Whether this was done by *ballistae* is a disputed issue: Rainbird believed that the abbreviation OPBA on *CIL* VI 1057 and 3744 referred to *Op[tiones] Ba[llistarum]* and interpreted Suetonius (*Ner*. 38) as saying that *ballistae* had been used in the fire of AD 64 (**No. 59**).   Suetonius described how war machines (*bellicae machinae*) demolished walls in the city prior to being deliberately set on fire.[565]  In fact, this is not proof that the *Vigiles* had *ballistae*. Sablayrolles believes that OPBA (*CIL* VI 1057, 3744) more likely refers to *Op[tiones] Ba[lteariorum]* -  adjutants in charge of, or in charge of the use of,

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[560] *Digest* (1.15.3.4): *Sciendum est autem praefectum vigilum per totam noctem vigilare debere et coerrare calciatum cum hamis et dolabris, ut curam adhibeant omnes inquilinos admonere, ne neglegentia aliqua incendii casus oriatur.*

[561] Rainbird 1986, 151.

[562] See Donahue Kuretsky 2012, 25 - 29 for Jan van der Heyden's emphasis on this point; DeHaan and Icove 2012, 62 - 69.

[563] Sablayrolles 2006, 467 describes the *Vigiles* as '*efficaces*' cohorts who saved the city from potentially calamitous fires every day.

[564] Seneca *(Clem*. 1.25.5): *at incendium vastum et multas iam domos depastum parte urbis obruitur.*

[565] Suetonius (*Ner*. 38): *bellicis machinis labefacta atque inflammata sint, quod saxeo muro constructa erant.*

belts or cordage - and rejects the use of *ballistae* to demolish buildings for firebreaks on the grounds of impracticality.[566] Considering how narrow streets became blocked with smouldering débris, the movement of *ballistae* of any size through the streets does seem impractical. However, fire-breaks eventually stopped the course of the fire of AD 64 (Tac. *Ann*. 15. 40); most scholars accept that demolition to create firebreaks occurred and that the same or similar artillery was used for projecting damp materials onto a fire.[567]

**Water and wet fire-fighting**

In modern fire-fighting the availability of water and the technology of dousing are fundamental to fire control. That, and the traditional view of Rome as a city with a plentiful supply of water readily at hand, colours our perception of the role of water in the work of the *Vigiles*. The problem facing the *Vigiles* was manipulating water in the quantity needed if a serious blaze broke out. A closer look at the nexus of fire management and water supply gives a clearer picture. We get an insight into the challenges facing the *Vigiles* from van der Heyden's treatise (1690) which describes firefighting in Amsterdam prior to his innovations and which had remained relatively unchanged since Roman times. In a document regarded as the founding document in the history of modern firefighting, he first analysed the risks and shortcomings inherent in the system and the urgent need for change in the fire service. Although Amsterdam had a plentiful water supply, he concluded that it was almost useless in a fire unless harnessed properly. Key to van der Heyden's success in Amsterdam was his invention of the *slang* (snake), a 100 foot long flexible hose attached to a suction pump which syphoned water from the canals, thus addressing the problem of accessing water efficiently from source and training it on a fire (**Fig 37**). Although they may have had the water, the Romans did not have this, or any other, technology to train it effectively on a fire. Epigraphic evidence indicates that the *Vigiles* had syphons as the rank of *siponarius* is attested epigraphically on *CIL* VI, 1057, 1058 and 2994. Vitruvius (*De arch*.10. 7. 1- 4) describes the machine of Ctesibius, a type of syphon, which raises water to a height but he does not mention it in the context of fire-fighting.[568] Such apparatus would have been very heavy and difficult to manoeuvre and, of course, did not have a flexible hose. In fact, mobile water pumps were ineffective in Lisbon because of the narrow crooked streets.[569] The *Vigiles* relied

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[566] Sablayrolles 1996, 367.
[567] Baillie Reynolds 1926, 98; Rainbird 1986, 151; Robinson 1992, 109; Coulston 2000, 89.
[568] Vitruvius (*De arch.* 10. 7. 1- 4) provides a detailed description of the 'machine of Ctesibius, which raises water to a height'. See Sablayrolles 1996, 361 - 8.
[569] Molesky 2012, 136.

on the bucket chain as the most used method of dousing fire and it probably was one reason for their large numbers. Buckets easily leak and spill and water is evaporated by heat.[570] Reaching upper storeys could only be done by bucket chains on stairs, corridors and, probably, balconies. The building of balconies following on Nero's regulations may have been of help, albeit limited (Chapter 5, 172; **Figs. 28** and **29**). Water was available in Rome either from a nearby *lacus* or *castellum* but actually capturing that water and using it effectively would be a considerable challenge, if not impossible, once a fire had taken hold. In fact, it is not useful to think of dousing with water as the more 'natural' way to extinguish a fire. Expending such vast amounts of human energy does not contribute to the more fundamental solution of depriving fire of fuel; dry firefighting, demolition, does this more effectively.[571]

**Water, water everywhere**

One of the remarkable features of ancient Rome was the constant water supply due to its natural springs, wells and, above all, aqueducts the first of which, Aqua Appia, was built in 312 BC.[572] In 11 BC the senate established a specific role of *curator aquarum* and in 9 BC the *lex Quinctia* further defined the *cura aquarum* (Frontin. *Aq.* 100, 104, 125-9). Provision, control and management of the water supply and its distribution were an integral part of Augustus' reformed administration of the city and he affirmed its importance by assigning it to a distinguished member of the senate.[573] By the time Frontinus was appointed *curator aquarum* in AD 97, the number of aqueducts in Rome had risen to nine. Each of these aqueducts had a *castellum* (settling tank) and a number of secondary *castella*. There were 247 *castella* by the time of Frontinus (*Aq.*79 - 86). This availability of water served a very large proportion of the city.[574] Based on the number of 247 *castella*, both primary and secondary, one would have been located about 190 to 270 metres from any point in the city. This would make access to water a manageable distance for a bucket brigade of *Vigiles* and volunteers.[575] Taylor argues, correctly in my view, that one of the reasons *castella* were so numerous in Rome is that they were the main water sources in firefighting; he cites as evidence Frontinus' (*Aq.* 117.3) comment that men were posted near the *castella* and *munera*

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[570] Donahue Kuretsky 2012, 29 discusses how van der Heyden demonstrated the inefficiency of the bucket chain. Amsterdam actually had 28,000 leather buckets at that time.
[571] Sand and Wills 2012, 57.
[572] Dodge 2000, 166 - 209; Bruun 2013, 297 - 8.
[573] Bruun 2013, 301.
[574] Bruun 1991, 133.
[575] Taylor 2000, 50.

to be on hand, especially in the event of emergencies, so that water could be delivered from several regions to aid the one in need.  Frontinus (78.3) listed 39 *munera* and indicated (3.2) that they were ornamental fountains.  However, his comment (117.3) that they could be used in emergencies gives them a status beyond the purely ornamental.

In addition, *lacus* (basins) were positioned on almost every street corner as shown by circles on the *FUR* (fr. 11c) (**Fig. 38**).[576]  Frontinus lists 591 *lacus* within the city (*Aq.* 78.3) and the Regionary Catalogues list 1194 local *lacus* in the 14 regions.[577] This represents a 50% increase from the time of Frontinus (*c.*AD 100) to the compilation of the Catalogues in the 4th century. The number of *lacus* doubled to serve the growing needs of neighbourhoods due to population increase; the actual size of each *lacus* could not be increased as that would impede the free flow of traffic at street corners.[578] While this had the benefit of shorter distances between *lacus*, the amount of water delivered to each one, and thus the capacity available to combat fire, remained the same.[579]  Each *lacus* was supplied by two aqueducts and if the supply from one was interrupted it could be connected by a second pipe to a different aqueduct to re-establish the flow (*Aq.* 87.5). Presumably, if a fire broke out, the two sources could be opened and the flow increased.   However, it is still likely that *lacus* were of limited use once a large fire had taken hold. The concern which motivated the installation of alternative sources of aqueducts to the *castella* could be linked to the possibility that the Aqua Claudia was out of order during the fire of AD 64 (**No. 59**).  An inscription (*CIL* VI 1257) attributing the repair of the Aqua Claudia to Vespasian in AD 71 claims it had been out of use for nine years. However, this is by no means certain as the date of the construction of the Aqua Claudia is unclear.[580]

The reference to *aquarii* (water workers) in the different ranks within the *Vigiles* of the 5th cohort of AD 205 and AD 210 (*CIL* XV 1057 and 1058) could indicate official links between the management of the water supply and the control of fire. However, it is not known exactly what they did; they may have tended to the water supply in the barracks.  A *fistula* (pipe) found on the Via Lata near the *castra* of the 1st Cohort bearing the name of a tribune of the *Vigiles*, and another (*CIL* XV 7245) found near the baths of Diocletian bearing name of a

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[576] Dodge 2000, 187.
[577] Nordh 1949.
[578] Taylor 2000,  47. Frontinus (*Aq.* 104.1) refers to an investigation into whether there were enough *lacus* after death of Agrippa in 11 BC.
[579] *Lacus* in Pompeii are at the edge of streets and are uniform in size.
[580] See Dodge 2000, 179 for a discussion on the date of the Aqua Claudia.

centurion of an unknown cohort of the *Vigiles,* indicate that at some point the *Vigiles* had their own designated water.[581]   Alternatively, the *aquarius* may have been responsible for providing accurate knowledge of where water could be obtained in a crisis.[582] At the very least, the *aquarius* must have liaised with water officials in instances where additional water was needed in time of emergencies (*Aq.* 117.3); emergencies can be taken to include fires and floods. In order to divert vast quantities of water from one region to another, as described by Frontinus (*Aq.* 117.3), the sophisticated system of operating valves and auxiliary conduits required a co-ordinated quick-response master plan involving both water and fire services.[583]


## Water distribution

It is uncertain how much water was actually available in Rome, let alone for dousing fires. There were three main consumers of water: the imperial palaces and buildings under the emperor's control *(sub nomine Caesaris)*, public structures including baths, theatres, markets, fountains (*usibus publicis*), and private citizens (*privatis*) through written authorisation from the emperor (Frontin. *Aq.*105.1).[584] Water for *usus publicus* was given to 18 *castra* (Frontin. *Aq.* 78.3).   This is traditionally interpreted as military camps and taken to include the seven cohorts of the *Vigiles*.[585]   All urban cohorts had the same amount so this water was not for fire-fighting. Water would be found at the scene or close to the fire as carrying water from a *castra* or *excubitorium* to a fire would have been highly impractical.

In the aftermath of a conflagration, the continuous flow of clean water may have proven to be far more important for the well-being of the citizens than its use in dousing the fire. Ironically, the restoration of the purity of the Chicago River due to the ravages of the fire in the city (1870) provided clean drinking water to the inhabitants of Chicago. Because the mains and sewers no longer functioned, the river could be replenished with fresh water from Lake Michigan. This supply, which became more obvious in the days following the fire, lessened the outbreak of disease and hastened the recovery of Chicago.[586]

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[581] *NSA*, 1902, 464.
[582] Baillie Reynolds 1926, 95 is of this view while Sablayrolles 1996, 234 suggests they were responsible for the water supply to the cohort.
[583] Evans 1994,  49.
[584] Bruun 1991, 110; Evans 1994, 9.
[585] Dodge 2000, 186 includes military establishments as those benefitting from *usus publicus*.
[586] Lowe, 1979, 49.

This chapter has questioned some of the assumptions about the *Vigiles* in Rome and pointed up how little can be known for certain about their function and work in spite of the support of written sources. The next chapter explores how the human experience of fire can be interpreted largely without the support of written sources.

## Chapter 7    Effects of fires: the human experience

## Introduction

The silence which surrounds the immediate effects of fires on human experience in the sources presents considerable challenges, including the danger of imposing a 21st century sensibility upon that silence. These challenges can be addressed in an innovative way: by applying the findings of comparative research into situations of disaster, and by careful scrutiny of descriptions in the ancient sources of human behaviour, it is possible to construct a model whereby new light may be shone on the effects of fires. Much factual information survives on significant buildings destroyed by fires and this has been collated under each fire in Chapter 2 and is developed further in Chapter 8. However, we know practically nothing directly about the consequences of fires for the lives - and deaths - of the ordinary citizens of Rome.  In fact, identifying the 'ordinary' citizens of Rome is problematic in itself.  The particular challenge is the search for the narrative of the poor which is in general much more difficult to find than that of the wealthy.[587] Aldrete makes the same point about lack of information in the primary sources about the consequences of floods but, by using what little information there is with scientific and comparative data, he has assembled a considerable range of effects the floods must have caused.[588]  While similar methodology can be used to model the effect of fires, there is one main difference: fires ranged from conflagrations impacting upon part of or the whole city to one-room event impacting upon one individual or family. When a fire burns large sections of a city, whole neighbourhoods and communities suffer this loss and the social order which allows a city to function is broken down.[589] A fire which has a catastrophic effect upon a family in terms of loss of life or possessions does not disrupt the daily life of a city. Based on a study of a number of interrelated factors and consultation with professional firemen, Rainbird estimated 100 fires daily in ancient Rome.[590] There is little reason to discount this estimate given the evidence of Rome's vulnerability to fire and the measures taken to counter that vulnerability (Chapters 4, 5 and 6); individuals and families were affected every day to a greater or lesser degree by fire. In the 88 fires

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[587] Patterson 2007, 346, describes this difficulty.
[588] Aldrete 2007, 91.
[589] Pyne 2012, 95.
[590] Rainbird 1976, 376. The interrelating factors were: the population size, the combustibility of materials within the city, the proliferation of naked flames, the existence of fire regulations, knowledge of medieval structures and knowledge of modern cities with similar types of buildings, and the size of the fire brigade.

recorded for 460 BC to AD 410 there is no description of a domestic fire in the annalistic writings.[591] But that does not mean they did not occur; nor does it mean that their effects cannot be explored. The modern sociologist has a variety of tools to examine the effects of personal danger and loss in the contemporary city but the situation is very different for anyone attempting to capture this element of Rome or any ancient city. The human element is missing in the accounts, the institutions are foreign to the modern sociologist's experience, and the sources only incidentally involve urban problems.[592] In these circumstances, it is easy for the 21st century view to distort any attempt to gain a more meaningful understanding of the ancient world. However, analysing what our sources did and did *not* report is a worthwhile exercise as, in searching for the effect of fires on the human experience in Rome, we are also exploring the value of empathy as a tactic of historical analysis.[593] The legitimacy of applying modern sociological concepts to an ancient society is contentious but greater understanding and study of social structures, together with the benefit of hindsight, can lead to the possibility of understanding the Romans better than the Romans could themselves.[594] For example, there is now an established terminology for conditions which may have existed but went unrecognised until named: an obvious example is Post Traumatic Stress Disorder (PTSD).[595]

Another important source helps to fill the silence: there is plenty of source evidence for the attitude of the Romans and the response of the authorities to large scale disasters other than fires. Disasters were a recurrent feature of Roman society; earthquakes, volcanic eruptions, floods and droughts, plagues and epidemics, wars, famines, and shipwrecks were a hard fact of the harsh reality of Roman life.[596] Research into modern disasters such as 9/11 in New York and Hurricane Katrina in New Orleans suggests that the psychological impact of such intensely stressful events would have been significant.

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[591] The burning of Cicero's house (**No. 24**), that of his brother, Quintus, (**No. 25**) and that of Milo (**No. 26**) in 57/58 BC are not recorded because they are domestic fires but because of the individuals involved and the crime of arson. The burning of the house of Symmachus (**No. 87**) was also a political attack.
[592] Ramage 1983, 61.
[593] Hopkins 1983, xv.
[594] Morley 2007, 303 summarises the debate around the legitimacy of this approach.
[595] This is a relatively newly diagnosed disorder first appearing in the Diagnostic and Statistical Manual of Mental Disorders (DSM-III), published in 1980 by the American Psychiatric Association.
[596] Toner 2013, 154-155.

**Immediate effects of a fire**

*Loss of property*

Apart from injury or loss of life (p. 203 below), the immediate effect of a fire for an individual or family is loss of property and home.  Even today fire-caused property losses are far in excess of those caused by all classes of crime and natural disasters.[597]  In his description of the fire of AD 64 (**No. 59**), Tacitus (*Ann.* 15. 38-43) describes those who lost everything, even their food, in the fire.  Juvenal (3.203-8) lists the paltry possessions Cordus lost in a fire, his 'entire nothing' (*totum nihil*).[598] A tenant and his family who have not paid the rent move out with a few odds and ends (Mart. 12.32.1-25) to join the homeless and the beggars living under the bridges of Rome.[599] Impoverished tenants were just one fire away from the loss of the little they possessed and from homelessness.

A modern glimpse into an often overlooked effect of the loss of property occurs in the study of the aftermath of an earthquake in Armenia in 1998 and a fire storm in California in 2003, where the loss of personal keepsakes was a significant stress factor and was a predictor of depression and PTSD.[600] This supports the results of Tapsell and Tunstall and of Bryant who found that survivors of flood disaster singled out the loss of objects imbued with personal significance, such as photographs, as traumatic.[601]  Referring to loss in floods, Aldrete suggests that for the Romans, who had a far smaller range of possessions than modern dwellers,  the loss of *imagines* (images of dead ancestors and relatives) was comparable.[602] Even for those with the fewest resources and no *imagines* to lose, something, however small, cannot be discounted as lacking sentimental value and could have proven impossible to replace.[603]

A recurring theme in poetic sources is the constant nagging anxiety felt by those who actually had property to lose as one of the stock worries of the well-off.[604]  For example, Juvenal (3.69) writes bitterly of the plight of impoverished lover and poet. But it has to be asked

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[597] DeHaan and Icove 2012, 4.
[598] Juvenal (3. 203-8): *ultimus autem aerumnae cumulus, quod nudum et frusta rogantem nemo cibo, nemo hospitio tectoque iuvabit*.
[599] Their possessions were a small truckle bed, a two-footed table, a broken chamber-pot, a lamp and a wooden bowl.
[600] Norris and Wind 2009, 33.
[601] Tapsell and Tunstall 2000; Bryant 1991.
[602] Aldrete 2007, 158.
[603] See Morley 2006, 33 for a discussion of the possessions of those near subsistence level. Aldrete 2007, 97, makes the same point in relation loss of personal property in floods.
[604] For example, Propertius (2.27.9), Catullus (23.8.9), Martial (3.52; 5.7; 11.93).

whether this is a reliable description of the life of the poor man. Fires occurred and buildings collapsed, just as Juvenal describes, but his protagonist Umbricius (3) is not the 'average' poor Roman; his complaint against Rome is that of a poet from the upper ranks fallen on hard times because of the preferment of lower classes and foreigners.[605] The *paupertas Romana* (6.295) of earlier times was a good thing as it levelled out social distinction but, now replaced by *luxuria* (6.300), it represents a a gulf of bitterness between rich and poor and is resented.[606] While Juvenal's anger (*indignatio*) dictates both his material and tone, it does offer a glimpse of contemporary Rome and some indication of living conditions of the urban poor. There were real pressures and fears among those who had no spokesman, especially the underclass who were trying to survive from day to day.[607]

Seneca the Younger also wrote of the fear of losing possessions in a fire (*QNat.* 6.32.7; *Tranq.* 12.4; *Ben.* 4.6.2; *Clem.* 1.25.5; *Ira* 3.43.3). But the thrust of Seneca's philosophical observation is that the poor man is less troubled because he can just leave a burning building – he has nothing to lose (*Ep.* 17.3); absence of possessions meant absence of fear and that was a great blessing.  Juvenal says the same thing: 'miserable is the guardianship of great riches' (14.304-308). This is the privileged view of those who *have*, not of those who struggle to survive and live with the fear of losing what little they have.

### *Loss of investment*

In the List of Fires in Chapter 2, loss of property is reported as loss of investment; for example, the great financial losses incurred by the burning of private houses on the Caelian hill in the fire of AD 27 (**No. 46**) (Suet. *Tib*. 48). After that fire, Tiberius was more or less forced to make good the losses of owners and landlords of *insulae* or houses to keep them happy. There is no reference to any loss of property, or life, by tenants. The multi-storey *insula* represented an economic opportunity for profit for the élite of Rome where the tenant paid rent, often substantial, and the loss of the *insula* meant an interruption of income.[608] The financial gains from the rental market for landlords were great: Cicero (*Att.*12.32.2, 15.15.4, 15.17.1, 16.1.5) earned up to 100,000 sesterces annually in rent from two *insulae* on the Aventine and Argiletum.[609] Cicero is an example of the type of wealthy landowner from the Roman élite, scrupulous about maintaining houses and villas but quite different about rental

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[605] Braund 1989, 23; 1992, 1-2.
[606] Courtney 1980, 26.
[607] See Ramage 1983, 81-82 for a discussion of this underclass.
[608] Purcell 1994, 667.
[609] Frier 1978, 1.

and commercial property such as *tabernae* and *insulae*.[610] He was interested solely in the profits to be earned and delegated all maintenance and repair to be taken care of by friends such as Atticus (*Att.* 12.32.2 and 15.26.4). The risk of urban property investment is the focus of Gellius' (*NA* 15.1.2) record of a fire during the reign of Antoninus Pius (AD 138 - 161) (**No. 69**). Herodian (7.12.5-6) describes many rich people turned into paupers by losing their magnificent accumulation of property, and the income it brought, in the fire of AD 238 (**No. 77**). The condition of the property did not devalue its rental income as slum properties were let out to poorer tenants, with rent paid on a daily basis, while the more affluent occupied the better apartments on a long term basis.[611] In fact, a landlord and his leasing agent (*conductor*) were potentially more vulnerable than an affluent tenant who was released from his lease and from paying rent in the event of a fire (*Dig*. 19.2.30*pr*).

