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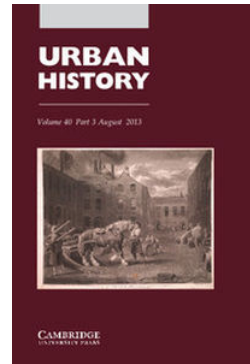
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Healthscaping a medieval city: Lucca's *Curia viarum* and the future of public health history

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ABSTRACT: In early fourteenth-century Lucca, one government organ began expanding its activities beyond the maintenance of public works to promoting public hygiene and safety, and in ways that suggest both a concern for and an appreciation of population-level preventative healthcare. Evidence for this shift (which is traceable in and beyond the Italian peninsula) is mostly found in documents of practice such as court and financial records, which augment and complicate the traditional view afforded by urban statutes and medical treatises. The revised if still nebulous picture emerging from this preliminary study challenges a lingering tendency among urban and public health historians to see pre-modern European cities as ignorant and *apathetic* demographic black holes.

Even in its demographic peak, sometime around the dawn of the fourteenth century, medieval European society was roughly 80 per cent rural, a fact that rendered many cities anomalous in their original landscapes.¹ Today, by contrast, the continent is a global trend-leader with an urbanized population estimated at 75 per cent.² But the juggernaut of urbanization, even where – as in the Lowlands and central-northern Italy – cities were more common than elsewhere, did not proceed unopposed. The proliferation of urban centres, while responding to and enabled by profound technological, social and political changes, simultaneously exacerbated the pressures incumbent upon urban life,

* For their helpful comments and suggestions, I am grateful to Carole Rawcliffe and the journal's editors and anonymous reviewers. Seminar participants at the University of Amsterdam, the Institute for Historical Research in London, Bielefeld University and Monash University provided a stimulating discussion of earlier versions. A special thanks to Corinne Wieben, who kindly pointed out to me the existence of the records at the basis of this study.

¹ J.C. Russell, *Medieval Regions and their Cities* (Newton Abbot, 1972), 130–47; C. Dyer, 'How urbanised was medieval England?', in J.-M. Duvoisquel and E. Thoen (eds.), *Peasants and Townsmen in Medieval Europe: Studia in Honorem Adriaan Verhulst* (Ghent, 1995), 169–84.

² European Environment Agency, *Urban Sprawl in Europe: The Ignored Challenge* (Copenhagen, 2006), 5. See www.eea.europa.eu/publications/eea_report_2006_10. As of 2008, over half the world's population lives in cities, a rate that is expected to rise to about 75% by 2030. See www.unfpa.org/pds/urbanization.htm (both sites last accessed 10 Apr. 2012).

some of which persist to this very day. Salient among these pressures was the need to provide ever more numerous and diverse inhabitants with a safe, healthy and productive surrounding in which to live, work and procreate. The challenges facing pre-modern cities were indeed great. Yet, as recent historiography demonstrates, and in contrast to their traditional image as passive and ignorant, at least some pre-modern urban governments and residents rose to meet these challenges, at times explicitly citing a commitment *pro maiori sanitate hominum* – to people's greater health.³ In their efforts to prevent metropolises from becoming necropolises, individuals, groups and governments embarked on what can be termed healthscaping: a physical, social, legal, administrative and political process of providing their environments with the means to safeguard and improve residents' wellbeing.⁴

Concerns and actions related to population-level healthcare in pre-modernity are often overlooked or marginalized. Earlier histories of public health – often focusing on urban centres – tended to be written by scholars seeking precursors to applied modern epidemiology.⁵ The perspective and trajectory, however, left aside population-level interventions that required few of the accoutrements of modernity, from advanced technology and science to capable and democratically elected governments. Even more recent and less teleological attempts to identify preventative measures in pre-modern societies, such as Dorothy Porter's *Health, Civilization and the State* and Samuel Cohn's *Cultures of Plague*, appear to be locked into a discourse of applied epidemiology that marginalizes actions taken by medieval governments, organizations and individuals to reduce threats other than the spread of epidemic disease.⁶ Public health surveys (among

³ The expression underwrites Italian urban sanitary legislation. See R. Greci, 'Il problema dello smaltimento dei rifiuti nei centri urbani dell'Italia medievale', in *Città e servizi sociali nell'Italia dei secoli XII–XV* (Pistoia, 1990), 458–60; and M. Kucher, 'The use of water and its regulation in medieval Siena', *Journal of Urban History*, 31 (2005), 504–36. And see C. Rawcliffe, 'Sources for the study of public health in the medieval city', in J.T. Rosenthal (ed.), *Understanding Medieval Primary Sources: Using Historical Sources to Discover Medieval Europe* (London and New York, 2012), 177–95 at 181.

⁴ To my knowledge, 'healthscaping' has yet to be treated or defined by urban historians. It is, however, fast becoming a staple term for experts working across the fields of public health, nutrition, social work, architecture and urban planning, building on the insights of Jane Jacobs, especially her seminal *The Death and Life of Great American Cities* (New York, 1992; orig. publ. 1961). And see T. Farley and D.A. Cohen, *Prescription for a Healthy Nation* (Boston, MA, 2005), esp. section III, who espouse a decidedly behaviourist approach to healthscaping.

⁵ C.E.A. Winslow, *The Evolution and Significance of the Modern Public Health Campaign* (New Haven, 1923); C.F. Brockington, *A Short History of Public Health*, 2nd edn (London, 1966); R. Sand, *The Advance to Social Medicine* (London and New York, 1952); G. Rosen, *A History of Public Health*, rev. edn (Baltimore, 1993). And see the important review article by M.S.R. Jenner, 'Underground, overground: pollution and place in urban history', *Journal of Urban History*, 24 (1997), 97–110.

⁶ D. Porter, *Health, Civilization and the State: A History of Public Health from Ancient to Modern Times* (London and New York, 1999), 9–61; S.K. Cohn, Jr, *Cultures of Plague: Medical Thinking at the End of the Renaissance* (Oxford, 2010). And see E. Perdiguerio et al., 'History of health, a valuable tool in public health', *Journal of Epidemiological Community Health*, 55 (2001), 667–73.

which I do not include Cohn's recent study), moreover, are sometimes directly and more commonly indirectly based on works that privilege prescriptive and normative sources. These texts are fairly accessible in either published or manuscript form, as compared with descriptive and practical ones, which are usually buried in provincial archives and libraries, where they can be more easily ignored or simply dismissed as too subjective. Thus, our knowledge of attempts to identify and address staple public health concerns, such as water pollution, disease contagion and waste management, is often derived from texts such as law codes, medical treatises and building manuals, and much less so (certainly in terms of systematic research) from chronicles, account books, tax records, diaries, letters, saints' lives, city council minutes and, last but not least, court protocols.⁷

With few studies on pre-modern health interventions based on descriptive sources, historians of urban public health (and those of cities generally, commenting on the latter) have been slow to expand the view afforded by works that mostly relied on normative texts. To be sure, the insights that the latter afford are extremely valuable. Yet, without juxtaposing them with records of social practices, we are often left with an ambiguous picture of contemporary mentalities, which in turn allows historians' assessments to run the gamut from surmising the failure of ambitious governments to their triumph in following instructions handed down by physicians, lawyers and architects. Thus, the US authors of a monograph concerning late medieval Italy chose the simile of 'straws in the wind' to describe failed, if honest, top-down attempts to prepare the urban environment for the challenges at hand, while a contemporary Italian scholar typically drew upon a similar range of prescriptive sources to reach rather different conclusions.⁸ The wind, apparently, blows both ways; and it is a clearer view of actual practices that we still lack.

