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POLICING THE URBAN ENVIRONMENT IN PREMODERN EUROPE

edited by

CAROLE RAWCLIFFE and CLAIRE WEEDA

Front cover: Panorama of Ghent (1534), detail © Lukas – Art in Flanders VWZ, photo Hugo Maertens

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INTRODUCTION

Carole Rawcliffe and Claire Weeda

As urban communities in Western Europe mushroomed from the twelfth century onward, authorities promptly responded with a plethora of regulations to facilitate, at least in theory, the orderly cohabitation of dwellers within the city walls. Many of these rules concerned public health matters, such as the disposal of waste, the protection of water supplies, and the sale of wholesome foodstuffs. In some cases, sanitary regulations drew from Ancient Greek and especially Galenic medical theory, which stressed the importance of a hygienic environment in safeguarding the urban body from disease. The effective execution of such measures relied in part on the active engagement and compliance of the population. Shared assumptions regarding physical and spiritual well-being, social cohesion, neighbourliness, and economic prosperity, as well as the pursuit of ideals of urbanity, fed into communal efforts to police the environment, the behaviour of others, and the conduct of the self. Nonetheless, conflicting interests and contradictory impulses abounded, and official bodies might wield the disciplinary stick when their efforts met with apathy, confusion, resistance, or evasion. This volume explores attempts to enforce rules and recommendations for the improvement of public health and sanitation in premodern Western Europe, while also seeking to establish how urban populations may have reacted to them. To this end, it draws upon a wide range of source material, including bylaws, court rulings, and official injunctions, together with the evidence of judicial inquiries, administrative records, urban chronicles, panegyrics, and medical texts. And in so doing it comprehensively challenges a lingering tendency on the part of historians writing for the academic as well as the popular market to employ the word ‘medieval’ as a synonym for ignorance, superstition, and indifference to squalor.

Policing the environment and the politics of health

As a form of ‘social disciplining’, policing involves the regulation of behaviour in social and physical spaces.¹ Primarily, it is a political act, for it concerns the intervention by authorities in the lives and conduct of individuals and groups with the stated objective of promoting order and security. The word ‘police’ derives from the Latin *politia*, which in turn comes from the

¹ The term ‘social disciplining’ was first coined by Oestreich, *Geist und Gestalt*, pp. 179-197, in the 1960s and implied intervention by the early modern state to impose a well-ordered government and capitalist economy. See also Ogilvie, ‘Social Disciplining in Early Modern Bohemia’, p. 43.

Greek *politeia*, meaning variously the state, public administration, politics, or public life. Its inseparable connection to these concepts, as well as to questions of civic morality, is reflected in the three meanings attributed to ‘*politia*’ in the Latin dictionary compiled in the 1670s by Charles Du Cange: 1. ‘the *res publica*, the cohabitation of men in the same city’ (*respublica, hominum in eadem urbe simul habitatio*); 2. ‘government, administration’ (*regimen, administratio*); and 3. ‘urbanity, elegance of manners’ (*urbanitas morum elegantia*), or *politesse*.² In the late Middle Ages ‘*politia*’ consequently came to represent the ideal of good order – in German *gute Policey*, in French *bonne police* – only subsequently assuming the more institutional meaning which it has today.³

Until recently, the ways in which late medieval governments and people policed the environment, each other, and themselves have been largely neglected by urban historians. With a few occasional exceptions, the topic lay more or less dormant, despite the wealth of relevant documentation on the shelves of city archives, and notwithstanding the pioneering work of Lynn Thorndike in the 1920s and the three substantial articles on sanitary measures in late medieval London published by Ernest Sabine a few years later.⁴ Beginning tentatively in the 1970s and gaining momentum over the past decade, a series of mostly regional case studies has now appeared, notably regarding public health in English and Italian cities.⁵ This renewed interest is partly a result of the development of socio-cultural approaches to medical history, which place an increasing emphasis upon preventative as well as curative medicine and upon the religious, cultural, and gendered aspects of health and well-being.⁶

To compound the problem, previous generations of historians have frequently identified the emergence of scientific medicine, public health concerns, and the police services as an early modern phenomenon tied to the rise of the modern state and the growth of capitalism. It was, apparently, only then that royal, seigniorial, and urban bodies began to

² Du Cange, *Glossarium mediæ et infimæ latinitatis*, ed. Favre: ‘*Politia*’. Kotkas, *Royal Police Ordinances*, pp. 1-2; Nitschke, ‘Von der Politeia zur Polizei’, p. 5.

³ For the origins of the term ‘*politia*’, see Nitschke, ‘Von der Politeia zur Polizei’, pp. 2-4, 12.

⁴ Sabine, ‘Butchering in Mediaeval London’; Sabine, ‘City Cleaning’; Sabine, ‘Latrines and Cesspools’; Thorndike, ‘Sanitation, Baths and Street-Cleaning’.

⁵ For instance, Bocchi, ‘Regulation of the Urban Environment’; Balestracci, ‘Regulation of Public Health’; Geltner, ‘Healthscaping a Medieval City’; Rawcliffe, *Urban Bodies*. A regularly updated ‘Bibliography of the History of Public Health in Pre-Industrial Societies’ can be accessed at <https://premodernhealthscaping.hcommons.org/documents/>, last consulted 15 January 2019.

⁶ Forerunners of this new approach are, for instance, Monica Green and John Henderson.

formulate and pursue a coherent set of regulations pertaining to matters of health, social welfare and security, religious conformity, sexual offences, the environment, and food safety.⁷ Yet, as this volume makes clear, both the term ‘politia’ and a preoccupation with the very same roster of sanitary issues significantly predate the ‘early modern’ era, thereby challenging a dominant interpretation of what is meant by the term ‘modern’. Indeed, the word ‘politia’ was already being used by thirteenth-century intellectuals in discussions of Aristotelian politics as an alternative to *civilitas*; and the bulk of what in early modernity have been termed ‘policing regulations’ may be identified in urban and royal ordinances from the twelfth century onward. Concern for the maintenance of communal welfare, peace, and justice, for the enforcement of high moral standards, and for the regulation of human interactions with the natural environment can, in fact, boast a remarkably long pedigree.⁸ For instance, political debates held during meetings of the thirteenth- and fourteenth-century city council of Siena, sometimes based upon citizens’ petitions and addressing the necessity of imposing sanitary regulations, are rubricated ‘*pro sanitate et securitate*’, indicating an early acknowledgement that the health and safety of the urban body and its decision-making processes were shared, communal concerns.⁹ And in other late medieval sources, potentially coercive policing powers are often justified in collective terms as being designed for the benefit of the entire community (*pro bono commune*).¹⁰ One of the oldest surviving regimes of police, produced in the Low Countries in the fifteenth century by Denis the Carthusian, claims that access to an abundance of life-sustaining goods, including medication, helped to promote the foundation of cities, where artisans, *magistri*, and officials safeguarded the spiritual and physical health of citizens and the exchange of goods.¹¹

⁷ For public health as an early modern phenomenon see, for example, Cipolla, *Public Health and the Medical Profession*. For early modern French police ordinances: Napoli, *Naissance de la police moderne*; Iseli, “Bonne Police”: *Frühneuzeitliches Verständnis*. For early modern Germany: Simon, “Gute Policey”: *Ordnungsleitbilder und Zielvorstellungen*. General studies: *Policey in Europa der Frühen Neuzeit*, ed. Härter and others; *Gute Policey als Politik*, ed. Blickle and others; Härter, ‘Security and “Gute Policey”’, p. 42; Kotkas, *Royal Police Ordinances*, p. 3.

⁸ Rigaudière, *Penser et construire l’État*, pp. 285–341, discusses statutes and ‘police ordinances’ from the thirteenth century onward concerning sanitation, among other matters.

⁹ Siena, Archivio di Stato, Consiglio Generale 92, fol. 44r, 7 July 1319; Bowsky, *A Medieval Italian Commune*, p. 89; Kucher, *The Water Supply System of Siena*.

¹⁰ See the various contributions to *De Bono Communi*, ed. Lecuppre-Desjardin and Van Bruaene.

¹¹ Denis the Carthusian, *De regimine politiae*, I, p. 11.

This begs the question to what extent policing can still be viewed as the product of an early modern ‘rationalization’ of behaviour associated with state formation processes, whereby societies were transformed into ‘orderly, market-oriented modern cultures’, as, for example, Gerhard Oestreich once maintained.¹² Such a top-down approach has sparked criticism for its emphasis on the all-encompassing impact of market-driven incentives by the state or city government at the expense of intervention from below, by concerned householders, artisans, clergy, and others.¹³ It has also invited some scholars to ask how far all these regulations were observed, as most of the sources hitherto discussed have been normative or prescriptive rather than documents that record the daily realities of practice.¹⁴ Writing in the specific context of Ancient Rome, Mark Bradley provides a timely reminder that ‘dirt, cleanliness, pollution and purity have been flexible, negotiable and hotly contested topics for well over two thousand years of western history’.¹⁵ The following chapters furnish many examples of official compromise in the face of commercial and industrial interests, population growth, and the demands of public finance.

Drawing on the most recent research, this collection of essays explores the enforcement of sanitary regulations, and the circumstances prompting practical interventions, such as the provision of infrastructure for the promotion of urban health, at a communal level in the period before the emergence of centralized police institutions and state power. In other words, to use a Foucauldian term, it sets out to discover if a form of ‘bio-power’ emerged in premodern times, by which ruling authorities incorporated knowledge about health and the biological life of their subjects into politics, and applied it as a disciplinary and organizational tool.¹⁶ As the nine contributions to this volume attest, the legal and administrative documents,

¹² Oestreich, *Geist und Gestalt*, pp. 179-197.

¹³ See, for example, McIntosh, *Controlling Misbehavior*, Chapters one, three, and five.

¹⁴ See Ogilvie, ‘Social Disciplining in Early Modern Bohemia’, pp. 43-44, for an account of these approaches and attendant criticism. For instance, Weber, ‘Disziplinierung und Widerstand’, argues that Early Modern Silesian serfs mostly ignored or resisted attempts at regulation. Kotkas, *Royal Police Ordinances*, p. 6.

¹⁵ Bradley, ‘Approaches to Pollution and Propriety’, p. 39. The divide between precept and practice has preoccupied historians of Antiquity in light of the ongoing debate about the relative cleanliness of Ancient Rome. See, for instance, Morley, ‘The Salubriousness of the Roman City’. His conclusion, that however filthy Rome may have been it was ‘still a long way removed from the squalor of a typical medieval or early modern city’ (p. 203), confirms how entrenched this unfortunate stereotype has become.

¹⁶ Rabinow and Rose, ‘Biopolitics Today’, p. 8; and pp. 98, 124 below. McCleery, ‘Medical Licensing’, pp. 210-214, convincingly argues for early evidence of ‘bio-political awareness’ in Portugal.

treatises on the regulation of the natural environment, and urban panegyrics produced across Western Europe reveal a remarkable degree of contingency when it came to negotiations over cleanliness and wellbeing, which involved not only royal and civic authorities but also guilds, the Church and private individuals. Ordinances, often issued in response to practical concerns articulated in petitions and neighbourhood disputes, structured sanitary practices, oversaw food supply and safety, and laid down rules for the appropriate use and upkeep of infrastructure. Particular emphasis was placed upon such pressing issues as the quality of the air and the water supply and the elimination of nuisances caused by the metabolic residuum of the civic community and its various industries.¹⁷ Bylaws sought to control the activities of butchers, dyers, laundresses, and tanners; to curtail the freedom of wandering animals such as dogs and pigs; and to reduce levels of noise pollution at night. Evidence that these ordinances were no empty threat, but were in fact enforced – and resisted – is apparent from the activities of various specially appointed officers and the records of court proceedings for the implementation of public health measures, which were sometimes initiated by concerned neighbours. Long before the centralized organization of police services, municipal officials, such as the Bolognese *fango*, the ward constables of London and Norwich, and Ghent's *coninc der ribauden*, were already walking their beat in the thirteenth century. They supervised health and safety, while shaping and conserving, with various degrees of success, a material, spatial, and social reality in accordance with government policy.¹⁸

From at least the twelfth century, the languages of power and health drew from the same reservoir of natural metaphors, following the influx of knowledge about Classical and Muslim medicine (explained further below). Both took an organic view of the relationship between people, environment, and society, which depended upon the smooth working of specific metabolic processes. The discourse on these topics merged on two levels. Firstly, the metaphor of the body politic gained cogency through the appearance of treatises reflecting a physiological or anatomical concept of society and politics.¹⁹ Secondly, regimens and mirrors – such as the twelfth-century *Regimen sanitatis Salernitanum*, archbishop Giles of Rome's thirteenth-century *De regimine principum*, legal scholar Bartolus de Saxoferrato's fourteenth-

¹⁷ Hoffmann, 'Footprint Metaphor and Metabolic Realities'.

¹⁸ Geltner, 'Finding Matter Out of Place'; Coomans, 'In Pursuit of a Healthy City'. See Napoli, *Naissance de la police moderne*, pp. 287-301, and Kotkas, *Royal Police Ordinances*, p. 8, for the role of police in this regard, as well as for preserving order.

¹⁹ Kaye, *History of Balance*; Nederman, *Medieval Political Theory*.

century *De regimine civitatis*, and Denis the Carthusian's fifteenth-century *De regimine politiae* – presented advice on how to regulate the physical and political body, encouraging householders, magistrates, and monarchs actively to conserve their own health and that of society.²⁰ These organic metaphors spilled over into discussions about the 'health' of royal and urban government, in which the blood of the communal body was likened to political provision and its sinews to laws, while conflict and war might be envisaged as a type of disease, or corruption of the collective humours.²¹ Guilds often served as intermediaries between civic and domestic regimes, as Bert De Munck has recently argued, since their members represented the body politic collectively through their commercial and political activities and individually as heads of households. Their status as citizens rested upon concepts of virtue and trustworthiness, which in turn guaranteed the intrinsic quality of the goods and services that shaped civic identity.²²

Certainly, these metaphorical blueprints for rulership evoked an ideal world far removed from the quotidian challenge of policing a busy, noisome environment, haunted by the spectre of epidemic disease and natural disasters, such as fires and floods. Nonetheless, the challenges that evolving communities faced inspired new forms of political debate and organization, which in turn gave rise to a raft of legislative and administrative developments. Overall, there were several overlapping configurations or categories in which the policing of people and the environment occurred. Firstly, human behaviour was policed in order to safeguard the material goods or bodies of others from real or perceived harm (as in cases of theft or violence). Secondly, people's conduct with regard to the natural environment was policed to protect it from pollution and similar hazards. Additionally, the natural environment could itself be the focus of policing, as the creation of clean, orderly living conditions might encourage residents to take better care of their homes and possessions and also pay greater attention to the welfare of others. In this way, a safe and sanitary environment invited self-policing and might potentially reduce crime and other social problems. The natural environment could, moreover, be the focus of policing for reasons of health and safety, as for instance, through the draining of marshes or building of dykes, or the imposition of controls on animals. Fifthly, people might police their own bodies and behaviour by following

²⁰ See pp. 57-59 below.

²¹ An image used in the fifteenth century by Sir John Fortescue in *De laudibus legum Anglie*, ed. Chrimes, XIII, p. 30.

²² De Munck, *Guilds, Labour and the Urban Body Politic*, pp. 13-16.

practices of health and hygiene, both material and moral. And, finally, they could police the bodies of others by introducing quarantine regulations, sequestering certain occupations in particular areas, creating sanitary corridors, and demanding the removal of sick residents, such as lepers, from cities. The educational text *Livre des metiers*, written in the 1370s to help tradesmen learn French and Dutch, thus expounds the commonplace (not invariably observed in practice) that suspects, upon being ‘pronounced leprous, dwell amidst the sick and never will cohabit with healthy persons, because of the danger they pose’.²³ These interventions not only focused on the reduction of harm through the threat of punitive or preventive measures, but also sought to regulate the flow of waste and goods, as well as controlling the quality of merchandise, food, and drink.

As we can see from the following chapters, urban governments – in Italy, France, the Low Countries, England, and the Imperial German territories – often did their utmost to ensure that a remarkably consistent range of sanitary measures was adopted, if not always uniformly or effectively enforced. Property owners were responsible for cleaning and sometimes paving the streets next to their homes and workplaces. Gutters and cesspits had to be regularly cleared in order to ward off miasmatic stench and facilitate the uninterrupted flow of waste matter - a vital precaution in cities prone to flooding, such as Dordrecht and Montpellier, the focus respectively of chapters by Naaktgeboren and Dubé and Dumas. Particular attention was paid to the layout and cleanliness of market spaces and the quality of consumables. Indeed, as Rawcliffe, Coomans, and Kinzelbach point out, designated officials might be charged with the task of inspecting flesh and fish on a daily basis to prevent the sale of contaminated foodstuffs. Policing also extended to the formal examination of individuals suspected of having contracted leprosy, although Demaitre’s essay reveals that the outcome could be far less harsh and coercive than might be supposed, not least because of the charitable imperatives that existed alongside an increasingly medicalized approach to segregation.

Medicine for urban bodies

²³ *Het Brugsche Livre des mestiers*, ed. Gessler, pp. 45-46: ‘Est jugiés comme meseaus; il demeure a le maladerie, et n’oise mais habiter entre les saines gens, pour les perils qui en porroient venir’ and ‘es ghevonnest beziect: hi woend ten zieken lieden, ende ne dar nemmeer habiteren onder die ghesonde lieden, omme de vreesen diere af mochte comen’.

The many decrees and regulatory bodies described in these chapters did not fall unbidden from the sky upon an ignorant population. As noted above, the arrival in Western Europe of a rapidly growing body of medical texts translated from Greek, Hebrew, and Arabic gave an impetus to the production of a specific type of advice literature, known as the *regimen sanitatis*, about the best way to remain healthy.²⁴ Initially composed by court physicians for their royal or aristocratic patrons, these guides soon found a more popular market, circulating in a modified and accessible format among members of the urban community. Their audience grew appreciably after the Black Death, fuelled by a demand for practical guidance about avoiding now regular outbreaks of plague. The *regimen*, a genre that helped to define and shape urban health norms, owed much of its appeal to the fact that it could easily be adapted to fit the requirements of an entire community as well as those of the individual citizen. It focussed upon the management of six factors external to the human body (the ‘non-naturals’), each of which had a crucial effect upon personal wellbeing.²⁵ Health was to a significant extent determined by diet, ‘the first instrument of medicine’, since the effectiveness of every physical and mental process depended from the start upon what one ate. Having been cooked in the stomach, partially digested food was conveyed to the liver, where it was converted into humoral matter: blood (hot and wet), phlegm (cold and wet), black bile (cold and dry), and yellow bile (hot and dry). Unlike their first parents, Adam and Eve, whose humours had been perfectly balanced before their expulsion from paradise, ordinary mortals had to pay constant heed to the proportions of heat, cold, moisture, and dryness within their bodies.²⁶ In a healthy person, any surplus would be excreted, leaving a slight imbalance in favour of the particular humour that determined his or her temperament. A marked excess or deficiency of one humour or more could, however, prove devastating, leading to sickness and eventually death, the ultimate legacy of Original Sin.

From the liver, the blood and other humoral matter, which together constituted the natural spirit, were transported in the veins to the organs and extremities, providing the nourishment essential for survival and growth. (Being unaware of the concept of

²⁴ Gil Sotres, ‘The Regimens of Health’, pp. 291-318.

²⁵ They were diet, the environment, sleep and waking, retention and evacuation (through such procedures as blood-letting and the use of laxatives), exercise and rest, and accidents of the soul (involving the reduction of levels of anxiety and other intense emotions): Rather, ‘The Six Things Non-Natural’, pp. 337-347; Gil Sotres, ‘The Regimens of Health’, pp. 291-318; Carrera, ‘Anger and the Mind-Body Connection’, pp. 116-128.

²⁶ Rawcliffe, ‘The Concept of Health’, pp. 318-322.

circulation, Galen of Pergamum (d. 216) and the physicians who followed him compared the veins and arteries to irrigation canals.) Some of this blood passed directly to the heart, the source of warmth and life. Flowing through the septum, from right to left, it then mingled with air from the lungs and entered the arterial system as a warm frothy substance, known appropriately as vital spirit, which carried heat to the rest of the body, thereby keeping it alive. The vital spirit that travelled to the brain was, according to Galen, filtered through a network at the top of the spinal cord called the *rete mirabile*. Once mixed with air from the nostrils this purified blood assumed the power not only to activate the nervous system but also to mediate between sense perception and those parts of the brain responsible for imagination, reason, and memory.²⁷ Now converted into animal spirit, it quite literally *animated* both body and mind, influencing attitudes and behaviour in keeping with the individual's personal temperament. As the Arab physician Haly Abbas (al-Majusi, d. 994) explained, this entire process depended upon humoral balance, 'which cannot be fully maintained without the rule (*regimen*) of the art of medicine'.²⁸ Whereas the natural spirit could be modified through diet and manual procedures such as phlebotomy, the vital and animal spirits were more responsive to the quality of the air and environment, as well as the avoidance of anger, anxiety, and fear.²⁹

Concerns about environmental issues increased exponentially during epidemics because of the entrenched belief that pestilence arose from miasmatic or contaminated air, which carried it from person to person. Long before the Black Death, an influential passage in Avicenna's *Canon*, the bedrock of the late medieval medical syllabus, described the toxic effect of these exhalations upon the human body, providing a rationale for campaigns to clean the streets, markets, and conduits of European towns and cities:

Vapours and fumes rise [into the air] and spread in it, and putrefy it with their debilitating warmth. And when air of this kind reaches the heart, it corrupts the complexion of the [vital] spirit that dwells within it; and, surrounding the heart, it then putrefies it with humidity. And there arises an unnatural heat; and it spreads

²⁷ Harvey, *The Inward Wits*, pp. 4-30.

²⁸ Haly Abbas, *Liber medicinae*, Liber I, theorice, cap. 3, sig. aiiij.

²⁹ Rawcliffe, 'The Concept of Health', pp. 322-327. See also, Pender, 'Subventing Disease', pp. 193-218.

throughout the body, as a result of which pestilential fever will occur, and will spread to a multitude of men who likewise have vulnerable dispositions.³⁰

Although few urban magistrates would have possessed this work, or been able to cope with the demanding Latin text, they could hardly claim ignorance of its underlying message, especially if, like the consuls of Montpellier, they could draw upon the collective expertise of a distinguished faculty of medicine.³¹ Vernacular *regimina* and plague tracts, such as that composed in 1348 by the Catalan physician, Jacme d'Agramont, specifically for 'the common and public utility' of the residents of Lerida, stressed the dangers posed by polluted water and other sources of toxic air.³² If, as was the case in England, magistrates did not customarily retain their own medical advisors, a stream of orders, writs, and other directives from crown or parliament would provide the necessary information.³³ The widespread deployment of heralds, town criers, and other officers charged with the task of proclaiming regulations through the streets of European cities in language that everyone could understand served further to warn against risky or antisocial behaviour.³⁴

We have already seen that sanitary policing focussed heavily upon the regulation of food markets, especially with regard to the quality of the goods on offer. At a basic level, attempts by urban magistrates to prevent the sale of bread, meat, and fish that seemed unfit for human consumption reflect a pragmatic awareness that they would make people sick and, quite possibly, foment popular unrest. But they were also prompted by contemporary medical beliefs about the transmission of epidemic disease, which was frequently associated with poor diet or rotten food contaminating the air. Responding in October 1348 to a royal commission of inquiry into the causes of the plague then sweeping through Europe, members of the medical faculty of the University of Paris noted that 'major pestilential illnesses' were often

³⁰ Avicenna, *Liber canonis medicine*, book IV, fol. 329r. This passage appears almost verbatim in one of the earliest printed vernacular English plague tracts, *A Litill Boke Necessarye and Behouefull agenst the Pestilence*, n.p.

³¹ See pp. 181-182 below.

³² Jacme d'Agramont, *Regiment de preservació de pestilència*, p. 57; Arrizabalaga, 'Facing the Black Death', pp. 244-250; Demaitre, *Medieval Medicine*, pp. 60-66.

³³ See pp. 71, 74 below.

³⁴ See pp. 80, 100, 153, 188 below.

1. The value of mountain air illustrated in a fourteenth-century vernacular *regimen sanitatis*

caused by contaminated food, especially during famines. Indeed, although in this instance corrupt air was identified as the principal culprit, anyone who failed to eat properly would become more vulnerable to infection, just as dry kindling was more likely to catch fire during a conflagration.³⁵ This was partly because the digestion of heavy or unwholesome food would generate a dangerous level of heat, opening the pores to venomous air. A body already suffused with corrupt matter would, moreover, be unable to resist any invading toxins, being likely to surrender without a fight.³⁶

Nor was this all. Contaminated foodstuffs seemed particularly dangerous because they so often smelt badly, releasing miasmatic vapours and thus posing a double threat to communal health. General anxiety on this score can be traced from an early date, but it became especially acute during epidemics. One of the very first measures instituted by the rulers of Venice when plague struck in 1348 was to order the incineration of infected pork ‘which creates a great stench and attendant putrefaction that corrupts the air’.³⁷ A century and a half later the city’s Health Commissioners reiterated the same concerns, with a warning that

³⁵ *The Black Death*, ed. Horrox, p. 163.

