Papers of the British School at Rome 85 (2017), pp. 171–204 © British School at Rome
doi:10.1017/S0068246217000022

'MONS MANUFACTUS': ROME'S MAN-MADE MOUNTAINS BETWEEN HISTORY AND NATURAL HISTORY (c. 1100–1700)

by Lucy Donkin

Rome's man-made mounds occupy a position between built antiquities and natural features. In the Middle Ages and early modern period, particular attention was paid to Monte Testaccio, the Mausoleum of Augustus, and the related 'mons omnis terra'. Debate focused on the origins and composition of the mounds, thought to contain either earth brought to Rome as symbolic tribute, pottery used to hold monetary tribute, or pottery produced locally. Developing over time in different genres of writing on the city, these interpretations were also employed in works on historical, religious and geological themes. The importation of material, expressive of relations between Rome and the wider world in antiquity, was used to draw positive and negative comparisons with present-day rulers and the papacy, and to associate Rome with Babylon. The growth of the mounds and the presence of ceramics were invoked in discussions of the formation of mountains and montane fossils. If the mounds' ambiguities facilitated their incorporation into other debates, the terms in which they are discussed reflect ongoing engagement with literature on the city. The reception of these monuments thus offers a distinctive perspective on the significance of Rome to connections between spheres of knowledge in this period.

A Roma le colline artificiali, frutto dell'azione umana, possono essere considerate una sorta di via di mezzo tra antichità costruite e realtà naturali. Nel Medioevo e nel periodo moderno particolare attenzione è stata data al Monte Testaccio, al Mausoleo di Augusto e al relativo 'mons omnis terra'. *In particolare il dibattito si è focalizzato sulle origini e sulla composizione di questi rilievi. Si è pensato che contenessero o terra portata a Roma come un tributo simbolico, o ceramiche utilizzate per contenere tributi monetari, o ceramiche prodotte localmente. Sviluppandosi nel corso del tempo in relazione a diversi tipi di scritti sulla città, queste interpretazioni sono state utilizzate anche in lavori su tematiche storiche, religiose e geologiche. L'importazione di materiale, espressione delle relazioni ad ampio raggio di Roma nel mondo antico, è stata usata per tracciare confronti in positivo o in negativo con governanti contemporanei e il papato, e per associare Roma con Babilonia. La 'crescita' di queste colline artificiali e la presenza di ceramiche sono state chiamate in causa nelle discussioni sulla formazione di montagne e fossili montani. Se l'ambiguità di queste strutture ha facilitato il loro inserimento in altri dibattiti, i termini nei quali sono state discusse riflettono tuttavia anche il continuo interesse nei confronti di Roma. La ricezione di questi monumenti perciò offre una prospettiva peculiare del significato di Roma con connessioni tra diverse sfere di conoscenza.*

The city of Rome, as is well known, is built on seven hills.[1] However, as noted by the English traveller Fynes Moryson in the 1590s, 'within the walls of Rome there

[1] On the construction of this idea see C. Vout, *The Hills of Rome: Signature of an Eternal City* (Cambridge, 2012).

bee some other Hills or little Mountaines, but lesse famous'.[2] One of these 'little Mountaines' — Monte Testaccio — is a man-made structure, formed from the remains of hundreds of thousands of amphorae shipped to the city in antiquity. It lies just inside the Aurelian Walls in the south of Rome in an area still relatively open and undeveloped. From perhaps as early as the thirteenth century, a variety of opinions regarding its origins were expressed in a wide range of genres of writing. Not only did it feature in literature on Rome, from pilgrimage guides to humanist texts, but it was also discussed within the wider temporal and spatial framework of world history, eschatology and geology. The most enduring of these explanations understood Monte Testaccio to result from a concentration of material brought from all over the Roman world: either earthenware used to carry monetary tribute, or earth brought as symbolic tribute, or a combination of the two. In this manner, perceptions of the mound were bound up with those of the Mausoleum of Augustus, also thought to have incorporated earth from all over the Roman Empire. Other interpretations saw the potsherds as produced locally, whether the detritus of neighbouring potteries or generated in the ground itself.

Modern scholarship on Monte Testaccio has also concentrated on its period of creation, focusing on the light thrown by the archaeological data on patterns of production, consumption and trade within the Roman world.[3] The medieval and early modern history of the site is often discussed in the context of the carnival games that took place there, with the study by Andrea Sommerlechner notable for including consideration of contemporary understandings of the mound's origins.[4] Maurizio Campanelli also brought together a number of earlier references to the site in his study of Contuccio Contucci's eighteenth-century *Epistola de Monte Testaceo*.[5] However, these discussions are mainly limited to references within the literature on Rome, and do not treat the other genres and contexts in which interest in Monte Testaccio was expressed. Moreover, post-classical engagement with the site is not always recognized in wider studies. A work on the geology of Rome, which treats Monte Testaccio within a discussion of the impact of man-made debris on the cityscape, states that 'after the fall of Imperial Rome, the Testaccio Hill went virtually unnoticed until the 18th and 19th centuries, when it became a tourist attraction'.[6] In fact, it was a widespread point of reference for much of the intervening period.

[2] F. Moryson, *An Itinerary* (London, 1617), 126.

[3] E. Rodríguez Almeida, *Il Monte Testaccio: ambiente, storia, materiali* (Rome, 1984).

[4] R. Lanciani, 'Il Testaccio e i prati del popolo romano', *Bulletino della Commissione Archeologica di Roma* 42 (1914), 241–50, esp. 242–4; A. Vos, 'Testaccio: change and continuity in urban space and rituals', in H. De Mare and A. Vos (eds), *Urban Rituals in Italy and the Netherlands: Historical Contrasts in the Use of Public Space, Architecture, and the Urban Environment* (Assen, 1993), 58–89, esp. 78–82; A. Sommerlechner, 'Die *ludi agonis et testatie* — das Fest der Kommune Rom im Mittelalter', *Römische Historische Mitteilungen* 41 (1999), 339–70, at 349–51.

[5] M. Campanelli, 'Settecento Latino III. L'inflazione dei poeti e il Monte di Testaccio in un'epistola di Contuccio Contucci', *L'Ellisse* 8/1 (2013), 159–95, at 163–7.

[6] G. Heiken, R. Funiciello and D. De Rita, *The Seven Hills of Rome: A Geological Tour of the Eternal City* (Princeton, NJ, 2005), 93–4.

https://doi.org/10.1017/S0068246217000022 Published online by Cambridge University Press

The present article places Monte Testaccio in the framework of a wider interest in the existence of a man-made mountain within the city of Rome during the Middle Ages and the early modern period, from the twelfth to the seventeenth centuries. This interest not only encompassed Monte Testaccio itself and the Mausoleum of Augustus, but also the idea of a 'mons omnis terra', made up of earth from all the world. Known from the thirteenth century, the term was applied to Monte Testaccio from at least the early fifteenth century. However, at times it is difficult to pin down to a particular site, whether because these associations shifted over time or because the location was not always of importance. This article traces attitudes to all three entities, with the aim of illuminating how they intersect, and how and why they came to be discussed in a wide variety of contexts. The three sections reflect the overlapping timescales — classical, biblical and geological — within which the man-made mountains were situated. The first sets out the interpretations that circulated in literature on the city and on Roman history; the second shows how the mountain was invoked in religious texts that identified Rome with the Babylon of Revelation and Lamentations; and the third traces references to the phenomenon in natural history writing on the generation of mountains and montane fossils. Attention focuses on explanations for the origins of the mounds, leaving aside their use and wider significance, and thus only limited reference is made to visual evidence. Other artificial mounds in Rome of classical and post-classical origin, such as Montecitorio, Monte Savello and Monte Giordano, are not included. These generated less interest, perhaps because of their location in built-up areas of the city or because their man-made identity was not recognized.[7] Finally, no attempt is made to be comprehensive or reconstruct in detail pathways of textual transmission. Rather, I wish to give a broader sense of interpretative traditions and the possible connections between them, and of the factors that led to one feature of the city being discussed more or less independently of its urban context. It will be suggested that explanations partly lie in the nature of medieval and early modern cultures of knowledge. The reception of the artificial mountains reflects the permeability of the discourses involved, relationships between the classical, biblical and geological pasts, and the relevance of Rome to each of these. At the same time, it also derives from the ambiguous nature and material of the mounds themselves, which occupied a position between built structures and natural landscape features; were associated variously with earth, earthenware and precious metals; and were credited with both local and global origins. Not only did the variety of interpretations mean that the mounds could be fitted flexibly into other contexts, but their contested nature may itself have contributed to their being drawn into other debates.

In concentrating primarily on textual constructs, the article is part of a wider interest in 'written Rome'.[8] In particular, it aims to contribute to the substantial

[7] I owe the first suggestion to an anonymous reader; the contrast is also drawn in Vos, 'Testaccio', 77.

[8] The phrase is taken from Catharine Edwards' discussion of the classical city: *Writing Rome: Textual Approaches to the City* (Cambridge, 1996).

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body of scholarship on medieval and early modern textual responses to the city. This increasingly spans the two periods in ways that challenge stark contrasts or simple narratives of progression.[9] However, attention still tends to focus on writing on the city itself, and less on how its antiquities were employed argumentatively in other contexts. Tracing the reception of a single monument, or type of monument, both across an extended period and through several spheres of writing can enrich the picture by revealing connections across time and genre.[10] The case-study of the man-made mountain has the potential to provide particular perspectives. In assessing the impact of the standing remains of ancient Rome on how the city was viewed and imagined in the post-classical period, attention has traditionally focused on built structures. With an ideal form compromised over time, ruined buildings spoke of loss; however, this was inflected by attitudes to the pagan past and Christian present, and to possible restoration and reuse.[11] As a landscape feature whose creation was understood to be gradual, with no obvious original or intended appearance, and whose contents were thought by many to be objects already broken in antiquity, the man-made mountain did not attract these sorts of reflections or debates, even when understood to have been mined for materials. Instead commentators displayed interest in the material composition and origins of the mounds and the connections with the wider world that they embodied, and it was in terms of these spatial relationships that parallels were drawn with the present.

Medieval and early modern religious perspectives on Rome's antiquities have been explored with particular reference to the relationship between pagan and Christian in particular texts and in particular places.[12] Here, what are essentially static sites and monuments, even if encountered in motion, either represent these different eras and beliefs, or fuse them in some way through conversion or reinterpretation.[13] Rome's man-made mountains additionally show how cross-period comparisons were drawn between dynamic systems, such as tribute and pilgrimage, which linked the city to other places. For the latter part of the period under discussion, the difference between Roman

[9] For example, J. Summit, 'Topography as historiography: Petrarch, Chaucer and the making of medieval Rome', *Journal of Medieval and Early Modern Studies* 30/2 (2000), 211–46.

[10] Works adopting this approach include L.E. Yawn, '*Culiseo*: the Roman Colosseum in early modern jest', *California Italian Studies* 6/1 (2016): http://escholarship.org/uc/item/7nh588h3.

[11] For discussions of Rome in terms of ruin and ruins, see, for example, P. Viti, 'La rovina di Roma come conscienza della rinascita umanistica', in S. Fabrizio-Costa (ed.), *Entre trace(s) et signe(s): Quelques approches herméneutiques de la ruine* (Bern, 2005), 121–58; D. Karmon, *The Ruin of the Eternal City: Antiquity and Preservation in Renaissance Rome* (New York, 2011); Salvatore Settis, 'Nécessité des ruines: les enjeux du classique', *European Review of History: Revue Européenne d'Histoire* 18/5–6 (2011), 717–40, esp. 717–27.

[12] Summit, 'Topography as historiography'; Å. Boholm, 'Reinvented histories: medieval Rome as memorial landscape', *Ecumene* 4 (1997), 247–72.

[13] For an interpretation of the *Mirabilia* attentive to movement through space, see L.I. Hamilton, 'The rituals of Renaissance: liturgy and mythic history in the Marvels of Rome', in L.I. Hamilton and S. Riccioni (eds), *Rome Reimagined: Twelfth Century Jews, Christians and Muslims Encounter the Eternal City* (Leiden, 2011), 5–26.

Catholic and Protestant perspectives has formed another point of interest, and attitudes to antiquities in writing on the city have been seen to be coloured by confessional identities and agendas.[14] The man-made mountains demonstrate how the interpretation of a classical monument could also be harnessed more explicitly to anti-papal rhetoric in religious texts. Geological interest in Roman antiquity, on the other hand, is usually considered from the perspective of the history of the discipline and with an emphasis on the early modern period.[15] Focusing on Rome's man-made mountains reveals continuity of interest from the Middle Ages, and illuminates how natural history was informed by medieval and early modern writing on the city. More fundamentally, then, this article demonstrates connections between three areas of knowledge and engagement with Rome that are generally treated in isolation in modern scholarship. Biblical commentary and natural history are both shown to have drawn on literature on the city as this developed over time. While the man-made mountains remain in some ways an exceptional case, complementing discussion of other antiquities, their reception also corresponds to wider interest in the monuments of Rome in both these spheres.