Achieving a fuller and more balanced picture, however, is possible. As Monica Green and Michael Solomon have shown, subjecting more or less familiar texts to different methodologies, from the transmission of specific works to engaging readership studies, can be enormously rewarding in

⁷ Notable exceptions include C. Rawcliffe, 'Health and safety at work in East Anglia', in C. Harper-Bell (ed.), *Medieval East Anglia* (Woodbridge and Rochester, NY, 2005), 130–51; and D. Jørgensen, 'Cooperative sanitation: managing streets and gutters in late medieval England and Scandinavia', *Technology and Culture*, 49 (2008), 547–67. And see E.L. Sabine, 'Butchering in mediaeval London', *Speculum*, 8 (1933), 335–53; *idem*, 'Latrines and cesspools of mediaeval London', *Speculum*, 9 (1934), 303–21; *idem*, 'City cleaning in mediaeval London', *Speculum*, 12 (1937), 19–43.

⁸ R.E. Zupko and R.A. Laues, *Straws in the Wind: Medieval Urban Environmental Law* (Boulder, 1996); F. Bocchi, 'Regulation of the urban environment by the Italian communes from the twelfth to the fourteenth century', *Bulletin of the John Rylands Library*, 72 (1990), 63–78. See also D. Balestracci, 'The regulation of public health in Italian medieval towns', in H. Hundsichler, G. Jaritz and T. Kührtreiber (eds.), *Die Vielfalt der Dinge: Neue Wege zur Analyse mittelalterlicher Sachkultur* (Vienna, 1998), 345–57; B.S. Hakim, *Arabic-Islamic Cities. Building and Planning Principles* (London, 1986); and *idem*, 'Mediterranean urban and building codes: origins, content, impact, and lessons', *Urban Design International*, 13 (2008), 21–40.

establishing the motivations and impact of prescriptive sources.⁹ At the same time, broadening our view also depends on our ability critically to incorporate both instruments and documents of practice that have been left untapped for such purposes. The State Archive of Lucca, in north-western Tuscany, offers one such opportunity. For, insofar as they have made any observation on Lucca's salubriousness in the Middle Ages,¹⁰ the city's historians have mostly relied on its statutes, while neglecting the records of a state organ called the *Maggior ufficiale delle vie e de' pubblici* (Senior official of the roads and public works), also known in Latin by the court it held, the *Curia viarum* or Court of Roads.¹¹ The men in charge of this body – I shall call them the Roads Officials – were mainly concerned with maintaining urban, suburban and regional infrastructure, but they were also held responsible for enforcing sanitary, labour and building regulations, hearing complaints from residents about pertinent violations, gathering evidence on-site and fining offenders. The latter included men and women occupying public ways illicitly for industrial or commercial purposes, landlords directing their gutters into public spaces or blocking sewage canals with domestic waste and parishes and rural communes neglecting to maintain public facilities under their jurisdiction, such as wells, bridges, gates, canals and, of course, roads.

The present article highlights the special value of the *Curia viarum*'s records – which include both normative and descriptive texts – for the history of public health, albeit without as yet offering a full-blown analysis of its rich documentation. Even at this early stage of studying the series, however, its relevance and significance is striking, both in its capturing of one pre-modern society's concerns about health, hygiene and pollution, and in attesting the approaches and solutions its members devised in order to safeguard their standards of wellbeing. Those familiar with the London Assize of Nuisance, also dating to the same period, will immediately recognize the parallels and how useful such records can be for observing

⁹ M.H. Green, *Making Women's Medicine Masculine: The Rise of Male Authority in Pre-Modern Gynecology* (New York, 2008); M. Solomon, *Fiction of Well-Being: Sickly Readers and Vernacular Medical Writing in Late Medieval and Early Modern Spain* (Philadelphia, 2010).

¹⁰ A. Mazzarosa, *Storia di Lucca dalla sua origine fino al MDCCCXIV*, 2 vols. (Lucca, 1833), vol. I, 233–4, construed Lucca's liberation from under Pisan rule in 1369 as an occasion for the city's comprehensive political as well as physical 'clean up': an evocative parallel, to be sure, but likely confined to a literary analogy. Recent general histories of the city include C. Meek, *The Commune of Lucca under Pisan Rule, 1342–1369* (Cambridge, MA, 1980); *eadem*, *Lucca 1369–1400: Politics and Society in an Early Renaissance City-State* (Oxford, 1978), 1–16; and M.E. Bratchel, *Medieval Lucca and the Evolution of the Renaissance State* (Oxford, 2008), 82–120.

¹¹ Archivio di Stato di Lucca (ASLu), Curia delle vie e de' pubblici (CVP), 1–13. Volume 12 of this series is currently missing. The series is described in S. Bongi (ed.), *Inventario del R. Archivio di Stato in Lucca*, vol. I (Lucca, 1872), 299–300. Foliation in this article follows modern pencil enumeration whenever possible. Personal and place names have been Italianized from the Latin.

the interaction between law and action, ideas and practices.¹² But whereas the London officials have left us a total of 130 membranes for the period 1301–1431 (just under 200 pages in the modern printed edition), the earliest Lucchesi records, covering the period 1336–77, when the body was suppressed and its responsibilities were subsumed under the *Maggiore ufficiale del fondaco*, amount to no less than 13 registers.¹³

So far as I am aware, the court protocols and fiscal registers, comprising the bulk of this series, have never been mined for studying public health practices. Accordingly, this article begins by describing the series and its contents and then proceeds to draw upon these records to make some tentative observations and speculate about the nature and scope of public health concerns in fourteenth-century Lucca. By explicating Lucca's public health policies in the first section and demonstrating their application in the second, this article introduces some hitherto under-explored dimensions of preserving and shaping pre-modern urban health. The conclusion will situate the revised, if still nebulous, image emerging from these texts within the broader contours of urban public health history, especially in the pre-modern period. Rather than offering firm revisionist conclusions about pre-industrial society, this study seeks to offer food for thought regarding the sources and attendant methodologies that students of public health history could embrace with profit, whichever side of the pre/modern divide they occupy.

Lucca's *Curia viarum*: norms

The first extant volume of medieval Lucca's *Curia viarum* records opens with the Roads Officials' statutes (fols. 1r–11v), a text that in all likelihood is based on rubrics drafted in the late thirteenth century, and which also appear in the city's 1342 statutes.¹⁴ In line with previous scholars' focus on normative sources, it is the only part of this or any other register belonging to the series to have merited a printed edition.¹⁵ The text begins by describing the election procedure, salaries and responsibilities of the chief officer, his notary and his urban and rural *nuntii* or messengers. Subsequent passages define the scope of the officials' mandate, which largely consisted of maintaining the commune's physical infrastructure, and ensuring residents and visitors alike obeyed key regulations concerning industrial

¹² H.M. Chew and W. Kellaway (eds.), *London Assize of Nuisance 1301–1431 – A Calendar* (London, 1973). And see C.M. Barron, *London in the Later Middle Ages: Government and People 1200–1500* (Oxford, 2006), esp. 237–66.