³⁶ Rawcliffe, *Urban Bodies*, pp. 233-238.

³⁷ Cipolla, *Public Health and the Medical Profession*, p. 15.

rotten meat would spread ‘pestilential disease’ and should be immediately destroyed.³⁸

Anxieties of this kind were common, as we can see from Cooman’s examination of market regulations in the late medieval Low Countries and their repeated emphasis upon food hygiene.

That objections to festering dung heaps and overflowing privies so often refer to their unpleasant *appearance* as well as their disgusting smell was more than a simple matter of aesthetics or affronted sensibilities.³⁹ Urban magistrates were certainly keen to present their cities to the best advantage, banishing offensive activities from public spaces, especially when (as in the case of St Mark’s Square in Venice) judgemental visitors might encounter ‘something foul and shameful’ on their first arrival.⁴⁰ Powerful medical reasons also lay behind initiatives, such as those described below by Weeda, Naaktgeboren, and Brenner, to create a good impression. As the rulers of Siena observed during a campaign to improve the inner city in the 1450s, the spectacle of butchers slaughtering livestock in busy thoroughfares was not only incompatible with their drive for ‘beautification and ornamentation’, but also a serious risk to health.⁴¹ Indeed, during the plague of 1368-1369 the ‘abominable’ and ‘loathsome’ *sight* of the carrion deposited in the streets by London butchers caused as much alarm as did the ensuing ‘corruption and grievous stench’, and resulted in the threat of imprisonment and a massive fine for offenders.⁴² Once again, we can detect an awareness of theories developed by Ancient Greek and Muslim physicians, in this instance with regard to the working of the human eye. According to the Islamic authorities who transmitted Aristotelian ideas about optics to the West, the eye was a passive organ which absorbed the impressions, ‘forms’, ‘virtues’, or ‘similitudes’ that radiated outwards in a continuous stream of multiple images from all visible objects.⁴³ The *aspectus*, or appearance, of visually disturbing nuisances such as lepers, piles of excrement, and rotting carrion consequently presented a potential source of infection. The ‘species’ of disease or physical decay could easily enter the body of anyone who stared at them, spreading poison throughout the entire

³⁸ Wheeler, ‘Stench in Sixteenth-Century Venice’, pp. 27-28.

³⁹ As assumed, for example, by Ciecieski, ‘Stench of Disease’, p. 97.

⁴⁰ Wheeler, ‘Stench in Sixteenth-Century Venice’, p. 29.

⁴¹ Nevola, *Siena*, pp. 97-98.

⁴² *Calendar of Plea and Memoranda Rolls of the City of London, 1364-1381*, ed. Thomas, p. 93.

⁴³ Stearns, *Infectious Ideas*, pp. 93-96.

venous system in the same way as rancid meat or toxic air.⁴⁴ Furthermore, as the beliefs outlined above make plain, unpleasant sights easily perturbed the animal spirits, leading them to flee in terror to the sanctuary of the heart and further destabilize the body's defences. At this point the Church seemed to offer the best medicine, for the most effective antidote to fear was widely regarded as confession, prayer, and repentance.⁴⁵

Spiritual hygiene

Before addressing the dangers of stagnant water and infected air, the Norman physician, Thomas Forestier, began his tract on the sweating sickness of 1485 with a solemn exhortation that the reader should 'leve welle and mende hys evyl lyf'. Like Jacme d'Agramont and countless others, he was at pains to stress that his professional recommendations would prove useless without a preliminary dose of spiritual prophylaxis. Indeed, the 'best and most profytable medicine to al the realme' was 'to go a pylgremage and do almesse, leve sweryng, detracciions, coveting of the flesshe and manslaughter, [to] love God and thy neybourghs, and kepe faithfully the commandementes of the lawe'.⁴⁶ From this perspective, bad behaviour disseminated the foul miasmas of sin, while those who performed charitable deeds and showed consideration for others helped to create a better and purer environment. This was quite literally the case when penitents sought to invest in such valuable items of civic infrastructure as drains, fountains, and refuse carts. Emphasis upon the Seven Comfortable Works (Matthew 25: vv. 32-36) as means to salvation was as old as the Gospel itself, and prompted many affluent (and not so affluent) individuals to underwrite communal health measures long before the Black Death. As Brenner observes, the provision of pure water supplies had long resonated with spiritual overtones, as well as following the dictates of Hippocratic medicine.⁴⁷ By the fifteenth century, however, public works in general had assumed a recognized spiritual dimension. The wealthy merchant and former mayor of London, Richard Whittington (d. 1423), left generous bequests in his will for sanitary improvements, such as the construction of a large public lavatory for both men and women

⁴⁴ Rawcliffe, *Leprosy in Medieval England*, pp. 93-95. Significantly, however, as Demaitre points out, premodern German sources tend to focus upon aesthetics rather than the risk of contagion that appearances posed: pp. 299-301 below.

⁴⁵ Wear, 'Fear, Anxiety and the Plague', pp. 339-363.

⁴⁶ British Library, Additional MS 27, 582, p. 71.

⁴⁷ See pp. 209, 215, 224 below.

over the tidal waters of the Thames. From a contemporary viewpoint, initiatives of this kind performed the multiple function of improving communal health and decorum, securing the donor's salvation and creating a lasting memorial to his (or her) sense of civic pride.⁴⁸

Even so, acts of charity and good neighbourliness were not enough. An overwhelming conviction that epidemic disease was, in the first instance, a mark of divine displeasure, prompted an outpouring of prayers, pilgrimages, masses, and other attempts, both individual and collective, to assuage the wrath of God.⁴⁹ At the same time, behaviour that, to a modern reader, has little, if any, connection with environmental issues, seemed to pose a threat to survival and had thus to be carefully policed. Forestier's emphasis upon swearing, for example, reflects the common belief that harmful, particularly blasphemous, speech invited retribution. Whereas confession cleansed the soul and calmed the animal spirits, oaths (especially involving the body or wounds of Christ) spread pollution. Compared to both a city without walls and an unsealed barrel whose contents lay exposed to dirt and vermin, an idle or uncontrolled tongue seemed even more dangerous than a heap of rotting offal.⁵⁰ For this reason, as many contributors to this volume observe, campaigns against suspicious or immoral activities cannot be divorced from more apparently conventional sanitary measures, since they performed exactly the same function.⁵¹ The beadles who patrolled London's wards during the fourteenth and fifteenth centuries were not only responsible for maintaining order and removing rubbish from the streets but also for policing the moral conduct of residents. Indeed, as the emphasis upon 'clennesse' in private as well as public life intensified after the Black Death, the struggle to eliminate deviancy became something of a crusade against 'stynkyng and horrible synne'.⁵² We should, therefore, hardly be surprised to learn from Kinzelbach that the physician Joachim Strupp (d. 1606) offered his readers in Frankfurt a range of spiritual remedies, along with more pragmatic suggestions for the improvement of

⁴⁸ Rawcliffe, *Urban Bodies*, pp. 224-225.

⁴⁹ *The Black Death*, ed. Horrox, Chapter three.

⁵⁰ Veldhuizen, *Sins of the Tongue*, pp. 31-32, 64-65.

⁵¹ See, for example, pp. 56, 90, 140, 165, 219, 239, 290 below.

⁵² Rexroth, *Deviance and Power*, pp. 6-7, 60-67, 96, 152, 286-290. Steps by the civic authorities in 1440 to disperse the miasmas of heresy by replacing the impromptu shrine that had grown up in Smithfield to a Lollard 'martyr' with a communal dung heap underscore the fact that some stench seemed far more lethal than others: Thomson, *Later Lollards*, p. 151.

their city, under the title of ‘Valuable Reformation for Good Health and Christian Order’. He was following a long-established medieval tradition.⁵³

The symbiotic relationship between physical and spiritual health was inescapable, even at the most mundane level. Sharing his fellow-citizens’ animus towards their rivals in Florence, St Bernardino of Siena (d. 1444) attacked as sacrilegious the latter’s habit of inscribing crosses on public buildings in order to dissuade people from urinating in major thoroughfares.⁵⁴ Almost a century later, the more cynical Thomas Arthur reflected that ‘the multitude of crosses set up against the walls in London that men should not piss there’ had only limited effect because their ubiquity tended to defeat the initial purpose of protecting specific ‘high status’ sites.⁵⁵ These comments serve as yet another valuable reminder that, contrary to widespread assumptions, premodern magistrates were far from indifferent to questions of waste management,⁵⁶ and that a variety of strategies, including recourse to people’s religious sensibilities, might be employed to contain and police unacceptable behaviour. It is, however, important to reiterate that a society steeped in religious belief did not lack ‘scientific’ explanations for disease. Nor, as some historians still maintain, did ‘the absence of a bacterial model of illness’ preclude the adoption of sanitary measures based upon coherent and rational theories about human physiology.⁵⁷

Individuals and communities, theory and practice

Given that ideas about politics, health, and the environment were circulating, so to speak, in the air and in the water, we may reasonably ask how far public health initiatives were informed by medical theory. From an early date specialist knowledge spread by means of texts and images in regimens, mirrors, conduct books, encyclopaedias, and urban regulations (proclaimed, as we have seen, in public by town-criers). Clergy, too, played their part, not only by preaching medically-informed sermons, such as those of Denis the Carthusian, but also through the medium of the confessional, when advice about spiritual health must often

⁵³ See pp. 237-238 below.

⁵⁴ Trexler, *Public Life in Renaissance Florence*, pp. 9-10, 54. Bernardino believed that the plague was divine punishment for the toleration of sodomy, against which he regularly preached.

⁵⁵ Aston, *England’s Iconoclasts*, p. 26.

⁵⁶ As assumed, for example, by Inglis, ‘Sewers and Sensibilities’, pp. 109-110.

⁵⁷ Bayless, *Sin and Filth in Medieval Culture*, p. 31. The belief that a society ignorant of germ theory must *ipso facto* lack any sense of hygiene is tenacious: Rawcliffe, *Urban Bodies*, pp. 19-22.

have strayed into the realm of humoral management.⁵⁸ Individual citizens as well as magistrates might draw directly upon Galenic theory when compiling or citing regulations or engaging in legal conflicts, as for instance, was the case in Pistoia in 1296, King's Lynn in 1426, and Frankfurt in 1621.⁵⁹ There can be little doubt that at least some officials, such as the *medicus* Giovanni di Maestro Pello, who served as city notary in Siena in the 1320s and 1330s, were themselves well acquainted with the theory of the non-naturals.⁶⁰ It is also important to note that surgeons and physicians intermittently feature in civic account rolls from at least the thirteenth century and that the authorities, such as those of Augsburg, might attempt to attract leading practitioners with tempting offers of fees and accommodation.⁶¹ And although the remit of surgeons was in the first place curative, treating the wounded in urban conflicts, they also adopted advisory roles, serving as forensic experts in criminal cases, and offering guidance in plague time.⁶² As Demaitre observes, however, even the best-qualified experts in the diagnosis of leprosy did not go unchallenged, notably by those who actually lived with the disease. Nor should we forget that interventions could also spring from basic common sense, empirical observation, and knowledge of best practices employed in other towns and cities. The sharing of specialist expertise, as illustrated, for example, by Dubé and Dumas in the case of Montpellier's complex hydraulic system, is a topic that merits further investigation.⁶³

The premise that the Black Death was a watershed moment in the formulation of public health policies, sparking the first real efforts to sanitize the environment, has already been challenged by Arrizabalaga, Geltner, and others.⁶⁴ As this volume clearly demonstrates, a significant corpus of legislation predates the late 1340s, although such measures gained in intensity and increased in number once magistrates recognized that plague had become a regular visitor to European towns and cities. Even so, these initiatives were not underpinned by medical arguments alone; besides the ubiquitous religious considerations noted above, they were also influenced by questions of status and respect. A reputation for good health, in both

⁵⁸ See, for example, Rawcliffe, *Leprosy in Medieval England*, pp. 179-184.

⁵⁹ See pp. 77, 101, 254 below.

⁶⁰ Bowsky, *A Medieval Italian Commune*, p. 95.

⁶¹ See generally, the essays in *The Town and State Physician*, ed. Russell; and p. 250 below.

⁶² See, for example, McVaugh, *Medicine before the Plague*, pp. 190-225; and Murphy, 'Plague Ordinances', pp. 146-150.

⁶³ See p. 183 below.

⁶⁴ Arrizabalaga, 'Facing the Black Death'; Geltner, 'Public Health and the Pre-Modern City'.

moral and physical terms, was an important form of social capital, especially when sickness could so often be linked to prostitution, vagrancy, and disorder, as is apparent in the context of leprosy. Partly for this reason, the observance of sanitary regulations contributed to the sense of civic pride that constituted such a prominent feature of late medieval urban life. The desire to advertise collective fame was especially apparent on festive and ceremonial occasions celebrated in streets that (as in Dordrecht) had been thoroughly cleansed of both physical and moral pollution.⁶⁵ If the foul smells arising from offensive deposits of butchers' waste appeared to *disparage* the reputation of one community (Great Yarmouth), it followed naturally that a clean and well-ordered meat market would underscore the *honesty* and *goodness* of another (Haarlem).⁶⁶ As the rulers of Frankfurt warned in 1481, herds of wandering swine did little to enhance its stature as an *honourable* Imperial city, celebrated for *respectability* as well as health.⁶⁷

As noted above, probity and trustworthiness seemed especially desirable among guild members, whose status was closely linked to the concept of urbanity. Weeda begins this collection by explaining how civic ideals, set out in regimens and panegyrics, emphasized the importance of creating an environment where urbanity might be translated into action and performed, particularly through the medium of good works. The latter, in turn, would enhance both the moral calibre and physical and political health of the entire community, in such a way that the *prudentes*, or wise men educated to lead 'civilized', healthy lives, participated in the regulation and government of the body politic by issuing bylaws and instituting policies. To this end, conduct manuals established rules of urbane behaviour, inviting self-policing, which might be further encouraged by peer pressure. Adherence to these rules reflected the virtues of obedience and self-control, while demonstrating the more tangible attributes associated with elevated social status. Finally, physical hygiene served increasingly as a prerequisite for the achievement of inner 'cleanness', as is attested in Rouen by the construction of fountains in front of churches so that worshippers could wash before entering a sacred space.⁶⁸ This combination of bodily and spiritual purity mirrored the aesthetic ideal of the salubrious, beautiful city, whose many sensory delights would energize the vital spirits.

⁶⁵ See, for example, p. 164 below.

⁶⁶ See pp. 86, 128 below.

⁶⁷ See p. 242 below.

⁶⁸ See p. 217 below.

Compliance with these noble aspirations was, however, harder to achieve, as subsequent chapters reveal. In some instances, magistrates themselves were to blame, either through inertia, negligence, or reluctance to intervene in less salubrious districts where poor people lived and unpleasant trades were already practised. Significantly, local residents were more than ready to draw attention to official shortcomings, and to campaign for better living conditions.⁶⁹ Economic considerations and the demands of vital industries could, however, undermine the best-intentioned sanitary measures. In 1315, for example, inhabitants of the contrade of St Pellegrino and St Antonio complained to the city council of Siena that the putrid hides (*pellas putridas*) of leather workers were polluting the area with their stench, making it an unhealthy place to dwell.⁷⁰ In response to orders prohibiting them from curing their leather near the famous Fontebranda fountain or from working in front of their shops, the artisans countered that such measures would benefit only a few people rather than *the common good*, which would suffer if they had to leave the city and leather items became more expensive. Persuaded by the economic logic of this argument, the authorities relented; and it was only in 1337 that the bylaw was finally enacted.⁷¹ A similar clash of interests arose in London later in the century, when the city's butchers became embroiled in a longstanding conflict over the slaughtering of beasts and disposal of waste. Demands by the crown and parliament that such potentially lethal activities should take place in the distant suburbs led to a rise in prices, the attendant threat of popular unrest and (of particular concern in plague time) some flagrant breaches of existing legislation. Eventually, after 30 years of negotiation, a solution was reached, again reflecting the complex issues involved.⁷²

As Coomans observes in chapter four, the voices of men and women who resisted authority are usually silent; and their reasons for doing so are now rarely apparent.⁷³ It seems, however, from the many cases documented throughout this volume that, alongside the inevitable instances of ignorance, obduracy, and outright profiteering, financial pressures loomed large. The prior of La Madelaine in Rouen who broke the law in 1513 by selling the goods of plague victims without first having them washed was as desperate for funds as the

⁶⁹ See pp. 78-82, 254-255 below.

⁷⁰ Siena, Archivio di Stato, Consiglio Generale 86, fols. 58r-61v (14 August 1315), 132r-4v (17 October 1315); 113, fols. 41r-3r (27 February 1333).

⁷¹ 'Statuti del Comune di Siena 26, 1337', ed. Rocchigiani, pp. 397-399; Bowsky, *A Medieval Italian Commune*, pp. 214-215.

⁷² Rawcliffe "Great Stenches, Horrible Sights and Deadly Abominations".

⁷³ See p. 142 below.

poor people who bought them were for cheap clothes and bedding.⁷⁴ Perhaps because they had little alternative, the rulers of premodern cities proved flexible in response to external crises, as, for instance, when food shortages made the keeping of pigs temporarily unavoidable in urban areas, or population pressure created an increased demand for latrines in hitherto prohibited places.⁷⁵ Conversely, however, overt defiance, especially in the face of officialdom, met with harsh treatment, since it undermined the established order and threatened the cohesion of the urban body. The sentence of imprisonment and heavy damages passed in 1364 upon a London woman for depositing filth in the street was less a reflection of the sanitary nuisance that she had caused than the fact that she reputedly called the alderman who upbraided her ‘a false thief and broken down old yokel’.⁷⁶

Penalties for the violation of public health measures were sometimes ingenious and often diverse, ranging from fines to public acts of contrition, such as penitential pilgrimages and even exile. As Thomas Forestier urged in his tract of 1485, punishments of this kind would not only safeguard the good of the community, the *bonum commune*, but also deflect further displays of divine wrath. An element of theatre, designed both to deter other potential offenders and to highlight the concern of officialdom for ordinary working people, also played its part. Serious transgressions, often involving the sale of unwholesome food, or unrepentant recidivism could lead to naming and shaming on the pillory or in the stocks in front of a hostile crowd. In some cases, as recorded by Coomans in the Netherlands, magistrates ordered miscreants to donate stones for the maintenance of city walls, thereby helping to defend the people whose survival they had put at risk. More often than not, however, penalties were pecuniary, the amounts often varying in accordance with the accused’s personal circumstances and relative culpability.

Who was charged with the responsibility of policing? Officials such as London’s ward constables, Lucca’s *viarius*, Ghent’s above-mentioned *coninc der ribauden*, and the ‘*Bauherren*’ of German cities oversaw the enforcement of regulations, supported by an army of menials.⁷⁷ Market officials in particular occupied a prominent position, overseeing the sale of goods and upkeep of the market square or hall. Although they might wear a formal livery

⁷⁴ See pp. 219-220 below.

⁷⁵ See pp. 240-243 below.

⁷⁶ ‘*Falsum latronem et rusticum veterem*’: *Calendar of Plea and Memoranda Rolls of the City of London, 1364-81*, ed. Thomas, p. 15.

⁷⁷ See pp. 107-109, 244-248 below.

or uniform, most of these men collected their salaries from whatever fines they could levy and were not remunerated directly from civic funds. Routine offenders were either fined on the spot or tried before local courts, such as the English leets or the aldermen's court in Leiden, whereas those who wilfully endangered life or limb might be forced to appear before a higher authority, as was the case in England and France.⁷⁸ Neighbours could benefit directly from this system, taking a small cut of any fines if they informed the authorities about transgressors. Yet besides such an obvious financial incentive, a sense of collective responsibility and ownership (as well, no doubt, as fear of disease) contributed to the enforcement of sanitary measures.

It is difficult - and in some respects anachronistic - to deconstruct the multifaceted relationship between self-policing and public policing, and by extension the private and the public, especially in a premodern context. On the face of things, the two terms demarcate spatially between acts performed in the open and those that take place behind closed doors, in the privacy of the home, although the distinction was, in practice, rarely so straightforward. Ubiquitous in urban bylaws, while also featuring as a flashpoint between neighbours, was the need to conceal domestic cesspits, sewers, and gutters from public view, in order to contain the unpleasant, miasmatic smells and unseemly sights deemed detrimental to both individual and *collective* health. Conversely, reputable artisans made a point of working in places where people could easily see that they were using authentic materials and following accepted procedures.⁷⁹ For similar reasons, the sale of goods, and particularly of perishable foodstuffs, outside the marketplace or after dark was widely prohibited. It seems, therefore, that we can best define the concept of the public and the private in terms of the constantly shifting remit of the 'public sphere', and of the delicate balance between personal freedom, on the one hand, and communal welfare and prosperity on the other. A striking number of bylaws promulgated in Italy, the Low Countries, England, and France concern the responsibility of individual householders for cleaning the gutters and streets adjacent to their dwellings, as well as for undertaking 'public works', such as the regular cleaning of rivers and canals, and in Dordrecht even the harbours.⁸⁰ These ordinances suggest that property owners bore a significant share of the burden of maintaining and safeguarding neighbourhood infrastructures, which were seldom financed entirely through communal taxation.

⁷⁸ See pp. 71-72, 85-87, 137 below.

⁷⁹ De Munck, *Guilds, Labour and the Urban Body Politic*, p. 151.

⁸⁰ See p. 160 below.

Private contributions in the form of charitable donations and the money raised by selling indulgences also funded public amenities such as fresh water supplies, which, as Dubé and Dumas point out, required a substantial (and ongoing) investment.⁸¹ Moreover, in a period when the private merged so seamlessly with the public, urban bylaws were frequently the product of consensus reached between residents, craft guilds, and authorities in the aftermath of conflicts about the distribution of communal funds or the negotiation of demands concerning common resources made in petitions and complaints.⁸² Policing the environment was demonstrably a collective affair in which many different interests and agendas merged. The public sphere further extended to the control and exchange of information about the self and ‘the other’, which could protect, enhance, or (in the case of public shaming) damage the reputations of individual citizens, rendering them either ‘urbane’ or ‘uncivilized’ members of (or even outcasts from) the community. Self-policing may, in this respect, be regarded as an attempt to align private aspirations with public expectations.

Another complication arises from the fact that the private and public spheres of policing were gendered domains, since women frequented domestic spaces, common privies, wells, watercourses, and markets, yet policing at home and in the streets mostly happened in a world of men. These distinctions are clearly reflected in the prosecution of sanitary offences, women being generally far less in evidence as defendants than men, but more likely to face charges relating to the sale of food and drink and the illicit disposal of domestic waste.⁸³ Even confirmations of leprosy varied according to gender, for although female suspects were more likely to be pronounced ‘clean’ (a telling word) by expert judges, far fewer received an inconclusive diagnosis, which would have allowed them to remain under observation in society. As Demaitre explains in chapter nine, such discrepancies were not simply due to epidemiological factors, but also reflect the more circumscribed role played by women in commercial and political life. Prostitutes were, significantly, an exception, being natural

⁸¹ See pp. 189-190 below.

⁸² The relationship between the promulgation of bylaws, the presentation of petitions, and urban conflicts in the late medieval Low Countries is discussed in Haemers, ‘Governing and Gathering’, p. 160; and Dumolyn, ‘Economic Discourses in Fifteenth-Century Bruges’, pp. 375-377. For petitions demanding public health initiatives in late medieval Saint-Omer, see Dumolyn and Papin, ‘Y avait-il des “révoltes fiscales”’.

⁸³ See pp. 77, 109, 113-114, 139-140 below.

targets for suspicion, as were laundresses, whose freedom to congregate in public places suggested, if it did not confirm, that they used their work as a cover for soliciting.⁸⁴

It remains briefly to describe the layout of the rest of this volume. Following on from Weeda's discussion of advice literature and urban panegyrics, Rawcliffe examines the ways in which local courts were used in late medieval England to enforce environmental regulations, while also disseminating vital medical information to the unlettered. Her survey confirms that participants enjoyed a remarkable degree of agency and were often the instigators of change, freely criticizing negligent officials and indifferent property owners. The misleading belief that England lagged centuries behind Italy in matters of public health is in part due to the wealth of archival material available to scholars of 'healthscaping' in the Italian peninsula. As Geltner reveals in chapter three, the records of cities such as Bologna and Lucca provide a fascinating and detailed picture of sanitary policing as it took place day by day on the ground. Moving northwards again, the next two chapters, by Coomans and Naaktgeboren, respectively, document efforts to promote communal health and prosperity in the Low Countries. We have seen that the regulation of food markets and the punishment of offenders had powerful religious and social, as well as medical, implications, since the working people who consumed the goods on offer formed the feet, legs and arms upon which the body politic depended for survival. Through a detailed analysis of fines and other penalties Coomans explores the struggle to convert precept into practice in the streets and markets of Ghent, Leiden, and Ypres. Since, unlike many contemporary cities, fifteenth-century Dordrecht experienced successive phases of expansion, Naaktgeboren focusses upon the environmental problems encountered by its growing population. Neighbourhood disputes often sprang from overcrowding and required sensitive solutions, which arbitration – an important, but generally neglected, aspect of urban policing – could most readily supply.