CLASSICAL TIME

Most attention to Rome's man-made mountains comes in descriptions of the city. Such texts uniformly situate their creation in the classical past but interpret their composition differently, variously favouring earth or earthenware, local or distant origins. Although distinctions can be made between texts drawing on the medieval *Mirabilia* tradition and humanist accounts prioritizing information in classical sources, there were continuities between the two, and multiple interpretations coexisted over this period. These were not only expressed in different works and genres circulating contemporaneously, but could also be given as alternatives in a single work. This section sets out the understandings put forward in writing on Rome, surveying those that saw the Mausoleum of Augustus as made up of earth from elsewhere and Monte Testaccio as made up of earthenware, before discussing references to the 'mons omnis terra'. It also begins to identify aspects of these interpretations that encouraged discussion of the sites in other contexts. These were not necessarily those that had received most scholarly respect, nor simply those present in the authors' source material, but also those that best fitted the concerns of the recipient text. Thus histories of Roman emperors and the imperial past favoured the idea of a mountain

[14] On responses by Protestant travellers, see B. Foster, '"The goodliest place in this world": early Tudor reactions to papal Rome', in M. Arshagouni Papazian (ed.), *The Sacred and Profane in English Renaissance Literature* (Newark, DE, 2008), 27–56, esp. 36–50.

[15] R. Rappaport, *When Geologists Were Historians, 1665–1750* (Ithaca, NY, 1997), ch. 3 'Natural and civil history', is a particularly helpful account.

https://doi.org/10.1017/S0068246217000022 Published online by Cambridge University Press

made up of imported material, which expressed a relationship between the city and the wider world.

Discussion of post-classical interest in Rome's man-made mountains necessarily starts with the Mausoleum of Augustus.[16] Although, unlike Monte Testaccio, this was a deliberately constructed monument, it too resembled a landscape feature, being described by Strabo as 'a great mound near the river on a lofty foundation of white marble, thickly covered with ever-green trees to the very summit'.[17] This hill-like quality is found in later documents to do with property ownership. In the tenth century, the Mausoleum appeared as Mons Augustus in documents confirming the land holdings of S. Silvestro in Capite.[18] Although the term could be used for other built structures — the Mausoleum of Hadrian was termed a 'mons' by Peter the Deacon — the Mausoleum of Augustus was also labelled 'monte del Signore Jacomo Ursino' in an early sixteenth-century sketch of the area.[19] Cartographic representations similarly indicate that the mound was an important aspect of the site. The Mausoleum appears as a circular ruined structure surrounding a mound in the related early fifteenth-century plans of Rome by Taddeo di Bartolo (Fig. 1) and the Limbourg brothers; as a ruin atop a mound in Alessandro Strozzi's *Pianta di Roma* of 1474; and as a mound devoid of built structures in Sebastian Münster's *Cosmographia* (1550).[20]

The earliest known reference to the gradual, symbolic accumulation of earth there occurs in the *Mirabilia urbis Romae*, composed before 1143.[21] This text combines discussion of classical and Christian monuments organized partly by

[16] For discussion of its condition and reception in the Middle Ages and Renaissance, see A.M. Riccomini, *La ruina di sì bela cosa: vicende e trasformazioni del mausoleo di Augusto* (Milan, 1996), 24–9; S.L. Fugate Brangers, *The Mausoleum of Augustus: Expanding Meaning from its Inception to Present Day*, Ph.D. thesis, University of Louisville, KY (2007), 83–98.

[17] Strabo, *Geography*, 5.3.8, ed. and trans. H.L. Jones, *Geography*, 2 (*Loeb Classical Library* 50) (Cambridge, MA, 1923), 408–9.

[18] G. Marini (ed.), *I Papiri diplomatici* (Rome, 1805), 38, doc. 28; 45, doc. 29.

[19] 'in montem qui dicitur sancti Angeli'; Peter the Deacon, *Vita beati Romualdi*, 25, ed. G. Tabacco (*Fonti per la storia d'Italia* 94) (Rome, 1957), 52; cited in F. Gregorovius, *History of Rome in the Middle Ages* (London, 1894–1902), III, 551, n. 1. For the sketch, by Baldassare Peruzzi, see Riccomini, *Ruina*, 42; Brangers, 'Mausoleum of Augustus', 92–3, fig. 5.3.

[20] On the Taddeo di Bartolo and Limbourg Brothers maps, see A.P. Frutaz, *Le piante di Roma*, 3 vols (Rome, 1962), I, 123–6, II: pls lxxvi–lxxvii; H.B.J. Maginnis, 'Rome: the missing maps', in H.B.J. Maginnis and S.E. Zuraw (eds), *The Historian's Eye: Essays on Italian Art in Honor of Andrew Ladis* (Athens, GA, 2009), 45–53. On the Strozzi map, see Riccomini, *Ruina*, 28, 36; M. Gori Sassoli (ed.), *Roma veduta. Disegni e stampe panoramiche della città dal XV al XIX secolo* (Rome, 2000), 135. Sebastian Münster, *Cosmographia* (Basel, 1550), 150–1; Riccomini, *Ruina*, 26; Gori Sassoli, *Roma veduta*, 140–1; Brangers, *Mausoleum of Augustus*, 92–3, fig. 5.1; J. Maier, *Rome Measured and Imagined: Early Modern Maps of the Eternal City* (Chicago and London, 2015), 45–6, fig. 10.

[21] *Mirabilia*, ed. R. Valentini and G. Zucchetti, *Codice topografico della città di Roma*, 4 vols (Rome, 1940–53), III, 3–65. For the date of composition, see N.R. Miedema, *Die 'Mirabilia Romae'. Untersuchungen zu ihrer Überlieferung mit Edition der deutschen und niederländischen Texte* (Tübingen, 1996), 2–11; D. Kinney, 'Fact and fiction in the *Mirabilia urbis Romae*', in É.Ó

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Fig. 1. Taddeo di Bartolo, plan of Rome, fresco, early fifteenth century, Anticapella, Palazzo Pubblico, Siena. © Photo SCALA, Florence.

type and partly by region.[22] Describing the Mausoleum of Augustus in a section that gives narrative explanations of various antiquities, it states that the emperor commanded a glove full of earth to be sent from all the realms of the world. This earth he placed on the 'temple' so that he should be remembered by all those coming to Rome.[23] The *Mirabilia* was popular throughout the Middle Ages, being copied, translated, and incorporated into other texts. It remained relatively uniform during the twelfth and thirteenth centuries, becoming more heterogeneous in the fourteenth and fifteenth.[24] Within these parameters,

Carragáin and C. Neuman de Vegvar (eds), *Roma Felix – Formation and Reflections of Medieval Rome* (Aldershot, 2007), 235–52, at 235–6.

[22] The literature on the *Mirabilia* is substantial. In addition to works already cited, see, for example, C. Frugoni, 'L'antichità: dai "Mirabilia" alla propaganda politica', in S. Settis (ed.), *Memoria dell' antico nell'arte italiana*, 1, *L'uso dei classici* (Turin, 1984), 3–72; C. Nardella, 'L'antiquaria romana dal "Liber Pontificalis" ai "Mirabilia urbis Romae"', in *Roma antica nel medioevo: mito, rappresentazioni, sopravivenze nella 'Respublica Cristiana' dei secoli IX–XIII* (Milan, 2001), 423–47.

[23] 'De omnibus regnis totius orbis iussit venire unam cirothecam plenam de terra, quam posuit super templum, ut esset in memoriam omnibus gentibus Romam venientibus'; *Mirabilia*, 22, ed. Valentini and Zucchetti, 48.

[24] Miedema, *'Mirabilia Romae'*, 278.

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treatment of the Mausoleum varied. The passage was retained in some later Latin re-workings, including the *Graphia urbis Romae*, and the *Tractatus de rebus antiquis et situ urbis Romae*. The latter adds that so much earth had been brought that a mound or mountain had been formed.[25] The passage on the Mausoleum is also found in some Romance translations, with small but significant variations in detail. Notably, in a thirteenth-century French version, the bringing of earth is interpreted as a sign that all the world was tributary to Rome.[26] The same interpretation is found in Jean d'Outremeuse's fourteenth-century *Ly Myreur des Histors*, which refers to the 'temple de tout terre' in a discussion of the monuments of Rome drawn from the *Mirabilia*.[27] The description of the Mausoleum is not found in the fourteenth-century Latin version of the *Mirabilia* upon which the German, Dutch and English versions depend.[28] However, as discussed below, some fifteenth-century German editions of the *Mirabilia Romae* include similar interpretations of Monte Testaccio as the 'mons omnis terra'. If the presence of the Mausoleum in one strand of the *Mirabilia* tradition perpetuated one idea of the man-made mountain into the fifteenth century, its absence from another strand may have encouraged the application of its associations to Monte Testaccio; no one text gives the same explanation for both.

Most discussions of Monte Testaccio focused on the ceramics that make up the mound, differing in terms of the function and origins ascribed to them.[29] The surrounding area seems to have been known as 'Testacio' from as early as the eighth century.[30] From the fourteenth century, 'Mons Testaceus' was explained as deriving from 'testa', Latin for potsherd, and the vessels it contained were

[25] 'et tanta fuit multitudo praedictae terrae, ibi iussu praedicto posita, quod mons ibi isto modo factus extitit'; *Tractatus de rebus antiquis et situ urbis Romae*, ed. R. Valentini and G. Zucchetti, *Codice Topografico*, IV, 101–50, at 137.

[26] 'Et puis commanda Octavien que l'en li aportast de toutes les provinces du monde plain .j. gant de terre, et il la mist environ le temple en senefiance que tout li mondes estoist soumis a Rome'; D.J.A. Ross, 'Les merveilles de Rome. Two medieval French versions of the "Mirabilia urbis Romae"', *Classica et Mediaevalia* 30/1–2 (1969), 617–65, at 628. The text of *Les Merveilles de Rome* in BnF MS français 22932 is identified by Ross as a late thirteenth-century book-hand, and the version dated to 1249–75.

[27] 'De toutes les parties de monde mandate Octovian de la terre plain I ban que ilh metit sor ledit temple, en signe que toutes les provinches de monde astoient a Romme tributaires'; Jean d'Outremeuse, *Ly Myreur des Histors, Chronique*, I, ed. A. Borgnet (Brussels, 1864), 72. On the relationship between Jean's work and the *Mirabilia*, see A. Sommerlechner, 'Mirabilia, munitiones, fragmenta: Rome's ancient monuments in medieval historiography', in F. Andrews et al. (eds), *Pope, Church and City: Essays in Honour of Brenda M. Bolton* (Leiden, 2004), 223–44, at 239; J. Pucet, 'Jean d'Outremeuse, traducteur des *Mirabilia* et des *Indulgentiae*', *Folia Electronica Classica* 25 (2013).

[28] LAT14; Miedema, '*Mirabilia Romae*', 334–56.

[29] On Monte Testaccio, see M. Maischberger, 'Testaceus Mons', in E.M. Steinby (ed.), *Lexicon Topographicum Urbis Romae* V (Rome, 1999), 28–30; Rodríguez Almeida, *Monte Testaccio*, esp. 120–3 for medieval references.

[30] D. Orano, *Come vive il popolo a Roma: saggio demografico sul quartiere Testaccio* (Pescara, 1912), 20–1; Rodríguez Almeida, *Monte Testaccio*, 121.

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understood to have held monetary tribute.[31] Perhaps the first reference comes in Giovanni Cavallini's mid-fourteenth-century *Polistoria*, a humanist treatise on the history and monuments of pagan and Christian Rome that has been seen to inaugurate the 'scholarly study of Roman antiquities'.[32] This presents the mound as made up of, and taking its name from, fragments of the clay vessels ('vasa terrea') used to transport tribute from Persia and other kingdoms and provinces.[33] Cavallini's approach to the city has an etymological flavour more generally, and the passage comes in a chapter on the gates of Rome, where an alternative name for the Porta Portuensis — Erea or Raudera — is said to derive from this payment or 'ere'.[34] His interpretation is echoed in a longer passage in the late fourteenth-century *Libro Imperiale*, a work on Caesar and his descendants generally attributed to Giovanni Bonsignore, in which the inhabitants of Rome under Augustus are described as having lived entirely from tribute.[35] The earthenware vessels ('vasi di terra') that contained the tribute gave the Romans the opportunity to create a lasting 'memoria' and perpetual fame for the city. The hill, here called 'monte dey choccie' (from the Italian for earthenware, 'coccio'), is said to be made up of layers of earth and potsherds. A similar explanation was advanced in 1398 by Pier Paolo Vergerio, who saw the 'mons manufactus' as a vast sign of Roman power.[36] These interpretations thus shared elements with the traditions surrounding the Mausoleum, with both sites understood as a lasting material embodiment of Roman dominion.