¹³ Bonghi (ed.), *Inventario del R. Archivio di Stato in Lucca*, vol. I, 299; D. Corsi (ed.), *Statuti urbanistici medievali di Lucca* (Venice, 1960), 15–20, which also demonstrates how the offices were intermittently intertwined even before the *Curia viarum* was subsumed under the *Fondaco*. The latter office has left a far greater footprint in the archives (some 4,895 registers) and is the subject of a future study.

¹⁴ Corsi (ed.), *Statuti urbanistici medievali di Lucca*, 11–12.

¹⁵ *Ibid.*, 43–64. Corsi traces the institutional history of the organ up to the early modern era.

zoning; the construction of furnaces and ovens; the maintenance of walls; the disposal of waste; the raising, trafficking and slaughtering of animals; the occupation and upkeep of public land and ways, including moats and canals; and the maintenance of drains, cesspits, latrines and wells. The Roads Officials were to supervise all of these activities and facilities within the city, in its immediate hinterland or *distretto* (also known as the *Sei miglia*) and throughout Lucca's subject rural communes and territories. To enforce their mandate they were required to visit sites, collect testimonies and ultimately impose and collect fines from individual and corporate offenders. In some cases, the statutes authorize the officials to raze or burn a hazardous or obstructive edifice.

Given its broad mandate, the organ's title of a *Curia viarum* is rather misleading to the modern eye, a fact that helps explain why in Lucca and elsewhere such records were only occasionally mined by architectural and administrative historians and mostly ignored by social and medical historians. Yet, while lengthy clauses describe how roads and waterways are to be maintained, an equally substantial room is reserved there for instructions on supervising other objects considered hazardous, such as ovens, and on curbing the effects of diverse industrial sites, such as tanneries, slaughterhouses and their byproducts on the city's population. A survey of the fines the Roads Officials could impose (see Appendix 1) shows that part and parcel of monitoring the activities of guilds and individuals was to ensure that vessels, such as drains and sewage canals, were covered and that public resources, like wells and troughs, always remained connected to their sources and kept clean and intact. These decrees suggest that magistrates set the pertinent fines to stress residents' personal, mutual and at times collective duty for ensuring the city's cleanliness, signalling an emergent parallel between urban hygiene and public order.¹⁶

To achieve such mutual responsibility, the statutes' authors sought to close numerous loopholes through which residents could avoid fines and turn a blind eye to existing or potential hazards. Virtually no one, for instance, could escape a penalty on the grounds of poverty, age or lowly legal status: 'and let father pay for son, teacher for student out of the latter's possessions, man for wife and brother for brother, and lord or lady for servant or maid'.¹⁷ On several occasions, it is stated that neighbours failing to report a violation or officials neglecting to act upon denunciations would also incur fines. Yet the commune seems to have provided carrots as well as sticks to improve detection, since individuals reporting certain offences were eligible to receive up to half the value of the imposed fine. The statutes also favoured the credibility of denouncers, which suggests that landlords and guildsmen often relied on the power of their word

¹⁶ See D. Biow, *The Culture of Cleanliness in Renaissance Italy* (Ithaca and New York, 2006).

¹⁷ ASLu, CVP 1, fol. 2r: 'et solvat pater pro filio, tutor pro pupillo de bonis pupillj, et vir pro uxore et frater pro fratre, dominus seu domina pro famulo et famula, de feudo ipsorum'.

against, for instance, that of a domestic servant lodging a complaint or interrogated as an eyewitness.

Beyond laying out the regime's priorities, the statutes and especially the fines they prescribe trace the contours of a socio-economic map attendant upon environmental offences. As Appendix 1 demonstrates, in nearly one third (8 out of 25) of the generic cases listed in the statutes, relatively modest sums, amounting up to 5 *lire*, are set for illicit domestic and small-scale industrial waste disposal, blocking drains, allowing and selling livestock within the city walls or defiling troughs. These were likely to be offences perpetrated, at least in a direct sense, by a social underclass: domestic servants, apprentices and day-labourers. Fines of up to 10 *lire* were to be imposed in nearly half of all cases (12 out of 25) dealt with by the statutes, and said to involve larger-scale industrial waste, illicit occupation of streets and waterways and neglecting the upkeep of public infrastructure passing through one's land: all being offences strongly linked with the possession of property or access to some executive or guild power. It is mostly beyond these two groups of fines that socio-economic barriers disappear. Only major damage to public walls, roads or waterways, or else highly visible (and thus, in medieval thinking, more dangerous) acts of pollution, such as failing to enclose a latrine or bury a sewer, were to be punished by fines higher than 10 *lire* and up to 100 *lire*.

The statutes likewise provided guidelines for the Roads Officials' comportment, prescribing fines of between 10 and 200 *lire* for dereliction of duty. Tellingly, there is no direct correlation between the socio-economic scale established above and penalties for the officers' neglect. Thus, the officials are to be fined 100 *lire* for failing to pursue any case concerning the occupation of or damage to a public road. Perhaps reflecting a prevalent notion that 'bad air' (miasma) emanating from liquid waste is a major source of contamination, the statutes prescribe moderate to high fines against officials who overlook cases of water contamination (25 *lire*) and allow animal blood to flow into a public place (200 *lire*). What this may convey, apart from how strongly miasma theory shaped Lucca's public health strategies, is an emphasis on the importance of routine vigilance regarding minor offences rather than targeting major but rare violations. It was perhaps Lucca's leaders' concern that their officials would pursue the latter (and from a financial perspective more lucrative) cases at the expense of the greater public good.¹⁸

Much can be adduced from these records, already at the prescriptive level. First, the mere existence of Lucca's Roads Officials from 1336 (at the very latest) challenges a view that sees the Black Death of 1347–48 as a singular watershed moment in the history of public health, prior

¹⁸ There is a parallel between the statutes' emphasis on pursuing seemingly minor violations and the strategies espoused by modern-day 'broken windows' theory. See G.L. Kelling and C.M. Coles, *Fixing Broken Windows: Restoring Order and Reducing Crime in Our Communities* (New York, 1996).

to which urban governments were reluctant to tackle issues of public hygiene and safety.¹⁹ Affirming observations made by a recent generation of historians regarding the expansion of socialized medicine prior to the plague epidemic, these records attest that here too there was a recognition and at least a modest mobilization of resources for improving urban health conditions, however successful or unsuccessful such attempts were, and regardless of the degree to which they seemed to strive for modern solutions.²⁰ This is not to deny that responses to the Black Death influenced such practices, at times even radically, but rather to stress that their point of departure was neither a state of complete ignorance nor a total lack of government will and capacity to enforce population-level health policies.

The officials at work

Subsequent volumes in the *Curia viarum* series bridge between the realm of norms and that of practice by allowing us to observe the Roads Officials in action and especially in interaction with their natural, built, social, legal and institutional surroundings. Each register contains the proceedings of the officials' court and other activities undertaken on their behalf, such as construction, fine collection and public communication of new by-laws. While the bulk of this organ's activities comprised the upkeep of physical infrastructure, and thus involved a constant hiring of labourers and purchase of provisions, most of its extant records attest enforcement activities against environmental offenders. Either way, the records expose both the tenuous equilibrium the Roads Officials sought to maintain and the danger of disequilibrium they attempted to stress.