Magistrates faced a particular challenge with regard to the management of water, being obliged to provide reliable supplies that were fit for both domestic and industrial use, while protecting residents against floods and the noxious air arising from pools of stagnant waste. Chapters by Brenner on Rouen and Dubé and Dumas on Montpellier explore these interconnected problems, revealing how two very different communities sought to exploit and contain the water sources at their disposal. Adopting a broad perspective across the towns and

⁸⁴ See pp. 90, 165, 219, 275-276, 279-281, 283-288 below.

cities of Imperial Germany, Kinzelbach considers the limitations as well as the hitherto untapped potential of the surviving records, stressing how difficult it could be to balance the conflicting demands of health, commerce, and politics. Our collection concludes with Demaitre's analysis of the complex and ambivalent objectives of the *visitatio leprosororum*, an increasingly mandatory procedure for the examination of suspect lepers. Extensive evidence from France, Germany, and the Netherlands from a period of over five hundred years reveals that many factors besides fear of contagion influenced the outcome of these deliberations, often in response to specific local circumstances. The desire to alleviate poverty and maintain order went hand in hand with less clear-cut issues relating to morality and social status, as well as distrust of outsiders, who were not members of the urban body and therefore seemed less deserving of institutional support. Such divergent responses once again throw into relief the many ways in which environmental health might be defined and policed in premodern society.

Despite the wide geographical remit of this volume, the striking discrepancies in size and wealth between the communities considered in it, and the different political and administrative structures within which their rulers operated, a number of common themes emerge from the nine chapters that follow. All of them challenge still entrenched assumptions about the squalor of premodern cities, the alleged indifference of ordinary residents to matters of public health, and the fatalistic acceptance of disease (and especially epidemic disease) as a supernatural phenomenon beyond human control.⁸⁵ On the contrary, as we shall see, the profoundly held belief that sickness came ultimately as a punishment from God was entirely compatible with a keen awareness (derived from the Ancient Greeks) that more immediate and potentially rectifiable environmental problems were also to blame. Measures for the containment of such ubiquitous nuisances as blocked drains, industrial pollution, and the sale of corrupt food were underpinned by contemporary medical theory, which provided the rationale behind a remarkably similar raft of sanitary measures promulgated across Western Europe. Yet although the number and urgency of these regulations, and the desire for more effective enforcement, may have increased after the Black Death, it is clearly apparent that urban communities had accepted (if not always welcomed) the need for sanitary policing long before pestilence first struck. From at least the thirteenth century we can identify a number of officials charged with this task and trace the development of judicial machinery for the punishment of offenders, usually by means of fines, but sometimes in more imaginative ways.

⁸⁵ As maintained, for example, by Benedictow, 'New Perspectives', p. 33.

The symbiotic relationship between Galenic medical theory and Christian theology meant, however, that premodern approaches to public health differed in many respects from our own. At a basic level, attempts to improve the quality of urban life draw heavily upon ideas about humoral balance, miasmatic air, and the physical impact of sights and sounds upon the spirits. Concepts of neighbourliness, morality, and order served to broaden definitions of potentially hazardous behaviour, while the conviction that society as a whole functioned in exactly the same way as the human body prioritized the need for concord and compromise, at least in theory. The proliferation of vernacular advice literature, along with the spread of information through proclamations, sermons, and the very public punishment of recidivists, increased popular understanding of these issues. It also placed a particular premium upon such personal attributes as cleanliness, self-discipline, and good manners, which were increasingly defined in the context of *urbanity*. For the premodern magistrate, the creation of a peaceful and salubrious environment was as much a spiritual as a physical goal, which would bring him and his community one step nearer the shining streets of the New Jerusalem.

BIBLIOGRAPHY

Archival Sources

London, British Library, Additional MS 27,582

Siena, Archivio di Stato, Consiglio Generale 86, 92, 113

Primary sources

Avicenna, *Liber canonis medicine* (Lyon: Jacques Myt, 1522)

The Black Death, ed. by Rosemary Horrox (Manchester: Manchester University Press, 1995)

Calendar of Plea and Memoranda Rolls of the City of London, 1364-1381, ed. by Arthur Hermann Thomas (Cambridge: Cambridge University Press, 1929)

Denis the Carthusian, *De regimine politiae*, in *Opera omnia divi Dionysii Cartusienensis*, VI, ed. by M. Leone and others, 42 vols. (Doornik: Monstrolii, 1896-1935)

Du Cange, Charles du Fresne, *Glossarium mediae et infimae Latinitatis*, ed. by Léopold Favre (Niort and London: Nutt, 1883-1887)

Fortescue, Sir John, *De laudibus legum Anglie*, ed. by S.B. Chrimes (Cambridge: Cambridge University Press, 1942)

Haly Abbas, *Liber medicinae sive regalis disposito* (Venice: Bernardinus Rizus, 1492)

Jacme d'Agramont, *Regiment de preservació de pestilència*, ed. by Joan Veny (Lerida: University of Lerida, 1998)

A Litill Boke Necessarye and Behouefull agenst the Pestilence (London: W. de Machlinia, c. 1485)

Het Brugsche Livre des mestiers en zijn navolgelingen, ed. by Jan Gessler (Bruges: Consortium der Brugsche meesters boekdrukkers, 1931)

‘Statuti del Commune di Siena 26’, ed. by Roberto Rocchigiani, ‘Urbanistica ed igiene negli statuti senesi del xiii e xiv secolo’, *Studi senesi*, 70 (1958), 369-419

Secondary sources

Arrizabalaga, Jon, ‘Facing the Black Death: Perceptions and Reactions of University Medical Practitioners’, in *Practical Medicine from Salerno to the Black Death*, ed. by Luis García-Ballester and others (Cambridge: Cambridge University Press, 1994), pp. 237-288

Aston, Margaret, *England’s Iconoclasts* (Oxford: Oxford University Press, 1988)

Balestracci, Duccio, ‘The Regulation of Public Health in Italian Medieval Towns’, in *Die Vielfalt der Dinge: Neue Wege zur Analyse mittelalterlicher Sachkultur*, ed. by Harry Kühnel and others (Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 1998), pp. 345-357

Bayless, Martha, *Sin and Filth in Medieval Culture: The Devil in the Latrine* (London: Routledge, 2012)

Benedictow, Ole, ‘New Perspectives in Medieval Demography: The Medieval Demographic System’, in *Town and Countryside in the Age of the Black Death*, ed. by Mark Bailey and S.H. Rigby (Tournhout: Brepols, 2012), pp. 3-42

Blickle, Peter, and others, ed., *Gute Policey als Politik im 16. Jahrhundert: Die Entstehung des öffentlichen Raumes in Oberdeutschland* (Frankfurt am Main: Klostermann, 2003)

Bocchi, Francesca, ‘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

Bowsky, William M., *A Medieval Italian Commune: Siena Under the Nine, 1287-1355* (Berkeley and Los Angeles: University of California Press, 1981)

Bradley, Mark, 'Approaches to Pollution and Propriety', in *Rome, Pollution and Propriety: Dirt, Disease and Hygiene in the Eternal City from Antiquity to Modernity*, ed. by Mark Bradley and Kenneth Stow (Cambridge: Cambridge University Press, 2012), pp. 11-40

Carrera, Elena, 'Anger and the Mind-Body Connection in Medieval and Early Modern Medicine', in *Emotions and Health, 1200-1700*, ed. by Elena Carrera (Leiden: Brill, 2013), pp. 95-146

Ciecieznski, N.J., 'Stench of Disease: Public Health and the Environment in Late-Medieval English Towns and Cities', *Health, Culture and Society*, 4 (2013), 92-104

Cipolla, Carlo M., *Public Health and the Medical Profession in the Renaissance* (Cambridge: Cambridge University Press, 1976)

Demaitre, Luke, *Medieval Medicine: The Art of Healing from Head to Toe* (Santa Barbara: Praeger, 2013)

De Munck, Bert, *Guilds, Labour and the Urban Body Politic: Fabricating Community in the Southern Netherlands, 1300-1800* (New York and London: Routledge, 2018)

Geltner, G., 'Healthscaping a Medieval City: The *Curia viarum* of Lucca and the Future of Public Health History', *Urban History*, 40 (2013), 395-415

Gil Sotres, Pedro, 'The Regimens of Health', in *Western Medical Thought from Antiquity to the Middle Ages*, ed. by Mirko D. Grmek, trans. by Antony Shugaar (Cambridge, Mass.: Harvard University Press, 1998), pp. 291-318

Härter, Karl, and others, ed., *Policey in Europa der Frühen Neuzeit* (Frankfurt am Main: Klostermann, 1996)

Härter, Karl, 'Security and "Gute Policey" in Early Modern Europe: Concepts, Laws, and Instruments / Sicherheit und "Gute Policey" im frühneuzeitlichen Europa: Konzepte, Gesetze und Instrumente', *Historical Social Research / Historische Sozialforschung*, 35 (2010), 41-65

Harvey, E. Ruth, *The Inward Wits: Psychological Theory in the Middle Ages and the Renaissance* (London: Warburg Institute Surveys, 6, 1975)

Hoffmann, Richard, 'Footprint Metaphor and Metabolic Realities: Environmental Impacts of Medieval European Cities', in *Natures Past: The Environment and Human History*, ed. by Paolo Squatriti (Ann Arbor: University of Michigan Press, 2007), pp. 288-325

Inglis, David, 'Sewers and Sensibilities: The Bourgeois Faecal Experience in the Nineteenth-Century City', in *The City and the Senses: Urban Culture since 1500*, ed. by Alexander Cowan and Jill Steward (Aldershot: Ashgate, 2007), pp. 105-130

Iseli, Andrea, *"Bonne Police": Frühneuzeitliches Verständnis von der guten Ordnung eines Staates in Frankreich* (Tübingen: Bibliotheca Academica Verlag, 2003)

Kotkas, Toomas, *Royal Police Ordinances in Early Modern Sweden* (Leiden: Brill, 2014)

Kucher, Michael P., *The Water Supply System of Siena, Italy: The Medieval Roots of the Modern Networked City* (London and New York: Routledge, 2005)

Lecuppre-Desjardin, Elodie and Anne-Laure Van Bruaene, ed., *De Bono Communi: The Discourse and Practice of the Common Good in the European City (13th-16th C.)* (Turnhout: Brepols, 2010)

McCleery, Iona, 'Medical Licensing in Late Medieval Portugal', in *Medicine and the Law in the Middle Ages*, ed. by Wendy J. Turner and Sarah M. Butler (Leiden: Brill, 2014), pp. 196-219

McIntosh, Marjorie Keniston, *Controlling Misbehavior in England, 1370-1600* (Cambridge: Cambridge University Press)

McVaugh, Michael, *Medicine before the Plague: Practitioners and their Patients in the Crown of Aragon 1285-1345* (Cambridge: Cambridge University Press, 2002)

Morley, Neville, 'The Salubriousness of the Roman City', in *Health in Antiquity*, ed. Helen King (Abingdon: Routledge, 2005), pp. 192-204

Murphy, Neil, 'Plague Ordinances and the Management of Infectious Diseases in Northern French Towns', in *Society in an Age of Plague*, ed. by Linda Clark and Carole Rawcliffe (Woodbridge: Boydell, 2013), pp. 139-159

Napoli, Paolo, *Naissance de la police modern: Pouvoirs, norms, société* (Paris: La Découverte, 2003)

Nevola, Fabrizio, *Siena: Constructing the Renaissance City* (New Haven, Conn., and London: Yale University Press, 2007)

Nitschke, Peter, 'Von der Politeia zur Polizei: Ein Beitrag zur Entwicklungsgeschichte des Polizei-Begriffs und seiner herrschaftspolitischen Dimensionen von der Antike bis ins 19. Jahrhundert', *Zeitschrift für Historische Forschung*, 19 (1992), 1-27

Oestreich, Gerhard, *Geist und Gestalt des frühmodernen Staates: Ausgewählte Aufsätze* (Berlin: Duncker and Humblot, 1969)

Ogilvie, Sheilagh, "'So That Every Subject Knows How to Behave": Social Disciplining in Early Modern Bohemia', *Comparative Studies in Society and History*, 48 (2006), 38-78

Pender, Stephen, 'Subventing Disease: Anger, Passions, and the Non-Naturals', in *Rhetorics of Bodily Disease and Health in Medieval and Early Modern England*, ed. by Jennifer C. Vaught (Farnham: Ashgate, 2010), pp. 193-218

Rabinow, Paul, and Rose, Nikolas, 'Thoughts on the Concept of Biopower Today' (2003), 1-39, available at

https://www.researchgate.net/publication/228606732_Thoughts_on_a_Concept_of_Biopower_Today, last consulted 15 January 2019

Rather, L.J., 'The Six Things Non-Natural: A Note on the Origins and Fate of a Doctrine and a Phrase', *Clio Medica*, 3 (1968), 337-347

Rawcliffe, Carole, *Leprosy in Medieval England* (Woodbridge: Boydell, 2006)

Rawcliffe, Carole, 'The Concept of Health in Late Medieval Society', in *Le Interazioni fra Economia e Ambiente Biologico nell' Europa Preindustriale Secc. XIII-XVIII*, ed. by Simonetta Cavaciocchi (Florence: Florence University Press, 2010), pp. 317-334

Rawcliffe, Carole, *Urban Bodies: Communal Health in Late Medieval English Towns and Cities* (Woodbridge: Boydell, 2013)

Rawcliffe, Carole, "'Great Stenches, Horrible Sights and Deadly Abominations": Butchery and the Battle Against Plague in Late Medieval English Towns', in *Plague and the City*, ed. by Lukas Engelmann and others (London and New York: Routledge, 2018), 18-38

Rexroth, Frank, trans. by Pamela E. Slewyn, *Deviance and Power in Late Medieval London* (Cambridge: Cambridge University Press, 2007)

Rigaudière, Albert, *Penser et construire l'État dans la France du Moyen Âge. XIIIe - XVe siècles* (Paris: Comité pour l'histoire économique et financière de la France, 2003)

Russell, A.W., ed., *The Town and State Physician in Europe from the Middle Ages to the Enlightenment* (Wolfenbüttel: Herzog August Bibliothek, 1981)

Sabine, Ernest L., 'Butchering in Mediaeval London', *Speculum*, 8 (1933), 335-353

Sabine, Ernest L., 'Latrines and Cesspools of Mediaeval London', *Speculum*, 9 (1934), 303-321

Sabine, Ernest L., 'City Cleaning in Mediaeval London', *Speculum*, 12 (1937), 19-43

Simon, Thomas, *"Gute Policey": Ordnungsleitbilder und Zielvorstellungen politischen Handelns in der Frühen Neuzeit* (Frankfurt am Main: Klostermann, 2004)

Stearns, Justin K., *Infectious Ideas: Contagion in Premodern Islamic and Christian Thought in the Western Mediterranean* (Baltimore: Johns Hopkins University Press, 2011)

Thomson, F.A.L., *The Later Lollards* (Oxford: Oxford University Press, 1965)

Thorndike, Lynn, 'Sanitation, Baths and Street Cleaning in the Middle Ages and Renaissance', *Speculum*, 3 (1928), 192-203

Trexler, Richard C., *Public Life in Renaissance Florence* (New York: Academic Press, 1980)

Veldhuizen, Martine, *Sins of the Tongue in the Medieval West* (Turnhout: Brepols, 2017)

Wear, Andrew, 'Fear, Anxiety and the Plague in Early Modern England', in *Religion, Health and Suffering*, ed. by John H. Hinnells and Roy Porter (London: Kegan Paul, 1999), pp. 339-363

Weber, Mathias, 'Disziplinierung und Widerstand: Obrigkeit und Bauern in Schlesien 1500-1700' in *Gutherrschaft als soziales Modell: Vergleichende Betrachtungen zur Funktionsweise frühneuzeitlicher Agrargesellschaften*, ed. by Jan Peters (Munich: De Gruyter, 1995), pp. 419-438

Wheeler, Jo, 'Stench in Sixteenth-Century Venice', in *The City and the Senses: Urban Culture since 1500*, ed. by Alexander Cowan and Jill Steward (Aldershot: Ashgate, 2007), pp. 25-38

Electronic sources

'Bibliography of the History of Public Health in Pre-Industrial Societies'

<https://premodernhealthscaping.hcommons.org/documents/>, last consulted 15 January 2019

CHAPTER ONE

Cleanliness, Civility, and the City in Medieval Ideals and Scripts¹

Claire Weeda

Abstract

Latin and vernacular urban panegyrics, describing the ideal city and its residents, mushroomed in the twelfth century. Painting a utopian view of the city that mirrors the heavenly Jerusalem, they rhetorically conveyed ideals of urbanity for aspiring members of the body politic to emulate. This chapter explores the ways in which the cityscape constructed in these texts, and residents' behaviour (as influenced by conduct manuals and regimes of health), appear embedded in a natural environment reflected through the lens of Galenic medicine. Evoking the benefits of cleanliness and beauty, these concepts of health and hygiene accorded closely with issues of social status. The disciplined quest for moderation and balance offered spiritual and physical health, as well as enhanced personal repute.

Key words: Galenic medicine; panegyrics; urbanity; *habitus*; hygiene

Florence's salubriousness in Leonardo Bruni's *Laudatio Florentinae urbis*, written about 1404, stands in stark contrast to today's image of the medieval city as a place mired in filth.² Ideally situated between mountains and a valley, the city was shielded from the bitterly cold northern winds and the corrupt air that festered in the damp and dreary vale. Beneath a canopy of fresh air, the circuit of well-maintained walls enveloped a majestic cityscape of palaces and churches, ancient and modern. Above all, Florence surpassed all other cities in its cleanliness, for 'you will find here nothing that is disgusting to the eye, offensive to the nose, or filthy under foot. The great diligence of its inhabitants ensures and provides that all filth is removed

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² The dating of Bruni's *Laudatio* is discussed in Hankins, *Plato in the Italian Renaissance*, II, pp. 367-378.

from the streets, so you see only what brings pleasure and joy to the senses.’³ Sanitation penetrated the very pores of the city, purging the nooks and crannies of the household interiors of the poor and the rich, as well as sweeping clean the broad, paved streets where crowds gathered. Refuse produced at night was not left lying about in the streets, as in other cities, but removed directly. Perambulation of the city was further facilitated through the channelling of rain water in gutters, thereby ensuring that pedestrians had dry feet. As a result, ‘just as these citizens surpass all other men by a great deal in their natural genius, prudence, elegance and magnificence, so the city of Florence has surpassed all other cities in its prudent site, and its splendour, architecture, and cleanliness’.⁴

In the past, scholars have often viewed Bruni’s panegyric of Florence – which goes on to describe the orderliness of the city’s institutions and laws – first and foremost as a rhetorical blueprint for civic humanism. The text is thus said to reflect classical, Ciceronian ideals of civic culture, language, and politics rather than the actual concerns, practices, and material conditions of the late medieval city.⁵ More generally, scholars such as Frugoni and Scattergood have regarded medieval urban encomia – the genre to which Bruni’s description praising the city belongs – as idealized pictures of an enclosed space of Christian spirituality, which alluded to a divine sanctuary or even a heavenly Jerusalem.⁶ In this chapter, however, I would like to examine encomia from a different angle, namely one involving ideas of urban cleanliness, the undergirding impact of Greek-Arabic medical knowledge, and civic honour. Greek-Arabic medical knowledge, a discourse concerning physical and spiritual wellbeing, was disseminated across western Europe from the 1100s in various formats, including medical

³ Bruni, *Laudatio Florentinae urbis*, ed. Baron, I, p. 235; trans. Kohl, *The Earthly Republic*, p. 138: ‘[I]n qua nichil fedum oculis, nichil tetrum naribus, nichil pedibus sordidum offendas. Summa diligentia habitatorum cuncta eiusmodi cauta ac provisum sunt ut, omni turpitudine procul semota, ea tantum incurras que letitiam ac iocunditatem sensibus queant afferre.’

⁴ Bruni, *Laudatio Florentinae urbis*, ed. Baron, I, p. 233; trans. Kohl, *The Earthly Republic*, p. 136: ‘Nam quemadmodum ipsi cives naturali quodam ingenio, prudentia, lautitia et magnificentia ceteris hominibus plurimum prestant, sic et urbs prudentissime sita ceteras omnes urbes splendore et ornatu et munditia superat.’

⁵ For instance, Biow, in *The Culture of Cleanliness*, pp. 87-94, argues that Bruni’s commentary on Florentine hygiene should be interpreted foremost as a metaphor for linguistic purity. The discussion about reality versus rhetoric in Bruni’s *Laudatio* goes back to a debate of 1966 in the journal *Past & Present* between Hans Baron (‘Leonardo Bruni: “Professional Rhetorician” or “Civic Humanist”?’), who argued that Bruni’s description reflected political reality in Florence, and Jerrold Seigel (‘Civic Humanism or Ciceronian Rhetoric?’), who emphasized the rhetorical nature of Bruni’s words.

⁶ Frugoni, *Distant City*, pp. 10-12, 20; Scattergood, ‘Misrepresenting the City’, p. 23.

treatises, regimens and urban statutes, and by using various modes of communication, such as educational texts, conduct books, sermons, public announcements, and the infrastructure of public space.⁷ Texts discussing Galenic theory postulated that a person's health was subject to the influence of the so-called six non-naturals – external agents such as the quality of the air, dietary intake, and rest – on the body's constitution, in which the absorption of images and odours through the sensory organs played a significant part.⁸ Civic councils, as well as individual residents, accordingly went to some lengths to sanitize streets, waterways, and human bodies in response to medical concerns over the impact of bad smells on the vital spirits (miasma theory) and sights on the nervous system (intromission theory), thereby removing 'matter out of place' and enhancing their city's beauty.⁹ Medieval historians have, indeed, recorded an array of urban health interventions that in part were underscored by medical theory, at a private and public level, across Europe's cities from the twelfth century onward, from individual adherence to regimens to the installation of public waste disposal

⁷ For the concept of the 'regime of truth', see Foucault, 'Political Function of the Intellectual'. For the spread of Galenic knowledge in the Latin West from c. 1100, see: Demaitre, *Medieval Medicine*, pp. 1-34; Siraisi, *Medieval and Early Renaissance Medicine*, pp. 48-77; McVaugh, *Medicine before the Plague*, pp. 68-107. In 'The Politics of Cleanliness', pp. 82-83, Biow does acknowledge that in the late Middle Ages concerns over public health, and particularly the establishment of health boards, increased in response to outbreaks of plague, yet he argues that there was little medical reasoning behind sanitary regulations, and still considers Bruni's panegyric to be first and foremost a rhetorical argument for cultural-political humanist ideals. Conversely, as Cohn, *Cultures of Plague*, for instance, argues (although likewise viewing the introduction of public health regulations as a reaction to the Black Death), learned physicians trained in medical theory played a significant role in establishing sanitary regulations in late medieval cities.

⁸ Rather, 'Six Things Non-Natural', pp. 337-347; García-Ballester, 'On the Origins of the Six Non-Natural Things', pp. 105-115; Mikkeli, *Hygiene*, pp. 19-23; and pp. 18-23 above.

⁹ See Geltner, 'Finding Matter Out of Place', p. 307, and Fasoli, 'La coscienza civica nelle *Laudes civitatum*', for the importance of the theme of *decus* in the urban panegyric. For sanitary efforts, see Ciecieznski, 'The Stench of Disease'; Henderson, 'Public Health, Pollution and the Problem of Waste Disposal', pp. 378-379; and the publications mentioned in note 6 above. See Jørgensen, 'Cooperative Sanitation', pp. 554-558, for collective efforts to sanitize the environment. For a summary approach to cleanliness in the Middle Ages, see Vigarello, *Concepts of Cleanliness*, and Ashenburg, *The Dirt on Clean*. For the established bathing culture and concepts of moral cleanliness in the later Middle Ages, see Coomans and Geltner, 'On the Street and in the Bathhouse', pp. 9-18. Bocchi, 'Regulation of the Urban Environment', p. 74 and note 64, describes measures in Siena concerning the Piazza del Campo and the preservation of urban beauty.

systems, the appointment of officials policing the environment, and the prosecution of offenders, as described in the rest of this volume.¹⁰

A hitherto relatively unexplored question, however, is to what extent medical theory informed *ideals* concerning the urban environment and civic behaviour in encomia produced in the central and later Middle Ages. How might city dwellers have been encouraged to subject themselves to these medical discourses, take heed of sanitary directives, and self-police their behaviour, inspired by the broadcasting of such models of cleanliness and health through the medium of urban panegyrics and conduct books? And how were these ideals of cleanliness connected with notions of urbanity, good Christian behaviour, and, ultimately, incorporation within the body politic and its deliberative institutions, such as city councils? These are pertinent questions, given that the premodern city was said to be defined by the morality and sense of identity of its inhabitants – *civitas in civibus*. To answer them, it is therefore useful to first make a short excursion into the disciplines of sociology and anthropology, in order to understand how concepts of health, hygiene, civility, and morality might go hand in hand.