The idea of the tribute was countered in the fifteenth century by the next generation of humanists. Flavio Biondo argued in his *Roma instaurata* (1444–8) that tribute was not contained in amphorae and thus the potsherds were more

[31] A. Graf, *Roma nella memoria e nelle immaginazioni del medio evo*, 2 vols (Turin, 1882–3), I, 154; Sommerlechner, '*Ludi agonis et testatie*', 349–51.

[32] M. Laureys, 'Between *Mirabilia* and *Roma Instaurata*: Giovanni Cavallini's *Polistoria*', in M. Pade, H. Ragn Jensen and L. Waage Petersen (eds), *Avignon & Naples: Italy in France, France in Italy in the Fourteenth Century* (Rome, 1997), 100–15, esp. 104; see also P. Jacks, *The Antiquarian and the Myth of Antiquity: The Origins of Rome in Renaissance Thought* (Cambridge, 1993), 61–7; M. Campanelli, 'Monuments and histories: ideas and images of antiquity in some descriptions of Rome', in C. Bolgia, R. McKitterick and J. Osborne (eds), *Rome across Time and Space. Cultural Transmission and the Exchange of Ideas, c. 500–1400* (Cambridge, 2011), 35–51.

[33] M. Laureys (ed.), *Iohannes Caballini de Cerronibus Polistoria de virtutibus et dotibus Romanorum* (Stuttgart, 1995), 187–8; Graf, *Roma nella memoria*, I, 154.

[34] Marc Laureys identifies this as a misreading of Valerius Maximus' *Factorum et dictorum memorabilium*, in which 'raudera' was said to be formerly used as a word for pieces of bronze ('es' or 'aes'). Laureys (ed.), *Polistoria*, 365; Valerius Maximus, *Factorum et dictorum memorabilium*, 5.6.3.

[35] Giovanni Bonsignore, *Libro Imperiale*, 3.4 (Rome, 1488), 36v–37r; Graf, *Roma nella memoria*, 153. On the *Libro Imperiale* see J. Lecker, 'La présence des auteurs classiques dans l'historiographie des pays Romans (XIIIe au XVe siècles)', *Classica et Mediaevalia* 47 (1996), 325–57, esp. 352–5.

[36] Pier Paolo Vergerio, *Epistolario*, 86, ed. L. Smith (Rome, 1934), 218.

likely to come from potters working in the area.[37] He went on to cite Pliny as an authority for the widespread use of terracotta by the Romans, including for images of the gods, temple vessels and funerary urns. Biondo's work has been seen to have 'set a new standard for the study of classical archaeology', and his interpretation was repeated in a number of antiquarian works and guidebooks, including Mariano da Firenze's *Itinerarium urbis Romae* (1518) and Bartolomeo Marliani's *Urbis Romae topographia* (1544).[38] The idea of local production was also given graphic form in a view of Testaccio in Pompilio Totti's *Ritratto di Roma antica* (1627), where Monte Testaccio rises up behind smoking kilns, and a watercolour by Jan Goeree (1670–1731), in which workmen wheel barrows onto the mound from the surrounding buildings (fig. 2).[39]

So far, then, it is possible to outline a sequence in which new interpretations of Rome's man-made mountains kept pace with wider trends in the description of the city, moving from medieval legends to increasingly rigorous humanist investigations, with the *Mirabilia*, Cavallini's *Polistoria* and Biondo's *Roma instaurata* acting as influential points of reference. However, this is only part of the picture, and would be so even if Biondo's reading of Monte Testaccio had not in fact been moving away from the actual origins of the mound. The tribute explanation was repeated into the sixteenth and seventeenth centuries, most commonly in travellers' accounts of the city. In his *Historie of Italy* (1549), William Thomas noted the popular belief that 'the Romaines ordained that all tributes, whiche were brought yerely to Rome, should be laide in pottes made of the earth of the countreys from whens it came'.[40] Although he acknowledged alternative scholarly interpretations in which the pots were damaged ware from local potteries, he preferred to see the hill as created deliberately for the 'perpetuall memorie of the Romaine empyre'. Similarly in 1616, William Lithgow referred to the hill as 'made of the Pottars shards … which brought the tributary gold to this imperiall seate'.[41] Other accounts, such as those by

[37] Flavio Biondo, *Roma Instaurata*, ed. and trans. A. Rafarin, *Rome restaurée*, 2 vols (Paris, 2005–12), II, 198–203.

[38] A. Mazzocco, 'Petrarca, Poggio, and Biondo: humanism's foremost interpreters of Roman ruins', in A. Scaglione (ed.), *Francis Petrarch, Six Centuries Later* (Chapel Hill, NC, 1975), 353–63; Jacks, *Antiquarian*, 113–21, quotation at 114; Mariano da Firenze, *Itinerarium urbis Romae*, 8.12, ed. E. Bulletti (*Studi di antichità cristiana* 2) (Rome, 1931), 121; Bartolomeo Marliani, *Urbis Romae topographia* (Rome, 1544), 63; Andrea Palladio, *L'antichità de Roma* (Rome, 1554), 6r.

[39] Pompilio Totti, *Ritratto di Roma antica* (Rome, 1627), 213–14. Jan Goeree, *View of the Mons Testaceus and the Pyramid of Cestius*, before 1704, pen and black ink with grey wash, 33.3 × 20.5 cm; New York, Metropolitan Museum of Art.

[40] William Thomas, *The Historie of Italy* (London, 1549), fol. 35r–35v; G.B. Parks (ed.), *The History of Italy (1549) by William Thomas* (Ithaca, NY, 1963), 43–4. On Thomas, see Foster, '"The goodliest place in this world"', 36–42; J. Woolfson, 'Thomas Hoby, William Thomas, and mid-Tudor travel to Italy', in M. Pincombe and C. Shrank (eds), *The Oxford Handbook of Tudor Literature, 1485–1603* (Oxford, 2009), 404–17.

[41] William Lithgow, *A most delectable and true discourse, of an admired and painefull peregrination from Scotland, to the most famous kingdomes in Europe, Asia and Affricke* (London, 1614), 3.

https://doi.org/10.1017/S0068246217000022 Published online by Cambridge University Press

Fig. 2. Jan Goeree, *Testaceus Mons*, detail from a work showing Monte Testaccio and the Pyramid of Cestius, pen and black ink, brush and grey wash, red chalk over traces of black chalk, before 1704. Metropolitan Museum of Art, New York.

Fynes Moryson and John Evelyn, perpetuated the idea of tribute in the very process of dismissing it as implausible.[42] That the older tradition was not eclipsed by the new approach is worth stressing, as the temptation to focus on what is novel or prioritized in a given period can obscure the coexistence of different readings. Nevertheless, the idea may have continued to appeal because it corresponded so closely with Rome's status in antiquity and the commemorative quality of many of the city's monuments, both of which were, if anything, even more fully recognized in the Renaissance.

The neat progression of ideas is further complicated by another long-lived interpretative strand, which blurred the boundaries between descriptions of the Mausoleum and Monte Testaccio through a shared reference to earthen tribute. From at least the thirteenth century, mention was made of a man-made mound known as the 'monte d'ogne terra' or 'mons omnis terra' on account of earth brought there from throughout the world.[43] The term is found in a variety of texts, including cosmological, topographical and historical works, all of which see the imported earth as expressing Roman global domination. In some cases, it is difficult to know where in the city was meant. Not only is the material

[42] Moryson, *Itinerary*, 126; E.S. de Beer (ed.), *The Diary of John Evelyn*, 2, Kalendarium, 1620–1649 (Oxford, 1955 (repr. 2000)), 360.

[43] Some texts have 'mons omnis terre' or 'terrae'.

https://doi.org/10.1017/S0068246217000022 Published online by Cambridge University Press

nature of the hill shared with the Mausoleum as described in the *Mirabilia* and its name not unlike the 'temple de tout terre', but it could also be associated with Augustus. On the other hand, from the early fifteenth century, both name and explanation were applied to Monte Testaccio. In current scholarship, understandings of Monte Testaccio as an earthen entity are seen as embellishments of the idea of monetary tribute, perhaps reflecting knowledge of the traditions regarding the Mausoleum.[44] However, the early employment of the term 'monte d'ogne terra' at least raises the possibility that the association with monetary tribute may postdate and even develop out of traditions concerning symbolic, earthen tribute. Discussions of the 'monte d'ogne terra' also suggest that in some contexts the idea of Rome's man-made mountain of tributary earth was more important than its location in the city.

The earliest reference of which I am aware comes in the cosmological work *La composizione del mondo* by Restoro of Arezzo (1282). In a passage on man-made mountains, he states that the Romans had earth brought from all parts of the world as tribute in memory of their lordship, and the resulting hill was known by the Romans as 'monte d'ogne terra'.[45] Restoro's discussion of the generation of mountains has been seen to depend largely on Avicenna, Albertus Magnus and Vincent of Beauvais.[46] However, they do not treat man-made mountains, and Restoro is probably responsible for introducing this element into the discussion, since he had an interest in man-made artefacts more generally, using analogies with craft processes and including descriptions of classical works. Indeed, Maria Monica Donato has suggested that the concept that art reproduces nature underlies the whole work.[47] Restoro's other example of a man-made mountain is a hill near Arezzo, which he must have known at first hand, and he has been described as introducing other observations from his personal experience.[48] All of what he says could fit the Mausoleum of

[44] A. Graf, *Roma nella memoria*, 1:154; Sommerlechner, '*Ludi agonis et testatie*', 349–51.

[45] 'li quali se féciaro venire a rèndare terra de tutte le parti e le fini del mondo per tributo, en memoria de la loro signoria, e fàciarela pónare in uno loco; e de quella terra féciaro uno monte, lo quale fo chiamato da loro monte d'ogne terra': Restoro d'Arezzo, *La composizione del mondo*, 2.5.8, ed. A. Morino (Florence, 1976), 129.

[46] P. Duhem, *Études sur Léonard de Vinci, ceux qu'il a lus et ceux qui l'ont lu*, 2 (Paris, 1909; repr. 1984), 319–23. For discussion of the formation of mountains by these authors, see E.J. Holmyard and D.C. Mandeville (eds and trans.), *Avicennae De congelatione et conglutinatione lapidum, being Selections of the Kitâb al-Shifâ'* (Paris, 1927), 26–32, 48–9; Albertus Magnus, *Liber de causis proprietatum elementorum*, 2.4–5, trans. I.R. Resnick, *On the Causes of the Properties of the Elements* (Milwaukee, WI, 2010), 115–18; Vincent of Beauvais, *Speculum naturale*, 6.20 (Douai, 1624): http://sourcencyme.irht.cnrs.fr/encyclopedie/voir/133 [accessed 31 December 2016].

[47] M.M. Donato, 'Un "savio depentore" fra "scienza de le stelle" e "sutilità" dell'antico: Restoro d'Arezzo, le arti e il sarcofago romano di Cortona', *Studi in onore del Kunsthistorisches Institut in Florenz, Annali della Scuola Normale Superiore di Pisa*, ser. IV, 1–2 (Pisa, 1996), 51–78, at 61.

[48] A. Mottana, 'Oggetti e concetti inerenti le Scienze Mineralogiche ne *La composizione del mondo con le sue cascioni* di Restoro d'Arezzo (anno 1282)', *Rendiconti Lincei: Scienze Fisiche e Naturali*, ser. IX, 10 (1999), 133–229, esp. 140–52.

Augustus. Indeed, Restoro twice mentions the emperor later in the text in the context of Rome's domination of the world.[49] However, as discussed below, followers of his work from the late fifteenth century on interpreted the passage as referring to Monte Testaccio.

From at least the early fifteenth century the name 'mons omnis terra' was indeed used to describe Monte Testaccio. Perhaps the first recorded instance is the entry for 1405 in the *Chronicle* of Adam Usk, resident in Rome at that time. In the course of describing the carnival games that took place in Testaccio, he mentioned '"the mountain of all earth" — so-called because it is made of earth brought from every part of the world, as a sign of universal lordship'.[50] Chris Given-Wilson has noted that Usk's description of Rome 'reads in parts like a guide-book to the city (and may even be based on one)', though he sees the description of the games as an eyewitness account.[51] Certainly the aspect of the soil is found in later pilgrimage literature, where the hill is discussed on the way to St Paul's. Some of these texts offer more extended readings of the earth. In John Capgrave's mid-fifteenth-century *Solace of Pilgrimes,* pots full of earth are said to have been requested along with tribute. The author posited a proportional relationship between the soil and the lands represented, stating that the amount of earth depended on the extent and distance of the region.[52] If this implies that larger territories sent greater quantities of soil, more distant ones were perhaps understood to have provided less. This may reflect the contemporary practice of differentiating between pilgrims according to the distance they had travelled, with those from further away receiving more indulgences or being required to spend less time in Rome

[49] 'lo grande Cesaro Ottaviano Augusto, emperadore de la grande Roma, la quale signorigiò e pose giogo a tutto lo mondo': Restoro d'Arezzo, *La composizione del mondo*, 2.7.4, ed. Morino, 189; 2.6.4.6, ed. Morino, 171, refers only to 'lo grandissimo Cesare', but the context suggests that Augustus may be meant here too.