As was typical of that time and place, any case brought before the officials either began as a private accusation (*accusatio*) or was the culmination of an inquest (*inquisitio*) led by the officials in pursuit of allegations raised privately and at times even secretly.²¹ In March or April 1337, for instance, Cienuccho Neri was fined 2 *lire* for obstructing a public road with his merchandise;²² on 24 April that same year, Ceccore Ciardelli received the

¹⁹ C.M. Cipolla, *Public Health and the Medical Profession in the Renaissance* (Cambridge, 1976), 11; *idem*, *Miasmi ed umori: ecologia e condizioni sanitarie in Toscana nel Seicento* (Bologna, 1989), 2; K. Park, *Doctors and Medicine in Early Renaissance Florence* (Princeton, 1985), 7.

²⁰ L. García-Ballester, M.R. McVaugh and A. Rubio-Vela, *Medical Licensing and Learning in Fourteenth-Century Valencia* (Philadelphia, 1989); M.R. McVaugh, *Medicine before the Plague: Practitioners and their Patients in the Crown of Aragon, 1285–1345* (Cambridge, 1993), 190–240; L. García-Ballester et al. (eds.), *Practical Medicine from Salerno to the Black Death* (Cambridge, 1994).

²¹ My impression is that the cases are divided more or less equally between accusatorial and inquisitorial procedures, but their precise percentages, as well as the ratio of secret to public allegations remains to be established. On the development of these procedures in the Italian context, see M. Vallerani, *Medieval Public Justice*, trans. S. Rubin Blanshei (Washington, DC, 2012).

²² ASLu, CVP 3, fasc. 3, fol. 6r: 'dolose et fraudulenter et contra formam statuti dicte curie posuit et poni fecit in stratam et viam publica[m] certam quantitatem fabarum, occupando

same fine for allowing his drain to spill onto a public way;²³ and on 1 April 1343, Fiorina, widow of Lapo di Artimono, was charged with (and later absolved of) excessively contaminating a private cesspit²⁴ – all processes having been prompted by clandestine denunciations ('ex denuntia et accusa cuiusdem secreti denuntiatoris'; 'ad denuntiam secretam').

Such violations, which are common throughout the records, already hint at the usefulness of this series for a historical anthropology and sociology of urban public health. Studied more extensively, they should be able to illuminate the character and contested boundary between public and private health spaces, and how these were variously negotiated between individuals, guilds, the church, the secular government, and so forth, and thereby contribute to a growing historiography concerning identity, politics and public health in medieval Europe.²⁵ Further, given how central the concepts of dirt and pollution have become to our understanding of past (and present) cultures and societies, matters such as excrement may also prove important to our understanding of how fourteenth-century Lucchesi understood filth, both from a social and a political perspective, once again informing discussions of how pre-modern societies demarcated normalcy and deviancy.²⁶

The Roads Officials' tribunal participated in shaping the city's power relations and the conceptual boundaries between private and public space in other ways as well. For instance, again in 1337, four rural communes were fined for their dilapidated bridges, and two others for neglecting a road – thus undermining actions designed as prophylactic measures for human health and commercial viability, but equally demonstrative of the prescribed relations of power between the city and its subject communes.²⁷

dictam stratam et viam contra formam statuti dicte curie et in grave dapnum Luc. omunis et curie viarum'. See also CVP 5, fasc. 5, fol. 25r–v (1342).

²³ ASLu, CVP 3, fasc. 3, fol. 12r: 'habet et tenet in quadam sua domo posita in comune sancti Salvatoris in muro in brachio fontane quedam aquarium quod ducit aquam putridam in viam publicam contra formam statuti'.

²⁴ ASLu, CVP 6, unnumbered fol.: 'scienter et malo modo imisit ad mollandum in puteum existentem in via publica . . . certam maximam quantitatem lupinorum rem'. Florina's case was later dismissed because the water allegedly contaminated was already putrid, there were no eyewitnesses and Florina was poor.

²⁵ P. Strohm, 'Sovereignty and sewage', in H. Cooper and A. Denny-Brown (eds.), *Lydgate Matters: Poetry and Material Culture in the Fifteenth Century* (New York, 2007), 57–70; D. Jørgensen, "'All good rule of the cite": sanitation and civic government in England, 1400–1600', *Journal of Urban History*, 36 (2010), 300–15; T. Salminen, 'Public road, common duty – public road, private space?: King Magnus Eriksson's law and the understanding of road as a space in late medieval Finland and the Swedish realm', *Scandinavian Journal of History*, 35 (2010), 115–34. And see D. Armstrong, 'Public health spaces and the fabrication of identity', *Sociology*, 27 (1993), 393–410.

²⁶ M. Douglas, *Purity and Danger* (London, 1966); S. Signe Morrison, *Excrement in the Late Middle Ages: Sacred Filth and Chaucer's Fecopoetics* (New York, 2008). Filth itself, along with its vessels and vehicles, offer what L. Auslander, 'Beyond words', *American Historical Review*, 110 (2006), 1015–45, has discussed as a material point of departure for examining the social and political forces converging upon and shaping a given society.

²⁷ ASLu, CVP 3, fasc. 3, fols. 9r–10r. Rural communes are common offenders from the perspective of the extant documents, which contain hundreds of accusations most often

In a case delineating yet another axis of power, on 28 July 1335, Reynerio de Malizardi, rector of the church and hospital of San Leonardo in Treponzo, protested against his prosecution by the Roads Officials for refusing to rebuild a dilapidated bridge, arguing that the structure did not belong to the hospital, was damaged by the adjacent commune, and in any case that he could not be fined for it, citing clerical exemption.²⁸ Last, in early June 1354, Datuccio Pieri, a steam-bath worker (*stufaiolo*), was denounced for allowing filthy water to drain from his boilers and pour onto a public way, implying that the government was concerned about artisanal and industrial activities' threat to urban dwellers.²⁹ Jointly, these examples bode well for the usefulness of studying such records in order to gauge the role of a health and safety discourse in urban magistrates' attempts to define their power vis-à-vis laypeople and clergymen, rural communes and urban guilds and manufacturers.³⁰

A further theme emerging from the tribunal's records concerns contemporary views on health risks and the transmission of disease. While the idea of miasmatic contagion was central to pre-modern medicine and public health,³¹ both the Roads Officials and those who approached their court were apparently driven by another peculiarly medieval fear as well, namely that of sight pollution. It was grounded in a prevalent theory of optics, according to which the imprint of a perceived object can impress its positive or negative qualities upon the observer's mind.³² Thus, when on 25 January 1343 the officials charged Nucello Arrigi of Pertigliano with neglecting to maintain his latrine (*necessarium*), they complained about the debilitating sensual experience of passersby, who 'could observe the rotting and stinking blemishes of the said latrine'.³³ And in late May that year Danino Chichi was secretly accused of neglecting the upkeep of his latrine, which inflicted those using a nearby public road and others visiting

regarding neglect of infrastructure and loose animals. On urban-rural relations in this period, see T. Dean and C. Wickham (eds.), *City and Countryside in Late Medieval and Renaissance Italy: Essays Presented to Philip Jones* (London, 1990); and D. Waley and T. Dean, *The Italian City-Republics*, 4th edn (Harlow, 2010), 67–84.

²⁸ ASLu, CVP 2, fols. 139–42 (28 Jul.–24 Oct. 1335). See also CVP 4, fasc. 4, fols. 20v–21r (11 Feb. 1340).