Physical and socio-cultural capital: discipline and moderation

The idea that healthy and hygienic behaviour and care for the environment might not only promote physical wellbeing but also bestow a higher level of social status can already be inferred from the early twelfth-century conduct book *Disciplina clericalis*, compiled by the Spanish physician Petrus Alphonsi, who observed that hand-washing after dinner was both '*phasicum et curiale*'.¹¹ His comment suggests that the acquisition and expenditure of socio-

¹⁰ The following overview is by no means exhaustive. See also Rawcliffe, *Urban Bodies*; Rawcliffe, 'Sources for the Study of Public Health'; Magnusson, 'Medieval Urban Environmental History'; Keene, 'The Medieval Urban Environment'; Geltner, 'Public Health and the Pre-Modern City'; Thorndike, 'Sanitation, Baths and Street-Cleaning'. For London: Sabine, 'City Cleaning in Mediaeval London'; for Italy: Bocchi, 'Regulation of the Urban Environment'; for the appointment of officials overseeing compliance with environmental legislation: Geltner, 'Finding Matter Out of Place'; Geltner, 'Urban *Viarum* and the Prosecution of Public Health'; Kwakman, 'Slijkburgers in Utrecht'.

¹¹ Petrus Alphonsi, *Disciplina clericalis*, ed. Hilka and Söderhjelm, xxvi, p. 40. For the popularity of the *Disciplina clericalis*, see Tolan, *Peter Alfonsi and his Medieval Readers*, pp. 73-91, and Appendix 3, pp. 199-204, for a list of manuscripts. That hygiene and status went hand in hand is echoed in the rubric '*Phisica urbanus*' added to the medical section of Daniel of Beccles' conduct book *Urbanus magnus*. I am indebted to Fiona Whelan for this information: Whelan, *The Making of Manners and Morals in Twelfth-Century England*.

cultural capital – courtliness or urbanity (*civilitas*, *curialitas*, *urbanitas*)¹² – was tied to the possession of physical capital – health and hygiene (*phisicum*) – which might be acquired and embodied (as *habitus*) through the adoption of health-giving practices, to use the terminology coined by Pierre Bourdieu. Similar recommendations, indicating that Alphonsi’s observation was not exceptional, can be found in various contemporaneous tracts on courtly behaviour and in medical treatises that contain passages about desirable social conduct, for instance commenting that silence at the dinner table was both healthy and civilized.¹³ In a wider context, it might be added that attributes associated with civility were often related to health: youth, a healthy radiance, and an unblemished, fair skin are in many sources seen as physical manifestations of courtliness, civility, and Christianity – and ultimately purity.¹⁴

As this chapter suggests, the linchpin connecting such idealized images of behaviour and emotions regarding the self to the wider urban environment was (*self-*)*discipline and moderation*, implying control over the generation of odours, the evacuation of potentially shame-inducing bodily superfluities (for instance sweat, urine, or faeces) and the care spent on maintaining a clean environment, such as sweeping streets or cleansing ditches. Images of cleanliness thus evoked notions of self-discipline, order, and control, both over the physical and moral self, and over the physical environment. Inversely, ‘rustic’ or ‘immoral’ behaviour might be associated with low social status, lack of discipline, dirt, and ill-health, although this in part depended on a person’s station at birth – for unhygienic behaviour, ugliness, or sexual promiscuity in the case of the nobility was less likely to be accepted as evidence of social inferiority.¹⁵

¹² With the disintegration of the late Roman Empire, the ideal of *curialitas* and *urbanitas* – civilized behaviour – lost its urban context, and in the tenth and eleventh centuries was usually employed in the context of the schools run by royal courts: Gillingham, ‘From Civilitas to Civility’, p. 283. However, as Zotz has argued in ‘Urbanitas in der Kultur des westlichen Mittelalters’, pp. 307-308, with the onset of urbanization in the twelfth century, the terms *urbanitas* and *civilitas* regained their sense of civilized ‘urban’, alongside courtly, *habitus*.

¹³ Pels (ed.) and Hofstede (trans.), *Pierre Bourdieu, Opstellen over smaak, habitus en het veldbegrip*. In Bourdieu’s work, *habitus* stands for the cultural dispositions of the elite which give access to the symbolic capital of power and impose order (in which the elite holds a dominant position): Bourdieu, *Distinction*, pp. 23-24. See Weeda, ‘Reviewing Conduct Books’, for source references concerning health and hygiene in twelfth- and thirteenth-century conduct books.

¹⁴ See, for instance, Epstein, *Purity Lost*, Chapter one.

¹⁵ Coudert, ‘Sewers, Cesspools, and Privies’, pp. 716-717. Cleanliness, the use of soap, and access to bathing facilities might also point towards economic prosperity: Van Dijk, ‘Soap Is the Onset of Civilization’, p. 3.

Taking a bird's eye view, it can be argued that the possession of physical capital further helped to rank individuals with reference to accepted socio-cultural and religious categories, thereby allowing them to position themselves and gain (or contest) social and political status in the cityscape through self-disciplining the body, behaviour, and emotions. Indeed, as Mary Douglas argued: 'The care that is given to [the body], in grooming, feeding and therapy, the theories about what it needs [...] must correlate with categories in which society is seen in so far as these draw upon the same culturally processed idea of the body' – categories which may be ordered hierarchically.¹⁶ City dwellers of a higher station could thereby, in the pursuit of physical and socio-cultural capital, take recourse to *scripts* offering advice on how to maintain high standards of personal hygiene and acquire 'civilized manners', or *habitus*, as laid down in books of conduct such as that produced by Petrus Alphonsi.¹⁷

In order for ideals of health, civility, and morality to become relevant to the wider urban population, it was, however, necessary that they should be held up to everyone as a standard to emulate. To understand how such ideals, especially of wellbeing and cleanliness in relation to concepts of Christian and 'civilized' behaviour, may have been presented to urban communities, I have scoured eighteen Latin urban encomia (excluding Bruni's text), stretching from the eighth century to the turn of the fourteenth century (six of which date from before 1000), for references to the natural and material environment, hygiene, and appropriate religious and civic behaviour.¹⁸ The panegyrics in question, straddling the central Middle Ages and the outbreak of the Black Death, were for the most part produced in Italy (thirteen), with England (three) trailing far behind, and France in third place (two).¹⁹ At the outset, it must be emphasized that these texts present ideal constructions of urban reality and of the conduct of the populace as advocated by members of the elite.²⁰ As such, the models of good

¹⁶ Douglas, *Natural Symbols*, p. 93.

¹⁷ Nederman, 'Nature, Ethics, and the Doctrine of "Habitus"'. See Weeda, 'Reviewing Conduct Books', for references to literature on the topic.

¹⁸ These sources are drawn from Hyde, 'Medieval Descriptions of Cities', pp. 338-340. See also the bibliography of primary printed sources at the end of this chapter.

¹⁹ In the late Middle Ages, the German Territories witnessed a surge in the production of urban encomia, but they fall outside the scope of this chapter.

²⁰ In "All Good Rule of the Citee", pp. 302-304, when discussing sanitation in late medieval Coventry and Norwich, Dolly Jørgensen describes how magistrates strove to work for the common weal or common good, as

behaviour described in these texts were presumably tailored to reinforce the elite's status and were perhaps only accessed by the elite, supplemented by visual images and literary prose.²¹ The question therefore remains as to what extent the acquisition of status through self-discipline was actually attainable by, or even desirable to, the great majority of urbanites in a hierarchically ordered society.²² As many contributions to this volume attest, environmental regulations and beliefs about health and hygiene could be, and were often, ignored or resisted at all levels of urban society for many reasons, including apathy, ignorance, political conflicts, and financial incentives. Ideals and practices might thus stand far apart for a myriad of reasons.

Idealized cityscapes, environments, and civility

Between the eighth and early-fifteenth century, intellectuals – mostly clerics who often resided at ecclesiastical or secular courts, but also laymen working in an urban environment – produced dozens of idealized descriptions of the city known as urban encomia (panegyrics, *laudes urbium*).²³ Although they constituted a rather disparate genre, these panegyrics commonly drew upon the tradition of late antique epideictic oratory, which taught authors to comment on the physical setting, infrastructure, founders, and laws of cities, as well as the characteristics of their inhabitants. Early examples include Ausonius' fourth-century *Ordo urbium nobilium*. The genre was continued in the early Middle Ages, but the descriptions were now infused with religious beliefs and dominated by the task of painting an idealized

well as promoting 'civic godliness'. See further note 73 below for literature on the common good in political theory.

²¹ As succinctly summarized by Turning, *Municipal Officials*, p. 9, and Bourdieu, *Outline of a Theory of Practice*, pp. 90-91, 160-163. However, these ideals presumably resonated amongst, and were shaped by, at least a section of urban society in order for them to appear relevant. They cannot therefore have been wholly academic.

²² Rawcliffe, *Urban Bodies*, 78-83. In the later Middle Ages, the urban community was conceived as a body politic, made up of social groups who were expected to cooperate in harmony, yet each in accordance with its own station in society: see note 95 below.

²³ The genre of the urban panegyric is discussed in Hyde, 'Medieval Descriptions of Cities'; Ruth, *Urban Honor in Spain*; Classen, *Die Stadt im Spiegel der 'Descriptiones' und 'Laudes Urbium'*; Schmidt, 'Societas Christiana in civitate'; Zanna, "'Descriptiones urbium'"; Frugoni, *Distant City*, pp. 54-81.

Christian cityscape, potentially representing 'Jerusalem', and stressing the devotion of its populace.²⁴

Tending to grow longer over the course of time, the products of this genre encompassed both poetry and prose. Allusions and comparisons to the illustrious forebears Athens and Rome were not uncommon in the *laudes*, in an attempt to celebrate the ancient history or features of cities.²⁵ It is not, however, possible to discern a clear chain of transmission of the texts, except in the case of Milan, where an eighth-century Lombard manuscript containing the *De laudibus urbium* may have presented a blueprint of sorts for later Milanese *laudes*.²⁶ The genre gained distinct popularity from the twelfth century onwards with the acceleration of the process of urbanization, particularly in Italy.²⁷ From this period the descriptions become more detailed, extending from climate and the religious landscape to government institutions and urban occupations. William Fitzstephen's *Descriptio nobilissimi civitatis Londoniae* (written between 1170 and 1183) thus advertises London's famous landmarks, such as St Paul's cathedral, the Tower of London and Westminster Palace, as well as celebrating the city's wealth and commerce, its cook shops, sports, and schools.²⁸ Later medieval encomia more frequently also stand by themselves as discrete examples of rhetorical writing – reflecting a burgeoning civic pride – whereas earlier examples mostly feature as short excursions in urban chronicles or poetry.

Although the encomia reflect ideals, this does not necessarily mean that they were entirely devoid of real concerns over the environment and health. According to J.K. Hyde, the information garnered for writing the city panegyric was drawn in part from municipal charters, *privilegia*, catalogues of shrines, and ecclesiastical ordinances, and, especially in the later Middle Ages, from administrative records.²⁹ Notably, Fitzstephen's *Descriptio nobilissimi civitatis Londoniae*, initially inserted at the beginning of his biography of Thomas Becket, in the fourteenth century was transcribed in a copy of the *Liber custumarum*, a collection of civic ordinances containing advice on good government produced by the

²⁴ Scattergood, 'Misrepresenting the City', pp. 22-24.

²⁵ For instance, William Fitzstephen claims that London predated Rome in antiquity: *Descriptio nobilissimi civitatis Londoniae*, ed. Robertson, III, pp. 7-8.

²⁶ Hyde, 'Medieval Descriptions of Cities', pp. 312-317.

²⁷ Fasoli, 'La coscienza civica nelle *Laudes civitatum*'; Frugoni, *A Distant City*, pp. 54-81.

²⁸ William Fitzstephen, *Descriptio nobilissimi civitatis Londoniae*, ed. Robertson, III, pp. 3-5, 8.

²⁹ Hyde, 'Medieval Descriptions of Cities', pp. 311, 324, 327.

fishmonger and city chamberlain Andrew Horn (c. 1275-1328).³⁰ On the other hand, Latin grammarian Bonvesin de la Riva's detailed description of Milan, *De magnalibus Mediolani*, dated to 1288, was in his own words intended to inform both foreigners and the Milanese of the city's magnificent attractions, and thus seems to represent an early example of a city guide. At the other end of the spectrum, Lucian's twelfth-century *De laude Cestrie*, whose street plan took the form of a cross, is replete with religious symbolism and probably served a rhetorical-contemplative function reminiscent of the pilgrim guides to Rome and Jerusalem.³¹ Thus, these encomia served multifarious purposes stretching beyond mere outbursts of civic pride.³²

Comments in these sources bearing upon public health may be broken down into two categories: remarks pertaining first to man-made infrastructure and to the natural environment; and second to the residents' hygienic, 'civilized' behaviour, although overlap occurs where civic councils sought physically to modify the natural environment, particularly in the case of water management. In the following paragraphs I will review these comments, considering the extent to which they expose concerns over public health and refer implicitly or explicitly to Galenic theory. I shall begin with descriptions of human interventions regarding the construction and upkeep of urban infrastructure.

It is significant that throughout the entire period under review both the Italian and English panegyrics comment conspicuously on the structure of city walls and turrets: edifices which were seen to safeguard the population from external threats and to affirm civic-religious identity. These observations refer back to ancient rhetorical descriptions of the pagan city, yet are enhanced with additional meaning, as walls might from early medieval times be viewed as a Christian symbol of circular perfection, offering spiritual protection against physical and moral dangers.³³ Following the same Classical tradition, various later medieval encomia on

³⁰ Rawcliffe, *Urban Bodies*, pp. 82-83. Horn's biography may be found in Catto, 'Andrew Horn', pp. 387-390.

³¹ Lucian of Chester, *De laude Cestrie*, ed. Taylor, pp. 46-57; Rawcliffe, *Urban Bodies*, pp. 91-93; Hyde, 'Medieval Descriptions of Cities', p. 325. See Carruthers, *Craft of Thought*, for spatial descriptions of sacred locations as a tool for meditation.

³² Unfortunately, to date, relatively little research has been conducted on the audience for, and possible performance of, the texts, which would shed more light on their functionality.

³³ As stated by Bonvesin de la Riva, *De magnalibus Mediolani*, ed. Pontiggia, p. 40. See Bocchi, 'Regulation of the Urban Environment', p. 68; and, for the concept of the encircled city as an urban ideal, Scattergood, 'Misrepresenting the City', p. 49. See also *Laudes Mediolanensis civitatis*, ed. Dümmler, I, p. 25; *Laudes*

Milan and Florence likewise praise the well-ordered street planning, together with the spacious market squares and palaces, public spaces maintained by the citizens through the payment of property taxes.³⁴ Thus, a Florentine panegyric of 1339 states that the city is ‘full of palaces of the best stone, both the communal and private properties’, including those occupied by the municipal government and judiciary.³⁵ From the early Middle Ages, the quality of street paving and use of flint stone in some Italian cities also attract favourable attention.³⁶ These references to the built-up environment, drawing upon ancient models, do not specifically allude to medical theory and are commonplace. Nonetheless, they already divulge an active sense of the importance and benefits of a well-maintained urban infrastructure, which incorporated buildings assigned to civic administrative bodies.

Despite the multifarious and serious efforts by later medieval urban governments to banish obnoxious odours and unseemly sights from public spaces, for instance by covering up gutters and cesspits and installing public latrines, relatively little attention is paid directly to urban sewerage in any of the encomia.³⁷ Moreover, on the two occasions in urban panegyrics where sewerage is actually mentioned, it occurs within the context of the inheritance of Roman infrastructure. Thus, William Fitzstephen, boasting of London’s seniority to Rome and comparing its judicial and administrative institutions to the ancient city’s, merely notes that London had ‘drains and aqueducts in its streets’,³⁸ in a period when the Assize of

Veronensis civitatis, ed. Dümmler, I, p. 119; William Fitzstephen, *Descriptio nobilissimi civitatis Londoniae*, ed. Robertson, III, pp. 2, 3; Lucian of Chester, *De laude Cestrie*, ed. Taylor, pp. 45-46, 49; Opicinus de Canistris, *Liber de laudibus civitatis Ticinensis*, ed. Maiocchi and Quintavalle, p. 18; *Florentie urbis et reipublice descriptio*, ed. Frey, p. 119.

³⁴ Bonvesin de la Riva, *De magnalibus Mediolani*, ed. Pontiggia, p. 36; *Florentie urbis et reipublice descriptio*, ed. Frey, p. 120. See also Bocchi, ‘Regulation of the Urban Environment’, p. 68.

³⁵ *Florentie urbis et reipublice descriptio*, ed. Frey, p. 120: ‘Hec civitas quasi tota plena palatiis de optimo lapide ac communibus et inferioribus domibus.’

³⁶ *Laudes Mediolanensis civitatis*, ed. Dümmler, I, p. 25; *Laudes Veronensis civitatis*, ed. Dümmler, I, p. 120. Jørgensen, ‘Cooperative Sanitation’, pp. 551-553, states that paving was not uncommon in England, particularly from the thirteenth century onward, although in York, for instance, side streets were already paved with cobblestones by the twelfth century at least.

³⁷ Bocchi, ‘Regulation of the Urban Environment’, p. 73; Balestracci, ‘The Regulation of Public Health’, p. 346; Jørgensen, ‘Modernity and Medieval Muck’; and the numerous examples of efforts to control obnoxious smells and sights in references in note 6, above.

³⁸ William Fitzstephen, *Descriptio nobilissimi civitatis Londoniae*, ed. Robertson, III, p. 8: ‘eluviones et aqueductus in vicis’.

Buildings was already laying down detailed regulations for the location of private cesspits.³⁹ An encomium dating from about 1330, and attributed to Opicinus de Canistris, similarly recalls Pavia's marvellous vaulted sewerage system, claiming that its subterranean passages were high enough for a person to pass along seated on a horse.⁴⁰ Nonetheless, despite the fact that, for example, Milanese statutes of the fourteenth century endeavoured to control the disposal of waste that might make 'the air diseased', the panegyrics remain relatively silent on such interventions in the material infrastructure.⁴¹

Aside from the excerpt from Leonardo Bruni's panegyric presented above, only three encomia comment directly on the cleanliness of the built-up environment. These all date to the fourteenth century, perhaps reflecting growing concerns in this period about hygiene in response to the wider dissemination of Galenic theory. Parisian scholastic philosopher Jean de Jandun, companion to the medically-trained philosopher Marsilius of Padua during his sojourn at the court of Louis of Bavaria in 1326, comments in his *laudes* of Paris (dated to 1323) that the city is clean (*propitius*) and admired by all men of good will.⁴² In addition, when praising Senlis, where he occupied a prebend, he goes on to observe that 'generally none of the city pavements are stained with unsightly dirt, but are all of them levelled off, spotless and clean'.⁴³ In a panegyric to Florence, dated to 1338, Giovanni Villani likewise claims that it has become neater, more beautiful, and healthier.⁴⁴

In aggregate, relatively little is said about the built urban environment in medieval encomia in relation to hygiene, and where it is mentioned the comments allude in part to ancient tradition. Far more attention, however, is lavished on the natural environment and its potential benefits or risks to public health. In comparison, at least twelve of the eighteen texts

³⁹ They were to be located at least two-and-a-half feet away from a neighbour's land: see Shaw, 'The Construction of the Private in Medieval London', pp. 452-453.

⁴⁰ Opicinus de Canistris, *Liber de laudibus civitatis Ticinensis*, ed. Maiocchi and Quintavalle, p. 20: 'Totius civitatis tam strate, quam latrinarum cuniculi, quibus omnes domus habundant, tempore pluvial per subterraneas et profundas cloacas emondantur, que omnes cloace cum testudinibus quasi pulcra hedificia sunt sub terra, et alicubi tam altas testudines habent, sue fornices, ut posit per eas equus cum sessore transire.' See Rawcliffe, *Urban Bodies*, pp. 140-147.

⁴¹ Bocchi, 'Regulation of the Urban Environment', p. 73. For the construction of underground channels in Florence in the fourteenth century, see Balestracci, 'The Regulation of Public Health', p. 346.

⁴² Inglis, 'Gothic Architecture and a Scholastic', pp. 63-64.

⁴³ Jean de Jandun, *Tractatus de laudibus Parisius*, ed. Le Roux de Lincy and Tisserand, pp. 62, 76: '[P]avimenta civitatis nulla fere lutorum turpitudine maculate sint, sed plana, pura et munda per totum.'

⁴⁴ Villani, *Cronica*, ed. Racheli, I, 38, p. 20. Reference drawn from Frugoni, *Distant City*, pp. 59-60.

considered here remark, often extensively and explicitly, on the geographical situation of cities (on hilltops, in mountainous regions, or river valleys) – which is in keeping with Hippocratic ideas set out in texts such as *Airs, Waters, and Places* – and the access to natural resources hunted or harvested in their vicinity.⁴⁵ Often mentioned are the woodlands and fertile meadows yielding grain, vegetables, fruits, wine, meat, and wool. Many texts also emphasize a city's situation on river banks, stressing its proximity to fresh water and the abundance of fish. Thus, in 780 Alcuin observes that in York the Ouse's waters are teeming with fish.⁴⁶ In 1195, Lucian likewise praises Chester for its great catch of fish, although adding that many fishermen who cast their nets on the sands at low tide, possibly as a result of local overfishing, had lost their lives.⁴⁷ Finally, circa 1330, in the encomium to Pavia attributed to Opicinus de Canistris, the author relishes the summertime abundance of sturgeon and crayfish, even staking the claim that the fish in the river Ticino were the healthiest and best in the whole of Lombardy.⁴⁸

A supply of clean water is assuredly one of the most important preconditions for the survival of an urban population; and great value was accordingly placed on it. In the thirteenth century, Bonvesin de la Riva stated that six particulars set Milan apart from other cities, the first of which was the abundance of high-quality water, besides its archiepiscopal dignity and the impressive number of scholars in the college of jurists.⁴⁹ Clean water was essential for drinking and cooking, for sustainable fishery, and food production, as well as for transport, effective sanitation, waste disposal, and the support of industries such as dyeing and brewing. Accordingly, from the early Middle Ages, access to water and the shared ownership of wells had not only been a potential source of conflict but also of neighbourliness; and questions were often raised over the public or private nature of water resources.⁵⁰ We see these concerns reflected both in the encomia and in regulations and official interventions in the later Middle Ages, many of which focused on maintaining the free flow of water, forbidding uncontrolled waste disposal in waterways, and facilitating the appointment by city councils of personnel to

⁴⁵ Hippocrates' *Airs, Waters, and Places* was translated into Latin in the twelfth century: Biller, 'Proto-Racial Thought in Medieval Science', p. 161.

⁴⁶ Alcuin, 'Versus de patribus regibus et sanctis Eboricensis ecclesiae', ed. Godman, p. 6.

⁴⁷ Lucian of Chester, *De laude Cestrie*, ed. Taylor, p. 46.

⁴⁸ Opicinus de Canistris, *Liber de laudibus civitatis Ticinensis*, ed. Maiocchi and Quintavalle, p. 19.

⁴⁹ Bonvesin de la Riva, *De magnalibus Mediolani*, ed. Pontiggia, pp. 186-188.

⁵⁰ Squatriti, *Water and Society in Early Medieval Italy*, pp. 30-33; Kucher, *The Water Supply System of Siena*.

clean rivers.⁵¹ Almost all the panegyrics correspondingly emphasize the pleasing riparian situation of a particular city and its easy access to clean water. Conversely, stagnant waters were considered an all too likely site of pollution.⁵² The focus on the purity of the supply in Bonvesin de la Riva's praise of Milan clearly bespeaks the dangers of miasma arising from such a dangerous source: 'Are there are no putrid pools or lakes corrupting the air with their damp or stench? Certainly not! Here one finds clear fonts and fertile rivers.'⁵³

More generally, the vital importance of having access to clean water through fountains, wells, and cisterns is underscored in encomia produced throughout the central and especially the late Middle Ages.⁵⁴ The text attributed to Opicinus de Canistris celebrates the plenitude of wells and fountains in Pavia's public spaces, including a very beautiful and large vaulted fountain beneath the monastery church of St Thomas in the city centre.⁵⁵ Again, Bonvesin de la Riva in particular elaborates on the water provisions in Milan, stating that the city trumped all others in its use not of cisterns or channels conveying water, but rather of large natural wells, offering direct access to clear and healthy fresh water. Corroborating the real efforts that were being made to share and distribute supplies, he adds that the wells were so abundant that every decent (*decens*) house had access to its own private well, in total numbering 6,000 springs. The supply was of such high quality that the light and savoury liquid, poured into wooden or glass containers, could promote a strong digestion 'through the

⁵¹ See, in particular, Jørgenson, 'Local Government Responses to Urban River Pollution'; Keene, 'Issues of Water in Medieval London to c. 1300', p. 168; Trexler, 'Measures against Water Pollution in Fifteenth-Century Florence'.