### Loss of home

When considering homelessness in Rome, an underlying principle needs to be recognised: shelter was not considered an essential part of the legal concept of subsistence in the Roman world (Sall. *Cat.* 48.2).[612] According to Gaius (*Dig.* 50.16.234.2) subsistence was once thought to refer only to food, though others considered it to include clothing and straw as necessities of life; there is no mention of a roof over one's head.[613] The majority of Rome's inhabitants lived in rented accommodation. Most high and middle status inhabitants lived in *cenacula* (apartments) in *insulae* while poorer inhabitants lived in *diversoria* (probably one room, rented on a daily basis, which could be in *insulae* or *tabernae*). The poorest slept rough under bridges, and under seats of theatres and circuses (Amm. Marc. 14.6.25). Tenants had rights under the principle of *ex iusto metu,* which allowed them to abandon a rented property under certain circumstances such as fire (*Dig*. 19.2.27.1.), but it did not mean one was re-housed. DeWolfe notes that today those with the fewest resources are the most vulnerable in the first place and, while they may have developed better crisis skills than the more affluent, they often lack the availability of housing from family or friends and have no savings. Recovery from loss of home may be impossible. If they are renters, like the majority of the population of Rome, they may be faced with unaffordable increases in rent after

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[610] See Anderson 1997, 76 for a discussion of Cicero's attitude.
[611] Frier 1980; Patterson 2007, 353.
[612] Scobie 1986, 406.
[613] *Dig*. 50.16.234.2: *sine his vivere neminem posse.*

landlords have invested money to repair their properties.[614] The high-risk venture of owning an *insula* in Rome because of frequent fires and collapse meant that rents were inflated anyway and were probably increased after rebuild or repair.[615] An example of the inflated prices of rent in Rome come from Plutarch (*Sull.* 1.6): an acquaintance reminded Sulla that they had once shared a building, he taking the upper rooms at 2000 and Sulla the lower rooms at 3,000 sesterces. These high costs are corroborated by the actions of Caesar when he remitted all rents in Rome to 2,000 sesterces per year, twice the annual wage of an unskilled labourer (Cic. *QRosc*. 10. 28) at that time (Suet. *Caes*. 38.2; Dio 42.51).[616] At the other end of the scale Petronius (*Sat*. 8.4) complains of being fleeced by having to pay an *as* for a room for the night in a back alley.

A host of challenges are still associated with trying to find somewhere to live after a disaster. Temporary shelter may be available with neighbours, or in shantytowns such as have grown up in large urban sprawls in the past century. The impetus to rehouse quickly can lead to poor quality of rebuilding. For example, a study of the aftermath of hurricane Andrew in Dade County in the US in 1995 found, among other issues, very poor quality of repair and rebuilding.[617] Historically, burnt cities are rebuilt in haste as property owners need to get their rent. Examples of this have been recorded in 19th century New York and Montreal where the cost of reconstruction proved a barrier to improvements.[618]

### *Loss of life and limb*

Of the 88 fires listed (Chapter 2) only four make any reference to loss of life and those are major fires. Silence surrounds the plight of people in all the other fires that must have affected them. Victims are referenced in Livy's description of the Sack of Rome in 390 BC (**No. 3**) and by all sources for AD 64 (**No. 59**). Another reference to loss of life occurs in Herodian (7.12.5-6) for the fire of AD 238 (**No. 77**) when a great many people were unable to run away because their escape route was cut off by the flames, and they were burned to death. Notably, although 340 apartment blocks or houses (*insulae vel domus*) burned in the reign of Antoninus Pius (**No. 69**), the only discussion in the sources concerns loss of rental income not loss of life or injury (*SHA Ant*. 9; Gell. *NA* 15.1.2).

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[614] DeWolfe 2000, 27.
[615] Ramage 1983, 78; Frier 1977, 27.
[616] See Frier 1977 for a discussion of rents. See also Cicero *Off*. 1.138, 2.88, *Fam*. 5.6.2, *Att*.13.1, 14.3, 14.9.1, 11.2 for his rental income and lack of concern for his collapsed and cracking buildings.
[617] Norris and Wind 2009, 34.
[618] Meisner Rosen 1986, 16; Gilliland 2012, 192.

Even in the major fires (*eg* AD 64 and AD 80) loss of life is incidental to the catalogue of burned public buildings. Many lives must have been lost in those fires. In the fire of Chicago in 1871 from a population of *c*.550,000 it is estimated that 100,000 homes were lost and 300 lives.[619] Based on the accounts of contemporary chronicles of 'Abdi Paşa, loss of life in Constantinople in 1660 is estimated at up to 40,000, while recent studies of contemporary accounts have shown that up to 30,000 may have died in the earthquake and fire of Lisbon (1755).[620] Today fire-caused death and injuries continue to be the greatest of all public safety problems and are far in excess of those caused by all classes of crime and natural disasters. In 2008 in the U.S. fires caused 3,320 deaths and 16,705 injuries.[621] An estimated 300,000 people a year die worldwide in fires, the majority of them in cities, and approximately 83% of all deaths from fires occur in the home.[622] The room is the primary unit of fire (Chapter 4, 151) and in the most common scenarios of home fires today the source of ignition is almost always a room heater, fireplace, or stove. This must have been true also of a room in an *insula* with its moveable brazier and lamps. It would also be unreasonable to expect the sources to record individual deaths that occurred in such a fire, although fires may have been common as Rainbird has suggested (*n*.591 above).

Most fatalities are not directly the result of the effects of the flames but rather of asphyxiation caused by toxic gases. Today carbon monoxide is the single most important cause of deaths from fire and three times as many die from asphyxiation as from actual fire. Nor are deaths from fires always instantaneous; they can occur days, weeks after the fire.[623] The inhabitants of Rome may have been more at risk of asphyxiation as an immediate effect of a fire because of a possible predisposition to pulmonary diseases. Pleurisy and tuberculosis were probably aggravated by endemic malaria.[624] But the main culprit was the atmosphere of the city polluted by fuel burning. Throughout the city, smoke from thousands of wood-burning fires filled the air in Rome (Chapter 4, 152).

Modern research on the effects of toxic fumes on respiratory and lung function has traditionally focussed on bush fires. In 2003 an 11% increase in hospital admissions for respiratory and cardiac failure was recorded in California after bush fires, but further study

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[619] Schubert 2012, 213.
[620] Zweirlein 2012, 94; Molesky 2012, 148.
[621] DeHaan and Icove 2012, 4 list 443 fire deaths in the UK in 2007. On 9/11 in New York 343 fire-fighters died.
[622] DeHaan and Icove 2012, 612, 620; Shenker 2017.
[623] DeHaan and Icove 2012, 613, 635.
[624] Patterson 2007, 346.

has shown that the effect of inhaling wood-fire smoke in an urban environment is comparable to the effect of exposure to bush-fires.[625]  Capesso points out that paleopathological examination of skeletons from Herculaneum has found frequent indications of pleurisy.[626] The indoor environment in Rome was filled with particulate pollution from the animal and vegetable oils used in lamps as well as wood and charcoal used for cooking. In fact, Vitruvius (*De arch*. 7.4.4) recommends panels of black colour (*atramentum*) in winter dining-rooms because they are quickly damaged by smoke from braziers and lamps. This environment resulted in *anthracosis* or 'miner's lung.'[627]  Any underlying lung problems would be exacerbated in a fire and make one far more vulnerable to asphyxiation.   Seneca, himself an asthma sufferer, paints a vivid picture:

> As soon as I have left behind the oppressive atmosphere of the city and that reek of smoking kitchens which when fully operating pour forth all kinds of poisonous gases mixed with clouds of soot, I immediately notice an improvement in my health. (Sen. *Ep.* 104.6).

Livy (5. 48) mentions the disease (*pestilentia*) which assailed the Gauls during the Sack of 390 BC (**No. 3**) due to the effects of inhaling the dust and ash.  Almost all medical writers of antiquity explained illness on an individual's interaction with the surrounding air; the air *was* dangerous in Rome and the Romans knew it. Celsus (*Med.*1.2) advises bright, airy living quarters. Galen (*Epidemics*, 6.4.10) writes of the smells and fumes of the city and the dangers of sewers and stagnant pools. Although there was an obvious awareness of the pollution and the disease caused by smoke, there was no effort made to put any medical advice into practice as there was no concept of what we think of as public health.[628] Urban élites could escape to more salubrious environments, as Seneca attests, leaving the others, already vulnerable, even more at risk should a fire break out.   For those already weakened from living in conditions horrific by 21st century standards, but all too familiar in Europe until the early 20th century, sudden catastrophes such as fires, collapsing buildings, and floods, made Rome a very dangerous place.[629]

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[625] Finlay 2012.
[626] Capasso 2000, 1.
[627] Anthracosis is caused by the accumulation of carbon in the lungs due to repeated exposure to air pollution or inhalation of smoke or coal dust particles.
[628] Nutton 2000, 66-72.
[629] Purcell 1994, 650.

The fact that Rome was a dangerous city where illness spread like wildfire and where cramped unsanitary conditions possibly meant an average life expectancy of less than 20 years provides one possible explanation why ancient sources provide little record of human suffering and deaths from fire.[630] In a culture of risk, exposure to danger was normal. The Romans took death for granted; the élite, our sources, wrote their own narrative and did not show an interest in the poor, and most poor Romans left no memorial. The question remains whether the treatment of the bodies of the poor or destitute is also part of the explanation for the silence of the sources about loss of life in fires. In 1888 Lanciani interpreted pits he excavated just outside the site of the Esquiline Gate where he found human and animal bones intermingled as the *puticuli* described by Varro (*Ling*. 5.25).[631] His findings have influenced modern scholarship and it is generally believed that the poor, who could not afford to pay into a burial club (*Dig*. 47.22.3.2; *CIL* VI 10234; *CIL* XIV 112), were dehumanised in this 'hierarchy of poverty', and it has been suggested that 1,500 paupers annually would have been buried in mass graves even in 'normal years'.[632] It can be argued that from the archaeological remains of burial we can glimpse the social values of the living.[633] However, seeking an explanation for the silence of our sources in a dismissive attitude to the corpses by the use of mass graves is problematic. Lanciani's interpretation has recently been challenged by Graham: the pits could only accommodate a relatively small section of the population and cannot be considered a true reflection of the Roman attitude toward burial of 'poor' despite difficulties of disposal when mortality soared during the outbreaks of disease.[634] She argues that the use of mass graves and the subsequent de-humanising of those deposited there does not align with Roman religious ideals. In her study of the fire of AD 64 (**No. 59**), Closs also discusses the religious alarm provoked by the impossibility of offering the vast numbers of the dead correct burial and the deep distress this would have caused a society so invested in rituals of death and burial (Cic. *Leg*. 2.58; *Dig*.11.7.43. 2a; 11 7.12.3).[635] The appropriate disposal of the corpse was a mark of humanity (*negotium humanitatis*) (*Dig*. 11.7.14.7) and the failure to do so brought repercussions for both the living and the dead in the form of

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[630] See Whittaker 1989 and 1993 for a discussion of poverty in Rome and the attitude of the élite to the poor. See Sallares 2002 and Scheidel 2003 for illnesses endemic in Rome.
[631] Lanciani 1888, 65. See Bodel 1994, 38 for a synopsis of scholarly debate surrounding the meaning of the word *puticuli* and Lanciani's finds.
[632] Bodel 1994, 130 uses a population number of 750,000 in the time of Augustus as his basic figure and based on comparative data from New York concludes that 1 in 20 is a reasonable number of indigents who would fall into the category. He believes it to be an unprovable hypothesis but not far out of line. See also Bodel 2000, Whittaker 1993, Garnsey 1998, and Patterson 2007.
[633] Shaw 1996, 100; Patterson 2000, 267.
[634] Graham 2016, 62 - 63. She argues that the *puticuli* were severely limited in size and their use short-lived.
[635] Closs 2016, 114; Shaw 1996, 100.

unsettled spirits.[636]  While the observations of a deep desire to avoid mass burials are convincing and, although rituals and burial rites were enacted to appease the gods after the fire of AD 64 (Tac. *Ann*. 15.44.1), they are unlikely to have been held for all the dead in a time of emergency.  Needs must, and in a city where mortality soared during epidemics, mass death must have involved mass burial.[637]  The preference for ritual observance was superseded by the urgent matter of urban maintenance and those most at risk of summary disposal were not the élites.[638]

## Psychological effects

### *Trauma*

Ongoing research into the aftermath of catastrophe or trauma has shown that lives are thrown into turmoil either by the loss of home or by breakdown of the normal functions of a city.[639] A traumatic event is defined by its capacity to evoke terror, fear, helplessness, or horror in the face of a threat to life or serious injury and it is now acknowledged that all communities exposed to disasters, today and in the past, experience multiple traumatic events including threat to life, loss of property, exposure to death, and often economic devastation.[640] The inhabitants of ancient Rome were exposed to all of these either on an individual, family or community basis, leading to what Barton terms 'collective stress'.[641]

It is, of course, individuals or individual families who were most exposed, but it is they who are hidden from our view. Examining the psychological effects of the trauma of fire in ancient Rome and applying results of modern research to Rome has to be handled with great care. But it can be done by combining that research with descriptions of the psychological effects of disasters in our ancient sources which show recognition of the mental impact of trauma. It is worth quoting in full Seneca's description of the effects of disaster, in this case plague (*pestilentia*), on the mind and on human behaviour:

> Now, fear has made some people run around as though insane or in shock. Even
> when fear affects an individual and is mild, it still shatters minds. What then?

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[636] Hope 2000, 105; Graham 2016, 63.
[637] Hopkins 1983, 209.
[638] Bodel 1996, 129.
[639] Blaikie *et al*. 1994, Ursano *et al*. 2003, and Neria *et al*. 2009 present comprehensive collections of research on this subject.
[640] *APA*, 1994. Ursano *et al*. 2003, 1.
[641] Barton 1969, 38.

When panic affects everybody, when cities collapse, when populations are crushed, when the earth is shaken, is it any wonder that broken minds are lost between grief and fear? It is not easy to keep one's wits during great disasters. As a result, generally the most unstable characters develop such fear that they lose control of themselves. But in fact, no one feels terror without a loss of sanity and whoever is afraid behaves like a madman. Fear actually allows some people to quickly come back to their senses, while it disturbs others badly and brings them to a point of insanity. This is why during war people have wandered about stunned, and you will never find more examples of prophecy than when fear mixed with religion assails the mind.[642]

(Sen. *QNat*. 6.29. 1-3)

Recent research supports Seneca's view that 'no one feels terror without a loss of sanity and whoever is afraid behaves like a madman' and has shown that no one who sees a disaster is untouched by it. A difference between community and individual response to disasters has also been identified.[643] When entire communities are destroyed, everything familiar is gone; survivors become disoriented at the most basic level.[644] Tyhurst coined the phrase 'disaster syndrome' and defined it as the period of impact or immediately afterwards where a person is dazed, stunned, unaware, frozen, or wandering aimlessly, which he believed could affect up to 25% of people exposed.[645] Writing of the fire of AD 64 (**No**. **59**), both Tacitus (*Ann*.15.38) and Dio (*Ep*.62. 16 - 17) described reactions that echo Seneca (*QNat*. 6.29. 1-3) and are mirrored in modern research. There were those who abandoned the desire to escape through their concern for loved ones, and perished although a means of escape was open to them; people ran in panic in all directions but also stood speechless as if they were dumb. In his eye-witness account of the immediate aftermath of the fire of London in 1666, Evelyn records the same reaction: apathy or astonishment on the part of the people. He says they made little effort to quench the fire and that all, including himself, were disorientated and simply did not know where they were as they searched for their homes.[646]

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[642] *Nam quod aliquos insanis attonitisque similes discurrere fecit metus. Qui excutit mentes, ubi privatus ac modicus est. Quid? Ubi publice terret, ubi cadunt urbes, populi opprimuntur, terra concutitur, quid mirum est animos inter dolorem et metum destitutos aberrasse? Non est facile inter magna mala consipere. Itaque levissima fere ingenia in tantum venere formidinis ut sibi exciderent. Nemo quidem sine aliqua iactura sanitatis expavit, similisque est furentis quisquis timet; sed alios cito timor sibi reddit, alios vehementius perturbat et in dementiam transfert. Inde inter bella erravere lymphatici, nec usquam plura exempla vaticinantium invenies quam ubi formido mentes religione mixta percussit.*

[643] De Wolfe 2000, 13.

[644] De Wolfe 2000, 7.

[645] Tyhurst 1951, 764; Raphael and Maguire 2009, 7.

[646] Evelyn 2006, 447.

### Post-traumatic Stress Disorder

Recent studies (especially since 9/11) have shown that the behavioural and psychological responses seen in disasters frequently have a predictable structure and time-course. In other words, there is a pattern which may in some respects be applicable to an ancient society. The growth of interest in the field of disaster mental health, built upon the understanding of psychological trauma concepts from World Wars I, II, and the Vietnam War, led to the establishment of a diagnosis of Post-Traumatic Stress Disorder (PTSD) in 1980.[647] PTSD happens where the effects of disaster linger long after its occurrence, and are rekindled by new experiences that remind the person of the past traumatic event; this is more frequent in those who have been directly exposed to threat to life.[648]  Researchers have consistently shown that the more personal exposure a survivor has to the disaster's impact, the greater his or her post-disaster reactions while factors such as the death of a family member and the loss of home lead to the intertwining of grief and trauma.[649] In more recent studies it has been shown that PTSD is only one of a number of disorders displayed by survivors of disaster.  For example, a study of subsequent mental health issues among those who survived a fire which destroyed the Hotel Switel in Antwerp in 1994, where 10 people died and more than 120 people were burned or injured, found that almost 30% were suffering from new onset disorders *in tandem* with PTSD, the largest of which was depression.[650]  The findings indicated that the nearer the survivor had been to witnessing the horror the worse the depression.

### Panic

In the fire of AD 64, people wailed, jostled, were trampled underfoot and suffocated as they tried to escape (Dio *Ep*. 62. 16 - 17) and found themselves hemmed in by fire (Tac. *Ann*. 15. 38). Centuries later, Agathias (*Hist*. 5. 3) described panic-stricken people pouring out of the houses into the city of Constantinople during an earthquake in AD 557 to find that open spaces were now obstructed and the people were trapped, and where not only lower class women but women of distinction roamed about and mingled with men; social order and *decorum* were thrown into confusion and even slaves showed contempt for their masters by disobeying instructions.

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[647] Raphael and Maguire 2012, 9.
[648] De Wolfe 2000 and Raphael and Maguire 2012 present the research findings on this issue.
[649] De Wolfe  2000, 1- 6.
[650] Maes *et al*. 2000, 12 refer to a number of studies which have focussed on acts of terrorism affecting large communities such as New York 2001, Bali 2002, Madrid 2004, London  2005.

Modern studies have challenged the popular belief that the threat of disaster would lead to automatic panic and social disintegration. It is agreed that panic is rare and only occurs when there appears to be no means of escape.[651] Seneca makes that precise distinction (*QNat.* 6.1.6) when he describes public chaos during an earthquake when 'fear has lost a way of escape' (*ubi timor fugam perdidit*). Tacitus, Dio and Agathias also appear to make the same point: it is when safety is cut off that panic ensues.  However, the same modern research has found evidence of altruistic behaviour when there is a means of escape; for example, in the aftermath of a hurricane in Arkansas in 1952 the majority of survivors immediately looked after others.[652] In AD 64 there were those who were concerned for the safety of others as they dragged or awaited those who were incapable, some by delaying and others by running (Tac. *Ann*. 15. 38).

**Disintegration of neighbourhood**

Since Augustus' administrative reforms, the *vicus* (neighbourhood) was a clearly defined basic unit of the city (Suet. *Aug*. 30.2; Dio 55.8.6), a community with its own magistrates and festivals (Dion. Hal. 4.14. 2-4).[653] A major fire which destroys neighbourhoods also destroys cohesive social networks but we have no direct evidence of the impact of such a fire on the political and social structure of the *vici*.[654]  However, comparative evidence can be found in other cities.  Large-scale disasters are primarily social events where survivors have to adjust to a community that has been radically altered and are bereft at its loss.[655]  For example, whole neighbourhoods of densely populated parishes were destroyed in Lisbon (1755); in San Francisco (1906) whole communities were displaced and it took years to re-establish their neighbourhoods.[656]  The Chinese community in San Francisco was the most affected as Chinatown was completely destroyed and its residents dispersed.[657]  Disintegration of community exacerbates the difficulty of resolving problems of loss through the collective approach which modern studies have shown to be a feature of disaster-stricken communities, and which normally allows them to rebound with some degree of resilience.[658]

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[651] Raphael and Maguire 2009. See also McFarlane *et al*. 2009.
[652] Barton 1967, 5.
[653] See Lott 2013, 177 for a review of the importance of *vici*.
[654] See Sablayrolles 1996, 443 for the threat to the community of the *vici* by the fire of AD 64.
[655] Toner 2013, 154-158.
[656] Molesky 2012, 160.
[657] Rees Davies 2012, 282.
[658] Nigg 1995, 303.

**Acceptance and Resilience**

*The Gods*

In her overview of modern studies on human response to disaster, De Wolfe lists research that shows that each survivor experiences disaster through his own lens and that the meaning the survivor assigns to the event, together with his own world view and spiritual beliefs, contributes to how that person perceives, copes with and recovers from the disaster.[659] Where the causal agent is seen as beyond human control, an act of god, it can be easier for some victims; seeing disasters, including fires, as expressions of divine will may aid resilience and acceptance.[660] Portents of divine disapproval and anger at human wrongdoing are associated with 28 fires in the List of Fires (**Fig. 9**). Attributing blame to the gods also allowed the authorities and élite landlords in Rome to absolve themselves of responsibility; periodic disasters were part and parcel of life and were evidence of the link between man and gods; this meant that the favour of the gods could be enlisted to stave off catastrophe by prayer and ritual (Chapter 5, 180). While Toner believes that disasters were generally seen by the Roman as being theological in nature, it is more complex than that. [661] Like many societies, ancient and modern, the Romans lived with a dichotomy: even where the cause of a disaster was known it could still be seen as an act of god caused, in turn, by human misbehaviour. This is seen in *c*. 21 of the listed fires (Chapter 3, 126; **Fig. 9**).