²⁹ ASLu, CVP 10, fasc. 2, unnumbered fol.: 'dictus Datuccius . . . proiecit et decurrere permisit de eius stufa quam detinet . . . aquam putridam in viam publicam que est ante et circa domum stufe, ex qua aqua putrida fetor exivit et emanavit ad vicinos circumstantes'. And see *ibid.*, fasc. 3, unnumbered fols. (25 Aug. 1354).

³⁰ Once again, further work is required to trace the particular trajectory of these power dynamics, taking into consideration each player's agenda and circumstances. The point here, in any case, is that the regime considered health a useful term by which to impose or extend its authority.

³¹ Cipolla, *Miasmi ed umori*.

³² C. Rawcliffe, *Leprosy in Medieval England* (London, 2006), 94–5; J.K. Stearns, *Infectious Ideas: Contagion in Premodern Islamic and Christian Thought in the Western Mediterranean* (Baltimore, 2011), 91–105.

³³ ASLu, CVP 6, unnumbered fol.: 'non destruxit seu coperuit vel activit dictum necessarium set ipsum retinavit et retinet discopertum, ita et taliter quod euntes . . . aqua ad quemdam fontem ibi ipse existens videre possunt putrida et fetida lebentia de necessario superscripto'.

the adjacent church with repugnant sights and smells.³⁴ The extent to which such approaches and fears are typical remains to be determined. Yet they already identify the court records as a rich mine for learning about popular-medical mentalities in one pre-modern city and the relation between scientific theories and their application at a population level.

Like the officials' statutes, so their tribunal records offer a fresh perspective on the role of health and safety in shaping contemporary notions of private and public space. In late April 1352, for instance, Luporino Bertucci and Colucimo Ventura of San Bartolomeo in Gello were secretly charged with sabotaging a road 'through which men and animals ... were accustomed to come and go', posing at best an inconvenience and at worst a safety risk. On their part, the defendants explained that these were works being carried out on a trail passing through private land ('non ut via publica set ut semitula existente in terris et super terras dictorum Betti et Gueri vel alicuius eorum').³⁵ As the case continued, the accusers presented local residents' habits regarding the trail as a paramount consideration. In other words, the defendants were charged with encroaching upon and damaging a public utility. But was this a genuine concern or simply a litigation strategy designed to gain an advantage at the court? And did it work? At least the latter question can be answered in the future by a statistical analysis of such cases. As for the former, the least that can be said on the basis of this brief survey is that tweaking the private/public divide was a useful way for this government to insert itself into areas of civic society that formerly belonged to the domain of private households, neighbours or business associates.

Indeed, if not a prerequisite for a successful suit, stressing the public nature and location of violations seems to have been an effective way to secure the officials' attention. In late April 1339, for example, a group of residents complained about a gutter spilling sewage into their street from the home of a certain Benvenuto. In their petition, which also reflects fear of sight and scent pollution, the plaintiffs asked the court to order Benvenuto to seal the said gutter, refrain from placing garbage – the alleged cause of the obstruction and spillage – in it, or allow water to run through it ('quod dicta canalia claudat et plus aquam vel altram putritudinem non proiecat per ipsam canalia'). In his response, the accused rejected the charges out of hand, claiming first, that the gutter presented no obstacle; and secondly, that it had already been there for over 30 years.³⁶ Yet, as the case dragged on, it became increasingly evident that custom was the

³⁴ ASLu, CVP 6, unnumbered fol. (31 May–4 Jun.: 'transeuntes et euntes per viam publicam et ad ecclesiam supradictam videre possunt putrida et fetida descendencia per necessarium suprascriptum').

³⁵ ASLu, CVP 9, fasc. 3, unnumbered fol.: 'scinderunt et destruxerunt et cavaverunt viam publicam ... in pluribus partibus ipse vie per quam ire et redire consuerunt et soliti sunt homines et bestie honerate et dishonorate'. The case continues at some length later in the fascicule.

³⁶ ASLu, CVP 4, fols. 75r–79r (28 Apr.–12 Dec. 1339).

wrong card to play. From the court's current perspective, and in contrast to the one adopted in the previous case mentioned, maintaining a *status quo ante* was not or at least was no longer crucial. While anecdotal at this point, such information illustrates how governments and individuals sought to address the multiple health risks they faced, and that this required adaptation, sometimes at the expense of conservation. Further, although the extant register is silent about the outcome of this case, the proceedings suggest that the plaintiffs intuited how inviting the Roads Officials to intervene in this dispute was likely to curry favour, since they were appealing to the court's capacity to enforce environmental justice and obligingly underscore a link between public cleanliness and political order.

The officials' fiscal records in particular attest the government's major involvement in caring for Lucca's physical infrastructure, be it by directly paying rural communes or through covering the fees of numerous suppliers and workers. In one semester in 1336, for example, the officials spent nearly 350 *lire* on just such efforts, a handsome sum in contemporary terms, assuming that much of the work was carried out by unskilled labourers earning a pre-plague average daily wage of 4 *soldi* and using inexpensive materials.³⁷ While an exhaustive study of these records is still in order, even a cursory glance reminds us that beyond prosecuting violators the Roads Officials were major contractors of public works. These ledgers also allow us to assess what part of the fines meted out by the court was actually collected, how quickly, and whether some of that income was ever redirected to the violators' original accusers.³⁸ More systematically studied, such data can help further bridge the gap between theory and practice by illustrating how the Roads Officials distributed their workload, how efficient their enforcement was, and how willing were residents to co-operate with them. Beyond its modest direct contribution to the city's coffers, the organ was bent on lending substantial support to Lucca's wealth through preserving its human and material infrastructure, which in turn reduced health risks and enabled a steady and smooth flow of commercial traffic into and out of the city. Crumbling bridges, dilapidated walls and potholed roads posed a serious challenge to the safety of men, pack animals and cattle, and by implication to the integrity of cargos

³⁷ ASLu, CVP 13 (unnumbered, penultimate fol.). And see CVP 11, fasc. 4. On the cost of contemporary labour and construction materials see R. Goldthwaite, *The Building of Renaissance Florence: An Economic and Social History* (Baltimore and London, 1980), esp. 171–41 and 287–350. I cannot as yet determine what this amount meant in relative terms. But see J. Haemers and W. Ryckbosch, 'A targeted public: public services in fifteenth-century Ghent and Bruges', *Urban History*, 37 (2010), 203–25, according to whom '[t]he largest of spending on public services, 7.7 per cent, was taken up by the expenses for public works and infrastructure' (207).

³⁸ Between Feb. and Jun. 1344, for instance, the officials collected 76 *lire*, 11 *soldi* and 5 *denari* from individuals and communes. ASLu, CVP 7, fol. 11r.

and their timely overland delivery. Lubricating the wheels of the city's economy also meant avoiding such nuisances.³⁹

All this hardly adds up to a rosy picture. After all, the very existence of the tribunal as well as the contents of its extant records strongly supports the hypothesis that the Roads Officials' role in promoting the city's health was riddled with tensions. The latter's particular nature and trajectory remains to be established, but some cases already point in several useful directions. For instance, the task of supervising furnaces, used in numerous industrial processes, was likely a contested mandate given urban guilds' reputation for being highly protective of their members' rights and duties.⁴⁰ There is little doubt that city councils struggled to balance the professional needs of artisans such as tanners and dyers and the dangers that uncontrolled access to water might entail for the general population. The impetus here is important: on the one hand, it seemed senseless to prohibit the disposal of industrial waste without providing adequate alternatives. On the other, and as some of the examples cited here imply, the power of guilds was apparently no longer sufficient (at least in the eyes of the regime) to dismiss general concerns with waste management, which was already emerging as a major health concern. In this sense, the broad mandate given to Lucca's Roads Officials articulated a genuine – if somewhat ambitious – public perspective.