⁵² Rothauser, 'The Use of Water in the Medieval Consideration of Urban Space', p. 245; Allen, 'The Public Water Supply of Ipswich'.

⁵³ Bonvesin de la Riva, *De magnalibus Mediolani*, ed. Pontiggia, p. 30: 'Suntne ibi paludes aut lacus putride suis nebullis atque fetoribus aerem corrumpentes? Non certe; imo limpidi fontes et fertillia flumina.'

⁵⁴ Accordingly, in the later Middle Ages, civic councils imposed regulations on the use of public fountains, posting guards to protect them: Magnusson, *Water Technology in the Middle Ages*, p. 134. For William Fitzstephen's description of London's water supply, see Keene, 'Issues of Water in Medieval London to c. 1300'.

⁵⁵ Opicinus de Canistris, *Liber de laudibus civitatis Ticinensis*, ed. by Maiocchi and Quintavalle, p. 18. See Moses de Brolo, *Liber Pergaminus*, ed. Gorni, p. 449.

1.1. The benefits of pure water from a well-illustrated fourteenth-century vernacular *regimen sanitatis*

pores of the limbs'.⁵⁶ Since antiquity, water had also been siphoned off for bathing purposes, as, for instance, the *Laudes Mediolanensis civitatis* dated to circa 738 attests.⁵⁷ The *Florentie urbis et reipublice descriptio*, dated to 1339, similarly commends the sweet water of the Arno, which allowed each Florentine household to boast its own private well. On the other hand, the panegyric explains, the water in the suburbs was used for laundry and the cleaning of wool and other products.⁵⁸ Finally, in his depiction of the Roman origins of Florence, Villani emphasizes that the third-century Roman emperor Macrinus had built aqueducts and conduits in order that the city might have plenty of pure water to drink and for cleansing the streets and

⁵⁶ Bonvesin de la Riva, *De magnalibus Mediolani*, ed. Pontiggia, p. 32: 'per poros membrorum'. See Boucheron, 'Water and Power in Milan, c. 1200-1500'. For efforts in medieval Siena to maintain the water supply system from the twelfth century onward, see Kucher, 'The Use of Water and its Regulation in Medieval Siena'.

⁵⁷ *Laudes Mediolanensis civitatis*, ed. Dümmler, I, p. 25.

⁵⁸ *Florentie urbis et reipublice descriptio*, ed. Frey, p. 120.

gutters, as the water flowing to the Arno through canals equipped with drains rinsed the major thoroughfares on feast days.⁵⁹

Water, however, was not just a natural resource necessary for hydration, transport, industry, and sanitation. From the twelfth century onwards, it was considered to have an additional aesthetic value that also benefited a person's health. As mentioned above, ancient Greek medical ideas lent considerable weight to assumptions concerning the impact of the olfactory and visual senses on health and wellbeing.⁶⁰ Emphasis on a city's beauty and its well-positioned situation was thus undergirded by Greek intromission theory, which postulated that visible species or forms (images, phantasms, impressions) entered the body through the eyes, imprinting the form of the object viewed upon the viewer's senses. As a result, a direct relationship was said to exist between the object of vision and the viewer.⁶¹ Accordingly, whereas most encomia have something to say about the aesthetics of a city's environment (as do earlier geographical descriptions of territories and places, such as Bede's seventh-century panegyric of Britain), sources from the twelfth century onwards directly address the benefits of contemplating sites of beauty, sometimes expressly in medical terms. Gazing at greenery and clear pools of water in particular was regarded as a health-sustaining activity that refreshed the eyesight and the brain, especially of those weary from intensive reading.⁶² Bonvesin de la Riva clearly draws a relationship between the natural environment and the belief that pleasing sights could improve health, stating that, in addition to the direct medicinal use of plants in Milan, the flowers blossoming in the city refreshed the eyes, thereby rejuvenating an individual's eyesight and, through their wonderful smell, comforting the olfactory senses.⁶³

Aesthetic experiences might also include the pleasures to be had from beautiful vistas. The same author, for instance, comments on the remarkable beauty of the plain (*ratione pulcerimme planicie*) upon which Milan is situated.⁶⁴ No less delightful is Jean de Jandun's early fourteenth-century description of Senlis, where the hilltops surrounding the city are said

⁵⁹ Giovanni Villani, *Cronica*, ed. Racheli, p. 20, cited by Frugoni, *Distant City*, pp. 59-60.

⁶⁰ Rawcliffe, "Delectable Sights and Fragrant Smelles", pp. 7-12; Woolgar, *The Senses in Late Medieval England*.

⁶¹ Akbari, *Seeing through the Veil*, Chapter two; and pp. 22-23 above.

⁶² Rawcliffe, "Delectable Sights and Fragrant Smelles", pp. 11-12.

⁶³ Bonvesin de la Riva, *De magnalibus Mediolani*, ed. Pontiggia, p. 86.

⁶⁴ Bonvesin de la Riva, *De magnalibus Mediolani*, ed. Pontiggia, p. 34. See also Frugoni, *Distant City*, p. 112, for a similar comment in Petrarch's description of Genoa, viewed from above.

to offer stunning views and where bird song caresses the city dwellers' ears.⁶⁵ William Fitzstephen's description of London's natural environment is just as acutely sensory. Here, he lovingly itemizes the:

[S]pacious and beautiful gardens of the citizens, and these are planted with trees. Also there are on the north side pastures and pleasant meadow lands through which flow streams wherein the turning of mill-wheels makes a cheerful sound. [...] There are also outside London on the north side excellent suburban wells with sweet, wholesome and clear water that flows rippling over the bright stones. [...] These are frequented by great numbers and much visited by the students from the schools and by the young men of the city, when they go out for fresh air on summer evenings. Good indeed is this city when it has a good lord!⁶⁶

In a similar vein, the early thirteenth-century encyclopaedist and Franciscan friar Bartholomaeus Anglicus in his *De proprietatibus rerum* praised the benefits for scholars of the Parisian environment, its air, rivers, and encircling fields, claiming that the green meadows and streams refreshed philosophers' tired eyes.⁶⁷ Lastly, for Leonardo Bruni, the surrounding woodlands, flowering meadows, river banks, and pools of clear water resembled a utopian paradise where the Florentines might feast their eyes on the panoramic views, and where the hills were full of laughter.⁶⁸ Moreover, not only did the flowers delight the senses, they also helped to overpower bad odour or miasma. In times of plague, the inhabitants of crowded towns and cities were thus well-advised to surround themselves with fragrant

⁶⁵ Jean de Jandun, *Tractatus de laudibus Parisius*, ed. Le Roux de Lincy and Tisserand, p. 76. Music was considered to have a medicinal, therapeutic effect on the accidents of the soul: Jones, 'Music in the Later Middle Ages', pp. 121-125.

⁶⁶ William Fitzstephen, *Descriptio nobilissimi civitatis Londoniae*, ed. Robertson, III, p. 3; trans. Douglas and Greenaway, *English Historical Documents*, II, p. 957: 'Undique extra domos suburbanorum horti civium, arboribus consiti, spatiosi et speciosi, contigui habentur. Item a borea sunt agri, pascuae, et pratorum grata planities, aquis fluvialibus interfluis: ad quas molinorum versatiles rotae citantur cum murmure jocosum. [...] Sunt etiam circa Londoniam ab aquilone sub urbani fontes praecipui, aqua dulci, salubri, perspicua, et per claros rivo trepidante lapillus [...] et adeuntur celebriore accessu et majore frequentia scholarium, et urbanse juventutis in serotinis aestivis ad auram exeuntis. Urbs sane bona, si bonum habeat dominum.'

⁶⁷ Bartholomaeus Anglicus, *De proprietatibus rerum*, xv, 'De Francia'. In Jean of Jandun's panegyric of Senlis, the fresh water, fruits, flowers, verdant colours, and smells presented a bountiful tableau for the visual senses: Jean de Jandun, *Tractatus de laudibus Parisius*, ed. Le Roux de Lincy and Tisserand, p. 76.

⁶⁸ Leonardo Bruni, *Laudatio Florentinae urbis*, ed. Baron, I, p. 234.

flowers or greenery.⁶⁹ The references in the later medieval panegyrics of William Fitzstephen, Opicinus de Canistris, Bonvesin de la Riva, and Jean de Jandun, the 1339 praise of Florence, and Leonardo Bruni to good climate and healthy air should be interpreted in this context, as clean air was considered a prerequisite for good health; and the environment ranked as one of most important of the non-naturals. We should, however, bear in mind that actual reality was presumably less agreeable, as, for instance, complaints about urination in public places in fifteenth-century Florence attest.⁷⁰

Buttressed by good government, laws, and institutions, city dwellers might derive additional benefits from a healthy environment, which, according to Bonvesin de la Riva, also had a positive effect on population numbers, allowing both people and temporal goods to multiply.⁷¹ Bonvesin remarks with some satisfaction at the beginning of his encomium of 1288 that, because of ‘its climate, its waters, its fertile and beautiful plain, Milan is situated in a wonderful location; shining proof of this is the fact that there are numerous elderly people, men and women, who live up to old age, and that the fertility of families, the population density and the prosperity of all good things miraculously increase day by day, by the grace of God’.⁷² These remarks are echoed in numerous political, medical, and religious observations about population numbers, fertility, and chastity in late medieval Italian cities, as Peter Biller has shown.⁷³

Civitas in civibus: urbanitas and environment

Besides establishing the desirable features of urban infrastructure and the natural environment, the encomium also set the benchmark for collective civility, presenting an idealized image of the resident population that real inhabitants might aspire to. It is here that we may discern how health, hygiene, religious devotion, and urbanity come together, with status-enhancing civic virtues being embodied in urban communities, particularly as a result

⁶⁹ Rawcliffe, “Delectable Sights and Fragrant Smelles”, pp. 9-10.

⁷⁰ Biow, *Culture of Cleanliness*, p. 86.

⁷¹ Bonvesin de la Riva, *De magnalibus Mediolani*, ed. Pontiggia, p. 104.

⁷² Bonvesin de la Riva, *De magnalibus Mediolani*, ed. Pontiggia, p. 34: ‘Est ergo ratione aeris, ratione aquarum, ratione fertilis atque pulcerrime planicie, situ collocata mirabilli; cuius rei est fulgidum signum, quoniam quamplurimi senes grandevi et anus in etate ibi reperiuntur viventes decrepit, et etiam quia progeniei feconditas, populi frequentia, omnium bonorum prosperitas mirabilli modo quotidie per Dei gratiam perducitur in augmentum.’

⁷³ Biller, *Measure of Multitude*, pp. 385-417.

of the benefits of living in a clean environment. Indeed, the panegyrics reveal a remarkable degree of uniformity in their emphasis on the virtuous character, dress, behaviour, and physical endowments of their respective subjects, each of these qualities pertaining to the ‘honour’ of the citizens, and by extension to the *bonum commune* and honour of the whole community.⁷⁴ The encomia tend to focus in particular on the morality and fecundity of the female population (*pudicitia matronali*), which safeguarded the survival and ‘pure lineage’ of all.⁷⁵ Virtuous civility was, moreover, according to the encomia, imbued with Christian values. From the early Middle Ages, the charitable nature of the people of Milan is thus praised, and nearly all encomia from this period remark upon the religious cityscape and the ubiquity of churches, in some cases alluding to the foundation of religious brotherhoods and the piety of the urban populace. In addition, two later medieval Italian encomia celebrate works of charity for the vulnerable within a specifically medical context. Bonvesin de la Riva boasts that Milan housed ten hospitals for the poor and sick; the Brolo, founded in 1145 by Goffredo de Bussero, in times of famine offering more than 500 clean beds, meals, and kindness to poor patients, and additional relief to an even greater number of indigents who were not bedridden.⁷⁶ The *Florentie urbis et reipublice descriptio* of 1339 correspondingly commends the alms-giving populace and the hospitals in the city in the same breath as the installation of a new official whose task it was to ensure that men and women did not venture outdoors in indecent or sumptuous attire and make-up.⁷⁷ Here, charity, care for the sick, and ‘decent’ behaviour are interconnected. Ultimately, as the twelfth-century *Liber Pergaminus* unequivocally states, the city where ‘even the best houses, the fruits of hard toil, whether of rich man or poor, are made beautiful by a shared propriety’, was a city of peaceful harmony, where laws reigned, as well as decorum, solidarity, and concord.⁷⁸

Significantly, from the twelfth century onward, several encomia emphasize the fact that decency and urbanity evolved directly from a health-giving environment, in particular

⁷⁴ See Isenmann, ‘Notion of the Common Good’, p. 112, for the idea that Christian behaviour contributed to the honour and common good of the community.

⁷⁵ William Fitzstephen, *Descriptio nobilissimi civitatis Londoniae*, ed. Robertson, III, p. 4, likens the women to Sabines. Jean de Jandun, *Tractatus de laudibus Parisius*, ed. Le Roux de Lincy and Tisserand, p. 56, claims that the women of Paris mostly uphold the laws of marriage and are beyond repute. *Florentie urbis et reipublice descriptio*, ed. Frey, p. 122, mentions the fecundity of the female inhabitants.

⁷⁶ Bonvesin de la Riva, *De magnalibus Mediolani*, ed. Pontiggia, pp. 54, 56.

⁷⁷ *Florentie urbis et reipublice descriptio*, ed. Frey, p. 121.

⁷⁸ Moses de Brolo, *Liber Pergaminus*, ed. Gorni, p. 452.

from the beneficial effects of clean air. Shaped by their temperate climate, the inhabitants of London are ‘soft’, not in the sense of being effeminate, but rather liberal and kind, not fierce or bestial, ‘conspicuous above all others for their polished manners, for their dress and for the good tables that they keep’. Their courteous behaviour is comparable to that of barons rather than citizens, and they are accordingly good for their word.⁷⁹ In the late twelfth-century *De laude Cestrie*, the populace’s characteristics exemplify the ‘English’ temperament praised in contemporary poetry as sociable in feasting, lively at the table, generous, eloquent, free spirited, compassionate, and honest.⁸⁰ These attributes are strongly reminiscent of the characteristics of the sanguine man, enumerated in the popular *Regimen sanitatis Salernitanum*; and, indeed, William Fitzstephen’s flattering description of Londoners is directly preceded by a passage on the city’s wholesome, fresh air, before he moves on to list its principal churches. Likewise, in Bonvesin’s panegyric the inhabitants of Milan are said to live ‘*decenter, ordinate, magnifice*’, displaying generosity at home and abroad, and benign and honourable behaviour to all; their manners are elegant (*facetus*), their faces smiling, and they know nothing of deception.⁸¹ Jean de Jandun’s early fourteenth-century description of Paris, with its implicitly Galenic emphasis on balance, likewise praises the moderation of Parisians, their ‘charming affability, their urbanity, and the gentleness of their spirit’ (*decentis affabilitatis atque urbanitatis spirituali dulcedine gratiosi*), although such all too lively characters, in the absence of a decent education, are likely to succumb to buffoonery.⁸²

Scripts for urban civility

As mentioned at the beginning of this chapter, if the appropriation of ‘urbanity’ or civility might augment one’s social status, the inhalation of clean, temperate air was to be recommended, as it appeared to engender a well-balanced temperament and invigorate the vital spirits. In addition, cheerful behaviour, decent dress, and attention to personal hygiene – the avoidance of the spread of obnoxious odours and unseemly sights – were necessary

⁷⁹ William Fitzstephen, *Descriptio nobilissimi civitatis Londoniae*, ed. Robertson, III, p. 4; trans. Douglas and Greenaway, *English Historical Documents*, II, p. 957: ‘prae omnibus aliis civibus ornatu morum, vestium, et mensae lautioris, spectabiles et noti habentur’.

⁸⁰ Lucian of Chester, *De laude Cestrie*, ed. Taylor, p. 65. For the similarities between the sanguine man and English stereotypes of urbanity, see Weeda, ‘Images of Ethnicity’, Chapter eight.

⁸¹ Bonvesin de la Riva, *De magnalibus Mediolani*, ed. Pontiggia, p. 50.

⁸² Jean de Jandun, *Tractatus de laudibus Parisius*, ed. Le Roux de Lincy and Tisserand, p. 54: ‘decentis affabilitatis atque urbanitatis spirituali dulcedine gratiosi’, trans. Berger, *In Old Paris*, p. 14.

attributes in the pursuit of *urbanitas*. City dwellers with access to schools were accordingly drilled to make these traits their own, as a form of *habitus*. Conduct books, produced for educational purposes from the twelfth century onward, aided them in their social education by offering guides to acceptable behaviour.⁸³ Some of them included prescripts on personal hygiene, partly drawing upon the same intellectual tradition as the more strictly health-focused regimens such as the *Regimen sanitatis Salernitanum*.⁸⁴ Thus, where William Fitzstephen's and Lucian's encomia praise the table manners of the citizenry, conduct manuals laid down specific rules on how to remain clean and avoid causing offence when eating, along lines previously set out by the physician Petrus Alphonsi.

Although conduct manuals first came into being in the particular context of the Catonian educational programme of schools for the clergy and aristocracy, from the thirteenth century they were also produced in an urban environment. One such text, known as *De quinquaginta curialitatibus ad mensam*, was in fact authored by the above-mentioned Bonvesin de la Riva in about 1260, in the vernacular Lombard language for schoolboys not yet proficient in Latin. In it, civility and hygiene are once more strongly connected. Bonvesin describes the urban man as courtly, friendly, cheerful, well-tempered, and gay (*cortese, adorno, allegro e confortoso e fresco*).⁸⁵ Throughout the text he stresses the importance of moderation and self-discipline when eating and drinking, since they were believed to promote health by fostering humoral balance, as well as encouraging rest.⁸⁶ The need for cleanliness is addressed extensively: hands are to be washed before and after dinner, and should, moreover, be kept clean and not dirtied by sticking them in ears or other orifices, or by stroking cats or dogs. As in the great majority of conduct books, he also prohibits spitting, blowing one's nose at the dinner table without a handkerchief, licking one's fingers, or cleaning one's teeth with them. Servants, too, must be clean; nor should they spit or defile table-wear or consumables.⁸⁷ In his didactic poem *De regimine et sapientia potestatis* written c. 1240 about life behind the scenes at the podestà, Orfino da Lodi, who is mentioned in the panegyric of Lodi as a judge

⁸³ Gillingham, 'From Civilitas to Civility', pp. 269-281; Whelan, *The Making of Manners and Morals in Twelfth-Century England*; Jaeger, *The Origins of Courtliness*, pp. 166-168, 223-224; and Crouch, 'When Was Chivalry', discuss conduct literature in relation to courtliness.

⁸⁴ Weeda, 'Reviewing Conduct Books'. For health regimens, see Nicoud, *Les régimes de santé au Moyen Age*.

⁸⁵ Bonvesin de la Riva, *La cinquanta cortesie*, ed. Cantella and Magrassi, v, p. 29.

⁸⁶ Bonvesin de la Riva, *La cinquanta cortesie*, VII, XII, pp. 29, 33.

⁸⁷ Bonvesin de la Riva, *La cinquanta cortesie*, II, L, XXX-XXX, pp. 26, 45, 46, 58.

and master of Latin poetry,⁸⁸ also includes a lengthy chapter on personal hygiene and dining in an urban context, offering advice on hand-washing and the need to refrain from spitting.⁸⁹ Some early Latin examples of conduct literature expressed great concern about hand-washing in medical terms, as, according to Greek-Arabic medical theory, dirty fingers might infect the eyes and damage a person's sight. For that reason, in his *Disciplina clericalis* Petrus Alphonsi urges his readers to wash their hands after dinner, because it was hygienic and well-mannered, and because eyes often sustained harm if they were wiped by hands that had been soiled while eating.⁹⁰

In this way, members of the civic elite were not only presented with a set of ideals pertaining to their environment, behaviour, and morality, but also instructed on how to perform in accordance to them. These conduct books offered status-enhancing scripts, which drew upon concepts of self-discipline and moderation that in part derived from concerns about health and hygiene. Adherence to these rules helped to shape the urbane, civilized, and hygienic man – as is apparent from the titles of two of the earliest conduct books, Daniel of Beccles' *Urbanus magnus* and the twelfth-century Latin text known as the *Facetus*. By extension, acquiring the *habitus* of urbanity offered access to the deliberative and decision-making councils of the urban body politic, where civilized *prudentes*, or wise men, issued bylaws regulating the use of the natural environment for the good and health of the entire political community.

However, there is an important caveat. For, as Bonvesin de la Riva remarks in his encomium of Milan, the question remains as to what extent all elements of the urban population might be able or willing to accumulate such physical and socio-cultural capital through the adoption of hygienic and civilized behaviour. And was it even desirable for them to do so? According to Bonvesin, a man ought only to acquire the wealth and dignity (*expensas et honorem*) appropriate to his station. Nonetheless, as a member of the tertiary order of the Humiliati, who wrote in the vernacular as well as in Latin, it is not implausible that Bonvesin himself originally came from an artisanal background in wool and textiles, and, as a successful social climber, ended his days in relative prosperity.⁹¹ Conceivably, the attainment of elite social status through the self-policing of the body and its environment may

⁸⁸ *De laude civitatis laude*, ed. Caretta, p. 60.

⁸⁹ Orfino da Lodi, *De regimine et sapientia potestatis*, ed. Pozzi, pp. 124-134.

⁹⁰ Petrus Alphonsi, *Disciplina clericalis*, ed. Hilka and Söderhjelm, xxvi, p. 40.

⁹¹ Bonvesin de la Riva, *De magnalibus Mediolani*, ed. Pontiggia, p. 104.

have paid off on certain occasions and in certain urban contexts, and persons from a similar social background to Bonvesin's would assuredly have been consumers of such aspirational literature. However, many factors and circumstances – including having access to these guides in the first place – mean that we have to resist the temptation to regard them as reflections of reality, or to assume that these ideals applied to, or were embraced by, the entire populace.

In addition, the performance of urbanity could be enhanced through endowments and other forms of charity lavished upon the poor and sick, together with financial contributions towards the construction and repair of civic infrastructure. For instance, on festive occasions and royal visits, streets and squares in England might be spruced up to appear at their most attractive, while water courses, such as the Great Conduit in London, ran with wine.⁹² This remarkable monument to *civilitas*, which was built in the first half of the thirteenth century in front of the house where Thomas Becket, the country's most celebrated saint was born, and which supplied fresh water to the public, was in part constructed as a charitable amenity for the urban community.⁹³ Food was also handed out to the hungry; and donations, often made to hermits, for the maintenance of roads lying on important pilgrimage routes were regarded as good works celebrating the social community of the *corpus christianum*.⁹⁴ Conversely, court fines imposed on miscreants included compulsory donations of stone for the upkeep of city walls or street paving.⁹⁵ Transgressors might also be shamed in public and condemned to the pillory, their fate serving as both a threat to others and an uncompromising display of official authority. In this manner, the creation of a clean and salubrious environment was visibly associated with morality, and the violation of collective beliefs was punished not only financially, but also by assailing a person's sense of individual worth.

Conclusion

Painting an idealized cityscape, urban panegyrics, particularly from the twelfth century onwards, engaged with concepts of health and wellbeing that hinged, *inter alia*, upon the desirability of maintaining clean and aesthetically pleasing surroundings. The inhalation of pure air in particular was believed to enhance the virtue of urban communities, alongside

⁹² Rawcliffe, *Urban Bodies*, pp. 38-39.

⁹³ Keene, 'Issues of Water in Medieval London to c. 1300', pp. 176-179.

⁹⁴ Sauer, 'Function of Material and Spiritual Roads'; Terpstra, *Religious Refugees*, p. 21.

⁹⁵ See pp. 139-141, 151-152 below.

other factors, such as religious devotion and good government. City dwellers from the thirteenth century onward might also have access to conduct books extolling the benefits of urbane, hygienic behaviour. Thus, it was not just the judicial stick that was wielded to regulate and shape conduct pertaining to public health, since questions of personal status and fear of disease might equally well drive individuals to adhere to the accepted norms of health and hygiene through self-regulation.