[50] C. Given-Wilson (ed. and trans.), *The Chronicle of Adam Usk, 1377–1421* (Oxford, 1997), 194–5: '… ad summitatem montis omnis terre, ideo quia ex omni terra mundi in signum universalis dominii illuc allata compositus'. On these games, see Sommerlechner, '*Ludi agonis et testatie*'.

[51] Given-Wilson, *The Chronicle of Adam Usk*, lv.

[52] John Capgrave, *The Solace of Pilgrimes*, 1.24, ed. C.A. Mills, *Ye Solace of Pilgrimes, A Description of Rome, circa AD 1450, by John Capgrave, an Austin Friar of King's Lynn* (London, 1911), 50: 'As we goo to seynt paules stant a hill on ye rith hand which Þei clepe omnis terra and Þis is Þhe cause whi it is clepid soo. In Þat tyme Þat romanes had lordchip of all Þe world for Þe moost party Þei mad a constitucioun in her senate Þat all Þat puple whech was undir her dominacioun schuld brynge with her tribute certeyn pottis ful of erde summe mor summe lesse aftir Þe quantite of the regioun and Þe distaunce of Þe place. Þis usage lested many ȝeres and Þat is sene Þer for Þe hill is gret and brod and at Þis day if a man delve in Þat hill he shal fynde all Þe erde ful of schordis of pottis.' On Capgrave, see Summit, 'Topography as historiography', 228–30; J. Grossi Jr, 'John Capgrave's "Smal Pyping": marvelling at Rome in *Ye Solace of Pilgrimes*', *Medievalia et Humanistica* 30 (2004): 55–83; P.J. Lucas, 'An Englishman in Rome: Capgrave's 1450-Jubilee Guide, *The Solace of Pilgrimes*', in A.M. D'Arcy and A.J. Fletcher (eds), *Studies in Late Medieval and Early Renaissance Texts in Honour of John Scattergood* (Dublin, 2005), 201–17.

than those from closer regions.[53] Capgrave himself describes this in relation to the exhibition of the Veronica.[54] If so, the earthen tribute was seen to articulate a relationship between Rome and its empire in a manner similar to the way in which the granting of indulgences expressed the geographical reach of papal Rome. In other texts, earth was said to be requested because the Romans had enough gold and silver already. This is found in the German-language version of the *Indulgentiae ecclesiarum urbis Romae* in the form it takes within the so-called *Mirabilia Romae vel potius Historia et descriptio urbis Romae*, where the hill is described on the way to St Paul's next to the burial place of Romulus and Remus (the Pyramid of Cestius).[55] The latter text appears to have been compiled for printed editions, of which the first is dated to 1481, and had a wide circulation, influencing individual travel accounts such as that of Arnold von Harff, who visited Rome in 1497.[56]

Although the idea that Monte Testaccio was made up of earthen tribute was primarily discussed in pilgrimage literature under the alias of 'mons omnis terra' or a vernacular equivalent, some awareness of this interpretation was occasionally displayed in texts that used the name Monte Testaccio and also discussed the humanist traditions. As mentioned above, William Thomas envisaged that the terracotta vessels in which monetary tribute was carried were made of the earth of the country concerned, giving the earthenware a similar underlying material significance to that of earthen tribute. More explicitly, Nicholas Audebert, who visited Rome in 1576–7, discussed three interpretations of the mound's contents circulating at the time: pots containing monetary tribute, pots full of tributary soil, and the products of local potteries. Although he

[53] D. Webb, 'Pardons and Pilgrims', in R.N. Swanson (ed.), *Promissory Notes on the Treasury of Merits: Indulgences in Late Medieval Europe* (Leiden, 2006), 241–75, at 243, 248.

[54] Capgrave, *The Solace of Pilgrimes*, 2.1, ed. Mills, 63.

[55] 'By dem thor, als man vßget zu Sant Pauls, ist der berg, der von aller welt ertrich ist gemacht worden. Da die Romer gutz genug hetten vnd nicht guldes ader silber begerten, da gebotten sie, zu geben vor den zins des ertrich von ydem lande. Da bracht man das ertich vß aller welt in krugen. Da wurffen sie die krugen vf einen haffen; vß der menig wart ein perg': N.R. Miedema, *Rompilgerführer in Spätmittelalter und früher Neuzeit: die 'Indulgentiae ecclesiarum urbis Romae' (deutsch/niederländisch): Edition und Kommentar* (Tübingen, 2003), 252; following the edition printed in Rome by Bartholomeus Guldinbeck in 1487. The Latin version is shorter and only refers to 'Mons omnis terre'; for example, *Mirabilia Romae vel potius Historia et descriptio urbis Romae* (Rome, 1491), n.p.

[56] Miedema, *Rompilgerführer*, 39–44. H. Brall-Tuchel and F. Reichert (trans.), *Rom, Jerusalem, Santiago: das Pilgertagebuch des Ritters Arnold von Harff (1496–1498)* (Cologne, 2008), 53: 'Weiter unten auf derselben Seite der Stadt liegt ein kleiner Hügel, "omnis terra" geheißen, "Erde aus alle Welt. Als damals die Römer die ganze Welt unter sich hatten und jedes Land ihnen Zins und Tribut geben musste und sie nun Gold und Silber genug hatten, verlangten sie von jeder Landschaft der ganzen Welt, als Zins einen Topf voll Erdreich aus ihrem Land herbeizubringen. Dann warfen sie die Töpfe mit Erde alle auf einen Haufen. Aus deren Menge wurde ein Berg, "omnis terra" genannt'. On Harff's response to Rome and the indulgence literature, see G. Tellenbach, 'Glauben und Sehen im Romerlebnis dreier Deutscher des fünfzehnten Jahrhunderts', in E. Gatz (ed.), *Römische Kurie, kirchliche Finanzen, Vatikanisches Archiv: Studien zu Ehren von Hermann Hoberg*, 2 vols (Rome, 1979), II, 883–912, esp. 903–12.

favoured the last theory, he took the second more seriously than the first, giving an evocative summary that implicitly recognized the rhetorical potential of the gathering together of 'tant de sortes de terre estrangere', but concluding that insufficient soil was mixed in with the pottery to support the idea.[57] In the early modern period, then, not only were all three possibilities regarding the origins and composition of Monte Testaccio circulating, but there is some evidence that the readerships of the different types of text were not entirely mutually exclusive.

A mountain in Rome made up of imported material and connected with tribute, earthen or monetary, was a suggestive embodiment of Roman imperial reach and as such was also mentioned in works with a more historical or chronological approach. It has already been seen that the Mausoleum of Augustus and Monte Testaccio were discussed in these terms in *Ly Myreur des Histors* and the *Libro Imperiale*. The 'mons omnis terra' was also mentioned in texts that were broadly concerned with Roman antiquity. Even when presenting it as an example of a man-made mountain, Restoro of Arezzo had seen it as a sign of Roman imperial power, and it was in this sense too that it was brought up in discussions of Roman emperors. A number of these present interpretations similar to that in the German-language indulgence literature, giving the request for earth a renunciatory quality. In a commentary on the *Speculum regum* of Godfrey of Viterbo, found in fifteenth-century manuscripts, Antoninus Pius is credited with reluctance to accept tribute from the peoples of the Roman Empire, asking instead for earth from all the kingdoms of the world as a sign of obedience. This is said to have formed the hill known as 'omnis terre' next to the tomb of Remus.[58] However, in some contexts, the location is less securely identified. An early fifteenth-century chronicle in a manuscript containing a rescension of the Kölner Jahrbücher has Octavian commanding everyone to bring a hatful of earth to Rome, which created a mountain that could still be seen and was called 'omnis terra'.[59] Similarly, the late fifteenth-century Koelhoff Chronicle of Cologne described Augustus as bringing the whole world into the Roman Empire, and asking for a piece of earth from each

[57] Nicolas Audebert, *Voyage d'Italie*, ed. A. Olivero (*Viaggiatori francesi in Italia*, 1–2) (Rome, 1981–3), II, 16–18.

[58] Prose commentary on Godfrey of Viterbo, *Speculum regum*, ed. G. Waitz, MGH, SS 22 (Hannover, 1872), 21–93 (75): 'Ideo ab omni populo Romano imperio subiecto tributum accipere noluit, sed terram de omnibus regnis mundi loco tributi apportari iussit in signum obedientie, et montem Rome qui dicitur omnis terre iuxta sepulchrum Remi de eadem terra fecit'. The commentary is found in manuscripts, grouped by Waitz as classes 2 & 3, which date to the fifteenth century. On Godfrey's reception, see L. Scales, 'Purposeful pasts: Godfrey of Viterbo and later medieval imperialist thought', in T. Foerster (ed.), *Godfrey of Viterbo and his Readers: Imperial Tradition and Universal History in Late Medieval Europe* (Farnham, 2015), 119–44.

[59] Copenhagen, Kongelige Bibliotek, Gl. Kgl. Saml. MS 666, fol. 3v; given in K. Hegel, H. Cardauns and K. Schröder, *Die Chroniken der niederrheinischen Städte: Cöln*, 3 vols (*Die Chroniken der deutschen Städte vom 14. bis ins 16. Jahrhundert,* 12–14) (Leipzig, 1875–7), II, 15–16 for details of the manuscript; 290 for the quotation in an editorial note, where the mound is simply identified as Monte Testaccio.

land (instead of silver and gold), which formed a large hill known as 'omnis terra' or 'al ertrijch'.[60] These texts seem to conflate the traditions regarding the Mausoleum of Augustus and Monte Testaccio. This is not to imply that the name 'omnis terra' was necessarily attached to the Mausoleum or Augustus associated with Monte Testaccio; it could equally mean that a less site-specific entity was envisaged. Although the fact that a modern reader cannot be sure where is meant does not mean that this was unclear to the author or a contemporary audience, the blending of components does suggest that, outside of a topographical context, what was important was the idea of such a mountain existing within the city of Rome.

The same can be said of a reference in an oration by Luigi Groto, delivered on the occasion of the French King Henri III's visit to Venice in 1574. He compared the way in which Augustus ordered a 'handful of earth from all the world' to be brought to Rome, which earth grew into a mountain, to the gathering together in Venice of 'part of all the peoples of the world' on account of the presence of the French monarch.[61] While the comparison flatteringly links the two rulers, it is as much about the two cities; Groto made explicit reference to the fact that the capacity of Venice astonished its visitors. The city's reception of Henri III more generally portrayed it as a new Rome, including through classicizing temporary structures, and can itself be situated within a long tradition of viewing Venice in this way.[62] Where Palladio's triumphal arch on the Lido drew on the model of the Arch of Septimius Severus to celebrate individual *adventus*, Groto's comparison with Rome's man-made mountain was expressive of the two cities' broader centripetal qualities. Other commentators too stressed the cosmopolitan nature of Venice. A dialogue by Tommaso Porcacchi describing Henri's visit notes that 'you would have said that all the nations had gathered in Venice'.[63]

[60] 'Want eyn yglich lant all iair bewissen moyst syn gehorsamheit ind bringen syn gult ind rent zo Rome als van silver ind gould ind dar zo eyn stuck erden van sinre lantscaff also dat eyn grois berch dae van in Rome gemacht wart ind was genoempt omnis terra dat is al ertrijch': *Die Cronica van der hiliger Stat va[n] Coelle[n]* (Cologne, 1499), 39v; ed. Hegel, *Chroniken*, II, 290.

[61] 'Già si raccolse in Roma (onde ne crebbe un monte) al tempo, e per precetto d'Augusto un pugno d'ogni terra del mondo, & or s'accoglie in Vineggia per la venuta vostra, Re Cristianissimo, una parte di tutte le nationi del mondo': Luigi Groto, *Le orationi volgari di Luigi Groto cieco di Hadria* (Venice, 1593), fols 90r–v. The speech is discussed briefly in M. Greengrass, 'Henri III, festival culture, and the rhetoric of royalty', in J.R. Mulryne, H. Watanabe-O'Kelly and M. Shewring (eds), *Europa Triumphans: Court and Civic Festivals in Early Modern Europe*, 2 vols (*Publication of the Modern Humanities Research Association*, 15) (Aldershot, 2004), I, 105–15, at 112; I. Fenlon, *The Ceremonial City: History, Memory and Myth in Renaissance Venice* (New Haven, CT, 2007), 210.

[62] Fenlon, *Ceremonial City*, 193–215, esp. 215; P. Fortini Brown, *Venice & Antiquity: The Venetian Sense of the Past* (New Haven, CT, 1996), esp. 277–84.

[63] 'Questo medesimo stupore del popolo infinito occupava le menti al presente: in che avreste detto, che tutte le nationi fossero convenute in Vinetia, si come veramente da tutto il Dominio, e da altre parti erano concorsi': Tommaso Porcacchi, *Le Attioni d'Arrigo Terzo Re di Francia, Et Quarto di Polonia, Descritte in Dialogo*, ed. and trans. in *Europa Triumphans*, I, 140–83, at 156–7.