It was perhaps the presence of such political tensions that drove urban governments like Lucca's to develop its health (among many other) policies, even well before the onset of the Black Death. The plague epidemic of 1347–48 and its recurring visitations are often seen as pivotal. The development of quarantine measures, the resumption of extramural burials (a practice far more common to Antiquity than to the Middle Ages) and the establishment of health boards, to take a few celebrated examples, are understood as direct and seminal responses to the initial visitation of the plague. All this is fairly well documented, and nothing could diminish from the plague's role as a catalyst for shaping policies and urging their implementation. Yet, as some of the foregone examples demonstrate, both the concept and especially the practice of what can be understood in terms of population-level interventions certainly predate the plague's arrival. The Roads Officials' willingness occasionally to record their proceedings in the vernacular in the early 1340s offers further testimony to the broad significance of public health for urban dwellers well before the plague's onset.⁴¹ Litigating in the local dialect perhaps had to do with changing patterns of literacy among the urban administrative classes; but no less important was the need pro-actively to explain regulations to non-elites,

³⁹ See R.C. Trexler, 'Measures against water pollution in fifteenth-century Florence', *Viator*, 5 (1974), 455–67, which implies that that an ecological, as opposed to a purely economic, dimension of Florentine legislation on the maintenance of waterways trailed behind Lucca's.

⁴⁰ ASLu, CVP10, fasc. 1, fol. 2r (Jan.–Jun. 1354). And see above, n. 28.

⁴¹ ASLu, CVP 5, fasc. 1, fols. 2v–3r, 84r–v.

including women, day-labourers and domestic servants, who, as both the statutes and the court proceedings confirm, were held responsible for the city's cleanliness.

By July 1347 at the latest, and thus still before the plague's initial strike, the Roads Officials' recorded public ordinances or *bandi* made on their behalf in the vernacular (see Appendix 2): yet another documented attempt to reach out to local residents of lower status, since, as their colophons indicate, these communiqués were read aloud across the city several times a year.⁴² While these vernacular announcements repeat in essence the officials' established statutes, they specifically underscore the universal responsibility of local residents, citizens or foreigners, and of whatever status, age or gender, for maintaining the city's hygienic standards. For instance, no one was to slaughter animals above a well or wash them within 4 *braccia* of a well; no one was to dispose of any carcass improperly; all residents must clean the areas in front of their own houses every fortnight; every Saturday and feast vigil everyone must clean the road in front of his or her house; and all must keep the public ways clear of obstacles. The texts repeatedly conclude by stating that anyone could denounce environmental offenders, in which case the accuser's testimony would be considered more credible by default and s/he would be rewarded part of the value of the imposed penalty in case the prosecution is successful (for the list of penalties see Appendix 1).

By recourse to methods such as vernacular public announcements the Roads Officials sought to expand the statutes' audience as a means to increase residents' awareness and co-operation, a phenomenon usually associated only with post-Enlightenment approaches.⁴³ Communicating directly with a broader segment of society was desirable since it is plausible that many violations were witnessed by members of the social underclass, men, women and children who needed to be encouraged to participate more effectively in patrolling normative environmental borders. At least in one case the strategy paid off. On 20 April 1352, the inn-keeper (*hospitator*) Lippo Salvini was secretly accused of littering a public way. He denied the charges, but two domestic servants living next door, Liccio Nuti and Cecco Lemmi, testified to having seen Lippo throwing human waste from his balcony ('de dicto balchione fore derivatum in viam publicam proiecit'). Two months later, Lippo was fined 28 *soldi*.⁴⁴ It seems that, whoever the original denouncer was (the servants' employer? they themselves?), his or her accusation was either prompted or at any rate validly supported in court by men of lower status than that of the inn-keeper. The servants' central role in the case attest both the accuser's legal upper hand and the

⁴² ASLu, CVP 8, fasc. 12, fols. 39r–40v. And see CVP 11, fasc. 6, unnumbered fol. (5–6 Mar. 1374) for later communications in the vernacular.

⁴³ L.J. Jordanova, 'Policing public health in France 1780–1815', in T. Ogawa (ed.), *Public Health* (Tokyo, 1980), 12–32.

⁴⁴ ASLu, CVP 9, fasc. 3 unnumbered fol. (20 Apr.–27 Jun. 1352).

kind of witnesses the Roads Officials could and often had to rely on in practice.⁴⁵

The unploughed field of public health

To historians working in urban archives across Europe, the cases described above may be familiar if occasional sights.⁴⁶ Yet why Lucca's governors should have decided to create a special organ for implementing environmental policies, or indeed how typical was this act within and beyond the world of the peninsula's city-states, remains an open question. The least that could be said at this stage is that it was not an entirely isolated phenomenon in the late thirteenth and fourteenth centuries. In coeval Bologna, for instance, there was a similar office, known as the *fango*, which explicitly supervised urban sanitation.⁴⁷ And, as already mentioned, London's Assize of Nuisance in many striking ways constituted a parallel procedure, albeit not one premised upon a dedicated government organ. Last, the supervision of public hygiene, originally falling under the religious office of the *muhtasib*, as described among others by the contemporary savant Ibn Khaldun,⁴⁸ continued to straddle both continents of the western Mediterranean and remained an important feature of Iberian urban life after its return under Christian rule.⁴⁹

Practically speaking, however, the existence of a designated body or even magistrate is only one among several indications for urban healthscaping activities in pre-modern times. If other urban officials were charged with handling public hygiene, if regulations intended to encourage the creation of more salubrious living and working environments appear in city statutes, and if – as Lucca's records strongly suggest – they feature

⁴⁵ A broader and better-grounded social map of offenders, private accusers and witnesses is no doubt in order. My point here is that it is both possible and worthwhile carrying out on the basis of these records.

⁴⁶ F. Getz, *Medicine in the English Middle Ages* (Princeton, 1998), 80–2; T. Dean (ed. and trans.), *The Towns of Italy in the Later Middle Ages* (Manchester, 2000), 54; M. Kowaleski (ed.), *Medieval Towns: A Reader* (Toronto, 2006), 350–3, 361–2, 372; Rawcliffe, 'Sources for the study of public health', 183–5.

⁴⁷ For the late thirteenth and most of the fourteenth centuries, the *fango* fell under the podestà's jurisdiction, leaving substantial records behind: Archivio di Stato di Bologna, Curia del podestà, Ufficio delle acque, strade, ponti, calanchi, selciate e fango, 1–27 (1285–1376). For the period after 1376, now under the aegis of the capitano del popolo, the office's activities can also be easily traced. See W. Montrosi (ed.), rev. L. Scaccabarozzi, *La giustizia del Capitano del popolo di Bologna (1275–1511): Inventario* (Modena, 2011). On the office itself, see R. Greci, 'Il controllo della città: l'ufficio dei fanghi e strade a Bologna nel XIII secolo', *Nuova Rivista Storica*, 75 (1991), 650–61; and B. Breveglieri, 'Il notaio del fango', *Atti e Memorie della Deputazione di storia patria per le province de Romagna*, 55 (2005), 95–152.