In our sources, tremors and earthquakes are included frequently with fires as prodigies. The physical causes of earthquakes, common in the geologically unstable regions of Latium and Campania, and how to anticipate them, was known at least as far back as Aristotle (*Mete*. 2.8.; Pliny *HN* 2.191), but that did not mean they were not perceived as divinely caused. In the wake of the earthquake in Pompeii in AD 62, Seneca (*QNat*. 6.1.1-3.1) gave the cause as a flaw (*vitium*) in the make-up of the earth while making the point that most people through fear are driven to religion in the face of strange natural events. In one year (193 BC) earthquakes in Rome and its environs were reported so often that people grew tired, not just of the phenomenon itself, but also of the holidays declared because of it; no public business could be conducted because the consuls were busy with sacrifices and expiatory rites (Liv. 34.55.1-4). During an earthquake in Constantinople in AD 557, the shrieks, lamentations and prayers, fear and anxiety of mind seemed to subside gradually as people turned their eyes to

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[659] DeWolfe 2000, 8.
[660] Toner 2013, 158 is of this view.
[661] Toner 2013, 59.

the heavens to propitiate the deity (Agathias *Hist*. 5. 3). Many in Lisbon believed God to be the cause of the earthquake and fire (1755). The Jesuit, Gabriel Malageida, put it down to 'our own intolerable sins'.[662] Managing to find some kind of meaning to a disaster aids recovery, as does finding someone to blame for it, both of which can be achieved by attributing it to god's will.[663] **Figure 39** shows the manner in which people in San Francisco (1906) turned to prayer as the city burned. In the wake of the Grenfell Tower disaster (London 2017) while the search for the cause and accountability began, there were those who eschewed retribution. O'Hagan reports the attitude of many Muslim women who simply said, 'It is all in the hands of God.'[664]

### *Resilience of the familiar*

The frequency of disasters such as earthquakes, floods, plague, famine, wars, and fires meant that life in Rome was one of permanent vulnerability; it may be that an underlying resilience existed and the attitude of most towards disasters was largely one of acceptance.[665] This is certainly not confined to ancient Rome. In their general study of risk and disaster, Blaikie *et al.* show that disasters should not be segregated from everyday living, and that risks involved in disasters can be connected with the vulnerability created for many people through their normal existence.[666] Domestic fires were part and parcel of everyday living; catastrophic fires were exceptional. In the past century, in the face of numerous catastrophes, both natural and man-made, there has been an increasing recognition among trauma experts of societal and individual resilience, though they acknowledge it may co-exist with painful emotional scars.[667] Research into the suffering and destruction of the 9/11 attack in New York has demonstrated people's resilience after the disaster: the majority of survivors do not become psychiatrically ill.[668]

Plagues and diseases were a recurring feature of ancient cities and sources described and discussed their causes; Ammianus Marcellinus (19.4.2.) lists the different theories among philosophers and eminent physicians. The Romans were very familiar with food shortages and, in fact, there is circumstantial evidence that famines and diseases emerged in the

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[662] Molesky 2012, 154.
[663] Toner 2013, 158.
[664] O'Hagan, 2018, 17.
[665] Aldrete 2007, 6; Toner 2013, 15.
[666] Blaikie *et al*. 1994, 3.
[667] Raphael and Maguire 2009, 16.
[668] North and Westerhaus 2003, 103.

aftermath of the disruptions caused by certain fires.[669] Famine and plague occurred after the fires of 23 BC (**No. 36**) and AD 62 (**No. 57**) (Dio 53.33.4). A plague killed 30,000 people in AD 65 after the fire of AD 64 (**No. 59**) and another in AD 80 (**No. 62**) (Suet. *Ner.*39.1, *Tit.* 8.3; Tac. *Ann.* 6.13). Famine occurred in AD 189 (**No.71**) (Dio 72.14.3-4). Disease occurred in 212 BC after 213 BC (**No.7**) (Liv. 25.26.7) and in 190 BC after 192 BC (**No.13**) (Liv. 37. 23.3). This correlation may be coincidental but it is unlikely. In the great fires of those dates the living conditions of survivors would most likely have been even more cramped, insanitary and poverty-stricken than usual; dead bodies, both human and animal, would also have lain under rubble spreading disease.[670]

Thirty-three floods in Rome are recorded between 414 BC and AD 398.[671] Based on his extensive study of the sources, Aldrete has concluded that the Romans displayed considerable flexibility in dealing with the interruptions to the life and livelihood of the city that were caused by flooding. Floods appear to have been accepted as a natural part of the urban landscape. The example of Balbus, apparently unfazed by the flooded Tiber, arriving to the celebrations at the dedication of his new stone theatre in 13 BC by boat demonstrates this *sang-froid* most clearly (Dio 54.25; Suet. *Aug.* 29).

The Romans, in Rome and around the empire, simply had to cope with disasters. They were used to dealing with sudden terrible events and were all too familiar with the ephemeral nature of life. While the sources do not provide similar descriptions of the city coping with the aftermath of fires, it is reasonable to believe that the same flexibility of response came into play. The city just got on with life; there was no alternative.

**Grief and Bereavement**

The Romans may have been inured to disaster, but grief at the loss of loved ones must have existed in some form. The modern view is that fear and anxiety about personal safety is greatly exacerbated by fear for the safety of loved ones, while grief over loss is considered normal.[672] However, we cannot say with any certainty what was 'normal' for the average Roman, whoever he or she was. Reconstructing the emotional responses of individual members of past societies is an historical conundrum and it is misleading to assume that their

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[669] Dyson 2010, 268.
[670] Rubin 2004, 245.
[671] Aldrete 2007, 14 documents 33 floods between 414 BC and AD 398.
[672] Ursano *et al.* 2003, 5; De Wolfe 2000, 17. See Golden 1988 for a discussion on the attitude to the death of children in Rome.

grief was the same as ours. But it is a useful methodology provided one is aware of the danger of being blinded to important differences between the Roman world and our own, and that one accepts that public behaviour may not illuminate private loss and that nobody knows how the Romans felt.[673] Practices and rituals of mourning are often more accessible than grief and this leads to what Hopkins defines as the search for the connection between the experience of feelings and their expression.[674] Modern studies of grief can help, especially as they are increasingly aware of the varied nature of people's reaction to bereavement and show that what appears as contrived products of convention does not indicate an unfeeling society. Death is universal, but how the bereaved articulate their sense of loss is not. [675]

In the search for feelings of grief, we have particular difficulty with the written sources. Most evidence comes from inscribed tombstones and, although often touching, these may have been carved by stonemasons working from a stock of conventions or even 'handbooks',  and are largely the product of expected and accepted commemorative conventions.[676]   Hopkins regards two inscriptions, one from Ostia (*CIL* XIV 1731) where a father grieves for his baby and another from Rome (*CIL* VI 15546) where a husband grieves for his wife, as immediately recognisable as grief.  In fact *CIL* XIV 1731 is based on the same trope used by Martial (5.34) for little Erotion, but that does not mean it was not heartfelt. It does mean that it cannot be singled out as recognisable grief.[677] In fact, the comfort of convention and ritual in time of loss is widely recognised. This supports the view that a person may be truly grief-stricken even if expressing it conventionally. Such epitaphs cannot be regarded as reliable evidence of the extent of grief. Infants are not represented on tombstones and in strict law they received no formal mourning (Plutarch, *Numa* 12).  In addition, there must have been many free-born Romans (*ingenui*) who were simply too poor to erect tombstones.[678]

Sophisticated essays on grief or philosophical letters of consolation, such as Seneca's *ad Helviam* and *ad Marciam*, present the same problem as they are a literary genre often formulaic or intended for public consumption and cannot be relied on to illustrate private grief.[679] Cicero's letters (*Fam.* 4.5-6; *Att.* 12.14-15) on the death of his daughter Tullia are

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[673] See Hope 2007, 172 for a discussion of the challenge of this approach.
[674] Hopkins, 1983, 203.
[675] Hopkins 1983 205; Hope 2007, 173.
[676] Over 100,000 published epitaphs survive from the western half of the empire alone. See Lattimore, 1942 and Hopkins 1983, 204.
[677] Hopkins 1983, 204.
[678] Purcell 1994, 657.
[679] Hopkins 1983, 203 - 204 discusses the problems we face in analysing the emotions aroused in the Romans by death.

literary compositions, but that does not rule out the underlying fact that Cicero was suffering greatly from the loss of his 'Tulliola'. Another shortcoming of the written sources is that they are all written from a male point of view and give no information about the mother-child bond from the mother's perspective.[680]

We are also tastefully excluded from Roman grief by the limits the Romans put to its public display. Correct *decorum* in public mourning was part of the self-definition of the élite.[681]An 'outpouring of grief' was in bad taste. 'Nothing else becomes offensive as quickly as grief' (Sen. *Helv*. 16. 1-2). Limits were set to periods of mourning; women could demonstrate grief visually and audibly in a way that was not viewed as acceptable for men. In this context of the *decorum* of grieving, is not surprising that our élite sources rarely describe grief and sorrow in the aftermath of a disaster and only then as the preserve of women. Women wandered about in Rome wailing after the sack of Rome in 390 BC (**No. 3**) (Liv 5.42; 5.48) and the defeat at Cannae (Liv. 22.55.3; 22.56.4-5). Again, women and children lamented and wailed during the fire of AD 64 (Tacitus and Suetonius). In other fires (*eg* **Nos. 11** and **77**) where residential areas were destroyed, there is no reference to loss and grief.

It is possible that the Romans could not afford to care. In his study of England in the 16th and 17th centuries, Stone found that as mortality was high, frequent death and the expectation that death might at any time rupture close relationships prevented people from investing huge amounts of emotion in loving attachments.[682] The Romans lived in such a world. Disasters such as fires, either on a community or individual basis, were taken for granted (Mart.3.52.2; Tac. *Ann*. 4.64) but that does not mean that there was not an endemic anxiety (Juv. 3. 7-9; Mart. 3.52; Catull. 23. 8-11; Hor. *Sat.* 1. 1. 76-78; Propert. 2.27. 5-13). There is also evidence, especially in the writings of Seneca the Younger, of a sense of fatalism in the attitude to fires. He frequently associates the transient nature of life with constant exposure to *incendia* and *ruina* ('fires' and 'collapsing buildings'), and the fact that one never knows when disaster will strike is a theme which runs through his philosophical works (n.79 above).

On the other hand, although the society of Rome was cruel and harsh, grief could not be evaded: it is part of the human condition.[683] Repeated bereavements among parents and children might engender a façade of indifference, without providing immunity from grief.

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[680] Garnsey and Saller 2014, 162.
[681] Hope 2007, 176.
[682] Stone 1979, 57.
[683] Hopkins 1983, 222- 224.

Perhaps it is this façade which is found in the sources and it can never be established whether frequent deaths inured the Romans against a deep and long-lasting grief at the loss of a close relative.  This is a very difficult area raising questions which cannot be answered; whether family members experienced sentiments similar to those of modern families can only be surmised.[684]

**Did the state care?**

It is clear that the Roman state cared very much about *preventing* fires (Chapters 5 and 6). However, once a fire occurred, and while 'average' Romans may have felt loss or grief as people today, it is likely that there was less concern for loss of life in general on the part of the state and that less value was placed on certain categories of individual lives.  Those who were most at risk were the poor – lower-class citizens, foreigners and slaves – and they do not interest the sources; just as in floods, deaths and injuries in fires were not the focus of the accounts. Aldrete argues convincingly that those who ran Rome's government would have worried more about the main victims of fire or floods if they themselves had been the ones principally affected.[685]

It is in the immediate aftermath of a disaster that relief is needed, and the state did provide relief after some fires. For example, in 41 BC following a fire (**No. 31**) after the destruction of many private dwellings in different locations in Rome,  the rent of those who lived in the city was entirely remitted up to a maximum of 2000 sesterces (Dio 48.9.5.).  An unspecified form of assistance was given to victims of various conflagrations not only by Tiberius but also by Livia in AD 16 (Dio 57.16.2). However, some accounts of the state treasury being used for the alleviation of hardship show cynicism about the motivation of individual emperors. Referring to the great financial loss incurred by the burning of private houses on the Caelian Hill in AD 27 (**No. 46**), Suetonius (*Tib*. 48) and Tacitus (*Ann*. 4.63) each remark that Tiberius was grudgingly forced to silence his critics with a distribution of money. Suetonius adds that Tiberius had the name of the hill changed to the Augustan Hill in recognition of his own generosity. This is a prime example of where we are the mercy of the agenda of individual annalists and where credit may not be given where it is deserved. In this instance,

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[684] See Garnsey and Saller 2014, 171 for a discussion of attempts made to reach a clearer understanding of the ancient world in this regard.
[685] Aldrete 2004, 229 - 230.

Velleius Paterculus (2.130.2), a straightforward chronicler, actually praises Tiberius for his largesse.

In AD 36 when the thickly populated southern area of the Aventine Hill was ravaged by fire (**No. 50**), Tiberius donated the large sum of 100,000,000 sesterces to the relief effort (Dio 58.26), specifically for the rebuilding houses and *insulae* (Tac. *Ann*. 6.45; Suet. *Tib*. 48). Tacitus saw this as an effort by Tiberius to convert the disaster to his own personal glory and to distract from the extravagance of his own building programme but Tacitus cannot be relied upon to give an unbiased account of the actions of Tiberius. In another example, Caligula compensated many for their losses from unspecified fires (Suet. *Calig*. 16; and Dio 59.9.4). In AD 53 or 54 (**No. 54**) while the Horrea Aemiliana burned for over two days, Claudius moved into the Diribitorium from where he personally directed fire-fighting operations. Suetonius (*Claud*. 18) implies that Claudius' motivation was concern for the grain supply of the city. Following a fire in AD 62 (**No. 58**) which destroyed grain ships on the Tiber a cap was placed on the price of grain (Tac. *Ann*. 15. 18. 8).

Reports of the aftermath of the Great Fire of AD 64 (**No. 59**) give the most comprehensive information on state intervention after a catastrophe. Both Dio and Suetonius are scathing about Nero's relief efforts but they also blame Nero for setting the fire (Chapter 3, 133). Dio (*Ep.* 62. 17) wrote that Nero began to compel individuals and nations to donate vast sums with the conflagration as his excuse, while the mass of the Romans had the funds for their food supply withdrawn. Suetonius (*Ner.* 38) records that while Nero pledged to remove the corpses and rubble free of charge he did not allow anyone to approach the ruins of their own property so that he himself could gain possession of as much loot as possible; he almost beggared the provinces and the resources of private individuals as he collected and demanded contributions. On the other hand, the most reliable source, Tacitus (*Ann*. 15. 39. 43), shows no cynicism when he describes Nero offering relief to the homeless masses by opening up the Campus Martius, including Agrippa's public buildings, and even his own gardens where he constructed emergency accommodation for the destitute multitude. Food was brought from Ostia and neighbouring towns and the price of grain was cut to less than ¼ sesterce a pound; building legislation was immediately introduced or reinforced, colonnades were to be erected and débris cleared at Nero's expense; bonuses were announced for the completion of houses and *insulae* before a given date; rubbish was to be dumped in the Ostian marshes by grain-ships returning down the Tiber (Tac. *Ann*. 15. 39.45). This is a relief plan of significant proportions. After the fire of AD 80 (**No. 62**) Titus set aside the ornamentation of his own

villas and turned to the restoration of public buildings and temples, and made every effort that everything might be done with the greater speed (Suetonius *Tit*. 8).

There is no reference in the sources to any form of relief in the aftermath of other fires where many citizens must have been seriously affected. For example, when fire destroyed 340 dwellings on the Cispian hill (Gell. *NA* 15.1.2) in the reign of Antoninus Pius (**No. 69**), it is the loss of investment which is recorded not the loss of life or homes, or any relief effort which may have ensued.  However, lack of reference to relief efforts after such fires does not mean they did not occur. Caligula feared his reign was threatened with oblivion because there had been no public disasters and wished for the destruction of his armies, for famine, pestilence, fires, or a great earthquake (Suet. *Calig*. 31). However cynical, this comment underlines how disasters are opportunities for rulers to display munificence.  In the feudal city of Edo/Tokyo in the 18th century periodic fires proved useful for the ruling Shogunate to offer relief in the form of grants for reconstruction as well as emergency shelters and alms for the displaced.  The political opportunity for self-aggrandisement and of reaffirming the status hierarchy was not to be missed.[686]  Urban fires can legitimise and strengthen power as well as undermine it (Chapter 8).[687]

The wider context of other disaster relief measures throws some light on the complexity of state attitude. During serious food shortages in AD 6 -7 the people, distressed by lack of food and also by losses sustained in a fire (**No. 43**), were restless and openly discussed plans for a revolution. In response, Augustus took emergency measures which included rationing and price control (Suet. *Aug*. 42; Dio 55.27). Grain ships finally arrived and normality was restored. In AD 27 the amphitheatre in *Fidenae*, about five miles from Rome, collapsed and up to 50,000 were maimed or crushed to death.[688] Tiberius rushed back to Rome from Capri and, on the day after the accident, houses of the well-to-do (*procerum domus*) were thrown open; dressings and doctors were supplied to all (Tac. *Ann*. 4.62-3). Tacitus emphasises the way in which the practice of the ancients was recreated in those days where the war-wounded were always helped by anybody with the means to do so.[689]

[686] Toner, 2013, 50; Sand and Wills 2012, 48 - 58.
[687] Shenker 2017 makes this point in relation to the fire in Grenfell Tower in London.
[688] Suetonius (*Tib*. 40) puts the number of deaths at 20,000 but neither his nor Tacitus' figures can be considered reliable.
[689] Tacitus (*Ann*. 4.62 - 3): … *qui magna post proelia saucios largitione et cura sustentabant.*

Another glimpse of state attitude can be inferred from the evidence of relief efforts outside of the city of Rome, mainly financial and particularly after earthquakes. In 15 BC, Augustus gave money to the Paphians in Cyprus who had suffered an earthquake (Dio 54.23. 7-8). Tiberius pledged 10,000,000 sesterces in *c*. AD 17 when 12 cities in Asia had been destroyed. He remitted their tax burden to both the national and imperial exchequers for five years (Tac. *Ann.* 2.47; Dio 57.17.7). He also remitted the tax tribute of a further three cities damaged in another earthquake for three years (Tac. *Ann.* 4.13). After the eruption of Vesuvius in AD 79, Titus provided help to Campania (Suet. *Tit*. 8) by setting up a commission to oversee the relief programme. According to Suetonius, Titus also invoked every aid, 'human or divine', to cure a plague in Rome during his reign, but gives no details. After another plague in Rome, Marcus Aurelius (AD 161-180) held funeral ceremonies for the lower classes (*vulgaria funera*) at public expense; this is presented as an example of his kindliness (*SHA Ant*. 13).