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The interlocutors recall the reception of Emperor Frederick III in 1452, which included a procession of boats along the Grand Canal. One barge containing men dressed as Roman emperors, with Octavian singled out on a rostrum, particularly pleased the emperor, who remarked that 'Venice held all the nobility of the world'.[64]

These examples give an indication of how Rome's man-made mountain could have relevance beyond the city itself as an embodiment of its relationship with the wider world, especially where polities perceived themselves as in some way inheriting Rome's mantle. If Groto's reference to the 'pugno d'ogni terra del mondo' requested by Augustus can be situated in the context of wider allusions to imperial Rome and the cosmopolis, which appealed to both the city of Venice and its royal and imperial visitors, it may be significant that the mound was also invoked in a commentary on a mirror of princes written for the Hohenstaufen court, and chronicles written within the Holy Roman Empire. Interest in the spatial implications of the mound, including a tendency to moralize the request for earth and to draw parallels with the present day, is also found when it is invoked in religious contexts as well. However, where political entities that claimed a certain *translatio imperii* effectively appropriated the role of centre, in the religious sphere the centrality of Rome continued into the present through the papacy.

BIBLICAL TIME

If references to Rome's man-made mountain might circulate in relative isolation from wider treatment of the city's monuments and topography in discussions of the classical past, it was also discussed independently in religious writing that sought to relate biblical time to both classical antiquity and the present day. In particular it was invoked in the context of identifying Rome with Babylon, especially the Babylon of Revelation.[65] This had long possessed a topographical quality, with the seven hills of the seven heads of the beast on which the Whore of Babylon sits being identified with those of the city of Rome.[66] Nevertheless, as far as I am aware, Rome's man-made mountain was not worked into this comparison. Instead, the interpretations drew on other qualities of the hill as described in literature on the city, particularly its relationship with the wider world, and its connection with tribute or the renunciation of tribute. Debate

[64] 'e hebbe l'Imperatore a dire, che in Vinetia era tutta la Nobiltà del mondo': ibid., 154–5.

[65] For an overview of this tradition, see J. Kovacs and C. Rowland, with R. Callow, *Revelation: The Apocalypse of Jesus Christ* (Oxford, 2004), 179–88; H. Jedin, 'Rom und Romidee im Zeitalter der Reformation und Gegenreformation', in *Kirche des Glaubens, Kirche der Geschichte: Ausgewählte Aufsätze und Vorträge*, 2 vols (Freiburg, 1966), I, 143–52.

[66] On the role of the hills in the identification see G. Biguzzi, 'Is the Babylon of *Revelation* Rome or Jerusalem?', *Biblica* 87 (2006), 371–86, esp. 373–4, 384–5; Vout, *The Hills of Rome*, 25–6.

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surrounding the identification of Babylon with Rome primarily centred on whether the ancient or papal city was intended, and from the Reformation onwards was split along confessional lines. References to the mountain are found on both sides of this divide during the sixteenth century, being used to draw both positive and negative comparisons with the past, and posit unfavourable continuities. One Roman Catholic author connected the mound with ancient idolatry; writers critical of the papacy built on moralized readings of the soil to contrast imperial renunciation with papal greed, or saw in the tribute a sign of the city's enduring centripetal power and riches.

What may be the earliest reference comes in 1513, in a work on the celebration of Easter by Paul of Middelburg, Bishop of Frosinone, in which ancient Rome is associated with Babylon.[67] The passage in question places the birth of Christ at a time of great idolatry, when the Romans adopted the gods of all nations. This is evidenced by the creation of the Pantheon and by Monte Testaccio, which is understood as the site of a temple of all idols, to which individual cities subject to Rome, each year, brought a handful of earth 'in signum tributi'. The references to a temple and to the 'handful of earth' suggest some conflation with the traditions surrounding the Mausoleum of Augustus. On the other hand, 'Mons Testaceus' is explicitly named and its distinctive composition attributed to the vessels that contained the earth, and 'omnis terra' is given as an alternative toponym. Either way, both the religious function associated with the Mausoleum and the universal quality of both sites seem likely to have suggested the association with the Pantheon. Idolatry is then used to link classical Rome with Babylon.

The man-made mountain was subsequently discussed in the light of the Protestant identification of papal Rome as Babylon, here focusing on the tradition of the tribute. One writer used the 'mons omnis terra' to contrast the restraint of the ancient Romans with the greed of the contemporary Roman Catholic Church. An anonymous satirical gloss on Lamentations, printed in Schlettstadt in 1520 as the *Lamentationes Germanicae nationis* and subsequently translated into German, draws a parallel between Jerusalem destroyed by Babylon and contemporary Germany.[68] In the gloss on chapter 1, verse 2, it complains that where once the Romans had rejected the gold and silver of the provinces, asking only for a modicum of earth as tribute, as shown by the 'mons omnis terrae', they now had a voracious appetite that could not be satisfied by all the miners in Germany.[69] The contrast between the precious metals and the token

[67] Paul of Middleburg, *Paulina De rechta Paschae celebratione, et De die passionis domini nostri Iesu Christi*, 19.3 (Fossombrone, 1513), n.p.

[68] The publication date is given as 1526, but since the work is mentioned in a letter dated January 1521 and the name of the printer is false, this may be an error or deliberate falsification; J. Benzing, 'Der Winkeldrucker Nikolaus Küffer zu Schlettstadt (1521)', *Stultifera navis: Mitteilungsblatt der Schweizerischen Bibliophilen-Gesellschaft* 13 (1956), 63–6.

[69] 'Nec possunt omnes fossores in mineralibus montibus totius Germaniae tantum auri & argenti effodere, quantum Roma vorat, abissus infernalis est. Roma apud gentiles olim aurum & argentum provinciarum respuit, terram modicum pro tributo petiit. testis hodie mons omnis terrae':

https://doi.org/10.1017/S0068246217000022 Published online by Cambridge University Press

tribute of earth is reinforced here by the allusion to their common origin in the ground. There is also a certain topographical mirroring, with the ore-bearing mountains of Germany ('in mineralibus montibus totius Germaniae') brought into tension with the man-made mountain in Rome ('mons omnis terrae').

Given the wider concerns of the text with the abuses of the Roman Church, the information regarding the earthen tribute may be drawn from the *Indulgentiae ecclesiarum urbis Romae* as it appeared in the German-language *Mirabilia Romae*. Indeed, the *Lamentationes* linked papal Rome's exactions to the indulgence system, stating that once Germany's gold and silver are exhausted, sins will no longer be forgiven nor indulgences sold.[70] At the same time, the information may derive from the chronicle tradition or even the commentary on the *Speculum regum*. At least one chronicle text already contained discussion of both the earthen tribute that made up the 'mons omnis terra' and modern monetary exactions. In its entry for 1464, the late fifteenth-century Koelhoff Chronicle of Cologne, which earlier describes Augustus asking for earth instead of silver and gold, bemoans the vast quantities of money sent to Rome from Germany out of piety every year.[71] As in the *Lamentationes*, the author presents the land as being drained of resources, expressing surprise that there is any money left. Moreover, he draws an explicitly negative contrast between antiquity and the present day, arguing that Germany was not so hard pressed by yearly tributes by the pagan Roman emperors as it is now.[72] The implied comparison is between differing amounts of monetary tribute, and no reference is made to the passage on Augustus. However, the fact that this type of text could include both topics, and compare the demands of the two eras, provided an opportunity for the starker contrast of the *Lamentationes* to be drawn. The prompt to do so should also be seen in the context of the quickened tempo of criticisms of papal Rome in the early sixteenth century. In the past, the *Lamentationes* has been attributed to the humanist Ulrich von Hutten, and it certainly shares features with his works, notably the characterization of the German nation as exploited by a grasping papacy in his *Klag und Vormahnung*

Lamentationes Germanicae Nationis (Schlettschadt: Schürer, 1520/6), n.p.; Munich, Bayerische StaatsBibliothek, Res/4 Eur. 332,50.

[70] 'Quando Germania prorsus exhausta fuerit aere & argento & auro, tunc non rimittentur nobis misellis amplius peccata, nec venient ad fores mulgentiae dixerim indulgentiae, sed erimus in maledictionem & in derisum omni populo': *Lamentationes Germanicae Nationis*, n.p.

[71] 'Och wat groisser summen geltz ind wie mannich hondert duisent gulden komen alle jair zo Rome uis Duitschland me dan uis einigen anderen lande durch die geistlicheit, des niet vil widderumb heruis kumpt, dat wunder is dat einich gelt in dem vurß lande is, und is ghein wonder dat des goltz und silvers van dage zo dage gebrech und geminret wirt': *Die Cronica van der hiliger Stat va[n] Coelle[n]* (Cologne, 1499), fol. 317r; ed. Hegel, *Chroniken*, III, 810.

[72] 'Ich halden, dat Diutschland … nie so haftichlich van den roemschen keiseren in der zit der heidenschaft mit jairlichen tribute zo geven beschoren wart, as it nu bi unseren ziden ind bi 200 jairen hievur': *Die Cronica van der hiliger Stat va[n] Coelle[n]* (Cologne, 1499), fol. 317r; ed. Hegel, *Chroniken*, III, 810.

gegen dem übermässigen unchristlichen Gewalt des Papsts zu Rom (1520), where papal exactions are described in terms of tribute.[73] The same tone is present also in the *Gravamina Germanicae nationis*, including those compiled by Jakob Wimpfeling and printed by the same publishers as the *Lamentationes* in the previous year.[74]

If an earthen composition of the 'mons omnis terra' lent itself to a positive reading of antique Rome, where the amphorae of Monte Testaccio were identified as containing monetary tribute, this could be seen as testimony to an enduringly avaricious quality to the city. In his late sixteenth-century commentary on Revelation, John Napier used the site — here named as 'Monte Testaceo' — to support his interpretation of the woman 'arrayed in purple' in chapter 17 as signifying a city 'clad with all princelie riches', and his identification of this city with Rome. He discussed the tribute brought to Rome in antiquity in earthenware pots, which were broken and piled up as a testimony to the wealth of the Romans 'for their glorious name and ostentation'.[75] He presented this tradition of tribute as continued in the indulgence system: 'and what merveil it is that it be rich, seeing almost the whol world have bene tributaries to it, about 2000 years, including the time of pardons, as being the most welthy tributes'.[76] This made explicit a connection already present in earlier discussions of Monte Testaccio or 'mons omnis terra'. As noted above, an association with indulgences can be detected in Capgrave's presentation of the amounts of earthen tribute as proportional to the distance of the tributary country, mirroring the practice of distinguishing between pilgrims according to the distances they had travelled, while the *Lamentationes* contrasted the earthen tribute with papal Rome's exactions, themselves linked to the indulgence system. However, only the idea of the amphorae as containing monetary tribute allowed for a direct parallel. Some previous commentaries on Revelation, such as that by Sebastian Meyer, had associated the Whore's gold and precious stones with tithes and indulgences, while Heinrich Bullinger described ancient Rome as 'inriched with the spoyles of all

[73] Ulrich von Hutten, *Klag und Vormahnung gegen dem übermässigen unchristlichen Gewalt des Papsts zu Rom* …, in *Ulrich von Hutten: Deutsche Schriften* (Munich, 1970), 200–43, esp. 207. Hutten is given as the author of the *Lamentationes* in J. Grässe, *Trésor de livres rares et précieux; ou Nouveau dictionnaire bibliographique*, 7 vols in 8 (Dresden, 1858–69), IV, 87.

[74] Jakob Wimpfeling, *Gravamina Germanicae nationis cum remediis et avisamentis ad Caesaream Maiestatem* (Schlettschadt: Schürer, 1519); Regensburg, Staatliche Bibliothek, 999/4 Theol.syst. 714(45).

[75] 'And as in all things they are glorious, so also in their tributes they appointed that the same shuld be brought in earthen pots, & the pots broken in a certaine place of Rome, where, by the great quantity of broken pots, there is waxed a hil, called *Monte testaceo*. And this have they done for their glorious name and ostentation, which (confirming this text) beareth recorde of the great riches that hath bene brought to them from al the world': John Napier, *A Plaine Discovery of the Whole Revelation of Saint John* (Edinburgh, 1593), 212.