⁴⁸ Abd ar-Rahman bin Muhammed ibn Khaldûn, *Muqaddimah: An Introduction to History*, 3.29, trans. Franz Rosenthal, 3 vols. (New York, 1958), vol. I, 462–3.

⁴⁹ McVaugh, *Medicine before the Plague*, 226–7; K. Stilt, *Islamic Law in Action: Authority, Discretion, and Everyday Experience in Mamluk Egypt* (Oxford, 2011).

in urban statutes *and* documents of practice, we may be dealing with a different picture of pre-modern public health than earlier scholarship has accustomed us to. Moreover, should we expand our definition of medieval urban public health to embrace interventions designed to impact upon large segments of the population rather than individuals, and in ways that exceed the prevention of plague specifically, we would come to observe an urban landscape being rendered more and more susceptible to such pressures as the fourteenth century wore on. To judge by some recent studies, such awareness was gaining ground, as urban residents across Europe came to recognize the importance of sustaining a stable cadre of professional labourers, which in turn depended on safe working environments at all levels of the manufacturing process, and a sensible co-ordination between industries whose interests were not always aligned with the requirements of public health.⁵⁰

Health, however, did not begin and end in the work place (which, to be sure, could often be situated within or directly under one's domicile). Workers had to be kept safe outside workshops and building sites, just as soldiers had to stay away from harm when off-duty and in times of peace. By the same token, the protection of livestock and pack animals had to be extended beyond the realm of transportation and, as it were, into the backyards of inns and private homes.⁵¹ Last, as we have seen, urban industries could affect residents' wellbeing on a daily basis by polluting adjacent streets, waterways and the air.⁵² In all this, and anticipating debates that continue today, the struggle over the desired boundaries between the private and public spheres and the limitations of a state's duty to protect order in the latter at the expense of liberty in the former was already being waged in pre-modernity.

To those seeking medieval heralds to modern public health practices in an epidemiological sense, the records of Lucca's Roads Officials may seem disappointing. Yet once healed of such *precursoritis*, we may observe the emerging picture with greater historical reward. As this preliminary study and others suggest, at least some interventions were premised on cities' increasingly diverse populations, including a growing number of at-risk communities both within and outside the labour market. As Irina

⁵⁰ Rawcliffe, 'Health and safety at work in East Anglia', 130–51; I. Metzler, *Disability in Medieval Europe: Thinking about Physical Impairment during the High Middle Ages, c. 1100–1400* (London and New York, 2006), 115–17.

⁵¹ Orsellino del Iuncta was fined 10 *lire* after a wall (*clausura*) delimiting his property collapsed and, being situated on a main road, endangered pedestrians and mounted traffic with its accompanying animals ('ita quod pedes et eques secum aliis animalibus iri non posset sine periculo'). ASLu CVP 6, unnumbered fols. (20 Feb.–9 Apr. 1343).

⁵² In 1343, Andreuccio Cuicchini and Giovanni Lupucci were accused of disobeying the injunction 'de non retinendo in eorum apoteca sive domo aliquas pelles putridas vel fetidas recentes vel siccas'. ASLu, CVP 5, fasc. 6, unnumbered fol. Case continues in CVP 6, unnumbered fols. (2 and 20 Apr. 1343).

Metzler notes, medieval guilds were painfully aware of the challenges pertaining to their specific occupations and at times acted to reduce the risk of maiming and disease. Furthermore, already by the thirteenth century, some Italian cities were employing public physicians to care for the urban poor (including poor prison inmates), a practice which may have originated with the provision of medical care for non-elite combatants.⁵³ Other preventative means aimed at improving local environments across the medieval world included sequestering (but not exiling) lepers, addressing the needs of the mentally ill, increasing access to hospitals, and regulating (rather than banning) urban sex workers.⁵⁴ Curfew was likewise seen or at least justified as a way to increase the safety of urban residents.⁵⁵

Statuimus pro bono et sanitate hominum – ‘we decree for people’s wellbeing and health’: so proclaim the Lucchesi officials’ statutes, which open their extant series. And as its subsequent registers attest, in practice rather than only in theory, the city’s rulers and residents actually maintained or at least strove for what they understood – *in their own terms* – to be a healthier city. As such, they offer a glimpse of a society cognizant of its own need to identify and detect health hazards at the population level and the mechanisms it developed to obviate or at least mitigate them. Some risk was avoided by maintaining and commissioning public works, while harm itself was reduced through publicly prosecuting offenders who neglected the upkeep of workshops and roads, bridges, aqueducts, canals, latrines, gutters, wells, troughs and walls belonging to them personally or assigned to them collectively. No matter how many questions remain to be answered about the scale and effectiveness of these measures, and whatever the limitations of its success had been from a modern perspective, Lucca appears to have been one among a number of pre-modern cities that espoused healthscaping as a staple concern and an active pursuit.

⁵³ Metzler, *Disability in Medieval Europe*, 115–22. On prison inmates’ access to medical care see G. Geltner, *The Medieval Prison: A Social History* (Princeton, 2008), 17, 19, 34, 66.

⁵⁴ G. Magherini and V. Biotti, *L’Isola delle Stinche e i percorsi della follia a Firenze nei secoli XIV–XVIII* (Florence, 1992); J. Henderson, *The Renaissance Hospital: Healing the Body and Healing the Soul* (New Haven, 2006); P. Horden, *Hospitals and Healing from Antiquity to the Later Middle Ages* (Aldershot, 2008); Rawcliffe, *Leprosy in Medieval England*; A. Sabra, *Poverty and Charity in Medieval Islam: Mamluk Egypt, 1215–1517* (Cambridge, 2000); S. Watson, ‘The origins of the English hospital’, *Transactions of the Royal Historical Society*, 6th ser., 16 (2006), 75–94; L.L. Otis, *Prostitution in Medieval Society. The History of an Urban Institution in Languedoc* (Chicago and London, 1985); R. Mazo Karras, ‘The regulation of brothels in later medieval England’, *Signs: Journal of Women in Culture and Society*, 14 (1989), 399–433.

⁵⁵ E. Crouzet-Pavan, ‘Recherches sur la nuit vénétienne à la fin du moyen âge’, *Journal of Medieval History*, 7 (1981), 339–56.