In the aftermath of disasters, help was provided for whatever reason - political popularity, dispelling civil unrest, or care for the citizens of the empire - but it was community-wide and not aimed at individuals or inhabitants of an *insula* in Rome. While there was a range of status and prestige within the élite minority in Roman society, the majority were also stratified (*eg liberti*, *cives*, *servi*, *alieni*) but it is impossible to interpret this faceless mass with any certainty.[690] In this régime the ruling class cared little for most of its inhabitants' welfare and had little abiding interest in the plight of the poor and hungry.[691] It is misleading to view the grain dole as a form of poverty relief; eligibility was determined by status, not need, and the *plebs frumentaria* was a privileged sub-set of *plebs urbana*.[692]

The degree to which the authorities took remedial action after an event such as a fire in an *insula* was limited and may have reflected an ideological choice based on a hierarchical view of the social world. Some were more worthy of help than others. The view that people do not always deserve to be helped is a familiar phenomenon. In a study of relief efforts in the U.S., May highlighted the ongoing debate about reconciling a rush to aid stricken people with the fundamental belief that no one should receive something for nothing. He cited 18 shifts over time in the U.S. disaster relief legislation mainly due to the philosophical issue of the

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[690] Purcell 1994, 667. See also Morley 2013, 40.
[691] Toner 2013, 177.
[692] Suetonius, *Caes*. 41, *Aug*. 40; Augustus, *RG.* See Morley 2006, 38, for a discussion on this.

appropriate amount of federal assistance and resentment among some states, determined to get the same level of aid as another.[693]

**Breakdown of Law and Order**

A disaster such as a fire can inhibit normal social restraint and, while altruism and care for others is an identifiable, lawlessness such as looting has long been part of the narrative of the aftermath of all urban disasters. Van der Heyden declared in 1672 that his new hose (**Fig. 37**) would extinguish a fire early in its life and prevent 'lootings and other disorders which fires inevitably bring'.[694] The Romans were well aware of the practice of looting; the *Lex de incendio ruina naufragio rate nave expugnata* which predated Augustus made a distinction in punishment between fire-setting and looting. Tacitus (*Ann.* 15. 38) may be referring to looters in AD 64 when he says that attempts to fight the flames were prevented by menacing gangs. Dio (62. 16) describes people stealing the property of others as the Great Fire raged. During the fire in AD 238 (**No. 77**) Herodian (7.12.6-7) claims the entire possessions of some rich men were looted by criminals and the lower class who mixed with the soldiers in order to do just that. A conflation of criminals and the lower class is echoed in the accounts of the Chicago Fire of 1871 where the narrative is much characterised by stories of drunkenness and looting by the poor who were perceived as more likely to be lawless. Eye-witnesses speak of seeing burglars in private houses early in the course of the fire. Innkeepers rolled barrels of whiskey deliberately into the streets to keep their premises safe and this led to drunken men impeding the flight of the fugitives. Such drunkenness was to be found in the 'miserable alleys of the poor districts'.[695] Another eye-witness, remarking upon the generosity of some who opened their houses to shelter victims, wrote that some came 'professedly to help – really to pilfer'.[696] Yet another writes of looting and drunkenness in the poorer districts while he finds his peers, 'respectable people', to be good natured and polite.[697] The lawlessness of the poor comes up repeatedly in descriptions and seems to have left an indelible mark, whether real or perceived. Similarly, in the aftermath of the earthquake and fire in San Francisco of 1906, the poor and working-class refugees found themselves living in disaster

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[693] May 1985, 17 and 22.
[694] van der Heyden *Brandspuitenboek*, 1. 3.7, quoted in Donahue Kuretsky 2012, 30.
[695] Joseph Edgar Chamberlin, reporter on *Chicago Evening Post*, quoted on in Lowe 2012, 7.
[696] Mrs Alfred Hebard quoted in Lowe 2012, 32.
[697] H.W.S. Cleveland quoted in Lowe 2012, 34 and 48.

relief camps under the close supervision of military commanders.[698] The illustrations (**Figs. 40** and **41**) from *Cosmopolitan* magazine of 1906 show how seriously looting was taken.[699]

The manner in which lower class has been equated with criminal class is seen in an early example of the establishment of fire insurance.  In 1864 the Sun Insurance Company sent an employee to Constantinople to see if it could do business in that city which was plagued by fires.  A statistical analysis of the frequency of fires was collated and the city demarcated into blocks that were insurable and uninsurable.  Those uninsurable were inhabited by 'people of bad character'.  In effect, they were the poorest blocks.[700] In the wake of the most recent catastrophic urban fire, the burning of Grenfell Tower in London in 2017, Shenker wrote that fires can shape and alter the way a city is governed, and they can be utilised to play off one part of the population against another.[701]  This was even more likely to happen in a stratified society like ancient Rome with its predisposition to ignoring the poor at best and despising them at worst. In a general comment on Roman society, Tacitus (*Hist*. 1.4) makes the binary distinction between *plebs sordida* (the base lower class) and the *pars populi integra* (the respectable section of the people).

Whittaker has pointed out that throughout history the rich have stereotyped the poor for their own convenience, but he also warns of how our views and assumptions are in danger of creating our own value judgements of the Romans.**[702]** Once aware of this danger the perception of the poor and the lack of reportage on the effects of the daily occurrence of fires can be explored.[703] Whether class analysis is transferrable to ancient society has been much debated but it does provide conceptual tools for identifying the fundamental processes producing and reproducing inequalities in society.[704] Property systems and legal systems perpetuate inequalities.  And so they did in Rome, a stratified society with a very small group of élites controlling the vast majority of wealth and power.[705]  Roman society consisted of a number of distinct groups whose interests were often opposed and the official binary division

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[698] Rees Davies 2012, 280.
[699] *Cosmopolitan*  41, 1906 available on
https://babel.hathitrust.org/cgi/pt?id=mdp.39015004285402;view=1up;seq=249
[700] Zwierlein 2012, 87.
[701] Shenker 2017.
[702] Whittaker 1993, 1.
[703] Yakobson 2007, 383- 400.
[704] Garnsey and Saller 2014, 133 discuss the difficulty of class analysis suggesting it may be an endless and often fruitless debate.
[705] Aldrete 2007, 235; Morley 2007, 299; Garnsey and Saller 2014, 138.

of the population into *honestiores* (the minority élite) and *humiliores* (the mass of the population) was underpinned by Roman law. The notion of making punishment fit the circumstances of the perpetrator - or victim - can be seen firmly in the Roman legal system (Twelve Tables 8.10 and 14; Sen. *Ira* 1.19.5-7; Liv. 39.8-19). Under Claudius a range of penalties widened and punishment began to take detailed note of the status of the perpetrator (*Dig*. 48.19.11pr and 2; 48.19.13; 48.19.16). The division was formalised in the reign of Hadrian when the discrimination in punishment of individuals of the two orders for the same crime was also formalised. For example, the only death penalty suitable for the *honestiores* was decapitation by the sword (*Dig*. 48.19.8.1) while crucifixion and the gallows were suitable for the *humiliores* and slaves (*Dig*. 48.19.9.11; 48.19.28pr; 48.19.38.1-2; 48.19.8.11).

Hierarchical social divisions were built on the élite system of values upon which the stability of Rome (and the empire) depended.[706]  Pliny the Younger (*Ep*. 9. 5) advised a governor in Spain to preserve the distinction of orders and dignity because 'if these distinctions are confused, nothing is more unequal that equality itself'.[707]  However, it is very difficult, if not impossible, to pin down the social reality and complexity of the hierarchy within the *humiliores*. The main reason for this difficulty is that the élite sources had little interest in mapping the pattern of economic and social inequalities that existed among the *humiliores*.[708] Thus, the identity of 'the poor', those least capable of recovering from injury or loss of scant possessions and food in a fire, remains elusive.  It is likely that there were gradations of poverty and there is no single class of 'the poor'.[709]  A sliding scale of poverty is familiar in the modern world and the reality is that for ancient Rome we have no statistics and only a vague notion of what was necessary for subsistence. These were the people for whom pre-existing social inequalities dictated the manner in which a disaster impacted upon them; as today, the most vulnerable groups will be hardest hit.[710]

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[706] The social categories were roughly: the senatorial rank (*senatores*), equestrian (*equites*), the multitude of free-born citizens (*ingenui*), freedmen (*liberti*), foreigners (*alieni*) and slaves (*servi*). Cicero (*Cat*. 4.15-17) lists the different groups whom he regards as respectable (*honestiores*) members of society of all *ordines* (order/rank) and *genera* (class/type).
[707] Pliny (*Ep*. 9. 5): *quod eum modum tenes ut discrimina ordinum dignitatumque custodias; quae si confusa turbata permixta sunt, nihil est ipsa aequalitate inaequalius.* ('I meant to congratulate you on the way in which you preserve the distinctions of class and rank; once these are thrown into confusion and destroyed, nothing is more unequal than the resultant 'equality.'')
[708] Garnsey and Saller 2014, 131, addendum 147.
[709] Whittaker 1989, 304 and 308.
[710] Toner, 2013, 87.

In the context of such a society, it is unreasonable and inappropriate to search within the ancient sources for the experience of the poor; it is, in effect, asking too much of the sources, whose very existence depended on the strict hierarchical social divisions, to record the lives of those who were 'other'.   Not only had they little interest in recording the narrative of the poor but a value judgement of poverty is discernible in many of the ancient sources as is the paradoxical view that, while poverty is part of the natural order of things, the poor were somehow to blame for their own condition.[711] For example, a *graffito* in Pompeii expresses contempt for the poor: 'I hate poor people' (*CIL* IV 9839b).  Sallust (*Cat*. 37) writes scathingly of the poor. Cicero (*Off*.1.150, 3.15; *Rep*. 3.37), although not consistent in his divisions of Roman society, best articulates the élite attitude to the less well-off and the poor. It is nature itself that has allocated dominion to the 'best' (*optimi*) to the benefit of the 'weak'; he explains how the mob (*volgus*) does not understand how far it is from perfection while the *optimi* are the best judges of virtue and ability.[712] Low status meant 'low-life' devoid of the morality with which the *optimi* were endowed.[713]

Such distancing of the élite from the poor is a feature of the attitude to victims of catastrophe and would have a direct impact on the nature of the records compiled by our sources. Distancing, or dis-identification, is inherent in the notion that if people are poor it is because they are 'unfit' and victims can somehow be blamed for their own suffering; thus there is generally less sympathy for victims and human misery can be contemplated with the view that nothing can be done about it - it is the natural order.[714] This attitude offers some explanation for the apparent lack of interest shown by the ancient sources in the plight of those who would have suffered most from a disaster such as fire, plague or flood. Modern studies show that this attitude was certainly not peculiar to Roman society and that today one factor that reduces sympathetic identification with the victims of any disaster, and that tends to silence the victims themselves, is the development of explanations in which the victims are held to blame for their own situation.[715] It has also found that in traditionally stratified societies, the élite believe themselves to be morally superior while the mass of the poor was conversely said to be immoral, unproductive and socially expendable.[716] Blaming the victims

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[711] Whittaker 1989.
[712] Morley 2007, 302.
[713] Purcell 1994, 666.
[714] The theories of Hofstadter 1955 are discussed in Ursano *et al*. 2003, 244.
[715] Ursano *et al*. 2003, 253.
[716] See Hofstadter 1955 for his discussion of Social Darwinism.

reduces the sense of moral obligation to help them.[717]   During the Irish Famine (1845 - 1852) little sympathy was felt by the seat of government in London for misfortunes that were felt to be too frequent, too hopeless and impossible to remedy.[718] A similar withdrawal of identification was observed in Hiroshima (1945) where some survivors were so overwhelmed by seeing the masses of burned victims begging for aid that they did not help any of them. The use of detention camps for the survivors of fires speaks to the same phenomenon. After a fire was deliberately set by the authorities in Honolulu (1899) to control the spread of plague, almost 4,000 Chinese, Japanese and Hawaiians - the groups which suffered most loss and whose neighbourhoods had become the most commercially valuable land - were housed in church grounds patrolled by armed civilians to prevent them from 'spreading germs throughout the city'.[719] In the wake of forest fires around Los Angeles in 1993, the *Los Angeles Times* (5th Nov 1993) called for a 'true paradigm shift in the way that Californians think about fire … fire prevention and crime prevention are becoming one and the same … Californians need to stop viewing brush fires solely as acts of God and start thinking of them as sometimes acts of criminal man … we are no longer fighting 'it'; we are fighting 'them''.[720]   In a deeply stratified society such as ancient Rome, and particularly one where slavery was the norm, the existence of 'other' is endemic and engenders a lack of accountability among the ruling class for the plight of the underclass.[721]   Writers inevitably reflect the preoccupations of their age.[722] The lack of interest shown by the written sources in the lives, and deaths, of the poor in Rome creates the silence surrounding the occurrence of everyday fires and the human suffering experienced in any fires.


This chapter has attempted to capture the manner in which fire shaped lives in Rome. Chapter 8 now looks at how fire shaped the physical fabric of the city.

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[717] Ursano *et al*. 2003, 260, 265.
[718] Woodham-Smith 1962, 381.
[719] Mohr  2005, 139.
[720] Quoted in Davis 1998, 130.
[721] Robinson 2007, 5.
[722] Bispham  2007, 47.

## Chapter 8    How fires shaped the city

## Introduction

Fire is a central fact of urban life and is a process which shapes the physical fabric of a city in efforts to prevent or contain its effects but, above all, it is part of a transformative process which destroys and regenerates individual structures and whole areas of cities. In ancient Rome, fire was one in a suite of interrelated urban ills that included floods and quakes but the threat and occurrence of fires differed from the other problems which beset the city in a number of ways: fire was by far the most dramatic manifestation of the wrath of the gods, it was sudden and terrifying, but there was also a sense that fire could be managed or tamed by legislation, technology, administration or by human behaviour. Ultimately, it is ideology - political, social and, in the case of Rome, religious - coupled with expediency which shapes the fabric of a city.  Fires acts as a catalyst and can be used as an opportunity for change as it is frequently the reaction to the fire, and not the fire itself, which changed the city.  This chapter concentrates on fires that gave scope to leaders to change the city or individual buildings in a way which proclaimed an ideology or political agenda and to shape the city in their own image. There are specific themes in such a process which occur within dynasties and between dynasties and which require a developmental, therefore chronological, approach in this chapter.

## Challenges

### *Determining the extent to which fire affected the fabric of the city*

While fire shaped the city of Rome more than other catastrophic events, it is very difficult to determine and trace the actual extent to which it did so. Archaeological evidence of the link between fire and building is almost non-existent.  The urban space was constantly changing for a variety of reasons, including individual building programmes, and self-promotion by leading citizens would have happened without fire. Inflationary competition between emperors meant that each wanted, and probably needed, to build bigger and better than his predecessor.[723] To disentangle redevelopment of areas of the city as a result of fire from other factors can only be speculative and even meaningless in many cases, but there are also spectacular examples where a fire provided both the responsibility and the opportunity for leaders to shape the city in their own likeness and to their own taste.  The obvious example is

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[723] Coulston and Dodge 2000, 1; Elsner 1994, 112 - 114.

the fire of AD 64 (**No. 59**) but there are others perhaps less examined and less documented such as the destruction of the Capitol in AD 69 (**No. 61**) and Domitian's reimagining of the city after AD 80 (**No. 62**).[724] While this chapter looks at the reconstruction of whole areas of the city after a fire, such as the Forum Romanum after 52 BC (**No. 27**) and the Campus Martius after AD 80, the restoration of individual buildings is woven into the narrative, not solely because their renewal is significant for architectural or ideological reasons but also because occasionally when one building burned its restoration created a new dynamic which led to the realignment and harmonisation of the surrounding area; examples include Caesar's re-orientation of the Curia when restoring the Forum, and Hadrian's changes to the Saepta Julia to harmonise with his rebuilding of the Pantheon. Rebuilding specific structures allowed rulers to make a statement. For example, each restoration of the temple of Jupiter Capitolinus resulted in a more ostentatious structure as the imperial building and restoration pattern became one of emulation, imitation and improvement.[725]

*Sources*

The availability, and reliability, of literary sources for the changing face of the city is another challenge. Some later periods of the republic are poorly served historically. Livy, upon whom we are almost entirely dependent for the early and mid-republic, does not exist as a source after Book 45 (*ie* 167 BC).[726] We are limited mainly to Obsequens covering *prodigia* from 249 to 12 BC, Valerius Maximus selectively concentrating on moral themes, and the *Periochae* of Livy. There may have been far more construction activity than has been recorded, due to fires or not, during that time.[727] On the other hand, the building programme of Augustus is amply attested, including by Augustus himself (*RG*), while there is a paucity of written records for the period of the height of prosperity and building in the 2nd century AD. Hadrian was a building emperor for 21 years but his work is scantily attested in the sources.[728] Sources are also selective in their record of which buildings burned; an example is Dio's (*Ep.* 66.24) list of what burned in the fire of AD 80. The record is frequently focussed

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[724]All fires continue to be referred to by their number, in bold and in brackets, as listed in the Chapter 2. However, those frequently mentioned, AD 64 and AD 80, occur without their number for the rest of this chapter.

[725] Elsner 1994, 114.

[726] Anderson 1997, 209. Crawford and Coarelli 1977, 3 analyse the extent to which we depend on Livy for information on the construction of buildings in the period from 218 - 167 BC. Of the list of building projects by censors from 199 to 169 BC there are at least 34 buildings repaired or constructed. From 169 to 86 BC we read of only nine.

[727] Crawford and Coarelli 1977 and Darwall-Smith 1996 argue that far more construction took place during this period than is recorded in the literary sources.

[728] Boatwright 1987, 6.

in favour of temples (**Fig. 11**); ironically the opposite occurs in relation to Nero when the sources largely ignore his rebuilding of sacred buildings (p. 243 below).

Numismatic evidence can be more helpful than patchy literary sources as dates of coins and dates of fires can be correlated. Coins provided a remarkably efficient method of propaganda all over the empire as a lasting record of buildings and the emperor responsible. Those issued by Nero after the fire depict some of his remarkable architectural feats and restorations such as the Macellum Magnum and temple of Vesta (**Fig. 42**). The restoration of the temple of Vesta shows the value of numismatic evidence: the literary sources do not record its restoration, in fact they do not associate Nero with building or restoration of sacred buildings at all and yet three of the six coin types surviving from the period post fire represent sacred edifices.[729] Our knowledge of the building projects of Hadrian and Severus is also greatly helped by coin evidence (p. 254 below; **Fig. 47**).

## Topography

One fundamental way in which fires shaped the city was by contributing to the rise in ground level. According to Frontinus the level of the hills of Rome had grown higher due to the débris of frequent fires (*Aq.* 1.18). It is difficult to believe that the topography of the city would have changed to such an extent due to fires alone; other factors contributed to the rise in ground level. The collapse of buildings (*ruina*) because of floods, shoddy building or tremors, sediment deposited by floods, and the detritus of millions of people living in a small area for hundreds of years meant a rise in ground level.[730] Burned and collapsed buildings were levelled and formed the foundation for a new building, thus continually adding to the rising ground in the sections of the city most plagued by fire and flood (**Fig. 10**).[731] Planned levelling and infill of areas like the central basin of the Forum Romanum which occurred from the 7th century BC also raised ground level.[732] Ammerman argues that the marshy centre of the Forum basin would have been filled to make it suitable for habitation in a reclamation project and would have been raised to an elevation of about 9 *masl* and topped with gravel paving. This was not a gradual process but a major public works project which took place over a couple of years. The uneven natural surface of the Forum basin is is buried in places to a depth of 4m or more below the travertine pavement of the imperial age and as

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[729] Elsner 1994, 120.
[730] Aldrete 2007, 40.
[731] Ramage 1983, 74; Aldrete 2007, 40; Coulston and Dodge 2000, 3.
[732] Ammerman 1990, 632, 641; he points out that the Public works by Tarquinius Priscus (Liv. 1.38.6; Dion. Hal. 3.67.5) aimed to drain the lower part of the basin and fits well with such a landfill project, 644.

many as eight successive layers or Roman era paving have been excavated. After the gravel paving, stone paving is found at 10.6 to 10.9 *masl* while Sullan and later Augustan repaving raised the level of the central Forum to 12.6 to 14 *masl* respectively. [733]

Archaeological evidence of change in level is apparent from the fires of 213 (**No. 7**) and 210 (**No. 9**) which struck the whole area between the Fora Boarium, Holitorum and Romanum. This evidence comes from the temples of Fortuna and Mater Matuta which were reconstructed at least twice and the foundations rose by 2.40 metres from 300 to 100 BC. After the massive devastation of AD 64, Nero arranged for some of the detritus to be removed to fill in the Ostian marshes but a great part of it remained in Rome and was used to fill in the lowest areas of the city. As a result, the level of the Sacra Via was raised by 2 metres at that time.[734]

**Reconstruction and Political Capital**

The narrative presented by the primary literary sources of rebuilding programmes which followed upon major conflagrations has to be treated with some caution as the complex tapestry of destruction and reconstruction is interwoven with ideological and political agenda both in its doing *and* in its telling. The reaction to any fire by ruling classes provides an insight into political background, the state of the treasury, the effect of military campaigns and, above all, how ideologies are given expression through building and reconstruction. The ideological agenda of one ruler frequently evolved from that of his predecessors, either in deliberate continuation of the programme of a dynasty, to compete with that programme, and/or to distance himself from a previous ruler; the Flavians are prime examples as they try to distance themselves from Nero. We cannot view imperial building activity in isolation.[735] Beginning with Augustus after 19 BC (Tac. *Ann*. 3.72), public art and architecture within the city was regarded as the prerogative of the emperor and was intimately bound to an ideological programme designed to promote the interests of both himself and his household.[736]

The drive to control fire, to make a city more fireproof is a political act and success may be perceived as the act of a great statesman. The reconstruction of monumental structures after the damage of time, flood, earthquake or fire in Rome was frequently perceived as a tangible

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[733] Aldrete 2007, 178; Ammerman 1990, 633.
[734] Ventriglia 1971, 92-3.
[735] Elsner 1994, 113.
[736] Miller 2013, 196.

expression of the ruler's concern for his people and reinforced the bond between ruler and ruled, particularly after a period of civil unrest as stability was restored to the state.[737] A fire presented a chance for political capital in two ways.  The first was through relief efforts and financial largesse to those who had lost property (Chapter 7, 221 - 224).  The second was self-advertisement. Architecture used for ideological ends is seen in the site chosen for a building, the choice of what to build there, the features of decoration, and even the orientation of the structure.[738] For example, the positioning of the Amphitheatre by the Flavians on the site of the proposed lake of the Domus Aurea was a deliberate move to return focus to the well-being of the people from the perceived selfishness of Nero, while the decoration in AD 307 (**No. 83**) of the temple of Venus and Rome with precious stones and marbles by Maxentius proclaimed his vision of the capital city and how he identified himself with the restored Roma.[739] In the republican period the manner in which individual generals who were accorded a triumph, because of military successes abroad, competed to erect buildings in their names shows how political capital was to be gained by construction.  How much more was to be gained when one powerful ruler could reorganise a section of the city to advertise his *pietas* to gods and his subjects, and how much more easily could this be done if a site were presented to him by a fire.