[76] Napier, *Plaine Discovery*, 212.

https://doi.org/10.1017/S0068246217000022 Published online by Cambridge University Press

nations'.[77] As far as I am aware, though, earlier commentaries do not refer to Monte Testaccio, suggesting that this detail comes from a text on Rome.[78] While Napier may have spent time in Italy himself, his characterization of Monte Testaccio corresponds with the interpretation favoured in William Thomas's *Historie of Italy*, which has been seen as highly influential on English perceptions of Italy in the second half of the sixteenth century, while its presence in the library of James VI speaks of its reception in Scotland.[79]

While it was possible to identify the Whore of Babylon with Rome by drawing comparisons between her rich clothing and the vestments of the Roman Catholic clergy, Napier is one of several writers who did so on the basis of the fabric of the city. An influential reference point for this can be found in Luther's German translation of the New Testament, printed in 1522. As noted by André Chastel, Cranach's illustrations for the Book of Revelation included an image of the destruction of Babylon based on part of a view of Rome in Hartmann Schedel's *Weltchronik* of 1493.[80] The focus of the scene is a view of St Peter's and the Borgo from across the Tiber, including Castel Sant'Angelo, and the broken towers of the papal palace are prominent amongst the array of toppling structures. A similar scene by Hans Holbein is found in the Thomas Wolff Bible, printed in Basel in 1523; though the image is less detailed, the Vatican and Castel Sant'Angelo are still clearly evident.[81] Textual identifications of Rome as Babylon similarly seem to draw on earlier traditions of topographical description, here including classical antiquities. In particular, their accounts of Rome reflect the arrangement by types of building that characterizes the *Mirabilia*, and is also found in some pilgrimage accounts and humanist writing. For example, the Puritan Thomas Brightman, whose commentary on Revelation was printed in the early seventeenth century, saw the woman's adornments paralleled in the 'infinite costes of this City bestowed on Temples, Theatres, Galleries, hote Bathes, Palaces, Obeliskes, Pillars, Arches belonging to triumphes, Private houses, and other ornaments'.[82] The German Protestant David Pareus also saw the apparel of the woman in the light of the monuments of Rome, although his is a rather more eclectic list of less strictly classical types

[77] Sebastian Meyer, *In Apocalypsim Iohannis Apostoli* (Zurich, 1539), 72r; Heinrich Bullinger, *A hundred sermons vpon the Apocalips of Iesu Christe* (second edition, London, 1561), 528, see also 392, 538 for similar sentiments.

[78] Commentaries surveyed include those by François Lambert, John Bale, Heinrich Bullinger and Augustine Marlorat.

[79] A. Hadfield, 'Shakespeare and Republican Venice', in L. Tosi and S. Bassi (eds), *Visions of Venice in Shakespeare* (Farnham, 2011), 67–82, at 68; G.F. Warner (ed.), 'The library of James VI, 1573–83', *Publications of the Scottish History Society*, 15, *Miscellany* (Edinburgh, 1893), ix–lxxv, at lxvi.

[80] A. Chastel, *The Sack of Rome, 1527*, trans. B. Archer (Princeton, NJ, 1983), 72–4, figs 41b, 42.

[81] Ibid., 74, 77 fig. 44c.

[82] Thomas Brightman, *A Revelation of the Apocalyps* (Amsterdam, 1611), 461; on Brightman, see A. Crome, *The Restoration of the Jews: Early Modern Hermeneutics, Eschatology, and National Identity in the Works of Thomas Brightman* (Cham, 2014), 59–95.

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combined with items of liturgical furniture and clothing.[83] Nevertheless, in both cases, the building types correspond quite closely to those of the *Mirabilia*, which discusses in turn the walls, gates, triumphal arches, hills, *thermae*, palaces, theatres, bridges and pillars of the city, before moving on to images and cemeteries. Similar structuring can be found in Capgrave's *Solace of Pilgrimes* and in Andrea Fulvio's *Antiquaria urbis* of 1513.[84] Napier's invocation of Monte Testaccio can therefore be understood as part of a tendency for Protestant interpretations of Revelation to take aspects of the topographical representation of Rome, from details regarding individual sites to organizational tropes and city views, and turn them against it, as part of what Chastel termed the 'diabolization' of the city. Within this framework, pagan antiquities acted as traces of the wealth and voracity of the antique city.

Where the *Lamentationes* may draw on the indulgence literature of the very system it was criticizing, these examples relate less specifically to Roman Catholic accounts of the city. Instead, in their parallels with texts on antiquities and their negative portrayal of ancient Rome, they could be seen as closer to the work of Paul of Middelburg. Ultimately, the mobilization of writing on the city's built environment in the service of associating Rome and Babylon transcends confessional divides and provides an important context for the discussion of the man-made mountain in religious literature. Remarkably, Monte Testaccio continues to be cited today in modern commentaries on the Apocalypse. Without acknowledging its place within the commentary tradition, J. Nelson Kraybill discusses the mound in the context of the downfall of Babylon in chapter 18, in particular that city's wealth through trade, seen to condemn ancient Rome as the centre of an oppressive economy.[85] Where the early modern Protestant sources moralize the earth and tribute in the context of contemporary attitudes to the Roman Catholic Church, here the accumulated amphorae reflect the greed of Rome, the consumer city, while also prompting comparisons with present-day systems of economic exploitation; Kraybill asks readers: 'Where are the "potsherd mountains" in the modern economy?'.[86]

GEOLOGICAL TIME

A third sphere in which Rome's man-made mountains were mentioned independently of the rest of the city was the history of the earth. In particular, the site was drawn into Italian authors' discussions of the origins of mountains

[83] 'palaces, steeples, corners of streets, high arches, images, baths, temples, roofes, crosses, altars, idols, robes, mitres, and other Babylonish monuments': David Pareus, *A commentary upon the divine Revelation of the apostle and evangelist, John*, trans. E. Arnold (Amsterdam, 1644), 501–2.

[84] Capgrave, *The Solace of Pilgrimes*, ed. Mills; Andrea Fulvio, *Antiquaria urbis* (Rome, 1513).

[85] Revelation 18:11–19; J.N. Kraybill, *Apocalypse and Allegiance: Worship, Politics, and Devotion in the Book of Revelation* (Grand Rapids, MI, 2010), 140–5, 154.

[86] Kraybill, *Apocalypse and Allegiance*, 154.

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and montane fossils. This partly stems from the interconnected nature of the scholarly endeavours concerned, and the potential for individuals to be active in several areas of learning now considered distinct.[87] During the Middle Ages and early modern period, the timescales involved in the history of the earth and that of humankind were more closely aligned, with the biblical flood a critical point of reference for both. Classical antiquity too was important to natural history, both for the interpretative framework provided by Greek and Roman writers on the subject, and for the information that could be gleaned more generally about the past aspect of the earth. Concern for material evidence was another area of intersection. What can be thought of as the forerunners of archaeology and geology, with their attention to the earth and what could be found beneath its surface, were especially closely connected. There was a commensurately close relationship between man-made antiquities and those created by God or nature, with some terracotta finds being interpreted as natural creations, while mountains themselves might be seen as 'ruins' of a previous age.[88] Italy, and Rome in particular, was fertile ground for such connections; not only was it a source of both classical antiquities and fossils, but its monuments were used as markers against which to measure environmental change. While all of this created the conditions for the 'mons omnis terra' and Monte Testaccio to be invoked in works of natural history, equally important was the nature of the mounds themselves. Whereas their employment in the religious literature was prompted by their capacity to embody Rome's relationship with the wider world, here it was their inherent blurring of the man-made and the natural that invited discussion, focusing on the process by which both the mounds and the material within were formed.

In descriptions and representations of Rome, Monte Testaccio occupied a position between the city's hills and its built antiquities. In common with the Mausoleum of Augustus, it was understood by many to have been created deliberately as a monument, but in its form and dimensions it resembled a topographical feature, and some visitors compared it to naturally formed hills with which they were familiar. Giovanni Rucellai, visiting Rome in 1450, considered Monte Testaccio to be slightly lower than the hill of San Miniato in Florence; in the following century, Montaigne thought it the same height as the mound on which the castle at Gurson was built.[89] Comparisons were also drawn with hills in Rome: in 1616, William Lithgow described it as a 'gréene

[87] On the connections between natural and human history in the early modern period, with particular reference to geology and palaeontology, see Rappaport, *When Geologists Were Historians*, ch. 3; P. Rossi, *The Dark Abyss of Time: The History of the Earth and the History of Nations from Hooke to Vico*, trans. L.G. Cochrane (Chicago, 1984), 3–41; M.J.S. Rudwick, *The Meaning of Fossils: Episodes in the History of Palaeontology* (London, 1972), chs 1–2.

[88] Thomas Burnet, *The Theory of the Earth* (London, 1697), 95; discussed in Rossi, *Dark Abyss of Time*, 33–41.

[89] Giovanni Rucellai, *Della bellezza e anticaglia di Roma*, in *Codice topografico*, IV, 399–419, at 417; A. d'Ancona (ed.), *Journal de Voyage de Michel de Montaigne en Italie par la Suisse et l'Allemagne en 1580 et 1581* (Città di Castello, 1889), 243.

Hill like vnto mount *Cauallo*', that is the Quirinal.[90] Monte Testaccio's relationship with the city's seven hills reflects the same ambiguity. It remained peripheral where lists were expanded to include the lesser hills, and some authors explicitly noted that the composition of the mound set it apart.[91] For example, an Italian translation of Frans Schott's *Itinerarium* (1600) states that there are ten hills within the walls, but lists eleven including Monte Testaccio, which it identifies as man-made and materially different: 'che non è altro, che una gran quantità di pezzi di vasi, e d'altre opera di terra cotta rotte'.[92] Agostino Martinelli started his late seventeenth-century treatise on Monte Testaccio and its grottos with a description of the city's other hills, only to note that it should itself not properly be called a hill at all on account of its distinctive composition.[93] The same ambiguity can be seen in cartographic representations of the city. In Marliani's *Urbis Romae topographia* (1544), Monte Testaccio is omitted from a map showing Rome's walls, gates and eight major hills, but included in one of imperial Rome with both topographical features and major antiquities, sharing its lower-case label with the latter (Fig. 3).[94] However, in a map by Giovanni Antonio Dosio and Sebastiano del Re from 1561, 'M. Testaceus' is marked in capital letters otherwise primarily reserved for the city's other hills, while built monuments are numbered and identified in a key (Fig. 4).[95]

If it took some time for Monte Testaccio to be included amongst Rome's hills in descriptions of the city, Rome's man-made mountain had appeared in descriptions of the world from a much earlier date. Moreover, it continued to be discussed well into the early modern period in works that — despite the anachronism of the term — can be seen as broadly geological in character, or at least as constituting 'une réflexion sur la terre' in the words of Joëlle Ducos.[96] One tradition, following Restoro of Arezzo's *La composizione del mondo*, was primarily concerned with the origins of mountains. These texts display the same shift found elsewhere from references to the 'mons omnis terra' to consideration of Monte Testaccio and its potsherds. Thus the *De*

[90] Lithgow, *A most delectable and true discourse*, 3.

[91] Lorenz Schrader, *Monumentorum Italiae quae hoc nostro saeculo & à Christianis posita sunt, libri quatuor* (Helmstedt, 1592), 111v, numbers ten hills within the walls; 'Mons Testaceus' appears at the end of the list, unnumbered.

[92] Frans Schott, *Itinerario, overo nova descrittione de' viaggi principali d'Italia* (Padua, 1659), pt 2, 15.

[93] 'Il Testacio poi, viene impropriamente chiamato monte, perche in fatti altro non è, che una gran massa di frammenti de' vasi radunati in un'ampia pianura': Agostino Martinelli, *Il Monte Testaceo, ò Testacio* (Rome, 1686), 13; see 3–13 for the other hills.

[94] Marliani, *Urbis Romae topographia*, 7, 12–13; Maier, *Rome Measured and Imagined*, 66–8, figs 16, 17.

[95] Gori Sassoli, *Roma veduta*, 145–6, cat. no. 10; Maier, *Rome Measured and Imagined*, 111–13, fig. 39.

[96] J. Ducos, 'Esiste-t-il une "géologie" médiévale ?', in D. James-Raoul and C. Thomasset (eds), *La Pierre dans le monde médiéval* (Paris, 2010), 17–35, at 18.

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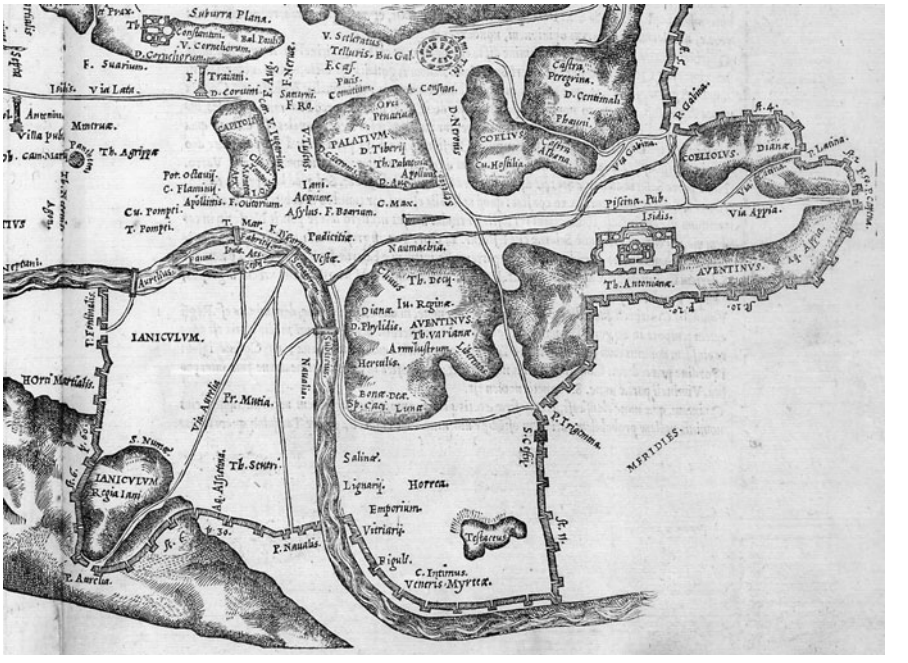

Fig. 3. Detail from a plan of imperial Rome, from Bartolomeo Marliani, *Urbis Romae topographia* (Rome, 1544), foldout between pp. 11 and 14. Oxford, Bodleian Library, F. ix. 67. Reproduced by kind permission of The Bodleian Libraries, The University of Oxford.