The pursuit of high standards of personal hygiene and other efforts to preserve health were not, however, only viewed as beneficial to the individual; they were also, at least at a theoretical level, regarded as an integral element of the wellbeing of the entire community, conceived metaphorically as the body politic. Just as, according to Galenic humoral theory, good health was contingent on the harmonious interaction between bodily parts, in political treatises and regimens the key concept for society and the economy at large was balance or ‘proportional equalization’ (*aequalitas temperantia*).⁹⁶ The inheritance of the Ancient Greek and Biblical concept of society as a body that should strive to maintain this state of equilibrium led to an early biopolitical conceptualization of power, in which the political body itself was viewed as the sum of the health of the individual parts, whose cooperation in a hierarchical system guaranteed collective well-being. Governing the body politic consequently involved the imposition of a regime in which individual health engaged with the health of the entire community. The concept of equilibrium is reflected in the medieval panegyric itself, which was believed to present a balanced description of all parts of urban society. The conceptualization of society as a harmonious corporate entity had a broad application, which is reflected not only in the increased production of the manuals concerning individual social behaviour discussed above, but also, for instance, in the popularity of regimens scripting personal health (such as the *Regimen sanitatis Salernitanum*);⁹⁷ of regimens for rulers (for example, Giles de Rome’s *De regimine principum*); and regimens of urban governance (such as John of Viterbo’s *Liber de regimine civitatum*). As a result, political tracts and health regimes engaged in an increasingly referential dialogue, which

⁹⁶ Kaye, *History of Balance*, pp. 128-240. The concept of equilibrium might extend to the textual composition of the urban panegyric, as for example in the case of Bruni’s early fifteenth-century encomium *Laudatio Florentinae urbis*. Here, the city itself is the sum of its constituent parts: Hyde, ‘Medieval Descriptions of Cities’, p. 309.

⁹⁷ Nicoud, *Les régimes de santé au Moyen Age*.

becomes clear when one considers the overlapping terminology of regime, regimen, polity and policing.⁹⁸

The other side of the coin was that the increasing indexation of healthy or insanitary behaviour and distinct bodily types – for instance the melancholic, dark Jew or the diseased poor – could, on occasion, encourage social Othering. It is perhaps relevant, in this regard, that the later Middle Ages witnessed a surge in violence against minorities, and has, indeed, been characterized as a ‘persecuting society’. The pursuit of high standards of social hygiene did not always entail an absolute rejection of minorities in theoretical texts, however, as the concept of equilibrium underlying the metaphor of the body politic involved the maintenance of a precarious balance between its ‘lesser’ and ‘better’ members. In practice, too, as many contributions to this volume attest, urban interventions at times display an inclusiveness and practical commitment to the principles of Christian charity that should qualify our assumptions about the rigidity of medieval Othering. Rather than undertaking a single-minded and essentially simplistic quest for the recovery of pre-lapsarian purity, particular emphasis was laid in this literature on ideals of temperance, self-control, moderation, the triumph of reason over passion, modesty, and considerateness. Fundamental in this regard was the order, consistency, and self-discipline that decorum imposed on personal behaviour, both in deeds and speech. Such ‘decorum’ the rhetorician Cicero, many centuries earlier, had likened to the physical beauty of the harmonious symmetry of limbs – a far cry from the popular image of medieval chaos, danger, and filth constructed in modern times.⁹⁹

⁹⁸ Kotkas, *Royal Police Ordinances*, p. 1.

⁹⁹ Jaeger, *The Origins of Courtliness*, p. 116.

BIBLIOGRAPHY

Printed primary sources

Alcuin, 'Versus de patribus regibus et sanctis Euboricensis ecclesiae', ed. by Peter Godman, *Alcuin: The Bishops, Kings, and Saints of York* (Oxford: Clarendon Press, 1982)

Anonymi Mediolansis Libellus, ed. by A. and G. Colombo (Bologna: Rerum Italicarum scriptores, I, 2, 1725)

Benzo d'Alessandria, *De Mediolano Florentissima civitate*, ed. by L.A. Ferrai, *Bollettino dell'Istituto Storico Italiano*, 9 (1890), 15-36

Bonvesin de la Riva, *De magnalibus Mediolani*, ed. by Giuseppe Pontiggia (Milan: Bompiani, 1974)

Bonvesin de la Riva, *La cinquanta cortesie de tavola*, ed. by Mario Cantella and Donatella Magrassi (Milan: La Spiga, 1985)

Bruni, Leonardo, 'Laudatio', ed. by Hans Baron, *From Petrarch to Leonardo Bruni: Studies in Humanistic and Political Literature* (Chicago and London: Chicago University Press, 1968)

Bruni, Leonardo, 'Panegyric to the City of Florence', trans. by Benjamin G. Kohl, ed. by Benjamin G. Kohl and Ronald G. Witt, *The Earthly Republic: Italian Humanists on Government and Society* (Manchester: Manchester University Press, 1978)

English Historical Documents, II, 1042-1189, ed. and trans. by D.C. Douglas and G.W. Greenaway (Oxford: Oxford University Press, 1981)

Fitzstephen, William, *Descriptio Nobilissimae Civitatis Londoniae*, ed. by James C. Robertson, *Materials for the history of Thomas Becket, Archbishop of Canterbury*, 7 vols. (London: Rerum Britannicarum medii aevi scriptores, 67, 1877)

'Florentie urbis et reipublice descriptio', ed. by C. Frey, *Die Loggia dei Lanzi zu Florenz: Eine quellenkritische Untersuchung* (Berlin: Verlag Wilhelm Hertz, 1885)

Graphia aureae urbis Rome, ed. by P.E. Schramm, *Kaiser, Könige und Päpste: Gesammelte Aufsätze zur Geschichte des Mittelalters*, 5 vols. (Stuttgart: Hiersemann, 1969-1971, 1975)

Jean de Jandun, *Tractatus de laudibus Parisius, Deux éloges de la ville de Paris*, ed. by Antoine J.V. Le Roux de Lancy and Lazare M. Tisserand, *Paris et ses historiens au XIV et XVe siècles* (Paris: Imprimerie impériale, 1867)

Jean de Jandun, *Tractatus de laudibus Parisius*, ed. and trans. by Robert W. Berger, *In Old Paris: An Anthology of Source Descriptions, 1323-1790* (New York: Italica Press, 2002)

‘Laudes Mediolanensis civitatis’, ed. by E. Dümmler, *Poetae Latini aevi Carolini*, 5 vols. (Berlin: Monumenta Germaniae Historica, 1881)

‘Laudes Veronensis civitatis’, ed. by E. Dümmler, *Poetae Latini aevi Carolini*, 5 vols. (Berlin: Monumenta Germaniae Historica, 1881)

Lucian of Chester, *Liber Luciani de laude Cestrie*, ed. by M.V. Taylor (Edinburgh: Lancashire and Cheshire Record Society, 64, 1912)

Master Gregory, *De mirabilibus urbis Rome*, ed. by R. Valentini and G. Zucchetti, *Codice topografico della città di Roma*, 4 vols. (Rome: s. n., 1940-1953)

Moses de Brolo, *Liber Pergaminus*, ed. by G. Gorni, ‘Il “Liber Pergaminus” di Mosè de Brolo’, *Studi Medievali*, 9 (1970), 440-56

Opicinus de Canistris, *Liber de laudibus civitatis Ticinensis*, ed. by Rodolfo Maiocchi and Ferruccio Quintavalle (Città di Castello: Lapi, 1903)

Orfino da Lodi, *De laude civitatis laude*, ed. by Alessandro Caretta (Lodi: n. p., 1962)

Paul the Deacon or Paulinus of Aquileia, ‘Versus de destructione Aquileiae’, ed. by E. Dümmler, *Poetae Latini aevi Carolini*, 5 vols. (Berlin: Monumenta Germaniae Historica, 1, 1881)

Petrus Alphonsi, *Disciplina clericalis*, ed. by Alfons Hilka and Werner Söderhjelm, *Die Disciplina clericalis des Petrus Alphonsi: Das älteste Novellenbuch des Mittelalters* (Heidelberg: Carl Winter’s Universitätsbuchhandlung, 1911)

Villani, Giovanni, *Cronica*, ed. by A. Racheli (Trieste: Lloyd Austriaco, 1857)

Printed secondary sources

Akbari, Suzanne Conklin, *Seeing through the Veil: Optical Theory and Medieval Allegory* (Toronto and London: University of Toronto Press, 2004)

Allen, David, 'The Public Water Supply of Ipswich before the Municipal Corporation Act', *Proceedings of the Suffolk Institute of Archaeology*, 40 (2001), 31-54

Ashenburg, Katherine, *The Dirt on Clean: An Unsanitized History* (New York: Vintage Canada, 2008)

Balestracci, Duccio, 'The Regulation of Public Health in Italian Medieval Towns', in *Die Vielfalt der Dinge: Neue Wege zur Analyse mittelalterlicher Sachkultur*, ed. by Harry Kühnel and others (Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 1998), pp. 345-357

Baron, Hans, 'Leonardo Bruni: "Professional Rhetorician" or "Civic Humanist"?', *Past & Present*, 36 (1967), 21-37

Biller, Peter, *The Measure of Multitude: Population in Medieval Thought* (Oxford: Oxford University Press, 2000)

Biller, Peter, 'Proto-Racial Thought in Medieval Science', in *The Origins of Racism in the West*, ed. by Miriam Eliav-Feldon and others (Cambridge: Cambridge University Press, 2009), pp. 157-180

Bocchi, Francesca, '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

Biow, Douglas, *The Culture of Cleanliness in Renaissance Italy* (Ithaca: Cornell University Press, 2006)

Boucheron, Patrick, 'Water and power in Milan, c. 1200-1500', *Urban History*, 28 (2000), 180-193

Bourdieu, Pierre, *Opstellen over smaak, habitus en het veldbegrip*, ed. by Dick Pels and trans. by Rokus Hofstede (Amsterdam: Van Gennep, 1989)

Bourdieu, Pierre, *Outline of a Theory of Practice* (Cambridge: Cambridge University Press, 1977)

Catto, Jeremy, 'Andrew Horn (c.1275–1328)', in *Oxford Dictionary of National Biography* (Oxford: Oxford University Press, 2004) [<http://www.oxforddnb.com/view/article/13780>, accessed 23 July 2017]

Carruthers, Mary, *Craft of Thought: Meditation, Rhetoric, and the Making of Images, 400-1200* (Cambridge: Cambridge University Press, 1998)

Ciecieznski, N.J., 'The Stench of Disease: Public Health and the Environment in Late-Medieval English Towns and Cities', *Health, Culture and Society*, 4 (2013), 92-104

Classen, Carl Joachim, *Die Stadt im Spiegel der 'Descriptiones' und 'Laudes Urbium' in der antiken und mittelalterlichen Literatur bis zum Ende des zwölften Jahrhunderts* (Hildesheim and New York: Olms, 1980)

Cohn, Samuel Kline, *Cultures of Plague: Medical Thinking at the End of the Renaissance* (Oxford: Oxford University Press, 2010)

Coomans, Janna, and Geltner, G., 'On the Street and in the Bathhouse: Medieval Galenism in Action?', *Añuario de Estudios Medievales*, 43 (2013), 53-82

Coudert, Allison P., 'Sewers, Cesspools, and Privies: Waste as Reality and Metaphor in Pre-Modern European Cities', in *Urban Space in the Middle Ages and the Early Modern Age*, ed. by Albrecht Classen (Berlin: Walter de Gruyter, 2009), pp. 713-734

Crouch, David, 'When was Chivalry', in *Chivalric Identity in the Middle Ages*, ed. by D. Crouch and J. Deploige (Leuven: Mediaevalia Lovaniensia, 2018), forthcoming

Demaitre, Luke, *Medieval Medicine: The Art of Healing, from Head to Toe* (Santa Barbara: Praeger, 2013)

Van Dijk, 'Soap is the Onset of Civilization', in *Cleanliness and Culture: Indonesian Histories*, ed. by C. van Dijk and G. Gelman Taylor (Leiden: KITLV Press, 2011), pp. 1-39

Douglas, Mary, *Natural Symbols* (Hoboken: Taylor and Francis, 2002)

Epstein, Steven A., *Purity Lost: Transgressing Boundaries in the Eastern Mediterranean, 1000-1400* (Baltimore: Johns Hopkins University Press, 2007)

Fasoli, Gina, 'La coscienza civica nelle *Laudes civitatum*', in *La coscienza cittadina nei comuni italiani del Duecento* (Todi: Accademia Tedertina, 1972), pp. 9-44

Foucault, Michel, 'The Political Function of the Intellectual', *Radical Philosophy*, 17 (1977), 126-133

Frugoni, Chiara Settis, *Distant City: Images of Urban Experience in the Medieval World* (Princeton: Princeton University Press, 1991)

García-Ballester, Luis, 'On the Origins of the Six Non-Natural Things in Galen', in *Galen und das hellenistische Erbe: Verhandlungen des IV. Internationalen Galen-Symposiums veranstaltet vom Institut für Geschichte der Medizin am Bereich Medizin (Charité) der Humboldt-Universität zu Berlin 18.-20. September 1989*, ed. by J. Kollesch and D. Nickel (Stuttgart: Franz Steiner Verlag, 1993), pp. 105-115

Geltner, G., 'Public Health and the Pre-Modern City: A Research Agenda', *History Compass*, 10 (2012), 231-245

Geltner, G., 'Healthscaping a Medieval City: The *Curia viarum* of Lucca and the Future of Public Health History', *Urban History*, 40 (2013), 395-415

Geltner, G., 'Finding Matter out of Place: Bologna's 'Dirt' (Fango) Officials in the History of Premodern Public Health', in *The Far-Sighted Gaze of Capital Cities: Essays in Honor of Francesca Bocchi*, ed. by Rosa Smurra and others (Rome: Viella, 2014), pp. 307-321

Gillingham, John, 'From Civilitas to Civility: Codes of Manners in Medieval and Early Modern England', *Transactions of the Royal Historical Society*, 12 (2002), 267-289

Hankins, James, *Plato in the Italian Renaissance*, 2 vols. (Leiden: Brill, 1990)

Henderson, John, 'Public Health, Pollution and the Problem of Waste Disposal in Early Modern Tuscany', in *Le interazioni fra economia e ambiente biologico nell'Europa preindustriale secc. XIII-XVIII*, ed. by Simonetta Cavaciocchi (Florence: Florence University Press, 2010), pp. 373-382

Hyde, J.K., 'Medieval Descriptions of Cities', *Bulletin of the John Rylands Library*, 48 (1966), 308-340

Inglis, Erik, 'Gothic Architecture and a Scholastic: Jean de Jandun's *Tractatus de laudibus Parisius* (1323)', *Gesta*, 42 (2003), 63-85

Isenmann, Eberhard, 'The Notion of the Common Good, the Concept of Politics, and Practical Policies in Late Medieval and Early Modern German Cities', in *De Bono Communi: The Discourse and Practice of the Common Good in the European City (13th-16th C.)*, ed. by Elodie Lecuppre-Desjardin and Anne-Laure Van Bruaene (Turnhout: Brepols, 2010), pp. 107-148

Jaeger, C. Stephen, *The Origins of Courtliness: Civilizing Trends and the Formation of Courtly Ideals, 923-1210* (Philadelphia: University of Pennsylvania Press, 1985)

Jones, Peter Murray, 'Music in the Later Middle Ages: The Case of Hugo van der Goes', in *Music as Medicine: The History of Music Therapy since Antiquity*, ed. by Peregrine Horden (Farnham: Ashgate, 2000), pp. 120-144

Jørgensen, Dolly, 'Cooperative Sanitation: Managing Streets and Gutters in Late Medieval England and Scandinavia', *Technology and Culture*, 49 (2008), 547-567

Jørgensen, Dolly, "'All good rule of the citee": Sanitation and Civic Government in England, 1400-1600', *Journal of Urban History*, 36 (2010), 300-315

Jørgenson, Dolly, 'Local Government Responses to Urban River Pollution in Late Medieval England', *Water History*, 2 (2010), 35-52

Jørgensen, Dolly, 'Modernity and Medieval Muck', *Nature and Culture*, 3 (2014), 225-237

Kaye, Joel, *A History of Balance 1250-1375: The Emergence of a New Model of Equilibrium and its Impact on Thought* (Cambridge: Cambridge University Press, 2014)

Keene, Derek, 'Issues of Water in Medieval London to c. 1300', *Urban History*, 28 (2001), 161-179

Keene, Derek, 'The Medieval Urban Environment in Documentary Records', *Archives*, 16 (1983), 137-144

Kotkas, Toomas, *Royal Police Ordinances in Early Modern Sweden* (Leiden: Brill, 2014)

Kucher, Michael P., 'The Use of Water and its Regulation in Medieval Siena', *Journal of Urban History*, 31 (2005), 504-536

Kucher, Michael P., *The Water Supply System of Siena, Italy: The Medieval Roots of the Modern Networked City* (London and New York: Routledge, 2005)

Kwakman, Carla, 'Slijkburgers in Utrecht', *Madoc: Tijdschrift over de Middeleeuwen*, 19 (2005), 167-174

Magnusson, Roberta J., 'Medieval Urban Environmental History', *History Compass*, 11 (2013), 189-200

Magnusson, Roberta J., *Water Technology in the Middle Ages: Cities, Monasteries, and Waterworks after the Roman Empire* (Baltimore and London: Johns Hopkins University Press, 2003)

McVaugh, Michael R., *Medicine before the Plague: Practitioners and their Patients in the Crown of Aragon, 1285-1345* (Cambridge: Cambridge University Press, 1993)

Mikkeli, Heikki, *Hygiene in the Early Modern Medical Tradition* (Helsinki: Academia Scientiarum Fennica, 1999)

Nederman, Cary J., 'Nature, Ethics, and the Doctrine of "Habitus": Aristotelian Moral Psychology in the Twelfth-Century', *Traditio*, 45 (1989-90), 87-110

Nicoud, Marilyn, *Les régimes de santé au Moyen Âge: Naissance et diffusion d'une écriture médicale, XIIIe-XVe siècle*, 2 vols. (Rome: École française de Rome, 2007)

Rather, L.J., 'The Six Things Non-Natural: A Note on the Origins and Fate of a Doctrine and a Phrase', *Clio Medica*, 3 (1968), 337-347

Rawcliffe, Carole, '"Delectable Sights and Fragrant Smelles": Gardens and Health in Late Medieval and Early Modern England', *Garden History*, 36 (2008), 3-21

Rawcliffe, Carole, 'Sources for the Study of Public Health in the Medieval City', in *Understanding Medieval Primary Sources*, ed. by Joel T. Rosenthal (London and New York: Routledge, 2012), pp. 177-195

Rawcliffe, Carole, *Urban Bodies: Communal Health in Late Medieval English Towns and Cities* (Woodbridge: Boydell, 2013)

Rothausen, Britt C.L., 'A Reurer ... Brighter þen boþe the Sunne and Mone: The Use of Water in the Medieval Consideration of Urban Space', in *Urban Space in the Middle Ages and the Early Modern Age*, ed. by Albrecht Classen (Berlin: Walter de Gruyter, 2009), pp. 245-272

Ruth, Jeffrey S., *Urban Honor in Spain: The Laus Urbis from Antiquity Through Humanism* (Lewiston: Edwin Mellen Press, 2011)

Sabine, Ernest, L., 'City Cleaning in Mediaeval London', *Speculum*, 12 (1937), 19-43

Sauer, Michelle M., 'The Function of Material and Spiritual Roads in the English Eremitic Tradition', in *Roadworks: Medieval Britain, Medieval Roads*, ed. by Valerie Allen and Ruth Evans (Manchester: Manchester University Press, 2016), pp. 201-224

Scattergood, John, 'Misrepresenting the City: Genre, Intertextuality, and William Fitz Stephen's Description of London (c. 1173)', in *London and Europe in the Later Middle Ages*, ed. by Julia Boffey and Pamela King (London: Centre for Medieval and Renaissance Studies, Queen Mary and Westfield College, University of London, 1995), pp. 1-34

Schmidt, Hans-Joachim, '*Societas Christiana in civitate*: Städtekritik und Städtelob im 12. und 13. Jahrhundert', *Historische Zeitschrift*, 257 (1993), 297-354

Seigel, Jerrold, 'Civic Humanism or Ciceronian Rhetoric?', *Past & Present*, 34 (1966), 3-48

Shaw, Diane, 'The Construction of the Private in Medieval London', *Journal of Medieval and Early Modern Studies*, 26 (1996), 447-466

Squatriti, Paolo, *Water and Society in Early Medieval Italy, AD 400-1000* (Cambridge: Cambridge University Press, 1998)

Terpstra, Nicholas, *Religious Refugees in the Early Modern World: An Alternative History of the Reformation* (Cambridge: Cambridge University Press, 2015)

Thorndike, Lynn, 'Sanitation, Baths, and Street-Cleaning in the Middle Ages and Renaissance', *Speculum*, 3 (1928), 192-203

Tolan, John Victor, *Peter Alfonsi and his Medieval Readers* (Gainesville: University of Florida Press, 1993)

Trexler, Richard C., 'Measures against Water Pollution in Fifteenth-Century Florence', *Viator*, 5 (1974), 455-467

Turning, Patricia, *Municipal Officials, their Public, and the Negotiation of Justice in Medieval Languedoc: Fear Not the Madness of the Raging Mob* (Leiden: Brill, 2012)

Siraisi, Nancy G., *Medieval and Early Renaissance Medicine: An Introduction to Knowledge and Practice* (Chicago: Chicago University Press, 1990)

Vigarelo, Georges, *Concepts of Cleanliness: Changing Attitudes in France since the Middle Ages* (Cambridge: Cambridge University Press, 1988)

Weeda, Claire, 'Reviewing Conduct Books: Galenic Medicine and the "Civilizing Process" in Western European Households c. 1100-1300', in *The Great Household, 1000-1500: Proceedings of the 2016 Harlaxton Symposium*, ed. by C.M. Woolgar (Woodbridge: Boydell, 2018), pp. 167-184

Whelan, Fiona, *The Making of Manners and Morals in Twelfth-Century England: The Book of the Civilised Man* (Abingdon: Routledge, 2017)

Woolgar, C.M., *The Senses in Late Medieval England* (New Haven: Yale University Press, 2006)

Zanna, Paolo, “‘Descriptiones urbium’ and Elegy in Latin and Vernaculars in the Early Middle Ages’, *Studi Medievali*, 32 (1991), 523-596

Zotz, Thomas, ‘Urbanitas in der Kultur des westlichen Mittelalters: Höfische Wertvorstellung im Umfeld von *elegantia morum* und *elegantia corporis*’, *Frühmittelalterliche Studien*, 45 (2011), 295-308

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CHAPTER TWO

The View from the Streets: The Records of Hundred and Leet Courts as a Source for Sanitary Policing in Late Medieval English Towns¹

Carole Rawcliffe

Abstract

Late medieval English leet court records are an underused resource for the study of public health. Yet, as this chapter reveals, they offer a remarkable, often unique, insight into ‘grassroots’ responses to insanitary nuisances and the enforcement at neighbourhood level of regulations concerning the urban environment. These courts functioned at the very bottom of the judicial hierarchy, serving as a useful vehicle for the implementation of bylaws and similar directives, as well as the dissemination of whatever basic information (such as the need to avoid contaminated air during epidemics) the ruling elite wanted ‘ordinary’ people to have. In turn, they gave local communities an opportunity to complain about hazards that required official action and to protest should the response prove inadequate.

Key words: communities; environmental/public health; leet courts; medieval England; urban nuisances

During the early 1870s, the distinguished medievalist H.T. Riley compiled a report on the municipal archives of Hythe in Kent. With his customary eye for detail, he drew attention to the many health hazards investigated by the local hundred court, including the noxious ‘hoggisty’ (pigsty) kept in 1422 by one Stephen Sare, ‘which smells very badly and is abominable to all men coming to market, as well as to all dwelling in the town’.² The proceedings of a session held on 14 January 1409 revealed such a plethora of sanitary offences (mostly to do with the dumping of dung and rubbish ‘to the public nuisance’ in roads, wells, and waterways) that Riley could barely contain his disgust. Even the ‘few

¹ I am most grateful to Ms Susan Maddock for her generosity in making available to me her transcripts of the King’s Lynn leet rolls cited here and for sharing her expertise on the late medieval port.

² *The Royal Commission on Historical Manuscripts: Fourth Report*, p. 432.

extracts' which he presented to his readers revealed 'a state of such utter filth and squalor that we are not at all surprised to learn [...] that the place was devastated by pestilence'.³

Few of today's historians of premodern medicine would share Riley's Victorian sensibilities, or his 'Whiggish' assessment of medieval attempts at environmental improvement. They might, indeed, be more inclined to regard such evidence as proof that the inhabitants were doing their best, in difficult circumstances, to contain the sort of behaviour that was believed to cause epidemic disease.⁴ But his report remains of continuing interest, not least because he was one of the first – and still remains one of the very few – scholars to recognize the importance of hundred and leet court records as a source for the study of late medieval public health in general and of the policing of sanitary offences in particular.⁵ This ongoing state of neglect seems all the more surprising because the very same material has long been a staple of research by economic, social, and legal historians into a wide range of topics, including trends in population, gender relations, petty crime, and local office-holding, as well as the regulation of crafts, trades, markets, and prices.⁶ In her classic study of the control of misbehaviour in England between 1370 and 1600, for example, Marjorie McIntosh refers in passing to the 'intriguing' juxtaposition of cases involving disorderly conduct and breaches of sanitary regulations in the records of 'lesser public courts'. Her suggestion that 'jurors felt a connection between good social order and public cleanliness' is not, however, developed further, while her exploration of misconduct stops short at activities that appeared to spread pollution or disease.⁷

Drawing upon a sample of the profuse documentation available in English regional archives, the following discussion seeks to redress the balance by focussing upon the environmental concerns of these 'lesser' courts in a number of late medieval English towns

³ *The Royal Commission on Historical Manuscripts: Fourth Report*, p. 431.