**Fires and the acquisition of land**

Powerful men, even emperors, could not simply build wherever they liked in Rome. The religious and ritual layout of the city constrained building activity; the *pomerium*, the space on either city of the city walls which the gods forbade men to inhabit or till (Liv. 1. 44.3 - 5), could not be built upon.  From earliest times the Forum, Regia, Comitium and Curia, and Capitoline, especially the temple of Jupiter Capitolinus with whose dedication the Republic was born,  were focal points of political and religious life (Strab. 5.3.7); they could not change no matter how frequently injured by fire. After the fire of AD 64, the will of the gods did not allow that the plan of their temples be altered (Tac. *Hist*. 4.53).[740] The conceptual boundaries between sacred and public can be seen in building programmes and reconstruction after fires especially where rulers ensured the swift rebuilding of important temples on the same site and along much the same design except, perhaps, on a grander scale.  Examples include the temples of Jupiter Capitolinus, of Vesta in the Forum and the Hut of Romulus on

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[737] Bankoff 2012, 15. Closs 2013, 124 analyses the relationship between the effects of fire and leadership.
[738] Darwall-Smith 1996, 18.
[739] Dyson 2010, 349.
[740] Robinson 1992, 16 discusses this point.

the Palatine. Archaeological and numismatic evidence show that the round shape and the location of the temple of Vesta remained unchanged over time in spite of fire damage (**Fig. 43**).[741] The ideological and psychological tie to the original 'hut' shape seems to have defied changes all around it. The Hut of Romulus (*casa Romuli*) on the Palatine, recorded as burning in 38 BC (**No. 33**), 12 BC (**No. 39**), and probably in either AD 64 and/or AD 80, also preserved its shape and primitive design into the 4th century AD when it is listed in the Regionary Catalogues.[742]

Fires such as those of 52 BC (**No. 27**), 31 BC (**No. 34**), AD 110 (**No. 67**), and conflagrations such as those of AD 64, AD 80, AD 191 (**No. 72**), may have presented rulers with cleared sites but ownership of the land was a thorny issue, and proved to be so for Nero's reputation (p. 239 below). The political sensitivity of the acquisition of land is evidenced by the attitudes of Julius Caesar and of Augustus. Caesar was among the first to think about Rome on a large scale in a planned manner as part of his overall policy as leader, but he needed land and he bought it at huge expense.[743] Through his agents Cicero and Oppius (*Att*. 4.16.8; *Att*. 13.20; 13.33), he bought up land to the north and east of the Forum as early as 54 BC for 60,000,000 sesterces. After the fire of 52 BC (**No. 27**), which destroyed part of the Forum including the Curia Hostilia, provided Caesar with the impetus for a massive overhaul he started the Forum Julium in 52/51 BC at a total cost of 100,000,000 for the purchase of the land (Suet. *Iul*. 26). Augustus, in turn, set about the politically expedient task of completing a lot of Caesar's work but he deliberately restricted the size of his own Forum for fear of being seen to dispossess those living nearby (*non ausus extorquere possessoribus proximas domos*) (Suet. *Aug*. 56.2).[744] Augustus also refused to take more than a small sum from each donor to rebuild his own house on the Palatine when it burned between 3 BC and AD 3 (**No. 42**) (Suet. *Aug*. 57; Dio 55.12.4). Augustus' attitude set the pattern not only for the Julio-Claudians, but for subsequent 'building' emperors such as Hadrian and Severus.

**Fire prevention: shaping a city**

The need to control and manage fire by legislation changed at different points in the history of Rome and, when enforced, affected the fabric of the city (Chapter 5, 170-174). Regulations on heights and the ambit of 'new-builds', bans on jettying, changed the streetscape. The fact

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[741] *LTUR* 5, 1993 - 2000, 125 -128.
[742] Richardson 1992, 74.
[743] Anderson 1997, 212; 1984, 40.
[744] Robinson 1992, 18.

that the same legislation is repeatedly introduced shows the difficulty of sustained enforcement after immediate reaction to a specific fire. Transformation of the streetscape must have been apparent in Nero's changes after AD 64, at least in the newly built areas of the city, with new internal courtyards in *insulae* and, especially, the required porticoes (**Figs. 28** and **29**). Those areas would have looked very different and also would have facilitated movement both of traffic and people more easily around the city. Nero's widening of the streets and measured lines must have been implemented at least in part as people complained about the heat of the sun (Tac. *Ann*. 15. 43).

Fires, and floods, also formed part of the periodic impetus for the change in building materials and the evolution of building technology (Chapter 5, 175 - 179). For example, the change from shingles to tiles on roofs, although probably not enforced throughout the city, and the choice of building material and design of the vast granaries were influenced by fire prevention. Tacitus (Ann. 15.43) makes the point that Nero's rules regarding building materials, such as the use of more fire-resistant *peperino* tufa stone, were welcomed for their utility and were also beneficial to the appearance of the new capital.[745] The appearance, even colour, of the city was greatly changed by the shift to widespread use of brick-faced concrete in the building programmes of Nero, the Flavians, Trajan and Hadrian.

**Architectural innovation**

Fire as a catalyst for architectural change, as well as building materials and technology, is familiar in urban history.[746] In more recent times, cities have undertaken reconstruction beyond the places ruined to reimagine the entire city as a more pleasant environment. For example, after the fire of 1755 in Lisbon an ambitious rebuilding project decisively changed the layout and function of the city centre.[747] The reconstruction of Chicago after the fire of 1871 helped birth a modernist architecture when the pre-fire mixture of architectural styles was replaced by a unified aesthetic ideal, the French Style Napoleon III.[748] In Chicago, making the city fireproof was such an important issue in the municipal elections that a political party, the 'Fire Proof Party', was formed and won a seat in almost every borough.

The fire of 390 BC (**No. 3**) highlights areas in Rome prone to fires in the centuries that followed: the Forum, the Comitium, the Temple of Vesta, and shops and homes in the

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[745] Tacitus (*Ann*. 15.43): *Ea ex utilitate accepta decorem quoque novae urbi attulere …*
[746] Bankoff 2012, 12.
[747] Molesky 2012, 147 - 149.
[748] Pyne, 2012, 71 and 93 on the architecture of Chicago. Lowe 2010, 101; Meisner Rosen 1986, 96.

vicinity of the centre (Liv. 5.42; Plut. *Cam.* 21) (**Fig. 10**).[749] Unsurprisingly, the closer to the congested and commercial centre the more frequent are destructive fires. Reconstruction of these areas demonstrates the opportunity to adopt new architectural forms. The fire of 210 BC (**No. 9**) opened the way for the erection of magnificent new buildings in the Forum once the Punic Wars were over.[750] Of particular importance in architectural innovation were basilicas. The Basilica Porcia (Liv. 39.44.7), Basilica Fulvia (Liv. 40.51.5), Basilica Sempronia (Liv. 44.16.11), and possibly the Basilica Aemilia, all belonged to the early 2$^{nd}$ century and were built in the spaces created by the fire of 178 BC (**No. 14**).[751] These projects were architecturally impressive and forward-thinking. Fires affecting the Forum such as in 52 BC (**No. 27**) and in 14 BC (**No. 38**) are central to the architectural history of Rome as rebuilding frequently resulted in structures changing in grandeur, plan and orientation (p. 238 - 239 below).[752] Those fires also brought about an increasing differentiation between residential and public spaces, leading to the later opportunity to create spaces such as the imperial *fora*. In Nero's Domus Aurea the concrete barrel vault appeared for the first time on a large scale, while Trajan's Baths, built on the remains of the Oppian wing of the Domus constructed with grandeur and careful planning to allow for the multiplicity of functions, became the model for subsequent baths.[753] The several fires which razed the Campus Martius provided opportunities to build new structures with updated architectural designs, some such as Domitian's *stadium* and *odeum* adapted from Greek models. (These innovations are discussed in more detail under the chronological headings below).

**Fire and rebuilding: the Republic**

The missed opportunity to rebuild along more ordered lines after the Sack of Rome (**No. 3**) and its subsequent fire, because of the apparent need to rebuild with haste, is a familiar theme in the sources (Cic. *Div*. 1.30; Liv.5.42; 5.48; Tac. *Ann*. 15.43; Plut. *Cam.* 32; Florus 1.3.17; Oros. 2.19.4-11; Diod. Sic. 14. 116.9.). Diodorus puts it succinctly: 'Since every man naturally built his home where it pleased him, the result was that the streets of the city were narrow and crooked; consequently, when the population increased in later days, it was impossible to straighten the streets.' This is a scenario familiar to most cities. The repetition

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[749] Serious fires are recorded in the Forum and the district immediately surrounding it in 241 BC (**No. 6**), 210 BC (**No. 9**) and 178 BC (**No. 14**) while the congested industrial and commercial quarter along the Tiber and the Forum Boarium were destroyed in 213 BC (**No. 7**) and 192 BC (**No. 13**).
[750] Canter 1932, 279.
[751] Torelli 2007, 97; *LTUR* 1993 - 2000, 2. 330. The poorly attested fire of 178 BC probably added more space for that building programme.
[752] Canter 1932, 280.
[753] Anderson 1997, 276.

of the story in the sources is remarkable. It shows that the Romans recognised that an urban fire presented the opportunity to modernise but felt the need to continue to excuse the narrow, confused streetscape of the city. The irregular reconstruction after the Sack with its overcrowded areas was dependent upon the nature of the terrain (Strab. 5.3.7) and the conditions of settlement rather than upon careless and hasty rebuilding.[754] In fact, the destruction was probably exaggerated because, apart from burn layers of an early 4th century date comprising broken roof tiles and carbonised wood under the *Comitium*, it is impossible to ascertain the actual extent of the devastation wrought by the Sack (Chapter 2, 32).[755] Lamenting the lost opportunity seems part of a view of Rome's place in the world and is a form of what Anderson calls 'retrograde projection'. Livy, one of the main sources for the republican period was writing within, and flattering, the Augustan world view.[756] Augustus' programme deliberately set out to maintain the traditional street patterns and the location of buildings had been sanctified by custom and time.[757]

From the middle republic until the burning of the Capitol by Sulla in 83 BC (**No. 21**), there is only scattered evidence of fires and, for those which are recorded as serious, the extent and location of damage is frequently unclear (**Nos. 9**, **11**, **13**, **14**, **16**, **17**, **18**, **19**). The extent to which fires shaped rebuilding in the same period can only be surmised. Our sources have remained silent about what must have burned in increasingly commercial and monumentalised areas such as the Forum Boarium in 213 BC (**No. 7**) and in 192 BC (**No. 13**) (Chapter 3, 130-133). Such fires may not have led to reconstruction which changed the commercial and monumentalised sectors but possibly led to a form of rationalisation. There is some evidence that the fire of 210 BC (**No. 9**) in the area of the Forum led to the consolidation of a number of marketplaces into one *Macellum*; Livy (26.27.2) lists the *forum piscatorium* as having burned but later (27.11.16) writes that the *Macellum* was restored after the same fire. The *Macellum* was the greatest food market of republican Rome which housed a number of specialised markets (Varro *Ling.* 5.145-47).[758]

With the rise to power of Sulla in 81 BC came one of the first recorded examples of a deliberate attempt to use fire as political rehabilitation by rebuilding and establishing a coherence which reflected the ideological and aesthetic interests of the ruler. Having defeated

[754] Canter 1932, 279.
[755] Anderson 1997, 208; Blake 1947, 123.
[756] Anderson 1997,208 and Robinson 1992, 14, argue this point. Also see discussion in Chapter 4, 142.
[757] Anderson 1997, 208; Favro 1996, 116.
[758] Anderson 1984, 22- 9; Rubin 2004, 30; Richardson 1992, 240; *LTUR* 3. 204-206.

Marius, Sulla had seized the Capitol with violence and fire in 83 BC (**No. 21**). The damage from the attack was not significant but such an impious act was psychologically and symbolically of great importance: it proved the destructive power of fire as an expression of civil disorder. The destruction provided Sulla, now dictator with money from the Mithridatic Wars and the ambition to place his stamp upon the city, with the opportunity not just to restore individual buildings but to plan a whole renewal of the Forum and Comitium.[759] Sulla needed the political and religious capital as he had used fire against his own city, especially against the sacred heart of the city on the Capitol. In the aftermath of the fire, he re-paved the central area of the Forum with *tufa* and defined the edges by blocks of *selce*, differentiating road and pavement for the first time in the city.[760] This was a landmark in urban development and must have been recognised as such because the image of Stata Mater was introduced in the Forum Romanum around the time of the death of Sulla to protect the Forum's new pavement from fire (Festus 416) (Chapter 5, 180).[761] The resultant raised level meant the restructuring of buildings and roads and, in doing this, Sulla also changed the orientation of a number of restored buildings.[762] He built a new Curia Hostilia to a slightly larger plan (Plin. *HN* 34.26) to house the increased number of senators. He rebuilt the temple of Jupiter Capitolinus which had burned in the assault on the Capitol, on a grander scale and in a manner which reflected changing tastes such as using columns imported from Athens (Plut. *Sull.* 27.6; Val. Max. 9.3.8; Tac. *Hist.* 3.72).[763] The ideological importance of rebuilding the urban sacred landscape after the horror of attack by its own citizens was firmly reinforced while the renewal of Rome, frequently after a major fire, as a statement of the self-image of 'great men' was begun.[764] Although Sulla's innovations were not as radical and grandiose in design as Caesar's or in execution as the programme of Augustus, the direct link between fire and urban redevelopment was visionary and strategic.

Julius Caesar used the fire of 52 BC (**No. 27**) to transform the political centre of the city. He repaved the northwest end of the Forum and may have converted the Curia Hostilia with its

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[759] Van Deman 1922; Robinson 1992, 16; Anderson 1997, 211; Darwall-Smith 1996, 20.
[760] Favro 1996, 56.
[761] Festus 416: *Statae Matris simulacrum in Foro colebatur; postquam id Cotta stravit, ne lapides igne corrumperentur … magna pars populi in suos quique vicos rettulerunt eius deae cultum* (An image of Stata Mater was worshipped in the Forum after Cotta paved it, so the pavement would not be damaged by fire .. and a large section of the populace transferred the goddess' cult to their own neighborhoods).
[762] Van Deman 1922, 1-31; *LTUR* 1. 331-332.
[763] See Richardson 1992, 223 for a discussion on the origin of the columns.
[764] Bendlin 2003, 473.

north-south axis (Plin. *HN* 7.212) into the temple of Felicitas (Dio 44.5.2).[765] He began to build an entirely new Curia adjacent to the Hostilia but probably on a different axis and orientation to facilitate its relationship with the new Forum Julium.[766] The area of the Comitium to the front of the Curia was reduced as the assemblies and voting traditionally held there were moved to the Saepta Julia and Campus Martius.[767] The entire reconfiguration was an ideological watershed which heralded a new political order.[768]   In a political speech of *c*.125 BC, Sempronius Gracchus had remarked that the Forum Romanum reflected the values of the *res publica* (Val. Max. 9.5. *ext*. 4); things had not changed. The *rostra* where speakers stood to address the people were also moved.  Now no longer subordinated to the Curia, they were placed on the central axis of the Forum Romanum.[769] The fire of 52 BC had been the work of civil unrest, particularly the destruction of the Curia; it was to be countered by order and elegance in a new Forum which was dominated, not by the new Curia, but by a temple to Venus Victrix, spelling out the Julian lineage and setting up one family as a prospective dynasty.[770]

**The Julio-Claudians: the interface of fire and self-representation**

With Augustus' accession to power a pattern of dynastic coherence in building and reconstruction began which mirrored a conscious establishment of family succession. It would be wrong to exaggerate the role of fire in the vast building and reconstruction undertaken by Augustus as it only acted as an occasional expedient for something which would have been done anyway.  Years of civil war, not recurring fires, had made the city dilapidated, and Augustus' concern was to restore the appearance, if not the reality, of normality after the destructive period of those civil wars.[771]  He was aware that the city was architecturally unworthy of her position as capital of the Roman Empire, besides being vulnerable to fire and floods (Suet. *Aug.* 28).

Augustus did have fires to deal with in the context of his overall building programme: 13 fires are recorded from 41 BC to AD 6 (**Nos.  31** to **43**), a disproportionately large number

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[765] Richardson 1992,102 - 103 points out that this reference to the temple of Felicitas is a mystery as no trace has been found. Only Dio (44.5.2) refers to it and also says that the senate wished to erase the name of Sulla from the Curia; Richardson says this is improbable.

[766] Anderson 1984, 43- 45, 50 -51; Richardson 1992, 102-103; *LTUR* 1993 - 2000, 1. 332- 4.

[767] Anderson 1984, 35.

[768] *LTUR* 1993 - 2000, 1. 332- 4.

[769] Stambaugh 1988, 43.

[770] Rubin 2004, 53.

[771] Favro 2005, 237; Closs 2013, 38.

which more likely indicates the level of literary sources rather than the frequency of fires (**Fig. 8**). The fire-wall he erected between the Subura and his Forum shows his awareness of fire risk (Chapter 5, 176; **Fig. 31**).  It is in his restoration of individual burned buildings that we see Augustus using the opportunity afforded by fire to reinforce an ideological message and to integrate his own image into the physical landscape. In 14 BC fire (**No. 38**) destroyed several important buildings in the Forum (Dio 54.24.2).[772] This fire led to another repaving of the Forum which seems to be the level we now see.[773]  Although Augustus sponsored rebuilding the Basilica Aemilia, it retained the name of the republican family that had originally dedicated it in 179 BC, while the decoration was changed to suit the developing Augustan propaganda agenda with Roman myth-history as the new theme.  The damage caused to the Circus Maximus in the fire of 31 BC (**No. 34**) provided the occasion for major reconstruction and enlargement (Dio 1.10.3). In a change already planned by Caesar (Plin. *HN* 36. 102), Augustus increased its capacity to 150,000 while porticoes with shops on the ground floor and apartments above were built on the outside (Diony. Hal. *Ant. Rom.* 3.68. 1-4). Traditionally statues of the gods were taken from temples and displayed at the games in the Circus and, in his restoration, Augustus added a *pulvinar* from which the imperial family would look at the games in the midst of the statues of the gods (*RG* 19). He was thus not only caring for his subjects by restoring entertainment to them after the fire but also making a direct link between himself and the gods.[774] He took advantage of the rebuilding of the temple of Castor after the fire of 14 BC (**No. 38**) to imperialise the traditional cult of military success by associating the twins, Castor and Pollux, with the imperial heirs-apparent Gaius and Lucius Caesar (Aug. *RG* 4.20).[775] He rebuilt the temple of the Nymphs in the Campus Martius which had been deliberately burned by Clodius in 58 or 57 BC (**No. 23**) in a signal that the city had defeated civic treachery. This restoration is particularly important as sources indicate that the Nymphs were associated with protecting the city from fire (*Fasti Fratrum Arvalium* 36 - 21 BC; Verg. *Aen.*  9. 77).  In 29 BC, Augustus completed the rebuild of the Curia Julia (*RG* 19.1) begun by Caesar, evoking the actions of the Clodian mob who burned it in 52 BC (**No. 27**) (Cic. *Fin*. 5.2, *Mil*. 90; Dio 49.49.2-3), and indicating through one building that a new political order had been established and civic unrest was in the past.[776]

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[772] Included were the Basilica Aemilia, the Temple of Vesta and the Temple of Castor (Dio 54.24.2.).
[773] *LTUR* 1993 -2000, 2. 313-342; Claridge 2010, 88.
[774] Closs 2013, 38; Zanker 1990.
[775] Richardson 1992, 75;  *LTUR* 1993 - 2000, 1. 242- 244; Dyson 2010, 122.
[776] Closs 2013, 42.

Tiberius' contribution to building in Rome was largely that of continuity of the work of Augustus and expressions of *pietas* toward his own family.[777] His restoration of the theatre of Pompey,  damaged by fire in AD 21 (**No. 45**) (Vell. Pat. 2.130.1; Tac. *Ann*. 3.72), attracted the admiration of Paterculus because of its perceived magnanimity and on-going healing of the past.[778]  This was not lost on his successors as the theatre of Pompey was later completed by Caligula and dedicated by Claudius. While Claudius had Pompey's name restored to the theatre (Tac. *Ann*. 3.72), he added his own name and that of Tiberius to the rebuilt *scaena frons* (Dio 60.6.8).  Thus, healing of the past also had an eye to dynastic political capital.

## AD 64: The Fire of Nero and the transformation of Rome

The fire of AD 64 and subsequent rebuilding display two fundamental issues with regard to the way fires can shape a city.  Firstly it was a spectacular example of a building programme associated with self-advertisement and, secondly, both fire and rebuilding provided a stage for subsequent emperors and dynasties to proclaim their own political ideologies. This fire had the greatest impact on the fabric of the city and its effect on the topography, architecture, appearance, and politics of Rome can be traced from Nero through the Flavians to the Antonines.

To understand the effect of the fire and, more pertinently, the effect of rebuilding after the fire it is important to understand Nero's attitude to architecture and building prior to AD 64. Nero already owned a substantial amount of land in the city as he had inherited a number of imperial residences such as the Domus Tiberiana, the Domus Germanici on the Palatine and probably a house on the Sacra Via from his father Cn. Domitius Ahenobarbus, while a number of estates on the Esquiline (Horti Lamiani, Lolliani, Maecenatis) had also come into the possession of the imperial house by this stage.  He began to build the Domus Transitoria based on the idea of consolidating all these imperial properties extending from the Palatine to the Esquiline (Tac. *Ann*. 15.39).[779]  But, despite the number of estates he owned, the Domus Transitoria was constrained in space by the tradition set by Augustus of avoiding confiscation

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[777] Elsner 1994, 114. See Thornton 1989, 46-51 for a discussion of Tiberius' reluctance to build.

[778] Velleius Paterculus (2.130.1): 'With what a magnificent control of personal feeling he restored the works of Gnaeus Pompey which had been destroyed by fire'. (*Quam magnifico animi temperamento Cn. quoque Pompei munera absumpta igni restituit*)

[779] Blake 1959, 33.

or compulsory purchase.[780] His interest in building heralded an innovative phase in the history of Roman art and architecture.[781] He focussed particularly on the provision of amusement and entertainment of his people; his works pre-64 included new Baths in the Campus Martius (Mart. 7.34.4), a gymnasium next to the Baths which was struck by lightning and burned in AD 62 (**No. 57**) (Tac. *Ann.* 15.22), and a temporary wooden amphitheatre of AD 57 also in the Campus Martius.[782] However, sources do not provide a laudatory list of these buildings; the most notable, but not specific, praise for his work comes from Aurelius Victor (5.2) who says that Nero was so effective for five years in his building that Trajan maintained that he stood out from all other emperors.[783]

The full extent of the fire is not known (Chapter 3, 133-136) but much of what Nero had previously built did burn (Tac. *Ann.* 15.41). His rebuilding programme was basically twofold: firstly, the transformation of the city in a new concept of urban design incorporating sensible new fire prevention regulations (Chapter 5, 168) and, secondly, reserving for himself a vast site for the creation of the Domus Aurea. As literary sources concentrate on the excesses of the Domus Aurea we are largely reliant upon numismatic evidence for Nero's restoration of temples and utilitarian buildings.[784] Recognising the importance of rebuilding ideologically symbolic structures quickly, Nero chose religious shrines and public amenities as his first priority before moving on to his urbanisation scheme, as evidenced by the coins of AD 64 (**Fig. 42**) showing the temple of Vesta and the Macellum Augusti both restored in the immediate aftermath of the fire.[785] These restorations are not mentioned in the literary sources.