Fig. 4. Sebastiano del Re after Giovanni Antonio Dosio, detail from a plan of Rome, engraving, 1561. National Gallery of Art, Washington, DC.

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compositione mundi of Paul of Venice (1369–1429), which translated and abbreviated Restoro's vernacular text, simply gives the case of 'monte omnis terra in Roma' as an example of a man-made mountain.[97] However, the *De constitutione mundi* of John Michael Albert of Carrara (1438–90), which also draws on Restoro's work and indeed explicitly names him a few lines previously, refers to Mons Testaceus as a man-made mountain made up of 'testis' used to contain tribute.[98] Similarly, in his mid-sixteenth-century dialogue *De montium origine*, Valerio Faenzi described Monte Testaccio as made up of pots that contained either human ashes or tribute.[99] John Michael Albert's work was never printed and few manuscript copies survive, suggesting that Faenzi updated the reference independently. Certainly, mention of the funerary nature of the pots must derive more directly from Biondo's *Roma Instaurata* or works following its precedent. These examples show that a move from 'mons omnis terra' to 'mons Testaceus' could take place within a textual tradition with a far more evident chain of transmission than can so far be posited for the texts that employ these sites to link Rome and Babylon. This suggests that the later writers at least understood the references to 'monte ogni terra' or 'mons omnis terra' to denote Monte Testaccio, regardless of what was originally meant, and were simply updating the discussion by incorporating terminology and information drawn from more recent topographical literature on Rome. Despite this change, and although the origins of the site in Roman antiquity were significant in providing a timescale for the creation of the mound, whether it was made up of earth or earthenware did not affect its interpretation here. In the context of the origins of mountains, the substance of Monte Testaccio was of less significance than the means of its composition, an accumulation of material over time through human actions. Nonetheless, the fact that the mound did feature as an earthenware entity in writing on the origins of mountains may have contributed to other references that were more concerned with its contents.

[97] Paulo Veneto, *Super libros de generatione et corruptione Aristotelis; De compositione mundi cum figuris* (Venice, 1498), 112v.

[98] 'etiam aliqui montes ab hominibus sicut ro[man]i ex testis in quibus tributa afferrebant[ur] montem testaceum fecerunt': John Michael Albert, *De constitutione mundi*, 11.8; Florence, Biblioteca Laurenziana, MS Ashburnham 198, fol. 113v; the work in general is discussed in L. Thorndike, 'The *De constitutione mundi* of John Michael Albert of Carrara', *The Romanic Review* 17/3 (1926), 193–216, esp. 197–8.

[99] 'Testaceum enim Romae vel figuli ex vasorum fragmentis, vel qui deferebant eum in locum vasa, quibus mortuorum cineres asservabantur, vel qui ex civitatibus, et provinciis tribute populo Romano solvebant, congesserunt': Valerio Faenzi, *De montium origine* (Venice, 1561), fol. 16r; ed. and trans. P. Macini and E. Mesini (Verbania, 2006), 76–8. On Faenzi's work, see I. Dal Prete, 'Valerio Faenzi e l'origine dei monti nel Quinquecento Veneto', in S. Boscani Leoni (ed.), *Wissenschaft-Berge-Ideologien. Johann Jakob Scheuchzer (1672–1733) und die frühneuzeitliche Naturforschung* (Basel, 2010), 197–214; and M.I. Campanale, *Ai confini del Medioevo scientifico: il* De montium origine *de Valerio Faenzi* (Bari, 2012), esp. 246, where the treatment of Monte Testaccio is set in the context of the archaeology of the site.

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From the sixteenth century, Monte Testaccio was also discussed in the context of the discovery of montane fossils and debate over whether these derived from organic matter or were generated in the rock. As Rhoda Rappaport has highlighted, the issue of transport was key to debates over the nature of fossils more generally, with shells posing a particular challenge.[100] To an extent, this mirrors discussions regarding the local or distant origins of the material making up Monte Testaccio. Italian naturalists on both sides of the debate mentioned the site, interpreting its composition differently in the light of their wider concerns. In Gabriele Falloppio's *De medicatis aquis atque de fossilibus*, based on lectures delivered in the mid-1550s but first printed posthumously in 1564, he described a mountain near Volterra full of oyster shells ('testis ostrearum lapidosis') which he argued were created there rather than resulting from the Flood, just as the fragments of pots in Monte Testaccio will perhaps be said to have been created there, rather than having been deposited by the ancients.[101] Falloppio was generally in favour of the creation of fossils from organic material, but the presence of shells in mountainous areas far from the sea gave him pause for thought.[102] In this case he posited a method of lapidification, which has been variously interpreted by modern scholars.[103] This does seem to retain an animal origin for the shells ('cochleis') said to be found in tufa ('nam prius fiunt animalia, deinde sunt factae lapides') but regards the animal itself as created at the same time as the rock by a process of fermentation or spontaneous generation. Vincenzo Bruno's dialogue on precious stones from 1602, which drew explicitly on Falloppio's work regarding the generation of stones, also includes mention of Monte Testaccio in the same context: 'ò si può dire ch'ivi quelle teste fossero originate, se non fù il Diluvio, ò l'acque del mare, come in Roma si vede nel colle testaceo chiamato, onde primo furono animali, & poi pietre'.[104]

It is not clear what inspired Falloppio's comparison between Monte Testaccio and the Volterran mountain, or indeed if he was the first to make this association. Some of the works that mention Rome's man-made mountain also discuss

[100] Rappaport, *When Geologists Were Historians*, ch. 4, esp. 105–8, 119–35.

[101] 'sicuti etiam fortasse erit dicendum, quod ollae, seu testae ollarum, quae sunt Romae in colle illo Testaceo vocato, fuerint ibi genitae, non autem ab antiquis inibi repositae, ut quidam afferunt': Gabriele Falloppio, *De medicatis aquis atque de fossilibus* (Venice, 1569), fols 108v–110r. On the work, see G.E. Ferrari, 'L'opera idro-termale di Gabriele Falloppio: le sue edizioni e la sua fortuna', *Quaderni per la Storia dell'Università di Padova* 18 (1985), 1–41; the reference to Monte Testaccio is noted in F. Rodolico, *L'esplorazione naturalistica dell'Appennino* (Florence, 1963), 44.

[102] K.-T. Hsu, 'The path to Steno's synthesis on the animal origin of *glossopetrae*', in G.D. Rosenberg (ed.), *The Revolution in Geology from the Renaissance to the Enlightenment* (Boulder, CO, 2009), 93–106, at 96–7.

[103] Hsu, 'The path to Steno's synthesis', presents this as compatible with an organic origin; Rudwick, *The Meaning of Fossils*, 41, sees Falloppio as positing spontaneous generation in these cases; G.B. Vai simply describes him as rejecting an organic origin: Vai, 'The Scientific Revolution and Nicholas Steno's twofold conversion', in *Revolution in Geology*, 187–208, at 189.

[104] Vicenzo Bruno, *I Tre Dialoghi* (Naples, 1602), 262.

montane fossils, although no connection is made between them. Restoro of Arezzo referred to a mountain full of shells, which he interpreted as resulting from flooding, in a passage shortly before that on the 'monte d'ogne terra'.[105] The same section also contains a discussion of mountains caused by the petrifying properties of hot springs, of relevance to the wider subject of the *De medicatis aquis atque de fossilibus*, and it is not impossible that Falloppio had access to the work or to one of its followers. In Valerio Faenzi's *De montium origine* (1561), in which Monte Testaccio is named and described as containing ancient potsherds, montane fossils are also seen to result from the Flood.[106] Ultimately the comparison derives from the ambiguous substance of the mound, but there is no evidence that Falloppio had visited the site himself, and its nature was likely mediated through texts. While it has been suggested that the rounded forms of the potsherds could, like that of the shells, have been understood to result from whirling motions within the rock, this is not made explicit.[107] Rather the connection may be primarily verbal, reflecting the use of the word 'testa' to denote both pieces of earthenware and the shells of shellfish, and thus predicated on a shared hardness. Certainly, in the *De medicatis aquis*, the 'testae ollarum' of Monte Testaccio echo the Volterran mountain of 'testis ostrearum lapidosis'. Falloppio did not explore the implications of the comparison for the creation of the Monte Testaccio potsherds or posit an animal quality for these 'testae', though Bruno's abbreviated account may bring the substance of Monte Testaccio closer to an animal origin. The idea of excavated earthenware as naturally produced was found elsewhere without reference to fossils; urns discovered in fifteenth-century Poland were understood to have been generated in the earth.[108] By entertaining the possibility that the forms in Monte Testaccio were natural, Falloppio was essentially bolstering an argument regarding location, which favoured generation *in situ* over movement from elsewhere. In this respect, the debate regarding the origins of fossils can be seen to parallel the divergent opinions as to whether the potsherds derived from local potteries or imperial tribute.

Monte Testaccio was also mentioned by Michele Mercati (1541–93) in his posthumously published *Metallotheca*.[109] While rejecting the marine origin of

[105] Restoro d'Arezzo, *La composizione del mondo*, 2.5.8, ed. Morino, 127.

[106] 'Cuius indicium in lapidibus existit, quos in remotis montibus conchis, et ostreis concretos reperimus': Valerio Faenzi, *De montium origine* (Venice, 1561), fol. 12r; ed. and trans. Macini and Mesini, 56.

[107] P.J. McCartney, 'Charles Lyell and G. B. Brocchi: a study in comparative historiography', *The British Journal for the History of Science* 9/2 (1976), 175–89, at 182–3.

[108] 'plura ollarum genera solo naturae beneficio et absque omni humano suffragio effigantur': J. Długosz, *Historia Polonicae*, XI, ed. A. Przezdziecki, *Joannis Długossi Senioris Opera Omnia*, 14 vols (Krakow, 1863–87), XIII, 193–4; W. Rączkowski, '"Drang nach Westen"?: Polish archaeology and national identity', in M. Díaz-Andreu and T. Champion (eds), *Nationalism and Archaeology in Europe* (Boulder, CO, 1996), 189–217, at 190.

[109] M. Mercati, *Metallotheca* (Rome, 1717), 295; B. Accordi, 'Michele Mercati (1541–1593) e la Metallotheca', *Geologica Romana* 19 (1980), 1–50, at 30. On Mercati, see also S. Dominici, 'Storia

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montane fossils, including those found in Monte Mario in Rome, he further distinguished them from man-made antiquities, which could also be unearthed in the city. In particular, he suggested that some items recently identified as oyster-shell shaped 'ostracites' were actually 'ceramites', described by Pliny as having the colour of pottery. Mercati acknowledged that some authors thought fragments of earthenware dug out of the ground to be produced by nature, and suggested that these were what had been termed 'ceramites' by the ancients. However, he countered this explanation of their origins with man-made examples, presenting Monte Testaccio as resulting from the potteries instituted by Numa and going on to note the presence of terracotta stamped with letters in ruins near the Lateran. Since Falloppio had brought up Monte Testaccio in the context of discussing 'testis ostrearum lapidosis', it is possible that Mercati had his work in mind when distinguishing man-made objects from idiomorphic stones.

Monte Testaccio could equally be invoked in support of opposing views concerning the generation of fossils. Agostino Scilla, in his *La vana speculazione disingannata dal senso* of 1670, mentioned the site twice in putting forward an organic origin.[110] He firstly characterized the idea of spontaneous generation as being as absurd as the idea that the potsherds in Monte Testaccio were created by seeds, again perhaps having Falloppio's work in mind here.[111] He then went on to counter the argument that the number of glossopetrae derived from Malta was implausible by noting the size of the island and the number of quarries and caves there, and comparing this to Monte Testaccio, only a third of a mile in length, which had not been visibly diminished by being used by all the construction sites in Rome.[112] During the seventeenth century the site does indeed appear to have been mined for building materials, since the construction of St Peter's involved wagon-loads of 'cochie, che si pigliano a Monte Testacio' for the plaster above the façade in 1612, and J.A.F. Orbaan recorded the presence in the Vatican archives of a notice of 1607

della Toscana, storia della terra / History of Tuscany, history of the earth', in S. Monechi and L. Rook (eds), *Il Museo di Storia Naturale dell'Università degli Studi di Firenze*, 3, *Le collezioni geologiche e paleontologiche* (Florence, 2010), 3–17.