⁴ See, for example, Geltner, 'Public Health and the Pre-Modern City'.

⁵ More use has been made of this type of evidence by historians of the early modern period, as, for example, Skelton, 'Beadles, Dunghills and Noisome Excrements'. Some of these authors, who tend to ignore historical beliefs about the transmission of disease, can, however, seem both patronizing and anachronistic. Thus, King, 'How High is Too High?', p. 454, concludes that, because the residents 'had no concept of germs', they must have been 'less concerned about odors and being odor free' than was actually the case in a society preoccupied with the risks posed by miasmatic air.

⁶ Many of the remarks made by King, 'Untapped Resource for Social Historians', pp. 699-705, hold good for the medieval as well as the early modern period.

⁷ McIntosh, *Controlling Misbehavior*, p. 68.

and cities. In particular, it examines the extent to which the presentments made by local juries can legitimately be said to reflect a popular or ‘grass-roots’ preoccupation with communal health, rather than one simply imposed from above. Despite some persuasive evidence of collective assertiveness in the face of official inertia, the jurymen who complained about perceived nuisances seem, nonetheless, to have been constrained by the limited range of penalties and punishments at the courts’ disposal. The second part of this chapter explores the various ways in which they could tackle problems and deter offenders in a judicial context, and in so doing attempts to establish their effectiveness – as well as revealing their apparent shortcomings – as agents of sanitary policing. It will be useful to begin with a brief account of the early development of hundred and leet courts in order to understand why their proceedings can so vividly illuminate the view from the street, which has largely been ignored by medical historians in favour of the far more familiar perspective from the municipal council chamber, the royal household, and the university.⁸

I should stress at the outset that many other late medieval English law courts were actively involved in matters of public health, as well as the prosecution of environmental offences. In response to petitions from aggrieved groups or individuals (and sometimes even the monarch himself), Parliament, the highest court in the land, passed statutes designed to eliminate dangerous activities, such as the pollution of rivers with noxious waste, while making sporadic attempts to improve hospital provision and standards of professional training for physicians and surgeons.⁹ On the ground that their lives were being threatened by insanitary nuisances, a few affluent litigants sought redress in the King’s Bench, England’s premier common law court, which customarily dealt with cases of treason, riot, and violence against the person. During the plague epidemic of 1450, for example, one irate suburban householder successfully sued five London butchers for dumping dung, offal, and other offensive matter in his garden, with the result that he and his servants had succumbed to various potentially fatal diseases spread by foul air.¹⁰ The victims of such reckless behaviour did not, however, need to travel to Westminster in search of redress. Across the country,

⁸ For an attempt to recover ‘the popular voice’ regarding the intersection between public and private space, see Rees Jones, ‘The Word on the Street’.

⁹ Rawcliffe, *Urban Bodies*, pp. 37, 40, 131-132, 148, 173, 192, 201, 210 note 152, 221, 294-295, 297-298, 336-337, 350-351.

¹⁰ The National Archives, Kew, KB 27/758, rot. 51r. See also Rawcliffe, *Urban Bodies*, pp. 194-195, for a similar case in the court of common pleas.

‘superior’ urban courts presided over by magistrates and seigneurial officials routinely sought to promote communal welfare and safety.¹¹ But although these bodies often acted upon complaints received from below, their records rarely furnish the insight into *collective* attitudes and responses that may be gained from a detailed study of the ‘lesser’ courts which involved ordinary people more directly. The reasons for this level of popular engagement can be traced back centuries, in some instances to before the Norman Conquest.

The growth of jurisdiction

From as early as the tenth century the population of some parts of England had been divided into small groups called tithings, which notionally comprised ten families and/or unattached men, making it easier to collect taxes and ensure that troublemakers obeyed the law. Tithings were, in turn, subsumed into the larger administrative and geographical unit of the hundred, either under the direct jurisdiction of the crown or of some prominent local landowner. Alarmed by the threat of civil disobedience from a conquered people, the Normans applied a ‘strong organizing hand’ to this system, insisting that *all* males aged over fourteen who were not in holy orders or of high status should be enrolled in tithings. Each member of the group could thus be obliged to stand surety for the good behaviour of his fellows.¹² The county sheriff or some other appropriate authority, such as an alderman or bailiff, was made responsible for holding annual or bi-annual inspections, called views of frankpledge, in order to ensure that everyone had complied with this ruling, and that the members of each tithing had elected one of their number to represent them.¹³ Known as ‘head boroughs’ or ‘capital pledges’, these spokesmen were supposed to be solvent and reputable (‘sufficient and of good conversation’), in part because the authorities increasingly relied upon them to report a wide variety of offences and offenders in the community at large.¹⁴ Anyone in breach of these orders, or who failed to appear in court, would be fined.

¹¹ Hudson, *The Oxford History of the Laws of England II*, pp. 818-832; Baker, *The Oxford History of the Laws of England VI*, pp. 303-314. For a discussion of London’s many courts, see Barron, *London in the Later Middle Ages*, Chapter six.

¹² Morris, *The Frankpledge System*, pp. 15-19, 31; Harding, *The Law Courts of Medieval England*, p. 34; Baker, *An Introduction to English Legal History*, p. 6.

¹³ Morris, *The Frankpledge System*, pp. 69-85.

¹⁴ *The Oath Book of Colchester*, ed. Benham, p. iii. See Sagui, ‘A Prosopography of the Capital Pledges of Medieval Norwich’, for a detailed study of the role and status of these men.

Hundred courts, which already met at regular intervals, were ideally placed to enforce the legislation regarding frankpledge; and, although their jurisdiction has been described as quintessentially rural, a few, such as that already encountered at Hythe, are to be found in late medieval English towns.¹⁵ During the reign of Richard I (1189-1198), for instance, the bailiffs of Colchester acquired the right to hold two ‘law hundreds’ every year which dealt with matters of policing, as well as the customary view of frankpledge.¹⁶ Elsewhere, however, a wide and potentially confusing variety of local courts, including ‘hall moots’, ‘ward moots’, ‘hustings’, and ‘day holdings’, began to assume these and other powers, especially in an urban context. Best-known today, the generic term ‘leet’ is in some respects a convenient anachronism. Although it is now employed by historians (and has been used here) to denote a certain *type* of court with a specific *range* of jurisdictions, it did not spread much beyond East Anglia until the later Middle Ages.¹⁷

Whatever they were called, these assemblies, which demanded the active participation of masters and servants, day labourers and freemen, hucksters and artisans, householders and paupers, constituted an ideal forum for the transaction of a wide range of additional legal and commercial business. The inspection of weights and measures, which were standardized by the crown, and the implementation of the assizes of bread and ale, England’s two dietary staples whose production and sale were also closely monitored, soon became a routine part of proceedings.¹⁸ As towns and cities began to acquire the right to hold their own views and leets, they developed into what Sarah Rees Jones has called ‘the bedrock of civic administration’, largely because they provided the most representative and responsive bodies through which a community could be governed.¹⁹

For it was here that local bylaws, as well as some national legislation, could best be publicized, explained, debated, and enforced, and that miscreants, including those who endangered the health of their neighbours, could be brought to book. A record of the leet

¹⁵ Morris, *The Frankpledge System*, p. 115; Baker, *An Introduction to English Legal History*, p. 7.

¹⁶ Britnell, ‘Colchester Courts’, p. 133.

¹⁷ Hearnshaw, *Leet Jurisdiction in England*, pp. 11-15. Pollock and Maitland traced the origin of the word ‘leet’ to East Anglia, arguing that it gradually became ‘a common name’ for any court which exercised the view of frankpledge, while also serving as ‘a police court [...] for the presentation of offences and the punishment of offences that fell short of felony’: *The History of English Law*, I, p. 580.

¹⁸ Rawcliffe, *Urban Bodies*, pp. 271-277.

¹⁹ Rees Jones, ‘Household, Work and the Problem of Mobile Labour’, pp. 140-141. Morris, *The Frankpledge System*, p. 69, asserts that these courts shaped the social and political environment ‘of the man of humble rank’.

court held by the prior of Coventry as lord of the borough in the autumn of 1278 furnishes a striking example of this process, and of the importance accorded to sanitary regulations in English towns during the century before the Black Death. All but two of the 24 measures promulgated at this time related either to environmental issues (such as the pollution of the water supply by dyers' waste) or food standards, which had just three years before been the subject of a comprehensive set of directives, or *composicio*, issued by Edward I.²⁰ I have noted elsewhere how rapidly the leet courts of medieval Norwich put this royal mandate into action by indicting a large number of cooks, butchers, and other victuallers for selling unwholesome food.²¹ We do not know if prosecutions also followed in Coventry, but the authorities did reiterate Edward's prohibition of the sale of contaminated meat and of the flesh of animals that had been found dead.

The role of the jury

By this date, English leet courts - or their equivalents - had developed an effective mechanism for reporting and prosecuting offences, which was done by means of juries comprising twelve or more of the recently-elected capital pledges.²² The latter acted as informants, whose primary task was to supply evidence rather than to determine the guilt or innocence of those charged. We know the names of 163 of the individuals who appeared as jurors in Norwich's eleven leet courts in 1287 and 1288, there being a considerable degree of continuity from one session to the next, and thus a steady accumulation of collective knowledge and experience.²³ Detailed research recently conducted on the jurors of one of these leets (Mancroft) between 1288 and 1313 confirms that long-term service, in this case for an average of seven years, was, indeed, the norm.²⁴ Why did people accept such

²⁰ *The Early Records of Medieval Coventry*, ed. Coss, pp. xxi, 41-42. Fourteen regulations concerned the price, quality, and weight of bread, ale, and grain sold in the town; three the quality of meat supplied by butchers; two the pollution of water sources; and one the proliferation of dung heaps. A further two, designed to protect the poor from escalating food prices, forbade the resale of certain commodities by hucksters or middlemen.

²¹ Rawcliffe, *Urban Bodies*, pp. 235-236.

²² Morris maintained that the leet court evolved specifically to deal with this type of business: *The Frankpledge System*, p. 132.

²³ *Leet Jurisdiction in the City of Norwich*, ed. Hudson, pp. xxix, xlv-vi.

²⁴ Sagui, 'A Prosopography of the Capital Pledges of Medieval Norwich', pp. 102, 107-109. A reasonable turnover of jurors was, however, deemed necessary to avoid the creation of 'an unacceptably small oligarchic clique': DeWindt, 'Local Government in a Small Town', pp. 637-641.

potentially burdensome obligations and risk incurring the animosity of their neighbours? Writing specifically of jurors who served in criminal courts, Sara M. Butler has drawn attention to the strong sense of communal responsibility that prompted many to seek election. Far from regarding their duties as ‘oppressive’, they relished the opportunity to assert personal authority and ‘to identify exactly what constituted offensive behaviour’.²⁵ The same considerations almost certainly obtained at the lower level of the leet, as did a basic grasp of current medical theory, which was already apparent before the Black Death, and which from then onwards reflected a growing awareness of the potentially fatal impact of corrupt air and contaminated water as vectors of pestilence. It is interesting to note, for example, that in the aftermath of the 1361 plague epidemic Colchester jurors began to complain specifically about the dangerous stench (as well as the general nuisance) caused by blocked ditches, contaminated foodstuffs, and dead animals.²⁶ Likewise, by the 1390s presentations demanding the removal of suspect lepers from Yarmouth refer not only to the foetid air emanating from their bodies but to the wider risk of infection that they posed.²⁷

To facilitate matters, a list of ‘articles’, or specific items for inquiry, would be read aloud to juries in English well in advance of every leet court so that they knew exactly what was expected of them. Even quite small places, such as Wakefield in Yorkshire, made much of this procedure. Significantly in the present context, the jurors who had been elected there in 1437 complained that they could not meet at the usual place ‘to enquire into the articles of the town’ because of ‘the great nuisance’ caused by ‘the smell and muck’ from the pigs accommodated nearby.²⁸ As levels of lay literacy rose, it became increasingly common to compile these lists in the vernacular. Colchester’s first surviving set, drawn up in 1375, was in Latin, whereas English was employed for the second, which dates from about 1450 and also includes a copy of the oath to be sworn by all the jurors.²⁹ Surviving articles from King’s Lynn (c. 1460) and Yarmouth (c. 1491) are also in English.³⁰ Each of these documents is

²⁵ Butler, *Forensic Medicine*, pp. 77-80.

²⁶ *Court Rolls of the Borough of Colchester*, ed. Jeayes, II, p. 150. For the medical background to these ideas, see pp. 18-23 above.

²⁷ Rawcliffe, *Urban Bodies*, pp. 123-124.

²⁸ *The Court Rolls of the Manor of Wakefield*, ed. Barber, p. 63.

²⁹ *The Oath Book of Colchester*, ed. Benham, pp. 2-4, 221-223.

³⁰ Norfolk Record Office [hereafter NRO], NCR, 5C/10; Y/C18/1, Yarmouth Book of Oaths and Ordinances, fols. 16v-17r.

notable for the emphasis placed on matters relating to public health, the capital pledges of Lynn, for instance, being made to promise:

[...] if ther be ony man with in this toun that makith ony dungehill in the stretes of this toun, or lay ony [...] thyng that is corupt in the stretes, or vse or susteyne custumably ony foule goters in the stretes of this toun, stathe [landing stage] or in other open place, ye shall present his name that so doth and how longe he hath vsed so to do, *et cetera*.

Also of alle bochers with in this towne that selle ony vnholosome flesshe, as mesell flesshe, raumes flesshe, bulles flesshe vnbaited, roten moten, blowen flesshe,³¹ in deceite of the kynges people, and of alle bochers that slen [slaughter] ony bestes in the stretes or defoulen the stretes or the watirgates of this toun with blode, bones or entrailes of bestes to the noisance of the communes, *et cetera*.³²

Also of all cokes of the toun whiche selle flesshe, fissue and other vitailles over dere [over-priced] against th'assise, or selle ony vitaille, flesshe or fissue ij tymes soden [boiled], or ij tymes baken, or chafed [warmed up] agayn,³³ or ony vitaille vnholosome for man is bodie in deceit of the kynges people.³⁴

The problems deemed ripe for attention could of course vary over time. While demonstrating similar concerns about the town's butchers, a list of orders (rather than articles) promulgated at the start of the century by at least one of the Lynn leets focussed upon the illicit sale of fish by innkeepers and fishmongers who traded in private away from the scrutiny of the market. A ruling that pigs were to be kept securely under confinement, except on Saturday afternoons when their sties had to be cleaned, suggests that too many had been found at large or left to wallow in filth. It is interesting to note that dairy-women, who rarely feature in documents of this kind, were then warned to sell only 'gode mylke and swete and gode creme and swete, as it comethe from the cow, nought combeyd [mixed] ne thikked with flour, ne clayed with water in desseyt of the

³¹ That is 'unwholesome flesh, leprous flesh, the flesh of rams and bulls that have not first been baited, rotten mutton, flesh that has been inflated in order to appear sound', for all of which see Rawcliffe, *Urban Bodies*, pp. 241-246.

³² Such concerns were longstanding. In 1422, for example, eighteen butchers were presented for killing animals in the streets and 34 for fouling the water-gates with offal: King's Lynn Borough Archives [hereafter KLBA], KL/C 17/13 (re-dated by Maddock from the late-fourteenth century).

³³ For the health problems posed by 'fast food' see Rawcliffe, *Urban Bodies*, pp. 246-250.

³⁴ NRO, NCR, 5C/10.

puple', quite possibly because of a recent scandal involving the adulteration of local supplies.³⁵

Not surprisingly, a significant proportion of the misdemeanours and nuisances to be investigated in late medieval London related to such threats to life and limb as unsafe buildings and other items of civic infrastructure, fire hazards, substandard food, environmental pollutants, including wandering pigs and lepers, and the deposit of filth in streets and gutters. Allowing for pressing topical issues, this comprehensive agenda changed very little, although the aldermen who presided over the capital's 24 separate ward moots (rising to 25 in 1394) were empowered to investigate any other matters that seemed important, and, if necessary, to hold more than the customary four meetings that took place every year during the fourteenth century. (This minimum requirement was subsequently reduced to one annual gathering, with the proviso that more might be summoned on an *ad hoc* basis if necessary.)³⁶ The mayor himself would sometimes intervene, as in December 1343, when he warned every alderman 'to make careful enquiry of all the articles of the ward moot' and specifically to ensure that the 'streets were properly kept and rubbish and dung removed, under pain of imprisonment for sergeants of the ward'.³⁷

Evidence of this kind is less common outside London, but local juries were clearly expected to respond to immediate anxieties, as well as to the persistent nuisances traditionally prohibited by borough custom. In 1426, for example, the capital pledges of Lynn made an unprecedented number of presentments regarding the pollution and blockage of the port's tidal fleets, no fewer than 22 householders along just one of these watercourses being fined for dumping 'abominable and foetid matter' there, with the result that 'the air had become corrupt and people had fallen sick'.³⁸ A plague epidemic had been reported further down the coast in Yarmouth, which would in part explain such vigilance, but the principal reason for this environmental campaign can be found nearer home. Two years previously the authorities had begun investing in costly public works designed to improve the local water supply and

³⁵ *The Making of King's Lynn*, ed. Owen, p. 422.

³⁶ Barron, 'Lay Solidarities', pp. 218-234, especially pp. 220-224. Rexroth, *Deviance and Power*, pp. 191-222, examines the role of London ward moots in the context of attempts to police an 'underworld' of social undesirables, assigning far less agency to the jurors, whom he regards as deferential instruments of civic authority.

³⁷ *Calendar of Plea and Memoranda Rolls of the City of London, 1323-64*, ed. Thomas, p. 156.

³⁸ KLBA, KL/C 17/19, m. 6; Maddock, 'Neighbours, Nuisances and Night-Walkers'.

were anxious to prevent any part of the network from becoming clogged with filth. Fears that seawater would overflow from blocked fleets and contaminate the ditches carrying ‘sweet’ water led to the introduction of draconian penalties for negligence, which the leet courts, as primary agents for neighbourhood policing, were best placed to report.³⁹ Similarly, from 1498 onwards, when the residents of Durham became liable to heavy fines of up to 20s. if they received visitors from places where pestilence had already broken out, the responsibility for identifying and prosecuting offenders fell to the leet courts.⁴⁰

The voice from below

Once equipped with their instructions, the jurors would be dispatched to take soundings in the community and return with a full list of complaints or presentments, which were supposed to represent ‘the common verdict of the whole body’.⁴¹ Negligence or favouritism leading to the concealment of evidence would incur a collective fine. The presentments would then be read in full court and recorded, usually in a highly truncated Latin format, along with a brief note of whatever measures seemed necessary to punish or otherwise secure the compliance of convicted offenders. It might be assumed from what we have learned so far that jurors enjoyed comparatively little freedom of action, but this was far from the case. As A.H. Thomas, who edited some of the London presentments, observed, they ‘felt themselves free to complain of many more inconveniences and defects than mentioned in the articles’, and frequently drew attention to the fact that longstanding grievances had not been redressed, despite repeated protests.⁴²

A presentment of 1423 from the ward of Farringdon Without, which lay beyond the city walls and was thus rather more prone to environmental problems than those at the centre, clearly reflects the exasperation felt by many residents:

The comune prive [privy] of Ludgate is ful defectif and perlus and the ordur ther-of rotith the stone wallys and makith other while a horrible stench and a foul sight, to grete desese and nusans of all folk therabout dwellyng and therby passing, and a

³⁹ Rawcliffe, *Urban Bodies*, pp. 182-183.

⁴⁰ Bonney, *Lordship and the Urban Community*, pp. 223-224; Rawcliffe, *Urban Bodies*, p. 107; *Records of the Borough of Crossgate*, ed. Britnell, no. 140.

⁴¹ *Leet Jurisdiction in the City of Norwich*, ed. Hudson, p. xxix.

⁴² *Calendar of Plea and Memoranda Rolls of the City of London, 1413-1437*, ed. Thomas, p. xxvii.

desclaunder to all this Citee, that so foul a nusans shuld be so nygh so comune an
hy wey, *and oft it hath be presentyd and no remedye yit is ordeined* [my italics].⁴³

Their irritation may in part have been due to the fact that, unusually, London ward moots did not fine or otherwise penalize offenders on the spot, but left the alderman and his officers to deal with a list of agreed ‘action points’ in consultation with the mayor. Indeed, the jurors of Colman Street ward then indicted no less a figure than the city chamberlain for failing to pay a raker to cleanse the grates at Lothbury and London Wall, which had become ‘evilly and horribly stopped up with mud and ordure to the great nuisance of the whole ward’, and urged that he should employ a second labourer to keep the common ditch free of filth.⁴⁴ Deposits of manure had meanwhile been causing ‘a right greuous nuysance wich hath longe contynued’ in the Smithfield area on the western margins of the city (near the cattle market). Having wearily reminded the authorities that their annual petitions had been ignored for sixteen years, the residents attempted to shame them into action by invoking the ‘reuerence of God’, the ‘saluacion of the kyngis pepul’, *and* the ‘wrshipe of the Citee’.⁴⁵ It is unfortunate that the only surviving run of these late medieval ward moot presentations, which covers most, but not all, of the years between 1465 and 1483, derives from Portsoken, another extra mural ward noted for its heavy industrial activities, and, moreover, the only one whose alderman served *ex officio* rather than being elected. The persistence of some environmental offences in the face of constant reminders was probably unrepresentative of London as a whole, or at least of those areas frequented by the elite. It is hard to imagine that the city chamber (which was regularly indicted by the Portsoken jurors for failing to repair pavements and to remove a noxious dung heap) would have ignored such problems in Cheapside.⁴⁶

Londoners were extremely well informed about the health hazards in their midst and the measures that should have been taken to eradicate them, partly because the relevant

⁴³ *A Book of London English*, ed. Chambers and Daunt, pp. 134-135. *Calendar of Plea and Memoranda Rolls of the City of London, 1413-1437*, ed. Thomas, p. 157.

⁴⁴ *Calendar of Plea and Memoranda Rolls of the City of London, 1413-1437*, ed. Thomas, p. 158. Full lists of presentments survive only for 1422 and 1423, having been copied into the plea and memoranda rolls of the city: *ibid.*, pp. 115-141, 150; *A Book of London English*, ed. Chambers and Daunt, pp. 121-136.

⁴⁵ *A Book of London English*, ed. Chambers and Daunt, p. 123.

⁴⁶ Winter, ‘The Portsoken Presentments’. I am grateful to Professor Peregrine Horden for drawing my attention to this article. As early as 1373, jurors in Portsoken ward had complained that the carters employed to remove dung from other parts of the city to designated pits were dumping it in their streets to save trouble: *Calendar of Plea and Memoranda Rolls of the City of London, 1364-1381*, ed. Thomas, p. 156.

ordinances had to be proclaimed through the streets every year just after Michaelmas (*deivent chescun an apres le Sein Michele estre cries par mi la dite cite*).⁴⁷ This, in turn, gave rise to ‘a dynamism in the articulation of popular opinion at neighbourhood level’ and a shared sense of the common good that have generally been underestimated by historians.⁴⁸ But leet juries throughout England, not just in the capital, proved more than ready to criticize official shortcomings. In the small borough of Basingstoke, for example, the bailiffs were harshly reprimanded and fined 3s. 4d. in 1511 for their failure to remove piles of filth from the market place, and then bound over in sureties of twice this amount to address the problem forthwith.⁴⁹ Not long afterwards, in a similar display of anxiety about economic as well as physical health, a Nottingham jury urged the authorities ‘to remember the clensyng of the lanys [thoroughfares] at the comyng in off the towne’, in order to promote its ‘wirship and profyte’.⁵⁰ The well-documented reluctance of visitors to frequent dirty and foul-smelling streets, especially in plague time, was clearly a matter of widespread concern, as was the attendant loss of both trade and collective repute.

Vigilance extended to the private as well as the public conduct of magistrates, who could rarely expect special treatment when they broke the rules. The same Nottingham jurors exposed the mayor as ‘furste begynner’ of a large and noisome muck-heap, while taking particular exception to his involvement in the sale of corrupt herring. Since he was *ex officio* clerk of the market, they observed tartly, he should be doing his best to promote the local economy rather than undermining its reputation.⁵¹ A mounting sense of indignation among residents of Southampton reached a head in 1550 with a concerted attack on the mayor for

⁴⁷ *Munimenta Gildhallae Londoniensis*, ed. Riley, p. 260, note 1.

⁴⁸ Rees Jones, ‘The Word on the Street’, pp. 119-120.