In Nero's programme there is a deliberate and comprehensive plan to transform the city. He had much of the débris of the fire cleared and removed by departing corn ships (Tac. *Ann.*15.43). The cleared sites of *insulae* were returned to their owners who were incentivised to rebuild quickly. He announced bonuses for the completion of housing before a given date (Tac. *Ann.* 15.43.3; Gaius *Inst.* 1.33; Ulpian 3.1), although this incentive may have been aimed more at those likely to build *domus* than *insulae*.[786] We cannot be certain how many

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[780] See Robinson 1992, 19, for the attitudes of the different Julio-Claudians to compulsory purchase.
[781] Elsner 1994, 119.
[782] Jacobs and Conlin 2014, 88.
[783] Aurelius Victor (5.2): *Qui cum longe adolescens dominatum parem annis vitrico gessisset, quinquennium tamen tantus fuit, augenda urbe maxime, uti merito Traianus saepius testaretur procul differre cunctos principes Neronis quinquennio.*
[784] Elsner 1994, 119.
[785] Closs 2013, n.278.
[786] Robinson 1992, 26.

were left homeless by the fire (Chapter 3, 135) but any re-housing programme would have to be fast. The parts of the city which did not burn were also affected as they became more cramped and crowded with people having to squeeze into smaller spaces because of lack of housing and the new laws controlling heights and widening of streets (Chapter 5, 172).[787] But it is not possible to gauge with any accuracy the changes in the city post-64. For practical and economic reasons much residential and commercial areas, especially those which were not affected, would have remained the same or been hastily rebuilt along the same lines.

## Domus Aurea

Estimates of the size of the site of the Domus Aurea vary but there is general agreement that a conservative figure is 125 and may be up to 200 acres.[788] Pliny's criticism that the Domus 'encircled'(*cingi*) the city cannot be relied upon as the focus of his comment is excess and degeneracy (*HN* 36.111). Much of the area planned for the Domus Aurea was already in imperial possession, such as the parts of the Palatine and Esquiline Hills used by the Domus Transitoria, but the site apparently extended to part of the platform of the temple of Divi Claudi on the Caelian (Mart. 2. 7-9).[789] It is not certain whether Nero moved wealthy homeowners from the Palatine, nor is it clear to what extent his plans evicted owners and tenants from their homes and businesses elsewhere; we are at the mercy of biased sources.[790] Records indicate that, in fact, some of those élite houses on the Palatine were still in private possession in later years (Plin. *HN* 17.5; Tac. *Ann.* 15.69; Suet. *Ner.* 37.1; Dio 62.27.1). The valley of the Colosseum, where the lake was planned, was probably at least partially a commercial area as *horrea* burned there (Suet. *Ner.* 38.1).[791] Martial (2. 8) wrote that houses of the poor were sacrificed to Nero's park in the area, covered in his day by Titus' Baths.[792] On the Oppian Hill next to the extant portions of the Domus the remains of modest republican private houses have been found.[793]  If the plans for the Domus covered heavily residential and commercial areas then some Romans, rich and poor, could see the palace

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[787] Packer 1967, 82 is of the view that only parts of the city were rebuilt and that others maintained the fire-prone squalor that had always characterised them. See Griffin 1984, 130 and Newbold 1974, 860 for discussion.
[788] Newbold 1974, 866 believes the former figure to be too low. Griffin 1984, 139 accepts a figure of 200 acres, the same as Hadrian's villa at Tivoli. *LTUR* 1993 - 2000, 2. 49 does not state actual figures but says the Palatine, Velia, Oppian and Caelian hills were included at least in part.
[789] Elsner 1994, 122; Richardson 1992, 119.
[790] Blake 1959, Newbold 1974 and Bergmann 2007 believe that Nero acquired land from élite owners or took land and evicted people but see Griffin 1984, 132- 133 for a discussion of the uncertainty.
[791] Remains may be those found under the nave of the Church of S. Clemente not far to the east of the Colosseum.
[792] Martial (2. 8): *abstulerat miseris tecta superbus ager* (an arrogant tract of land had robbed the poor of their homes).
[793] Griffin 1984, 133.

complex being built where they had lived or worked.[794] But we do not know and the issue is further complicated by the fact that wider streets also meant redefining property limits.[795] The Julio-Claudian tradition begun by Augustus of not acquiring land by compulsory purchase would have constrained Nero; perhaps he bought at fire-sale prices and added new land to what he already had but the central problem remains that what is identified as the Domus Aurea today cannot be correlated with literary evidence and its extent is unclear.[796]

The Domus was a domain more like traditional *horti* with an elaborate private villa on the grounds.[797] Making full use of the site afforded by the fire and of advances in building materials and techniques that had taken place in the previous half century, Nero blended architectural adventures with technological feats defeating the challenges of topography. This undertaking can claim to be a turning point in the history of Roman architecture and in its conception of *rus-in-urbe*, a new departure in the use of woods, pasture and lakes.[798] As a reimagined urban space it was arguably the greatest single attempt to change the city in the aftermath of a fire.[799] The Domus was in keeping with the Julio-Claudian tradition of private spaces becoming more and more lavish but it seems to have been the concept of *rus-in-urbe* which went too far against the laws of nature for Roman good taste and tipped the balance toward hostility (Tac. *Ann.* 15.42).[800] Although rumours of arson, later legitimised by Suetonius and Dio, may have been already current in Nero's reign (Plin. *HN* 17.7.1; Tac. *Ann.* 15. 67.2), the accusations that he set fire to the city are likely to have originated in his plans for the Domus and the speed and ingenuity with which he saw the results of the fire as an opportunity for self-aggrandisement and making Rome a platform for his own image.[801] In fact, the sources looked with some favour on the building regulations Nero initiated (Tac. *Ann.* 15.43; Dio 62.17) and compare them to the haphazard rebuilding after the Sack of 390 BC. However, the epigram telling Romans to move to Veii, that is if the house did not overtake Veii too, recalls with irony the discussion whether to move to Veii after the Sack (Suet. *Ner.* 39.2) and suggests that Nero's rebuilding would actually cause emigration.

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[794] Newbold 1974, 866; Griffin 1984, 130.
[795] Newbold 1974, 863.
[796] Warden 1981, 272.
[797] Champlin 2003, 208 argues that the definition of the Domus has led to misunderstandings.
[798] Ward-Perkins 1981, 59.
[799] Closs 2013, 146.
[800] Elsner 1994, 121.
[801] Robinson 1992, 19; Griffin 1984, 132 explores the hostility against Nero comprehensively.

The Domus Aurea was most likely designed to be a place of inclusion rather than exclusion for the urban population. If the city, and especially the Domus, were to frame the self-image of Nero then he would wish his creation to be seen and enjoyed by his people while he could be private in his huge imperial buildings.[802] The gardens were planned to be accessible to the public as the inclusion of restored temples and shrines which had burned (Plin. *HN* 36. 162) dictated it could not to be a private precinct.[803] He also widened and straightened the Sacra Via to lead to his front door. In fact, city traffic would have been a serious problem if the Domus were completely cut off as it stood on an arterial route. Nero also liked to mingle with his people.  Shortly before the fire he held a public banquet in the gardens of Tigellinus (Tac. *Ann*. 15.37) and he felt that if he could address the people directly at the end of his life that he would be saved (Suet. *Ner*. 57.1). The plebs were loyal to the end and beyond, and both Otho and Vitellius thought it prudent to evoke the memory of Nero when appealing to their loyalty (Tac. *Hist.* 1.78; Plut. *Oth.* 3; Suet. *Oth.* 7.10; Dio 64.8; 65.7; Suet. *Vit*. 11). A year after Nero's death, Otho took his name and designated 50,000,000 sesterces towards the completion of the Domus Aurea (Suet. *Otho* 7.1).

Nero's innovations formed the basis of the subsequent building programmes of the Flavians and early Antonines as successive emperors sought to dismantle his work; by covering the major areas of the Domus with buildings for public use to display their apparent concern for the people in contrast to Nero's perceived selfishness, they distanced themselves from the more monarchical perception of the Principate given visible expression by the Domus (Mart. 2; Nep. *Att.* 13).[804]

### The Flavians: building a dynasty on the ruins of Rome

The use of building for ideological ends is obvious in the Flavian re-shaping of the city after the fire of AD 64, the destruction of the civil wars of AD 69 (**No. 61**) (Tac. *Hist* .3.71, 82-3), and the subsequent fire of AD 80. When Vespasian emerged victorious from the turbulence of AD 69, he was faced with a similar scenario to that which had faced Augustus – a city wrecked by civil wars and a people who needed to be calmed and reassured.[805]  Unlike

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[802] Closs 2013, 147. Champlin 2003, 208 makes this point and says that privacy was not an issue.
[803] Griffin 1984, 140 is also of this view. See also Robinson 1992, 20, Darwall-Smith 1996, 38 and Blake 1959, 43.
[804] Rubin 2004, 131.
[805] Rubin 2004, 143.

Augustus, however, he wanted to distance himself politically from his predecessor, Nero, as he tackled the remaining devastation of the fire of AD 64.[806]

Vespasian was presented with a serendipitous *carte blanche* in that he could demolish Nero's work as a positive political statement yet avail of the sites designated by Nero to make his own, and his sons', political, ideological and architectural mark on history. He did not have to acquire any additional land as Nero - and the fire of 64 - had done that for him.  He began by clearing and repairing the streets and temples which were in disrepair (Suet. *Vesp*. 8; *CIL* VI 931).[807]  Like Nero, he first attended to symbolic structures: it was an absolute priority to rebuild the temple of Jupiter Capitolinus which had been burned when the Vitellians stormed the Capitol in AD 69 (Tac. *Hist*. 3.71; Suet. *Vit*. 15.3); Rome could not hope to prosper with its main temple in ruins.[808] Its reconstruction also delivered a subtle rebuttal of any perception that the Flavians themselves had caused the fire in the fighting.[809]  As the site was prepared for rebuilding, Vespasian accompanied the first of the rubble which was taken ceremoniously to the Campus Martius to be dumped (Suetonius *Vesp*. 8.5; Dio 65.10.2) in a clear signal that a benevolent reign was to replace the destructive tyranny of his immediate predecessor, Vitellius, and the self-obsession of Nero.[810]

The site of the Domus Aurea provided Vespasian with a spectacular opportunity.  In a calculated act of piety he completed the Templum Divi Claudii on the Caelian, a temple which Nero had demolished after the fire of 64 for the Domus Aurea. Vespasian was now by-passing Nero and associating himself with Claudius, a Julio-Claudian under whom he had had a successful career.[811]  To commemorate the capture of Jerusalem in AD 71, and using the booty from that campaign, he built the great temple (or Forum) of Peace at the southeast of the Forum Augusti across the Argiletum on the site of the Macellum which apparently burned in AD 64.[812] This precinct, regarded by Pliny (*HN* 36. 102-3) as one of the most beautiful in Rome, gave Vespasian the opportunity to present the same message as Augustus' Ara Pacis: peace was restored.  Not to miss an opportunity, he displayed many famous Greek

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[806] Elsner 1994, 123.

[807] Suetonius (*Vesp*. 8): *deformes veteribus incendiis atque ruinis.*

[808] Blake 1959, 88; Closs 2013, 124.

[809] While Pliny (*HN* 34.38) and Suetonius (*Vit*. 15.3) blame the Vitellians for the fire, Tacitus (*Hist*. 3.71) says it may have been Flavians.

[810] Darwall-Smith 1996, 43.

[811] Rubin 2004, 145. Darwall-Smith 1996, 53 deals in some detail with the links between Vespasian and Claudius

[812] Richardson 1992, 240; Darwall-Smith 1996, 55. Blake 1959, 89 believed that the Macellum had burned in the fire of 12 BC and that an unknown Augustan temple occupied the site before AD 64.

works of art there that had been used by Nero to decorate the Domus Aurea (Plin. *HN* 12.94; 34.84; 35.102-103), providing a direct message that works of art from Nero's private collection were now the property of the people.[813]   The temple of Peace was another element in the gradual cohesion of the independent sites that made up the Imperial Fora. This project of monumental urbanisation which spanned over 150 years was of sufficient importance that it passed from one emperor to the next until brought to completion.[814]   The fires of 52 BC (**No. 27**), AD 64 (**No. 59**), AD 80 (**No. 62**) and possibly AD 104 (**No. 66**) contributed to the development of the unified fora.

The biggest project begun by Vespasian in AD 70 was the development of the Flavian Amphitheatre (Colosseum) and its surrounding entertainment complex on the site of the lake of the Domus Aurea.  The destruction of this section of the Domus was a deliberate move to return focus to the well-being of the people; by providing utilitarian buildings, Vespasian appeared to eschew Nero and return to the Augustan model.[815]   The vast site, provided by the fire of AD 64, meant that the entire complex would remain as a reminder of the largesse of the Flavians. The transformation of part of the Domus Aurea into the anti-Neronian valley of the Colosseum was complete, and could claim to have been entirely remodelled for public use (Mart. 2.7-8), when  another catastrophic fire broke out in AD 80.[816]

**Domitian and the fire of AD 80**

This fire obliterated much of the restoration work completed by Vespasian and Titus, including that on the Capitol after the damage of AD 69, but it also threatened to destroy the image which the previous Flavian leaders had worked hard to project.[817]

Alone of the sources, Dio (66.24.1-3) presents a list of what was burned and subsequently restored by Domitian, while adding that a lot more burned: in the Campus Martius the temples of Serapis and Isis, the Saepta, the temple of Neptune, the Baths of Agrippa, the Pantheon, the Diribitorium, the theatre of Balbus, the stage building of Pompey's theatre, the Octavian buildings together with their books, all burned and were restored; the temple of Jupiter Capitolinus also burned once more.  Dio's list is selective and only prestigious buildings are mentioned.  When Titus died the following year, it was Domitian's

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[813] Darwall-Smith 1996, 65.
[814] Anderson 1997, 218.
[815] Darwall-Smith 1996, 74.
[816] Rubin 2004, 146.
[817] Closs 2013, 201.

responsibility - and opportunity - to reconstruct a city now marked by three fires: AD 64, 69 and 80.  A list of what he built or rebuilt is given by the Chronographer of 354 (p. 146).[818]

The majority of Domitian's efforts focused on the areas of the Campus Martius badly damaged in fire of AD 80 where he undertook costly repairs and new constructions (Suet. *Tit.* 8.3; *Dom.* 12; Dio 66.24.2).[819] It is mainly in the Campus that the opportunity for reimagining the city both in the introduction of new architectural forms and in the coherence of function and location arose.[820] The fire of AD 80 permanently changed Rome as it impelled Domitian to reconfigure the Campus and to enhance the activities and rituals that took place there.[821] His reconstruction radically reshaped the urban fabric of the city to reflect his personal interests, religious and family loyalties, self-image and imperial vision.[822] In Domitian's programme we see a clear example of the futility of trying to separate what was rebuilt because it burned and what was built anew.  This was a comprehensive vision where rebuilding was part of a much greater remodelling plan.  Although some of the reconstruction was not completed until Trajan's reign, the alteration in the city's appearance was so striking that Martial (5.7) refers to a new city.[823]

Domitian's concentration on building and rebuilding structures of entertainment and ritual in the Campus Martius resulted in the area increasingly attracting large crowds and becoming an integral part of the urban identity. It also provides one of the best examples of the introduction of innovative architecture in the wake of fire. Domitian built a Greek-style *stadium*, Rome's first, and only, permanent structure dedicated to athletic competition and an adjoining *odeum*, a rather élite cultural space with strong Greek associations.[824] These

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[818] Chronographer of 345 p. 146: *Atria vii, horrea piperataria ubi modo est basilica Constantiniana  et horrea Vespasiani, templum Castrorum et Minervae, portam Capenam, gentem Flaviam, Divorum, Iseum et Serapeum, Minervam Chalcidicam, Odium [sic], Minuciam veterem, stadium, et thermas Titianas et Traianas, amphitheatrum usque ad clypea, templum Vespasiani et Titi, Capitolium, senatum, ludos iiii, Palatium, metam sudantem et Panteum* [sic]. 'Seven palaces, the pepper warehouses where now is the Constantinian Basilica and Vespasian grain warehouses, the temple of Castor and Minerva, the Capena gate, the temple of the Flavians gens, the temple of the gods, the temple of Isis and Serapis, the temple of Minerva of Chalcis, the Odeum, the 'Minuciam veterem', the stadium, the baths of Titus and Trajan, the amphitheatre up to the roof, the temple of Vespasian and Titus, the Capitol, the senate, four schools, and the Meta Sudans and Meta Panteus (?).'
[819] Jacobs and Conlin 2014, 148 - 152.
[820] Sablayrolles 1996, 428.
[821] Jacobs and Conlin 2014, 148.
[822] Closs 2013, 237, Darwall-Smith 1996, 250-251 and Rubin 2004, 146.
[823] Darwall Smith 1996, 101 -252 presents a detailed discussion of Domitian's works.
[824] Jacobs and Conlin 2014, 89, 150.  *LTUR* 1993 - 2000, 4. 341 - 343; 3. 359 - 60.

structures in the central area of the Campus reflected his personal interest in Greek literature, culture and sport, and are testament to his attempts to promote Greek festivals.[825]

Of all emperors, Domitian's religious affiliations are most apparent in his rebuilding of Rome's sacred areas.[826] His fascination with Ptolemaic Egyptian religion is reflected in his elaborate reconstruction and decoration, which included Egyptian obelisks, of the complex of the Serapeum (temples of Isis and Serapis) in the eastern section of the Campus.[827]  His veneration of Minerva (Suet. *Dom*. 15.3) led him to build new temples to her, including the temples of Minerva Chalcidica in the eastern Campus adjacent to the Saepta Julia.[828] Another set of structures associated with Domitian's rebuilding programme after the fire which were closely tied to the personal and dynastic interests of the Flavians was the Divorum precinct containing two temples, Divus Vespasianus and Divus Titus (*FUR* fr. 46). Constructed east of the Saepta Julia in the Campus Martius, framed with colonnades and entered by a triple arch, it seems to have replaced the Villa Publica, an area traditionally used for marshalling armies for triumph and over which the fire of AD 80 had swept.[829] In doing so, he institutionalised the cult of the imperial family.  The deification of emperors had precedent but Domitian raised the cult to a greater extent than any predecessor.[830]

With these works in the Campus it can be seen how the fire of AD 80 was the catalyst for the emergence of a coherent pattern of building distribution: religious precincts were added to the eastern side of the central zone, new leisure and entertainment facilities constructed to the west.

Like Vespasian and Titus before him, Domitian prioritised the restoration of the temple of Jupiter Capitolinus. His restoration was swift (it was dedicated in AD 82) and magnificent (**Fig. 44**). Its doors were covered with plates of gold while gilded bronze shingles on the roof made it practically fire-proof as 'it shone as a magnificent and wonderful spectacle' (Zos. 5.38.5; Procopius *Vand*. 3.5.4).[831]  Domitian identified himself with Jupiter, and he declared

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[825] Jacobs and Conlin 2014, 152.
[826] Closs 2013, 237.
[827] Jacobs and Conlin 2014, 149 -50; Richardson 1992, 211.
[828] See Richardson 1992, 256 for a discussion of the possibility that this temple was *tholos* shaped.
[829] Richardson, 430 -1; Jacobs and Conlin 2014, 150.
[830] Darwall-Smith 1996, 154.
[831] Procopius (*Vand*. 3.5.4) was referring to the year AD 457 so the longevity of the roof is attested. 'He (Gizeric) plundered also the temple of Jupiter Capitolinus, and tore off half of the roof. Now this roof was of bronze of the finest quality, and since gold was laid over it was exceedingly thick; it shone as a magnificent and wonderful spectacle.'

this for all to see in his reshaping of the city after the fires.[832] He built the temple to Jupiter Custos probably on the Capitoline as a personal thanksgiving for his escape from the fire of AD 69 and he first held the Capitoline Games in AD 86 in honour of Jupiter in his newly built *stadium*.[833]

A consistent message running through the rebuilding programmes of the Flavians was that they were returning to the people what had been removed by Nero, but Domitian also availed of the opportunity to create on the eastern and southern section of the Palatine a palace for himself which fitted his new imperial vision (Mart. 7.56).[834] The southern slopes of the Palatine may have been affected by the fire of 80 (Stat. *Silv*.1.1.31-6) while traces of Neronian work have been found under part of the complex, the Domus Flavia, which was probably built on part of the platform and substructures of the Domus Aurea.[835] The palace engendered contemporary criticism for inaccessibility and extravagance (Plin. *Pan.* 48 - 49; Mart. 12. 15; Statius *Silv*. 4. 2; Plutarch *Pub.*15) but attracted nothing like the opprobrium that haunted the memory of Nero.