Appendix 1. Fines set for environmental violations, including officials' neglect, in fourteenth-century Lucca*Source:* ASLu, CVP 1, fols. 1r–8v (early–mid-fourteenth century)

Violation	Fine (in <i>lire</i> by default)	Half to accuser	Officials' fine
1. Neglect of oven maintenance	10		50
2. Contaminating water with liquid waste from dyers, metallurgists, soap makers, and steam-baths	<5		25
3. All other kinds of industrial contamination	<10 ⁵⁶		
4. Placing waste before one's home on a public way	<20 <i>soldi</i>	+	
5. Using public wells for washing, cleaning or watering animals	10 <i>soldi</i>	+	
6. Disposing of lime, earth or major industrial waste in public areas	<20 <i>soldi</i>		25
7. Blocking or appropriating waterways for private use	<10		
8. Blocking sewers and drains	<40 <i>soldi</i>		
9. Neglecting sewers and drains passing through one's property	<10		
10. Failing to enclose and bury sewers in one's property	<25		
11. Causing a reduction in a sewer canal's flow	<10		
12. Failing to conceal latrines from public view	10 ⁵⁷		
13. Keeping pigs and horses within the city walls	<40 <i>soldi</i> ⁵⁸		
14. Selling pigs and horses in Piazza san Michele or its environs	<40 <i>soldi</i>	+	
15. Damaging public walls or dykes	<25		
16. Occupying or damaging a public road	10	+	100
17. Appropriating or damaging a public space or work	25		10
18. Defiling the animal troughs in front of Porta san Pietro	3		
19. Allowing an animal to damage troughs	10	+	
20. Washing cloths in the fountains and canals leading to troughs	10		
21. Destroying fountains or canals	100 + repairs ⁵⁹		100

⁵⁶ Fine doubled if waste was left before someone else's house.⁵⁷ Edifice can be destroyed by the Roads Officials.⁵⁸ Animals can be taken or killed by anyone with impunity.⁵⁹ Actual fine determined by type of damage and the offender's status.

22. Allowing animal blood to flow into a public space	10	200
23. Obstructing a public road, street, bridge or canal	<25 a person; <10 per town	100
24. Slaughtering animals and disposing of carcasses near the city walls	100 <i>soldi</i>	+ ⁶⁰
25. Working with skins or wool outside designated areas	<10	+

Appendix 2. Public communications commissioned by the Roads Officials

Source: ASLu, CVP 8, fols. 39r–40v (Jul.–Nov. 1347)⁶¹

[1.] Bandise da parte del maggiore ufficiale delle vie e de publichi del comune di Luccha:

Che neuno fornario della citta di Luccha, borghi o sobborghi debbia ne possa tenere sopra lo suo forno, per modo che portasse alcuno pericolo, alcuna quantita di stipa se non quanta bizogna per una septimana al suo forno, ne etiando alcuna quantita di mortora secchare, a quella pena che al dicto ufficiale piacesse di tollere secondo la forma dello statuto.

E che nulla persona possa ne debbia abbeverare alcuna bestia sopra ad alcuno pozzo della citta di Luccha, borghi o sobborghi, ne lavorare o fare lavorare alcuna cosa presso a dicti possi a quattro braccia, a quella pena la quale si contiene nelli statuti.

E che niuna persona gatti o faccia gittare in della citta di Luccha, borghi o sobborghi alcuna cosa morta o bructura perlla quale ne possa uscire alcuna puzza, overo alcuna altra cosa che occupasse alcuna via della citta di Luccha, borghi e sobborghi alla dicta pena.

E che nulla persona guasti, impedisca, strami, o in alcuno modo occupi alcuna via, strada, ponte, o chiavita della dicta citta, borghi o sobborghi, distrecto, contado, o forza, a quella pena che al dicto ufficiale piacesse di tollere.

E che nulla persona ardisca overo presumma tenere nella citta di Luccha overo borghi alcuno porco overo troia [fol. 39v] contra la forma dello staduto, alla pena che dicta e di sopra.

E che ciaschiduno tintore, tavernaro, pellario, overo coraio o stufaiuolo debbiano tenere necto li loro acquai; e ogni vigilia de festa debbiano quelli rimondare e nectare; e etiando dinanti alle lori bocteghe tenere senza alcuna bructura, a quella pena che si contiene nello statuto e al suo arbitrio.

⁶⁰ Failure to report carries a 40 *soldi* fine.

⁶¹ S. Bongi (ed.), *Bandi Lucchesi del secolo decimoquattro* (Bologna, 1863), 188–90, prints three of these four brief texts, without specifying a source. It is likely, however, that he drew upon a consolidated series of communal promulgations rather than the Roads Officials’ registers since his rather orthographic transcription differs from mine in many places.

E a ciaschiduno sia licito di accusare e dinonsiare chi contrafacesse, e sarali tenuto credenza, e ara parte della condannagione.

E che tutti li consoli delle contrade e bracci della citta di Luccha, borghi e sobborghi debbiano comparire dinanti al dicto ufficiale, di qui a octo die proximi che verranno.

E che nulla persona, di qualunque condicione sia, ardischa overo presuma di fare alcuno danno o guasto in alcuno modo in del prato del comune alla pena de libri xxv per ciaschiduno e ciascuna volta.

Anche che nulla persona possa ne debbia tenere [o] conducere sopra o per illo prato del comune alcuno carro o carrecta o treggia, alla dicta pena.

Anche che nulla persona tegna o conduca alcuna bestia sopra il dicto prato a pastare o in altro modo tenere, alla dicta pena.

E a ciaschiduno sia licito di accusare e dinontiare chi contrafacesse e sarali tenuto credenza, e [40r] ara parte della condannagione.

[Closing passage, in Latin, indicates that on 2 Jul. Jacopo Braccini, the communal herald, publicly communicated these regulations]

[2.] Bandise da parte del maggiore ufficiale delle vie del comune di Luccha:

Che ogni persona cittadina e forostiera, la quale habiti in della citta di Luccha e in de borghi, la quale habbia in della dicta citta casa propria o conducta, faccia conciare e astracare dinanzi alle loro case bene e convernncuilmente in qualunque parte lo dicto astraco e sconcio e guasto, di qui a xv die proximi che vengnono, a pena di libri x a chi contrafacesse, sappiendo che il dicto ufficiale ne fara fare solemne inquisition, passato il dicto termine contra qualunque persona non observera al presente bando; e a ciaschiduno sia licito di denonsiare qualunque persona contrafacese, e ara la terza parte della condannagione e e [sic] sarali tenuto credenza.

E che ciaschiduna persona cittadina e forestiera, la quale habiti in della dicta citta, ogni sabato e vigilia di festa solemne faccia spazzare e nectare le vie dinanzi alle loro case a pena di soldi xx per ciaschiduno che contrafacisse; e ciaschiduno sia licito di dinonsiare e ara la meta della condannagione.

E che tutti i consoli delle contrade e bracci della citta di Luccha e de borghi, di que a tre di proximi che anno avenire, habbiano facto sconborare le loro contrade e bracci di tutte pietre pezzolame e minuzzame di matoni e d'ogni altra cosa la quale fosse occupamento di via publica alle spese delle loro contrade e bracci, a pena di soldi xx per ciaschiduno consolo in suo proprio nome.

[Publicly announced on 28 Aug.] [40v]

[3.] Bandise da parte del maggiore ufficiale delle vie che qualunque persona che pegnorata sia per cagione delle chiavate che si fano fare per Nicolao Busdiraghi fuor dellantiporto del Molino di porta san Gervagi,

per lo soprascritto officio, di qui a viii di proximi che ano avenire, qualle pengnora habbiano ricolte, sappiendo che passato il dicto termine le dicte pengnora si vendrano overo s'impegnorerano per quella somma di che ano a pagare per la cagione soprascritta.

[Publicly announced on 8 Nov.]

[4.] Bandisce da parte del maggiore ufficiale delle vie che qualunque persona, di qualunque condicione sia, la quale habbia pengnora sia per llo officio delle vie per qualunque cagione, di qui a viii die proximi che ano avenire quelle pregnora habbiano riscosse, sapiendo che passato il dicto termine le dicte pengnora si venderano e non sara tenuto loro alcuna ragione.

[Publicly announced on 18 Nov.]