[110] On Scilla, see Rossi, *The Dark Abyss of Time*, 19–24; P. Findlen, 'Agostino Scilla: a Baroque painter in pursuit of science', in O. Gal and R. Chen-Morris (eds), *Science in the Age of Baroque* (Dordrecht and New York, 2013), 119–59.

[111] 'Per ultimo, io non averei per cosa difficile, ogni volta, che si volesse chimerizzare, d'assegnar' anche nella Natura qualche semi, che avessero potuto produrre nel suolo Romano il famosissimo, ed antichissimo a gli stessi antichi, ed oscuro d'origine Monte Testaccio, il quale di vasi rotti è composto': A. Scilla, *La vana speculazione disingannata dal senso: lettera risponsiva circa i corpi marini, che petrificati si trovano in varii luoghi terrestri* (Naples, 1670), 39.

[112] 'simile al preteso, il soprannominato monte Testaccio di Rome, il quale non gira maggiore spazio d'un terzo di miglio e non s'osserva diminuito, ancorchè a tutte le fabbriche d'una Città vastissima, com'è Roma, egli abbia sumministrato, e sumministri buona, e considerabile quantità di se stesso; e ciò si deve considerare da un tempo altissimo in quà, e per l'avvenire se pur bisogna': Scilla, *Vana speculazione*, 55.

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banning the removal of potsherds from the mound.[113] Similarly, in his *Roma antica* of 1666 Famiano Nardini states that the mound should be even greater in size, since he himself had witnessed wagon-loads of the pottery fragments being taken to be spread on surrounding roads.[114] Although Rome's built antiquities had been similarly mined, the quarrying of the mound in a manner similar to natural hills also contributed to its use as a parallel in a work of natural history.

If Scilla's references to Monte Testaccio may well relate to previous debates in the literature on fossils, they are also likely to reflect his identity as an antiquarian. In her study of the relationship between Scilla's *La vana speculazione* and his artistic and antiquarian activities, Paula Findlen suggests that: 'His observations of this ancient Roman dump site stimulated his understanding of fossils as nature's amphorae, piling up over time and mixing with earth to create a seemingly infinite mountain of ruined things.'[115] It is interesting in this respect to recall that Restoro of Arezzo may also have been a practising artist, and identifies some of the fossil shells as those used by artists to hold their paints, as well as describing antique ceramics excavated locally.[116] However, both authors fit into a broader lack of segregation between fields of enquiry that sought the past in the ground, and a tendency for fossils to be treated as natural antiquities.[117] Even for scholars who understood fossils to be created organically, the time period in which this was thought to have taken place was not so very remote from that of classical antiquity. Robert Hooke characterized mountains containing fossilized shells as 'more lasting monuments' than the pyramids, and compared the way in which such shells showed a 'natural antiquary' the former extent of the sea to the way in which coins demonstrated to an antiquary the former extent of some princely dominion.[118] In a similar manner to Scilla, he also suggested that the shells were as unlikely to have been made by a 'plastick Faculty of Nature' as an urn full of coins dug up out of the ground.[119] The presence of earthenware in the archaeological record made it a

[113] J.A.F. Orbaan, 'Der Abbruch Alt-Sankt-Peters, 1605–1615', *Jahrbuch der Königlich Preussischen Kunstsammlungen* 39 (1919), 1–139, esp. 21, 116.

[114] 'la cui grandezza maggiore alquanto dovette essere, avendo veduto io a miei giorni levarne infinite carrettate, per rimediar con quelle coccie alla fangosità delle strade circonvicine': Famiano Nardini, *Roma antica*, ed. A. Nibby, *Roma antica di Famiano Nardini: riscontrata, ed accresciuta delle ultime scoperte, con note ed osservazioni critico antiquarie*, 4 vols (Rome, 1818–20), III, 320; cited in Lanciani, 'Testaccio', 249.

[115] Findlen, 'Agostino Scilla', esp. 129.

[116] Restoro d'Arezzo, *La composizione del mondo*, 2.5.8, ed. Morino, 127, for the shells; 2.8.4, ed. Morino, 198–200, for the chapter on the antique vases; on Restoro as artist, see Donato, '"Savio depentore"'.

[117] Rappaport, *When Geologists Were Historians*, 90–2, includes Scilla among a number of Italians, as well as scholars of other nationalities, whose activities spanned natural and civil history.

[118] R. Waller (ed.), *The Posthumous Works of Robert Hooke, M.D., S.R.S., Geom. Prof. Gresh. &c. Containing his Cutlerian Lectures, and other Discourses read at the meetings of the illustrious Royal Society* (London, 1705), 279–328, at 319–321; discussed in Rudwick, *Meaning of Fossils*, 74.

[119] Waller, *Posthumous Works of Robert Hooke*, 321.

natural point of comparison for fossils, beyond the particular case of Monte Testaccio.

Fixed antiquities were also invoked in discussions of the mutability of the earth's surface, especially with regard to rising ground levels. While this phenomenon was noted in a number of locations, it was particularly evident in Rome itself. Albertus Magnus noted that ancient pavements had been found deep underground in Cologne, ascribing this to the ground having been built up over them after the buildings were ruined.[120] In his *De montium origine*, Valerio Faenzi mentioned the way in which Roman amphitheatres were now significantly below ground level in support of the notion that the earth rose slowly through the mixing of earth and water in the presence of a 'mineral energy'.[121] Similarly, the seventeenth-century naturalist John Ray, in his discussion of the dissolution of the earth, illustrated the erosion of mountains and the filling in of valleys with reference to the way in which the foundations of the Capitol had been exposed over time, while the Arch of Septimius Severus in the Forum below was largely buried.[122] In describing other antiquities now below ground level, Ray seems to have drawn on his own experience, since he also mentioned the sunken quality of the Pantheon and Trajan's Column in an account of his visit to Rome in the 1660s.[123] These discussions present antiquities less as ruins, themselves subject to decay and erosion, and more as fixed points in a changing natural landscape. As an artificial mountain dating from classical antiquity, Monte Testaccio was a rather different case: not so much a yardstick against which to measure geological processes, as a man-made equivalent of these processes. However, the wider integration of built antiquities into geological literature is still important in providing a context for the discussion of 'mons omnis terra' and Monte Testaccio, suggesting that classical origins and Roman location may have contributed to the longevity of interest in this man-made mountain, where Restoro's Arezzo example faded from the picture.

CONCLUSION

When Pier Paolo Vergerio described Monte Testaccio as a 'mons manufactus', he put a name to a phenomenon that transcends any single site in the city. This article

[120] Albertus Magnus, *Liber de causis proprietatum elementorum*, 1.2, trans. Resnick, 51.

[121] 'quandoquidem amphitheatra multis in civitatibus olim erecta, quibus ad ludos spectandos, utebantur veteres Romani, nunc fere subterranea sunt': Valerio Faenzi, *De montium origine* (Venice, 1561), fols 5v–6r; ed. and trans. Macini and Mesini, 28–30; Dal Prete, 'Valerio Faenzi e l'origine dei monti', 201.

[122] John Ray, *Three physico-theological discourses … wherein are largely discussed the production and use of mountains …* (second edition, London, 1693), 299–300.

[123] Ibid., 309; John Ray, *Observations topographical, moral, & physiological made in a journey through part of the low-countries, Germany, Italy, and France …* (London, 1673), 347, 357.

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has sought to bring together for the first time the multiple strands of interest in this phenomenon, and to explain why it attracted attention beyond writing on Rome itself. One important aspect is the longevity and coexistence of the different ideas regarding the composition and origins of the mounds, which came to circulate simultaneously in literature on the city rather than replacing one another. This partly gave a wider field of ideas on which to draw in other contexts, with different understandings having particular relevance to the different spheres in which the mounds were discussed. At the same time, a variety of interpretations were adopted within each area of interest, and the very existence of ambiguities and differences of opinion in the literature on Rome may itself have contributed to the mounds being invoked in other debates.

In so far as the 'mons manufactus' was thought to be made up of material imported into the city, it embodied and facilitated discussion of the relationship between Rome and the wider world. Regardless of whether it was understood to be made up of earth or earthenware, this imported quality could be used to illustrate Roman imperial reach in antiquity, as in the *Mirabilia* literature and histories covering the classical past. It also prompted comparisons across time. In Groto's speech, parallels were drawn between Rome's past and Venice's present centripetal nature. More commonly, the implicit or explicit point of comparison was papal Rome and its sphere of influence. Capgrave's discussion of the proportionality of the tribute is suggestive of ways of differentiating between pilgrims, while Protestant writers invoked the tribute when criticizing the Roman Church and its economy of salvation. In this context, the material of the mound could take on an important moral dimension. Within the framework of characterizations of papal Rome as exploitative, the idea of earthen tribute created a contrast with ancient renunciation of silver and gold, while that of monetary tribute allowed the city to be portrayed as enduringly avaricious. In this way, debate over the nature of the mound in literature on Rome was mapped onto other debates regarding whether the Babylon of Revelation should be interpreted as referring to ancient or papal Rome, or indeed both.

Rome's 'mons manufactus' also occupied an ambiguous place between built antiquity and natural topographical feature, and as such found a place in natural histories. The formation of such an entity in the classical past was of interest for debates regarding the generation of mountains, with the gradual accumulation of material over time mirroring certain natural processes. Here, whether it was a deliberate monument to imperial power or the unintentional product of local manufacturing was of secondary concern, and discussions of man-made mountains were able to encompass these different possibilities without altering the overall significance of the site. That said, Restoro's discussion of the earthen mound as an intentional monument does correspond to wider parallels in his work between art and nature, suggesting that its 'built' quality may have inspired his inclusion of the site, and thus what seems to be its entry into this field. While the exact composition of the mound was also of lesser importance to writing on mountains than to historical and religious

works, the distinctive make-up of Monte Testaccio did lead to its inclusion in debates over the origins of montane fossils. Here physical and verbal parallels between buried earthenware and fossilized shells seem to have inspired the basic comparison. Yet the enigmatic quality of both phenomena, including issues of transportation, may also have prompted the association. The mound was invoked in the context of disagreement over whether such shells were the remains of marine animals deposited by floods or were generated *in situ*. Although one implication of such a comparison might be that the earthenware was a natural product, it also echoed disagreements concerning the foreign or local provenance of the pottery. In this case the ambiguous origins of the material in the mound were conducive to its being drawn into other debates.

When the 'mons manufactus' was discussed in other contexts, its location within Rome was rarely alluded to, but its identity as a Roman monument was key to its wider relevance. If parallels with natural mountains primarily highlight the montane quality of the 'mons manufactus', the reception of the idea was also informed by the authority Rome and its built structures possessed as points of reference for not only historical, but also eschatological and geological time. The invocation of the 'mons omnis terra' or Monte Testaccio in writing linking Rome and Babylon corresponded to a wider tendency to employ the topography and monuments of Rome in this way, whether the Babylon of Revelation was seen as the antique or papal city. Their discussion in 'geological' literature formed part of a wider engagement with the past through the ground in which a single scholar might write on the generation of mountains, fossils and excavated antiquities, while fossils themselves could be seen as natural antiquities. Italy and Rome in particular formed a fertile environment for such comparisons to be drawn. Finally, the way in which the 'mons manufactus' was discussed in these other fields suggests sustained engagement with the literature on the city of Rome, as the interpretative possibilities changed and expanded over time. Within writing on man-made mountains, views shifted from Restoro of Arezzo's conception of earthen tribute to Valerio Faenzi's earthenware; within biblical exegesis, the same shift can be noted between the *Lamentationes* and Napier's commentary on Revelation. In both cases this accompanied a change in nomenclature from 'mons omnis terra' to 'Mons Testaceus'.

In the course of seeking explanations for the widespread interest shown in Rome's man-made mountains during the Middle Ages and early modern period and for their argumentative employment in wider debates, some have been found in the nature of the mounds themselves and their interpretations; others in the manner in which these interpretations circulated within literature on the city; and others still in the consultation of that literature, informed by the importance of Rome, Roman antiquities and Roman antiquity to other spheres of enquiry. The reception of a particular and atypical type of monument is thus seen as symptomatic of wider trends and connections between cultures of knowledge at this time, but also illuminates these in ways not offered by the city's built antiquities.

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Acknowledgements
The material discussed in this article has been presented at a conference on 'Translating the Past' at Queen's University Belfast; a conference on 'Space and Place in the Medieval World' at the University of York; the Institute of Historical Research Late Medieval Seminar; and a workshop on 'Locating Memory in the Materiality of Heritage' at the University of Exeter. I am most grateful to participants in these events for their questions, and to Kenneth Austin, Jon Balserak and two anonymous readers for helpful comments on versions of the article.