The conundrum of the *arae incendiorum arcendorum* remains and it is difficult to place them in Domitian's religious programme (Chapter 3, 135-136). It seems likely that, ultimately, they were a statement that Nero was an emperor of destruction and Domitian of order and stability.[836]

**The Antonines:  a dynasty rises from the ashes**

The image of the phoenix became prominent in the iconography of Nerva, Trajan and Hadrian as seen, for example, in the Hadrianic accession coins of AD 117-118 (**Fig. 45**). Rome was still rising from the ashes of the fires of 64 and 80.[837]

Of the Antonine emperors Trajan and Hadrian left the greatest mark on the physical fabric of the city, each undertaking a number of significant building projects, and each with the funds from successful campaigning.[838] On the accession of Trajan, the devastation of AD 64 had not yet been entirely remedied, to say nothing of AD 80.[839] Domitian may have already

[832] Martial 9.91; 9.39; 5.1; 6.10 and 83; 7.99.
[833] Darwall-Smith 1996, 223.
[834] For a detailed description see Coarelli 2007, 145-157 and Claridge 2010, 145-156.
[835] Darwall-Smith, 1996, 179; Richardson 1992, 114-117.
[836] Closs 2013, 202; see Closs 2016 for a detailed analysis of the *arae*.
[837] Closs 2013, 202.
[838] Rubin 2004, 162. The conquest of Dacia, Parthia, Armenia and Mesopotamia.
[839] Blake 1973, 10.

started what would become the Baths of Trajan by filling in the remains of the Oppian wing of the Domus Aurea (Chronographer of 354 p. 146).[840] It is this wing which burned in AD 104 (**No. 66**) traces of which can now be seen in the foundations of the Baths.[841]  In yet another statement responding to the work of Nero, this time by Trajan, the entrance to the Baths faced the Flavian Amphitheatre linking them in a gesture of accessibility. Thus the burning of the last remnants of the Domus Aurea in AD 104 gave Trajan the opportunity to build the first great baths of the city in the continuing tradition of returning the land of the Domus to the people. He also repaired the Circus Maximus which burned possibly in *c*.AD 100 (**No. 63**).  Literary and epigraphic evidence (Suet. *Dom*. 5.1; 5.7; 20; *CIL* 6.955) point to significant changes by the time it was reopened in AD 103.  Pliny praises the new structure (*Pan*. 51.2.5) and Pausanius (5.12.6) attributes a new Circus Maximus to Trajan because it was so altered.  Archaeological evidence that Trajan added two *stadia* to the length of the seats has been found (**Fig. 46**).[842]

However, it was the fires of AD 110 (**No. 67**) and another undated in Hadrian's reign (**No. 68**) which effected yet more changes in the heart of the city, and those were undertaken by Hadrian. Both fires were extensive but this period of great construction, and reconstruction, is poorly served by literary evidence (p. 226 above).  The Pantheon burned in AD 110 (**No. 67**) but it is very likely that more burned in the fire because Hadrian restored a number of other adjacent buildings in the Campus Martius at that same time, including the Saepta Julia, the Basilica of Neptune, and the Baths of Agrippa (*SHA Hadr*.19. 10). The second, undated, fire (**No. 68**) in the Forum Holitorium probably burned the temples of Spes, Janus and Juno Sospita and, in the Forum Boarium, the temples of Mater Matuta and Fortuna. Evidence comes from the inscription record of their restoration by Hadrian (*CIL* VI. 979).  These were huge rebuilding programmes which involved a change to the monumental heart of the city.[843] Hadrian's new buildings in Rome were his Mausoleum in Trastevere and the Temple of Venus and Rome, which replaced the Vestibulum of the Domus Aurea (*SHA Hadr*. 19.12; Plin. *HN* 34.45). Excavations have shown traces of Neronian construction.[844]

While Hadrian's overall programme suffers from lack of literary evidence, his rebuilding of the Pantheon after the fire of AD 110 (**No. 67**) presents the most remarkable evidence of his

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[840] Anderson 1997, 275.
[841] Blake 1973, 29; Darwall-Smith 1996, 241.
[842] Richardson 1992, 85.  *LTUR* 1993-2000, 1. 272-275.
[843] Boatwright 1987, 24.
[844] Boatwright  1987, 119.

skill, interests and character. It is a 'restoration' which is key to understanding his extensive building programme as a whole and gives us the clearest sight of an emperor's conception of the principate.[845] Hadrian embraced the principle established by Augustus that the improvement and embellishment of the city was the responsibility of the *princeps*.[846] On the site of Agrippa's Pantheon, Hadrian raised a new building which still stands today.  From every element of the structure can be extrapolated Hadrian's participation in the transformation of Rome: audacious innovation of architecture and engineering, practical use of building materials, such as extensive use of brick-faced concrete, meant that it was both as fireproof as one can get and also could withstand the floods of the Campus Martius better than travertine or tufa (Vitr. *De arch.* 2.6.1; Plin. *HN* 35.166).[847] The marbles and granite used for columns and flooring came from all over the Mediterranean and gave a message of power and consolidated empire.[848] In a significant break with tradition, demonstrating both Hadrian's personal character and political ideology, in a show of respect for his predecessors (*SHA Hadr.* 19.10), and firmly establishing his direct connection with Augustus through Agrippa, he did not put his name on the new structure but rather that of Agrippa, the original builder (*CIL* VI 896).

The Pantheon is also key to understanding how Hadrian changed the central and western Campus Martius as it is a prime example of how the burning and restoration of an individual structure could reshape an area of the city as adjacent structures were reconstructed to align with it.  In this case, the vast complex of the Saepta was redesigned to harmonise with the Pantheon not only physically but also thematically; both had been built by Agrippa and had close connections with the Julian *gens*.[849]

The matter of whether the restoration and the design of the Pantheon was started by Trajan is debated and other evidence is still being brought to bear on the discussion.  For example, Hetland has used the dating of brickstamps found *in situ* to argue that an earlier date should at least be considered.[850] The difficulty with using brickstamps is that the bricks could have been manufactured during the massive building programme planned by Trajan and used at a

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[845] Boatwright 1987,  42.
[846] Boatwright 1987, 19.
[847] See Boatwright 1987, 43 - 49 for a complete description of Hadrian's Pantheon.
[848] Dyson 2010, 195.
[849] Boatwright 1987, 49 - 51.
[850] Hetland 2007, 111.

later date. Further research is needed to identify the respective roles of Trajan and Hadrian in the re-construction of the Pantheon.

**The Severans: fires and the last major building programme**

Two fires in the reign of Commodus, one in AD 188 or 189 (**No. 71**) on the Capitoline which affected the temple of Jupiter, an unknown library and 'and nearby buildings' (Oros.7.16.3), and another in AD 191 or 192 (**No. 72**) which raged for several days, devastated structures in different parts of the city. The temple of Peace, the temple of Sacra Urbs and the Horrea Piperataria, the temple of Vesta and extensive portions of the Atrium Vestae seem to have been affected before fire moved on to the temple of Apollo on the Palatine (Dio 73.24). It is likely that these fires provided the initial impetus for the subsequent high profile and intensive urban development of the Severan age.[851] Coins issued during Severus' time spent in Rome honour him as *restitutor urbis* (**Fig. 47**) and indicate his intention to create an impression of continuity between himself and Augustus.[852] Drawing parallels between his actions and other emperors, particularly Augustus, who had established peace and order after civil wars, one of his first projects was the restoration of the temple of Peace. Recent excavations have demonstrated the lavish use of expensive and exotic material, including columns of red Aswan granite, red porphyry and coloured marble *opus sectile*, in the rebuild while the scale of whole reconstruction is indicated by the size of the Marble Plan which covered an entire wall inside the temple. The map of the whole city was displayed and must have seemed a marvel to the citizens showing, as it intended, a city renewed by Severus.[853] He rebuilt the burned Atrium and temple of Vesta and the Palatine palace which he extended to the southwest.   He linked himself to Augustus directly in his restoration of, for example, the Porticus Octaviae which had been built by Augustus and dedicated in his sister's name; it was restored by Severus and his elder son in AD 203 following fire damage (**No. 71**?) and possibly renamed Porticus Severi (*CIL* VI 1034; *SHA Sev*. 21.12).[854] He restored the Pantheon putting his own inscription below the original proclaiming that he and his elder son had restored it *vetustate corruptum cum omni cultu* (*CIL* VI 896) despite the fact that their intervention was on a minor scale.

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[851] Wilson 2007, 290.
[852] Cooley 2007, 393.
[853] Dyson 2010, 203; Wilson 2007, 292.
[854] Cooley 2007, 393; Jacobs and Conlin 2014, 162.

**Fires of the 3<sup>rd</sup> century and late antiquity**

Our understanding of the 3<sup>rd</sup> century is far less clear than previous centuries, not just because of lack of records, but because Rome was no longer the centre of the empire and had waned in political significance. The period between the assassination of Alexander Severus in AD 235 and the accession of Diocletian in AD 284 was an era of unprecedented crisis for the Roman empire; economic problems, competition for the principate, and threat of invasions meant little time, money or manpower to spend on new building projects.[855] No emperor resided in Rome for any length of time until Diocletian (AD 284 - 305).[856] The fire of AD 283 (**No. 82**) destroyed the northern section of the Forum Romanum, apparently including the Curia, Forum Caesaris, Basilica Iulia, and Grecostadium (Chronographer of 354 p. 121). It is likely that the temples of Concord and of Saturn, among other structures, also burned. This was a devastating fire but there is a lack of literary evidence and uncertainty about what burned. In his reconstruction, Diocletian could establish normalisation of life in Rome after internecine war while projecting his own *pietas* and 'healing' image in bricks and mortar.[857] He reworked the Forum imposing a symmetry in keeping with the aesthetic of his time. He built new *rostra* with a line of columns on the eastern side to balance those on the west already there since Augustus. He added a new line of seven larger columns along the south side; the Forum effectively became a ring of columns within a ring of buildings (**Fig. 48**).[858]

The last major fire recorded which transformed a section of the city was that of AD 307 (**No. 83**) when the Temple of Venus and Rome burned. The fire may have been more extensive and included the Horrea Piperataria and other 1<sup>st</sup> century structures. Maxentius rebuilt the temple (Chronographer of 354 p. 148; Aur. Vict. *Caes*. 40.26) as one of the most splendid and most admired in Rome (Amm. Marc. 16.10.14). Constructed in brick-faced concrete, it was faced with white marble with a roof of gilded bronze tiles.[859] Like Hadrian before him who had originally built the temple, Maxentius recognised the propaganda value of monumental construction. Taking the opportunity of the fire of AD 307 to articulate his vision for his capital city and to identify himself with the restored Roma, he remodelled the temple from its very foundations with no expense spared on its decoration with precious

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[855] Miller 2013, 203.
[856] Rubin 2004, 196.
[857] Robinson 1992, 22; Rubin 2004, 203.
[858] Richardson 1992, 173; Rubin 2004, 204.
[859] Richardson 1992, 410; *LTUR* 5. 121-123.

stones and marbles.[860]  Sharing an aesthetic relationship with the temple was the enormous Basilica Maxentius built on the site of the burned Horrea Piperataria.[861] A third structure, the so-called temple of Romulus, was built adjacent to the Basilica and completed an architectural harmony of the three constructions.[862]  Combined, they created a new Maxentian focus at the entrance to the Forum facilitated, in part, by fire.

## Economic impact of reconstruction

The costs involved in clearing, repairing or reconstructing buildings after an urban fire are great, and huge in the aftermath of a major conflagration. In Rome, the entire economy of the city and its hinterland, would be affected as the state coffers were stretched and may not even have been able to cover the costs without recourse to levies throughout the empire.  The personal wealth of an emperor as well as the capital accumulation of private individuals could be wiped out.[863]  Owners of businesses like private baths or warehouses could be made paupers overnight (Herod.7.12.5-6).[864] Towards the bottom of the economic hierarchy, local shops and trades people lost their places of business, stored goods and possessions. Where commercial sections of the city were affected by fire, which frequently happened (**Fig. 10**), the flow of people and traffic was disrupted because of damage to the physical infrastructure. Added to the effect of major fires, the clearing and rebuilding programmes after individual or local fires, either of a temple or a small section of the city, must have been a constant drain on the finances of Rome.

Comparative data from more recent urban fires illustrates the instant financial impact of a catastrophic fire. After the fire of Chicago (1871) one businessman wrote that 'on Saturday our note would have been good for $100,000 and on Tuesday we could not buy four stoves and the fixtures on credit'.[865]  It is estimated that in purely economic terms, the kingdom of Portugal may have lost upward of 32% to 48 % of its GDP in the 1755 Lisbon disaster, much of it due to the fire. In more recent studies it is now acknowledged that the immediate economic impact of disasters is destruction of or damage to the enormous accumulated investment in the built physical environment and that the cost of replacing the infrastructure

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[860] Dyson 2010, 349; Krautheimer 1980, 7.
[861] Rubin 2004, 208.
[862] See Coarelli, 90 for the debate surrounding the identification of this building.
[863] Titus declared himself ruined by the fire of AD 80 (Suet. *Tit*. 8.4), although he may not have meant purely financially.
[864] The Regionary Catalogues list 856 baths in the city and 290 warehouses.
[865] Lowe 1979, 59 quoting the businessman William Bross.

is about equal to GNP.[866] Although the economy of Rome cannot be likened to a modern economy and, with the mass of people living at or near subsistence level, was unlike the sophisticated capitalist systems of today, it is still possible to appreciate the sudden loss of capital which occurred in Rome after a fire, earthquake or flood.[867]

## Cost to state treasury

The health of the treasury, largely dependent on monies acquired from foreign campaigns, played a significant role in the speed, extent, and grandeur of reconstruction of the city after a fire.[868] For example, Sulla had money from the Mithridatic Wars; the Flavians had a fortune from the Jewish War; Trajan and Hadrian had funds from successful campaigns in Dacia, Parthia, Armenia and Mesopotamia.[869] The economic impact and strain on the treasury can be estimated from the aftermath of the fire of AD 64 and applied to fires in general.[870] The homeless and dispossessed needed to be fed and rehoused, and rubble and dead bodies removed. But, above all, Nero was faced with the cost of reconstruction and it was clearly too much for his treasury. According to Suetonius (*Ner.* 17; 38) and Dio (62.17) he nearly bankrupted the provinces and exhausted the resources of individuals. Reliable or not, their comments draw attention to the need to raise taxes, especially in the provinces (Tac. *Ann.* 15. 45) where some of the great financial burden of rebuilding Rome was felt. This burden is indicated by additional measures Nero took: he encouraged speedy building by private individuals with financial incentives, possibly tax exemption or debt cancellation (Tac. *Ann.* 15.43.3; Gai. *Inst.* 1.33; Ulpian 3.1). He suspended the dole (*frumentationes* ) so that all grain had to be bought although at a capped price (Tac. *Ann.* 15.39.43; Dio 62.18.5). He also debased the currency possibly as another mechanism way of raising funds. The reduction in pure metal content in the gold and silver coins which started in late AD 64, the *aureus* by 4% and of the silver *denarius* by 10%, suggests a connection with the fire (Plin. *HN* 33.132). [871]

## Fire as financial opportunity

But fire also presents opportunity. In an ecological pattern of destruction and regeneration, fire could rid a city of older slums, and present the need and occasion to renew and build

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[866] See Jones and Chang 1995, 313 for an analysis of this aspect of the impact of modern urban disasters.
[867] Mattingly 2010, 286; Garnsey and Saller 2014, 71.
[868] Miller 2013, 199.
[869] Vespasian paid for temple of Peace with the spoils of the Jewish War (Dio 65.15.1; Joseph. *B J* 7.7.158-9).
[870] Ramage 1983, 78; Newbold 1974 provides a comprehensive analysis of the social and economic consequences of the fire.
[871] Griffin 1984, 123 -125 has a full discussion of the different hypotheses in relation to Nero's changes to the coinage and possible connection to the fire. She makes it plain that it is not at all clear-cut.

better.[872] Rebuilding is interwoven with the economy in terms of investment and employment. While it is beyond the scope of this study to examine the interface of the economy and the construction industry in Rome in any detail, some important issues can be highlighted. Throughout history, urban calamities have afforded opportunities to make money and the use of fire as a catalyst to reshape the urban landscape in a manner more conducive for capital accumulation is a familiar phenomenon.[873] The controlled burning of Cleveland in the 1970s to restore profitability in the city's real estate market has already been described (Chapter 5, 158-159).[874] Distressed and burned out old buildings were torn down and valuable high-rise built in New York in the mid-19th to early 20th centuries, beyond the means of the previous tenants.[875] There is some evidence of deliberate fire-setting to make a profit in Rome, but on a much smaller scale. Debtors deliberately started fires (Dio 55.8.); Tonglianus (Mart. 3.52) and Persicus (Juv. 3.220 - 2) burned their own property to sell the site at a profit. Crassus bought burning houses and paid little more than the value of the land (Plut. *Crass.* 2.4). His actions show how property owners were willing to sell at fire-sale prices rather than rebuild without state compensation.[876] What can be recognised here is a form, however immature, of capitalism.[877]

**Building boom**

While the maintenance and building of the city was a continuous process, construction would peak in the years after major fires and that meant employment and economic growth.[878] Periodic large-scale public building projects, and not just those in response to fires, in early and high imperial Rome, meant the constant presence in the city of a construction workforce, skilled, semi-skilled and unskilled.[879] Intensive building programmes would benefit the élite financially, and through their patronage, it also advantaged freed slaves who had gone into the construction industry. But it also benefitted the ordinary free-born builder working with a few slaves, and the casual unskilled labourer. Modern scholars conclude that the bulk of unskilled work on major building projects was provided by poor free inhabitants of the city hired daily as casual labourers.[880] Because of the sporadic and seasonal availability of

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[872] Thornton 1989, 97.
[873] Pyne 2001, 334.
[874] Kerr 2012, 332.
[875] Rozario 2007, 82. See Newbold 1974, 859 for a comparison with Rome after AD 64.
[876] Newbold 1974, 861.
[877] Mattingly 2014, 286; Rubin 2004, 39.
[878] Delaine 2000, 119; Graham 2013, 286.
[879] Anderson 1997, 88-95; DeLaine 2001, 326; Broekaert and Zuiderhoek 2013, 325.
[880] Anderson 1997, 117- 8, 119-27; Broekaert and Zuiderhoek 2013, 328; DeLaine 1997, 201; 2000, 135.

employment (Front. *Aq.* 96), workers had to be flexible and mobilised quickly and efficiently. This flexibility would prove of great advantage after a fire. Unskilled poor, those with most to lose in a fire (Chapter 7), could get a job when muscle was needed. In the last two centuries BC the development of building materials like concrete and fired-brick answered the demand for the city to regenerate because of population growth. Such developments meant a more efficient response after a fire and increased modular construction methods (Chapter 5, 179) from the 1st century BC already meant more unskilled could be employed and their lives improved.[881] Diocletian's Edict of Prices (7.1) in AD 301 sets out the daily wages of different categories of skilled construction workers and for general unskilled labour; the unskilled worker earned a maximum of 25 *denarii* per day, half the earnings of the skilled worker.[882] A major building project, after a fire or not, meant steady work and income for a period of time.

DeLaine' work shows the scale and significance of the construction industry in Rome and the social and economic impact of a construction or reconstruction programme.[883] Using a detailed study of the construction of the Baths of Caracalla and the price of materials and labour set out in Diocletian's Edict, she estimates that the average minimum workforce over the main four years of construction of the Baths was 7,200 men in the production of materials and construction, and 1,800 men and pairs of oxen for transport around Rome itself.[884] At the peak of construction in AD 213 that annual figure rose to 13,100 and 3,200 respectively, and over the lifetime of the project some 16,000 different people worked on it supported by a further 9,000 to 16,000 tradesmen.[885] DeLaine also extrapolates from figures based on the building industry of Severan Rome and concludes that in the last two centuries BC and the first two centuries AD, when public building was flourishing, as much as 4 to 6 % of the total population of Rome and 15% of adult males could have been employed in the building industry.[886] This figure implies a Severan construction *corps* of 25,000 to 30,000 and suggests the continuous presence of very large construction industry which could respond as required. It also highlights how many jobs could be provided in the aftermath of a crisis like

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[881] Brunt 1980, 93; Anderson 1997, 121; DeLaine 2001, 230.
[882] http://www.hs-augsburg.de/~harsch/Chronologia/Lspost04/Diocletianus/dio_ep_i.html ; DeLaine 2001, 232.
[883] DeLaine 1995, 1997, 2000 and 2001. See Rubin 2004, 266 and Mattingly 2010, 285 for a discussion of DeLaine's calculations.
[884] DeLaine 1995, 1997, 2000, 2001.
[885] Graham 2013, 287.
[886] DeLaine bases this figure on the population of Rome being 1,000,000. See Delaine 1997, 2000, 136 and 2001, 231.

an extensive fire and how the standard of living of the casual labourer would improve at that time.

## Production of Building materials

As construction peaked in the years after major fires (*eg* AD 64, 80, 189) not only was employment provided on sites but the providers of building materials and other ancillary industries must have also experienced a spike in production and profits. Vast quantities of wood were needed, not alone for an integral part of a structure, but also for shuttering and scaffolding (Chapter 4 and 5).[887] The quarrying of local tufa and the production of lime, all found near Rome, would be highly profitable. DeLaine has estimated that the Baths of Caracalla required an additional workforce of about 1000 for the production of tufa, pozzolana, brick and lime.[888] The trade in exotic and expensive stones which had to be extracted from distant quarries and transported to Rome would have increased during rebuilding programmes. Decorative crafts such as making mosaics and frescoes would profit.[889] Added to that was the employment of those who transported material to the city and within it to building sites (Juv. 3. 254-59).[890]

## Brick

Above all, it is the brick industry which gives us the clearest idea of the scale of construction activity in Rome.[891] When swift, robust rebuilding was required after a fire, the efficiency of brick-faced concrete construction was paramount. The intense demand generated by Nero's regulations and rebuilding programme after AD 64 meant a growth in brick production which continued with the building programmes of the Flavians and Trajan, reaching its high point under Hadrian.[892] To a certain extent, brick stamps can be used to chart fluctuations and spurts of activity in the construction industry but with caution because not all bricks were stamped and the use of stamps was concentrated in certain periods. For instance, 25% of the known brick stamps from the massive building programme of the early second century are

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[887] Graham 2013, 290.
[888] DeLaine 2000, 134 - 135.
[889] Graham 2013, 286.
[890] DeLaine 2000, 134. See Courtney 1980 and Braund 1996 for a discussion of the 'reliability' of Juvenal as a source of information of such activities in Rome. See also Chapter 6, 206.
[891] See Graham 2013, 292 - 295 for detailed discussion of the brick industry.
[892] Anderson 1997, 160.

Trajanic in date, while the very active Severan period would be under-recorded in the brick-stamp inventory.[893]

The brick industry can also give an indication of the city's ability to cope after a major event such as a fire. Bricks were always in production and it is likely that the industry could deal with extreme demands.[894] Clay was readily accessible in the Tiber valley and production was largely unskilled work. The role of the state in both ownership and management of the industry may also have been key to the swift mobilisation of production as brickyards came increasingly under the control of the imperial house during the early 2nd century.[895] The sudden widespread use of consular dating of bricks produced in Rome under Hadrian in AD 123 - the names of the consuls Paetinus and Apronianus were included in every brick stamp used that year - indicate official policy and tie in with Hadrian's streamlining of the organisation of workers in building trades along paramilitary lines (Aur. Vict. 14.5).[896]

**Socio-economic impact**

Hadrian's building programmes and interventions in Rome had a clear socioeconomic pattern, and it improved life for the unskilled masses of the city.[897] In fact, as the construction industry moved out of the control of private builders and into the hands of the imperial house, it can be argued that it had an important impact on society's general welfare.[898] We cannot be sure, but it is likely that Hadrian, and perhaps Augustus before him, used his building programme as a means of distributing largesse. In Athens, Pericles had proposed his great building programme precisely so that the people should have a share in the state's revenue, provided that they work (Plut. *Per*. 12.5).[899] Whether deliberate policy or not, employment in construction during all great building projects in Rome, including in the aftermath of a major fire, meant that no idle and disgruntled workers could unsettle social equilibrium; but, above all, it was a way of providing a living for the urban poor and improving the lot of tens of thousands of freemen in Rome.

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[893] Anderson 1997, 156 - 158; Dyson 2010, 255.
[894] Graham 2013, 295.
[895] Anderson 1997, 161; Dyson 2010, 256.
[896] Boatwright 1987, 20, 43; Anderson 1997, 160.
[897] Boatwright 1987, 22.
[898] Thornton 1989, 103.
[899] Boatwright 1987, 20.

**Chapter 9      Discussion**

*[Ignis] … inmensa, inproba rerum naturae portio et in qua dubium sit, plura absumat an pariat … succurrit mirari nihil paene non igni perfici* (Plin. *NH* 36.58).

'Fire is a vast, unruly element, and one which causes us to doubt whether it is more a destructive or a creative force … [but] there is almost nothing that is not brought to a finished state by means of fire.'

**Introduction**

This thesis has undertaken two main complementary lines of research: firstly, it has looked afresh at the evidence for urban fires in Rome as presented by the written sources and, secondly, based on that re-evaluated evidence and using modern research in fire science and social studies, it has reimagined the city as a fire régime.  The typology of a fire régime has proven a very useful structure as it provides a theoretical framework against which to address the same evidence available hitherto, but to ask different questions of that evidence using a multi-disciplinary and inter-disciplinary approach.  The fires of Rome have been used as a conduit through which to examine the history, architecture, politics, economy, religion, social and psychological well-being of ancient Rome.

Every city functions as a particular type of fire régime where a nexus occurs of environmental conditions, including climate, topography, and natural resources, with the political system that organises and sustains concentrated settlement.[900] It is a human characteristic to manipulate fire, to use it for survival while actively trying to control and avoid it. It is in the built environment where this activity mainly resides and, from individual dwellings to large urban settlements, that environment is designed with fire in mind. [901] Rome was an ancient city unlike any other in scale; it contained a density of population in crammed structures teeming with open fire and flame. The city could not survive without ubiquitous naked flame and fuel was stored everywhere amidst the close-packed buildings. Difficulty of access to multi-storey buildings to douse fire was compounded by the fact that it was a city of slopes where fire rushed upwards. Rome was also typical of a fire régime in the degree of control the Romans strove to have over fire in terms of architecture, technology, legislation; the manner in which fire control was woven into military and political stuctures

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[900] Bankoff 2012, 8.
[901] Pyne 2001, 24; 102.

of the city in the form of the urban cohorts of the *Vigiles* makes the typology fit Rome more than any other ancient city.

**Reading fire**

*The sources*

In almost all of the documented 88 fires from the period (460 BC - AD 410) written sources have provided us with what we know of specific fires in Rome. As first principle, the interrogation of the sources must begin with the language itself if we are to fully understand how fires are represented and interpreted by the Romans; to do otherwise is to court the danger of perpetuating assumptions. By looking at the vocabulary used by each source from different time periods for every fire, what has and what has *not* been recorded has been investigated precisely, and the translation and interpretation of that information has been challenged in a number of cases.  Close reading of the sources has highlighted the fact that translation is in itself an act of interpretation and that it has to be accepted that we will never know if some buildings were damaged by fire or burned down completely.  Each instance where the author's choice of a compound verb may, or may not, help in our understanding of the scale of the fire has been identified. It has also been established that the vocabulary of fire, in both Latin and Greek, is limited and that, without the help of phrases such as 'burned to the ground' and lists of structures burned, it is not possible to be in any way certain of the damage done. Scrutiny of the language has also identified a vocabulary of destruction which shows clearly that events which have been accepted as fires by some scholars may not have been fires at all. For instance, verbs of destruction such as *dissolvere* and *dissipare,* rather than verbs of burning, fit precisely with what fire science tells us: a lightning strike may demolish a structure without a fire, or a building may collapse due to weakening of the structure rather than actual consumption by fire.  Recent technical studies on the effect of fire on wood, stone and masonry have been used to help understand any nuances in the language, especially regarding the destruction of monumental structures in Rome; these studies have also highlighted the fact that the Romans knew with great accuracy the effect of fire on the building materials they used.

Systematic close reading of the texts has highlighted a number of other interrelated factors; the cause of fires, the extent and location, the frequency of fires in certain locations, are all collated under each fire in Chapter 2 and analysed further in Chapter 3 in a broad statistical analysis. Such an analysis has never been done before.  The context of each fire, the context

of the record, and the focus of the record have been identified where possible. This has shown the importance of constantly re-evaluating, not just our sources, but our expectations of those sources. It has been found that the sources must be appreciated on their own terms and their use of language is indispensable in establishing those terms.

## *Reliability of sources*

When looking at the language and the focus of the record, we get an insight into the writers themselves.  They are not neutral observers; they do not purport to be and to expect objectivity and impartiality is not only to expect too much but also to miss much. Copyists add another layer of selection. The extent to which the selective nature of records has coloured our perception of fires in Rome has not been fully explored in modern scholarship, and consequently it is arguable that the actual impact of fires on the city has not been entirely examined or understood.

Identifying agenda or purpose is important in understanding what we do know and what we do *not* know. There may be no underlying truth to be found in the source; in fact, what we identify as bias is likely the truth for our sources.[902] The extent of many of the 88 fires and what they burned will never be known; in the sources, rarely is a fire just that - a fire.  It was a manifestation of the intervention of the gods, the destruction of a highly symbolic structure, a symptom of unrest, a result of negligence.  How little is really known, even in the case of fires where the sources give substantial information on burned structures, has been demonstrated under each fire and also represented graphically in the case studies.  In reimagining the fires of 213 BC and 13 BC in Chapter 3 we are faced with wondering how 'reliable' Livy was. And, in spite of all written by Tacitus, Suetonius and Dio about AD 64, it is still not clear which regions burned and to what extent the city suffered. Our lengthy sources do not give us details; they had other reasons for recording the fire.

## *Modern scholars*

While scrutiny of the language attempts to clarify what has - and has not - been said by the sources, it also draws attention to what has been understood, accepted and, in some cases, assumed, by modern commentators.  Accepted interpretations of the reported incidents of fire need to be re-examined and, in some cases, revised.  Modern commentaries have been reviewed under each fire in the List of Fires (Chapter 2), thus mapping the scholarly evolution in the search for a deeper understanding of the fires and of the 'reliability' of the

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[902] Bispham 2007, 47.

source. Scholars have struggled with what fits the criterion of 'a fire' and there are many variations in what they choose to include. Such differences between commentators are inevitable, given that the primary evidence itself is sometimes hopelessly confusing, but the fact that the sources are frequently not all that interested in the fire in the first place has not always been fully appreciated. The recent work of Sablayrolles is of great importance in understanding, for instance, that clusters of fires are really clusters of records and that sources exaggerate or under-report for complex reasons. However, differences persist in modern scholarly commentary and those differences have been identified where they occur under each fire. In any area of research, a periodic review of interpretations is necessary; this has now been done and, together with the comprehensive gathering of all relevant information under each documented fire, can form the basis of further research on the topic of fire.

**Living fire**

The number of fires found in the sources over the time span (460 BC - AD 410) is a misleading record of the problem of fire and fires in Rome. The records are unevenly distributed and many of them incidental; important public, especially sacred, buildings are mentioned time and again; the reasons for the record are many and complex. This thesis has sought to fill in the gaps between the fires, to see fires as a lived experience in the city, and to question how flammable Rome actually was by examining, not only how fires were perceived and interpreted by the Romans, but to what extent our own view of fires, and how to deal with them, has coloured our interpretation of fires in Rome.[903] The approach has been to shift away from previous concentration on primary sources and to use a comparative strategy to find information which may have been missed in earlier studies because of the lack of written records. The causes of fire, efforts to prevent and retard fire, have all been examined in detail (Chapters 4, 5 and 5) through the additional lens of fire science. The ecology of fire, the management of fire and the social impact of fire, all derive from the behaviour of fire in an urban setting.[904] Consultation with fire experts and comparison with other urban fires has made it possible to reimagine the behaviour of fire in Rome and recreate the experience of fire for the inhabitants of the city.

Rome was a 'flammable city', but so are all cities to a greater or lesser degree, and even nowadays, when we think that fire has been tamed, a lapse in vigilance or enforcement of regulations can have catastrophic results. Assumptions have been made about the nature of

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[903] Aldrete 2007, 6.
[904] Pyne 2012, 107.

Rome's flammability. For example, the traditional view of the *insulae* as tinderboxes is too simplistic and the probability of *insulae* being constructed of a combination of materials must be considered. Recent technological studies show that any assumptions about the flammability of wooden structures, and the role of timber in fires involving monumental structures in Rome, must be re-evaluated. It is possible that in the event of a fire, the integrity and stability of monumental structures were enhanced rather than weakened by the use of large beams, and that stone and concrete elements of a building were at least as vulnerable to fire as wood.

Evidence has shown that the Romans were acutely conscious of the causes and preventability of fires; they knew how to retard fire in terms of building materials, construction, legislation and civic responsibility; but their technology was limited. Until the 1690s when van der Hayden developed a manner of syphoning water from the network of canals in Amsterdam (a uniformly flat city), invented a transportable fire 'engine' with a flexible hose, and devised the hydraulic ability to train that water on a blazing building to a significant height, the Romans were unsurpassed. Water was not accessible to the *Vigiles* except in bucket chains - ineffectual once a fire took hold - and it is wrong to assume that water was readily available for dousing fires. In fact, our understanding of the *Vigiles*, the aspect of fire in Rome most studied hitherto, has been coloured by the modern view of a traditional 'fire brigade' and this thesis has challenged assumptions about their role among the other urban cohorts as well as their method of combatting fires.

Modern research has also been used to challenge the silence of our sources and to glimpse the human experience of fire in Rome in terms of loss, grief, and trauma. The legitimacy of using modern findings to elucidate the feelings of the ancient world will always be contentious, but comparisons across time can be done, with caution, and modern understandings can be applied to explore the impact of disasters, either on a personal or community level. This approach is validated by descriptions in the ancient sources of human behaviour in catastrophes (*eg* Sen. *QNat*. 6.29. 1-3) which are remarkable in how they chime with modern findings on the social and psychological impact of disasters.

**The ecology of fire**

Fires were not isolated incidents but part of a continuum. Pyne has argued that the built landscape is as much a fire environment as forests and fields, and, that modern cities remain

fire-driven ecosystems.[905] Ancient Rome was such an eco-system.  The ecological pattern of fire is cyclical: it destroys and regenerates.[906] New buildings and districts rose out of the ashes of the old and reconstruction was then, as now, a political act imbued with ideological meaning. Fires were used to shape the streetscape, and by leaders to build in their own image and likeness. Chapter 8 has attempted to define the extent to which fires shaped the city, but has pointed out that separating such events from building programmes is not always possible or profitable.  There are spectacular examples where fire shaped the city, such as in the wake of AD 64, where the impact reverberated down the decades from one emperor and one dynasty to the next.   Not only were fires destructive and constructive forces in politics and architectural and technological innovation, but they also significantly affected the economy of Rome.[907] Although it is beyond the scope of the study to look in detail at the economy and the construction industry, Chapter 9 has shown how a major fire had a positive impact on the socio-economic life of the city.

**Further Study**

There are many directions in which this research could be continued.  For example, the rich possibilities of the concept of fire in ancient philosophy and religion have only been touched upon.  All over the world fire is regarded as precious; it is among the treasures that the gods hoard.[908] The dichotomy between a benevolent, life-giving force and one of destruction and terror has not been developed; nor has the place of Vulcan and Vesta in Roman life and psyche; fire as the family hearth, purified and eternal as embodied by Vesta and the manner in which fire is central to the human notion of a home await further study.[909] The prevalence of leitmotifs of fire in poetry, fire as integral to tropes of law and order, and to the origin of Rome are also beyond the scope of this study.[910]  The ever-present notion of fire as a symptom of disorder, anarchy and threat to the state could be extended much further.

It is hoped that the information collated and discussed here could be used as a basis for distant reading. While this thesis has used close reading, the subject matter makes it an ideal project for Digital Humanities (DH) and data mining, as a way of further engaging with the topic and interrogating the material in a different way.   DH could profitably be used as

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[905] Pyne 2001, 102.
[906] Pyne 2001, 114.
[907] Bankoff 2012,  4.
[908] Pyne 2012, 102.
[909] Bankoff 2012, 10; Pyne 2001, 86.
[910] Virgil and Lucan are particularly rich sources for such a study. See Closs 2013.

another model of chasing patterns in reading fire and plotting the location of fires. It would be a very useful tool to plot frequency of certain verbs and nouns, and to see the relationship between words. Like close reading, it can show something not previously seen and can overturn something that we thought was already interpreted, but its visualisation makes something immediately graspable; it strengthens one's peripheral vision. Given the availability of written sources it would be a robust process in a different framework and a new way of conceptualising the past.[911]

The use of Geographic Information System (GIS) is of particular relevance to this study; fire is a dynamic, not static, force which lends itself to digital modelling once all the variable factors have been established. It would be useful to look at the behaviour of fire, to construct a pattern of a 'virtual fire' and to examine the physical effects of fire using, for example, the case studies of 213 BC, 31BC and AD 64; this methodology would be a very informative way of examining the reportage of the sources.

**Conclusion**

The ability to tame the open flame forms part of the notion of civilisation and the modernity of a city.[912] The perpetual presence of fire makes life easier but it also makes it riskier.[913] The Romans went to great lengths to tackle those risks but it is probable that a certain level of flammability was regarded as inevitable. Social and political factors may conspire to maintain that level of flammability but also a city, or any locus of human habitation, needs fire to survive. Just as a modern city, Rome had legislation, regulation, building materials, technology, architectural fire-breaks, but in practice fire has proven inexpungible.

By complementing the re-evaluation of the evidence of our sources with modern fire science and social studies, this thesis has attempted to redefine the cultural understanding of fire in Rome, not as a series of events, but as a perpetual lived experience in a city which was a habitat of fire. Rome required open fire to function. As a fire régime, Rome was not just shaped by fires but shaped by the idea and fear of fire. Urban scholars have now come to appreciate that, like an informing principle, whether visible or not, fire shapes cityscapes.[914] The ancient city, and especially the city of Rome, can serve as an exemplar of the universality of fire within urban history.

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[911] Jehne 2007, 23; Moretti, 2013 (DH).
[912] Garnsey and Saller 2014, 25.
[913] Goudsblom 1992, 6.
[914] Pyne 2012, 392 - 395.

# Primary Sources

All abbreviated references to primary sources in this work are in accordance with the Oxford Classical Dictionary (4<sup>th</sup> edition) list of abbreviations.

*XII Tabulae sive Lex XII Tabularum*

| | |
|---|---|
| Agathias Scholasticus | *Historia* |
| Ammianus Marcellinus | |
| Asconius | *Pro Milone* |
| Appian | *Bella Civilia* |
| Aristotle | *Meteorologica* |
| Augustus | *Res Gestae* |
| St. Augustine | *De civitate Dei* |
| Aurelius Victor | *Caesares* |
| Cassiodorus | *Variae* |
| Cato | *De agricultura* |
| Catullus | |
| Celsus | *De medicina* |
| Chronographer of 354 | |
| Cicero | *Epistulae ad Atticum* |
| | *Epistulae ad familiares* |
| | *De divinatione* |
| | *De domo sua* |
| | *De finibus* |
| | *De haruspicum responso* |
| | *De legibus* |
| | *De natura deorum* |
| | *De officiis* |
| | *De oratore* |
| | *De republica* |

*In Catilinam*

*In Pisonem*

*Pro Caelio*

*Pro Milone*

*Pro Roscio comoedo*

*Pro Scauro*

*Pro Sestio*

*Codex Theodosianus*

*Digesta*

Dio Cassius

Diocletianus      *Edictum de Pretiis Rerum Venalium*

Diodorus Siculus

Dionysius Halicarnassensis      *Antiquitates Romanae*

Dio Chrysostomus      *Orationes*

*Fasti Ostienses*

*Fasti Fratrum Arvalium*

Festus

Florus

Frontinus      *De aquae ductu urbis Romae*

Gaius      *Institutiones*

Galen      *Commentary on Hippocrates' Epidemics.*

Aulus Gellius      *Noctes Atticae*

Herodian

Hieronymus (see Jerome)      *Ab Abraham*

*Historia Augusta* (see *SHA*)

Horace      *Ars poetica*

     *Carmina* or *Odes*

     *Carmen saeculare*

     *Epistulae*

|  |  |
|---|---|
|  | *Epodi* |
|  | *Saturae* or *Sermones* |
| *Institutiones Iustiniani* |  |
| Jerome (see Hieronymous) | *Ab Abraham* |
| Josephus | *Antiquitates Judaicae* |
|  | *Bellum Judaicum* |
| Julius Obsequens | *Prodigia* |
| Juvenal |  |
| Livy | *Ab urbe condita* |
|  | *Periochae* |
|  | *Oxyrhynchus* |
| Lucan | *De bello civili* |
| Macrobius | *Saturnalia* |
| Martial |  |
| Nepos | *Atticus.* |
| Orosius |  |
| Ovid | *Fasti* |
| Pausanias |  |
| Persius |  |
| Petronius | *Satyricon* |
| Plautus | *Amphitruo* |
| Pliny the Elder | *Historiae Naturales* |
| Pliny the Younger | *Epistulae* |
|  | *Panegyricus* |
|  | *Epistulae ad Traianum* |
| Plutarch | *Caesar* |
|  | *Camillus* |
|  | *Cicero* |
|  | *Crassus* |

|  |  |  |
|---|---|---|
|  | *De Iside et Osiride* |  |
|  | *Otho* |  |
|  | *Pericles* |  |
|  | *Publicola* |  |
|  | *Sulla* |  |
| Propertius |  |  |
| Procopius | *De bello Vandalico* |  |
| Sallust | *De Catilinae coniuratione* |  |
| Seneca the Elder | *Controversiae* |  |
| Seneca the Younger | *Ad Marciam* |  |
|  | *Ad Helviam* |  |
|  | *De beneficiis* |  |
|  | *De clementia* |  |
|  | *De Ira* |  |
|  | *De tranquillitate animi* |  |
|  | *Epistulae* |  |
|  | *Quaestiones naturales* |  |
| *Scriptores Historiae Augustae* |  | *Antoninus Pius* |
|  |  | *Elagabalus* |
|  |  | *Gallieni Duo* |
|  |  | *Hadrian* |
|  |  | *Maximinus* |
|  |  | *Max. et Balb.* |
| Statius | *Silvae* |  |
| Strabo | *Geographica* |  |
| Suetonius | *Divus Augustus* |  |
|  | *Gaius Caligula* |  |
|  | *Divus Claudius* |  |
|  | *Domitianus* |  |

|  | *Galba* |
|  | *Divus Julius* |
|  | *Nero* |
|  | *Otho* |
|  | *Tiberius* |
|  | *Divus Titus* |
|  | *Divus Vespasianus* |
|  | *Vitellius* |
| Symmachus | *Epistulae* |
| Tacitus | *Annales* |
|  | *Historiae* |
| Tertullian | *Apologeticus* |
| Valerius Maximus |  |
| Varro | *De lingua Latina* |
| Velleius Paterculus |  |
| Virgil | *Aeneid* |
| Vitruvius | *De architectura* |
| Zosimus |  |

Note: The Regionary Catalogues are the *Notitia* and *Curiosum* cited as Nordh 1949.

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