⁴⁹ Baigent and Millard, *A History of the Ancient Town and Manor of Basingstoke*, p. 316. Six years later the jurors demanded that grates should be placed over the gutters there to prevent them becoming filthy and noisome, ‘which is hurtful to the people’: *ibid.*, p. 321.

⁵⁰ *Records of the Borough of Nottingham*, ed. Stevenson, p. 338; Rawcliffe, *Urban Bodies*, p. 119. In Southampton, the aptly-named sergeant of the market, Thomas Mucklow, clearly offended these collective sensibilities by letting ‘the waye at the Bargate lye fowle to the anoyance of the inhabitants of the towne and all other that comyth in and lykewyse the market placis’. He was ordered in 1550 to ‘make cleane’ all these areas and threatened with a fine of 3s. 4d. for each subsequent dereliction: *Court Leet Records*, ed. Hearnshaw and Hearnshaw, p. 11.

⁵¹ *Records of the Borough of Nottingham*, ed. Stevenson, pp. 338, 340. In 1516 the court presented the official responsible for supervising the fish market for allowing ‘stynkyng salmone’ and other corrupt fish to go on sale: *ibid.*, p. 345.

keeping ‘a sowe in his backesyde [back garden], whiche is brought in and owte contrary to the ordenns [ordinances] of the towne’. Not only did the leet court insist that he and other members of the ruling elite should be fined for so flagrantly breaching a bylaw which lesser folk had been obliged to obey, but also took him to task for setting ‘an yelle insampelle to the reste of the holle towne’. Identifying a potentially serious threat to the social order, the jury warned that ordinary people had, with good reason, begun to ask themselves ‘why shulde nott we kepe hoggs who are poore as well as they who are ryche?’⁵²

Evidence of this kind constitutes a powerful rebuttal of the still widespread assumption that the implementation of public health measures must have been difficult, if not impossible, in a society which depended so heavily on consensual policing, and in which the majority of ordinary men and women remained indifferent, if not hostile, to schemes for environmental improvement imposed from above.⁵³ So trenchant were the opinions expressed by some Peterborough jurors at a leet court held in 1461 by their lord, the abbot, that the clerk who translated their ten presentments from English into Latin for the official record felt obliged to ‘edit’ some and omit others because of their outspokenness. Having protested about the disgusting state of one gutter, ‘that ys yerly presentyd & neuer amended, but cast up [emptied] a lytyll to blynd the pepull with’, they turned their attention to

[...] the comyn sewer that ys callyd Martyn brygge in Howgate, that ys nott reperyd, but grete noyng [nuisance] to the kyngs pepull and catell, that ys lyke to be drownyd both day & nyth for cause of reperyng of [failure to repair] the sayd brygge. And os we have knowlege and are informyd ther was gyven a place stondyng over the sayd brygge into the abbey to repeyr yt with: qwyth fawth [fault] ys in my lord & couent [convent].

Quod quedam sewera apud Martenbrig est valde defecta et ruinosa in defectum domini abbatis: ideo provideatur pro emenda eiusdem.⁵⁴

A further request that the abbot’s bailiff should be ordered forthwith to remove ‘all fylth and corrupcion’ from another sewer was ignored entirely, suggesting that court rolls, which

⁵² *Court Leet Records*, ed. Hearnshaw and Hearnshaw, pp. 7, 22.

⁵³ These arguments are summarised – and challenged – by Jørgensen, ‘Cooperative Sanitation’, pp. 547-567, especially p. 566.

⁵⁴ Bateson, ‘The English and the Latin Versions of a Peterborough Court Leet’, pp. 526-528. The terse Latin version reads: ‘That a certain sewer at Marten Bridge is truly defective and ruined through the neglect of the Lord Abbot: therefore, provision should be made for its repair’.

represent the final stage of a long process, may not always do justice to the environmental concerns initially expressed by jurors and the people for whom they spoke. A tendency on the part of some Lynn scribes to lapse occasionally into the robust vernacular of the original presentments (as in 1400, when describing a gutter which caused ‘a grete stynek and coryptcioun to the comones’) confirms this point.⁵⁵

Complaints did not always fall on deaf ears. Some local courts were clearly more influential than others, especially in self-governing towns and in provincial cities that enjoyed independent county status. A reference in the Norwich chamberlain’s account for 1543 to the effect that he had spent 20s. ‘by the *commandment* of certen inqwestes of the hedeburghs, lete & turne’ on cleaning the ditch around the castle and removing dirt from ‘other noyfull stretes in the cite’ reflects a very different and more assertive relationship with officialdom.⁵⁶ Nor did juries simply respond to instructions issued by a higher authority, being in some instances actively involved in formulating the measures taken to safeguard public health in the first place. In mid-fifteenth-century Colchester the law hundreds became such a focus ‘for the expression of opinion about how the borough ought to be administered’ that criticisms regarding the lax supervision of the fish market, the poor state of the roads, and the accumulation of dung heaps actually *prompted* the introduction of more stringent sanitary regulations.⁵⁷ A ruling of 1448, which confirmed existing bylaws for the protection of the communal water supply in Coventry and introduced a draconian fine of 40s. for subsequent offences, was likewise inspired by an eloquent ‘bill’ or petition from one of the leets. The ‘bones gentz del enquest’ had protested that magistrates were not doing enough on this score, actually naming one particularly notorious offender, who was duly bound over under threat of this very punishment to repair the damage he had caused by illicitly diverting water for his own use.⁵⁸

Writing in the context of early Tudor labour legislation, the legal historian Paul Cavill has argued that the ‘unpaid amateurs’ who served on local juries enjoyed a striking degree of independent agency when it came to interpreting, prioritizing, and applying specific rules and

⁵⁵ Arundel Castle Archives, MD 1478, m. 2.

⁵⁶ NRO, NCR, 18A/7, Chamberlains’ account book, 1541-1550, fol. 109v. The city’s chamberlains were also fined should they fail to remove piles of filth or keep the waterways clean: NCR, 5D/1-3.

⁵⁷ Britnell, *Growth and Decline in Colchester*, p. 219.

⁵⁸ *The Coventry Leet Book*, ed. Harris, pp. 104-105. According to Harris, the framing of bylaws ‘is but a small step from making inquiries under countless heads concerning the breaches of already existing law’: *ibid.*, p. xx.

ordinances.⁵⁹ The regulation of disruptive behaviour, such as sexual promiscuity, scolding, and gambling, was certainly more than a simple ‘top down’ phenomenon, being frequently the result of initiatives by local juries rather than of external pressure from central government.⁶⁰ From this perspective, the vigorous campaign launched by the four leet courts of Ipswich in the 1470s and 1480s against stray pigs, noxious drains, noisome dung heaps, and overflowing gutters can, not unreasonably, be regarded as a ‘grass-roots’ response to successive outbreaks of plague, beginning with ‘the most vnyuersall dethe’ in living memory, which swept East Anglia in 1471. At the time of this devastating epidemic just over a quarter of all presentments related to sanitary offences, exceeding a third in 1472. An unusually full, but not continuous, series of court rolls reveals that, whereas between 1415 and 1470 the number of people presented each year for ‘casting muck’ in the highway rarely reached 30 and never exceeded 36, in the aftermath of the 1471 plague it stood at 53 and had reached a remarkable total of 93 by 1487, which was another plague year. A similar rise in the number of presentments for owning stray pigs (which were widely regarded as a major health hazard) is also apparent: before the 1440s no more than three or four individuals would be reported annually, whereas offenders totalled 23 in 1471 and 40 in 1488. We should, however, exercise a degree of caution where these statistics are concerned, since Ipswich was then experiencing a nascent economic revival after a long recession, and some signs of demographic growth are only to be expected. In addition, the smaller, routine fines of 2*d.* or 3*d.* paid every year by many people for keeping dung-heaps may have constituted a form of licensing akin to that imposed on brewers and bakers, rather than an attempt to punish recidivists for polluting the urban environment.⁶¹

The power to punish

In theory, the Ipswich leets could employ a variety of deterrents. From at least the early-fourteenth century, borough custom had, for example, recommended four different penalties of increasing severity for victuallers, including fishmongers and butchers, who sold

⁵⁹ Cavill, ‘The Problem of Labour’, pp. 143-145. De Windt also maintains that ‘leet juries wielded genuine power as free agents and independent decision makers’: ‘Local Government in a Small Town’, p. 628.

⁶⁰ McIntosh, *Controlling Misbehavior*, pp. 14-15, 35-40.

⁶¹ Rawcliffe, *Urban Bodies*, pp. 47, 130, 160. This system evidently obtained in King’s Lynn, where in 1422 no fewer than 591 small fines were raised from residents for ‘household dirt’, or the right to keep a *small* dung heap outside their homes: KLBA, KL/C 17/13. These sums contrast sharply with the fines of over 3*s.* paid by butchers who polluted the water supply: KL/C 17/22 (1434).

foodstuffs that posed a risk to the public. As suppliers of ‘fast food’ to the urban workforce, cooks, in particular, were warned that:

[N]one of them shall keep consumables that they intend to sell to the people for longer than the appropriate time; nor shall any of them sell consumables that are corrupt and dangerous to human health to locals or outsiders. And if one of them does so, and is found guilty of so doing, then he shall on the first occasion be harshly punished (*grevousement puny*) through the confiscation of his chattels; and on the second occasion he shall be consigned to the pillory. And on the third he shall relinquish his craft for a year and a day, during which time neither he nor anyone acting on his behalf shall trade in the town, upon pain of losing all his chattels that can be found [...] And if he is pronounced guilty again he shall relinquish his craft for ever.⁶²

In contrast to borough and county courts with superior criminal jurisdictions, the remit of leets did not extend to cases of felony, with the result that their judicial powers were otherwise circumscribed. As happened in Ipswich, offenders might be fined, their goods or animals might be seized, they might be exposed to a jeering crowd in the public pillory and in extreme cases deprived of the right to trade, but ‘the exercise of repressive authority’ extended no further and was, in any event, tempered by a preference for compromise and a widespread reluctance to employ punitive measures.⁶³ For this reason it has been assumed that leet courts were far less successful in eliminating nuisances than they were in collecting and presenting information about them. Was this actually the case?

By far the most common type of penalty favoured by these courts was financial, in part because urban magistrates and the lords of seignorial boroughs were invariably short of money. In Lynn, where from 1309 onward the burgesses farmed the income from views of

⁶² ‘[Nul] de eux ne retygne ne garde les vyaundes qil atirent pur vendre au people outre temps covenable. Ne qe nul de eux ne vende as priveez, ne as estraunges, vyaunde corrupue ne descovenable pur cors de homme; et si nul le face e de ceo seyt atteynt, seyt il a la primere feze grevousement puny par soun chatel, e a la secunde feze seyt il agarde au pillori; e a la terce feze foriurge il le mester un an e un jour, issi qe luy ne nul de par ly le dit mester en la dite ville fra ne usera sour peyne de perdre tut le chattel, que poet estre trove [...] E si autre feze seyt atteynt, foriurge il le mester attouz jours en meyme la vyle.’ *The Black Book of the Admiralty*, ed. Twiss, II, pp. 146-147.

⁶³ *Leet Jurisdiction in the City of Norwich*, ed. Hudson, pp. lxxiii-iv. Exposure in the pillory could, however, lead to permanent injury or even death. In 1456, the mayor of London warned onlookers to desist from throwing eggs, stones, bones, rubbish, and other projectiles at those on display: Rexroth, *Deviance and Power*, p. 301.

frankpledge and the leets for £40 a year payable to their lord, the bishop of Norwich, it was essential to turn a profit.⁶⁴ As a result, other punishments were rarely employed, and the sums raised could be considerable, exceeding £56 a year in the 1360s and £52 at the turn of the century.⁶⁵ Throughout England, local custom (which was routinely defined, discussed, and explained at the leet) established a clear scale of amercements for specific nuisances, doubling or trebling the amount due from repeat offenders. Thus, for instance, a comprehensive set of regulations introduced in 1421 by John Leeder, the reforming mayor of Coventry, stipulated that:

no man by hym-self, ne by his servauntes, cast no dong of hur stablez, ne non othur fylthe in the comune ryver, upon the peyn to pay at the fyrst trespass half a marke [6s. 8d.], at the second trespass j marke [13s. 4d.], and at the thryd trespass xxs [20s.] [...] Allso that no man put noo dong to [the land of] his neighbour, ne rake ne swep in tyme of rayne, up to the peyn of xijd [12d.] at euery trespass.⁶⁶

By contrast, the fines imposed by leet courts and, to an even greater extent, the sums that were eventually collected by their officials were open to negotiation, with the result that there could be a striking discrepancy between precept and practice. A note in the Norwich leet roll for 1288-9 to the effect that Roger Benjamin paid the *whole* fine of 2s. due ‘for setting a muck heap in the king’s highway, in which he has buried the offal of beasts, whereby the air is abominably poisoned’, suggests that his was an unusual case. He was, however, excused a second fine of 12d. for causing a similar problem with an illegally sited pigsty, and thus escaped quite lightly.⁶⁷

Whatever custom may have decreed, fines could also vary dramatically from one person to the next, even if they faced the same charge. The four Yarmouth men presented in 1438-1439 for depositing ‘filth and the blood of beasts and *ly blubber* near the town gates in the common thoroughfare, causing a great stench to the great nuisance of locals and outsiders

⁶⁴ This arrangement allowed the burgesses to have a neat copy of court proceedings, written up each year by the bishop’s clerk. Four local officials, known as affeerers, were responsible for setting the fines and often annotated their working drafts, some of which also survive: *Making of King’s Lynn*, ed. Owen, pp. 37-80.

⁶⁵ KLBA, KL/C 17/8/1/1; Arundel Castle Archives, MD 1478.

⁶⁶ *The Coventry Leet Book*, ed. Harris, pp. 29-30.

⁶⁷ *Leet Jurisdiction in the City of Norwich*, ed. Hudson, pp. 23-24. In the same court, several fines were reduced or remitted altogether, sometimes because of poverty. Thomas de Howe, for instance, was excused the entire fine of 2s. imposed upon him for blocking a road with a dung heap, while Adam de Tiffanye paid only one quarter of a similar fine for reheating meat and pasties: *ibid.*, pp. 20-32.

and the disparagement of the vill', were each fined a different amount (between 6*d.* and 21*d.*), either because of their respective wealth or relative culpability. It is also clear from the manuscript in question that two of the fines had been altered, probably in recognition of what they could afford to pay.⁶⁸ Such mitigating factors seem often to have been taken into consideration at a time when few skilled artisans could earn more than 7*d.* or 8*d.* a day. Not surprisingly, the skipper who shipped a cargo of stinking fish into Colchester in 1311 bore the heaviest fine of 2*s.*, while a local man who attempted to sell some of it in the market had to pay 18*d.* and five female hucksters just 3*d.* each.⁶⁹ A couple of decades later the same court agreed to halve the fine imposed on a trader for forestalling fish because two royal messengers had intervened on his behalf, although this display of deference was tempered by the warning that a repeat offence would result in the pillory.⁷⁰

Deciding upon an appropriate financial penalty could be difficult. If they were set too low, some fines had the unintended effect of perpetuating serious environmental nuisances because persistent offenders found it cheaper to hand over a small amount every year than to rectify costly structural problems. John Gardener, the owner of a 'noyous place' near the Bell brew-house in Portsoken ward, London, had evidently reached this conclusion, opting for a modest annual fine instead of funding the necessary repairs to a structure which continued to endanger pedestrians, riders, and horses throughout the reign of Edward IV.⁷¹ Although, as we shall see, the prospect of exemplary punishment could reform the most persistent recidivist, an understandable tendency to threaten progressively heavier, often unrealistic, fines ran the risk of fostering a degree of cynicism about the authority behind the rhetoric. This tactic certainly proved counterproductive in the case of Alnet Malynery of Lyme Regis, who failed to remove dung and rubbish from the king's highway in 1501, despite the prospect of a crippling fine, and who may have ignored a second warning as well.⁷² Even when dealing with repeat offenders, the courts at Lyme seem rarely to have moved beyond this admonitory stage to enforce the full letter of the law. Increasingly stringent measures announced at the view of frankpledge for the containment of nuisances that might encourage flooding or pollution served to deter rather than to punish: the fines to be imposed for

⁶⁸ NRO, Y/C4/147, rot. 16r.

⁶⁹ *Court Rolls of the Borough of Colchester*, ed. Jeayes, I, pp. 28-29.

⁷⁰ *Court Rolls of the Borough of Colchester*, ed. Jeayes, I, p. 135.

⁷¹ Winter, 'The Portsoken Presentments', p. 105.

⁷² Dorset Record Office, DC/LR B1/2 no. 13.

washing flax or wool in public watercourses rose tenfold (from 12*d.* to 10*s.*) between 1492 and 1508, but there is nothing to suggest that such large sums were ever actually collected.⁷³

Evidence of this kind prompted the legal historian F.J.C. Hearnshaw to conclude that ‘the court leet, in fact, is incurably weak on its executive side [...] its eye is keen, its ear is quick, its nose is sensitive; but its arm is feeble. Forbidden to touch the bodies, it cannot with certainty reach even the pockets of those who defy it.’⁷⁴ We should, however, bear in mind that Hearnshaw was generalizing about leet business as whole. Serious environmental nuisances, especially involving the transmission of miasmatic vapours or sale of unwholesome food in plague time, were less readily tolerated, as Bartholomew Petipas, future mayor, Member of Parliament, and leader of a popular faction in Lynn, found to his cost. In 1403 he was fined (and paid) no less than 18*s.* for dumping filth in a common watercourse and erecting ‘a great new latrine’ in his house right next to the street ‘to the grave nuisance and bad odour of the entire neighbourhood’.⁷⁵ Nor did Hearnshaw recognize, as the jurors of Prescott in Lancashire appear to have done, that in some cases the simple act of presenting a neighbour – of naming and shaming him or her before the entire community – might alone suffice. In 1536, for example, they reported two residents for failing to cleanse their ditches, but instead of being fined, or bound over in the customary sureties of 40*d.*, they were merely ordered to rectify the problem ‘in conenyent hast’. Similarly, two years later, another miscreant was instructed to ‘amend’ a blocked watercourse under the direction of four local officials, but incurred no penalty. Each of these individuals appears to have complied at once.⁷⁶

Victuallers, who could be extremely sensitive to the imputation that either they or their merchandise posed a risk to health, were understandably anxious to avoid the adverse publicity that accompanied an appearance in court;⁷⁷ and it is worth noting that presentments involving the sale of contaminated meat by butchers, such as that noted below in Yarmouth,

⁷³ Dorset Record Office, DC/LR B1/2 nos. 9, 19. It is, however, possible that, as at King’s Lynn, fines were recorded on a separate roll, or on a missing part of the record.

⁷⁴ Hearnshaw, *Leet Jurisdiction in England*, p. 140. He is here enlarging upon similar comments made by Hudson in *Leet Jurisdiction in the City of Norwich*, pp. lxxiii-iv.

⁷⁵ KLBA, KL/C 17/14.

⁷⁶ *A Selection from the Prescott Court Leet*, ed. Bailey, pp. 86, 90.

⁷⁷ *Select Cases on Defamation*, ed. Helmholz, pp. liv, 5-6.

were, as in London, generally confined to periods of dearth and pestilence.⁷⁸ Consumers of the pies and pasties on offer in urban cook-shops were, to a notable extent, inured to the dangers lurking in these notoriously insanitary places, but even here loss of reputation could inflict far greater damage than all but the heaviest of fines. It might be assumed that the Lynn cook who in 1416 almost killed some of his customers with ‘putrid’ rabbit meat that had been ‘deceitfully and wickedly’ reheated in a pie escaped quite lightly with a fine of 20*d*. (Had he lived in London he would almost certainly have been condemned to the pillory as well.) Yet the attendant loss of trade that would surely have followed his very public disgrace almost certainly constituted a far greater punishment.⁷⁹

Research into the disciplinary measures adopted by sixteenth-century London livery companies has revealed that the authorities were far keener to encourage ‘appropriate behaviour’, eliminate bad working practices, and foster a sense of communal purpose than they were to exact ‘punitive or arbitrary justice’ against members who broke the rules. Even the most serious offences would be readily forgiven in the event of a fulsome apology and assurance of future acquiescence. In short, guild regulations served as ‘nominal guides’, reflecting ‘ideals and aspirations’ rather than actual practice, which was both reconciliatory and pragmatic. From this perspective, an apparent inability to enforce to the letter the various penalties established by borough custom could be regarded less as a mark of failure on the part of local courts than as evidence of widespread reluctance to strain the bonds of neighbourliness and community.⁸⁰ Significantly, during the controversy over the mayor of Southampton’s disregard for borough custom, discussed above, local jurors maintained that current prohibitions on the ownership of pigs should be abandoned on the ground that peer pressure alone would effectively contain any serious nuisances. Their assumption that ‘when the thinge is at the worste *shame* may redresse yt’ certainly suggests a shared sense of what constituted unacceptable behaviour, as well as a significant preference for the benefits of self-

⁷⁸ Sabine, ‘Butchering in Mediaeval London’, pp. 337-339. This seems not, however, to have been the case in the Low Countries: see p. 137 below.

⁷⁹ KLBA, KL/C 17/16; Maddock, ‘Neighbours, Nuisances and Night-Walkers’, p. 44.

⁸⁰ Wallis, ‘Controlling Commodities’, pp. 85-100. The need to determine what constituted a ‘successful intervention’ by the standards of the medieval men and women who sought to combat urban pollution rather than by those of modern epidemiologists is emphasised by Geltner, ‘Finding Matter Out of Place’, p. 313.

policing.⁸¹ Alongside the more tangible effects of forfeiture, fines, a spell in the pillory, or even loss of trading rights, the prospect of disapproval on the part of neighbours and fellow artisans evidently proved a powerful weapon in the battle for the hearts and minds of working people.⁸² It is, of course, now impossible to tell how far the striking connection between godliness, public spirit, and hygiene, so apparent in late medieval vernacular medical literature, may have promoted a greater readiness on the part of ordinary householders to accept the constraints of sanitary legislation.⁸³ Perhaps wisely, courts were more often disposed to back up a public caution with the *threat* of a stiff penalty in the event of recidivism or of non-compliance within a specific period.

Where such potentially lethal nuisances as noxious drains and miasmatic dung heaps were concerned there was clearly an urgent need to rectify the problem before it posed an even greater threat to the community. The punishment of offenders then became a secondary consideration, it being more important to galvanize them into action, especially if the court happened to be meeting during an epidemic. Thus, on 11 June 1426, Isabel Bell and Richard Hopkyns of Yarmouth were fined a relatively modest sum of 3*d.* each for failing to clean out their gutters and thereby allowing corrupt, stagnant water to accumulate, but bound over in far heavier securities of 40*d.* to complete the necessary operation within the next few weeks. Given that this already substantial sum would have been doubled or trebled in the event of further infractions and, more importantly, that a ‘gret pestilence’ was then spreading across East Anglia, we can see why the pair responded straight away.⁸⁴

Heavy financial penalties could serve a symbolic function, as in the case of the butcher who was ordered to pay 12*d.* in 1482 for selling ‘leprous flesh’ in Yarmouth market ‘to the grave peril and infection of the people’, and warned to expect an exemplary fine of 20*s.* should he ever reoffend.⁸⁵ A sum of this size would have paid the annual rent on a substantial urban property with change to spare, and was clearly meant to underscore the enormity of the offence and the seriousness with which it was regarded by local magistrates.

⁸¹ *Court Leet Records*, ed. Hearnshaw and Hearnshaw, p. 17. According to Carrel, ‘The Ideology of Punishment’, pp. 302-322, urban authorities also hoped that an appearance in court would encourage offenders to repent and mend their ways.

⁸² As De Windt observes, ‘Antisocial behaviour meant failure to cooperate and such failure [...] was all a part of the same threat to internal harmony’: ‘Local Government in a Small Town’, p. 637.

⁸³ See pp. 23-25 above; and Rawcliffe, *Urban Bodies*, pp. 188, 193-194.

⁸⁴ NRO, Y/C4/135, rot. 10r. For the pestilence of 1426, see Rawcliffe, *Urban Bodies*, p. 365.

⁸⁵ NRO, Y/C4/186, rot. 15r.

Nor, in the context of perceived health hazards, was it at all unusual. From time to time the Yarmouth leets would demand the expulsion of undesirables such as prostitutes and suspect lepers from the community, threatening some of them with serious repercussions should they fail to comply. The criteria used to identify these specific individuals seem to have had a moral as well as a medical dimension, since two-thirds of the 73 reputed lepers who were presented by local juries between 1369 and 1501 faced no apparent sanction at all, even though some of them were said to be infectious. They were simply ordered (and in eight instances ordered more than once) to leave the borough, no penalty for refusal being mentioned. Why the remaining third should have faced the prospect of patently unrealistic fines of 40s. or more when first presented is unclear, and may perhaps reflect wider social anxieties. By this date, most presumed lepers came from the ranks of the poor and marginal, and thus automatically invited a degree of suspicion, although some – such as the notorious prostitute, Alice Dymock – were clearly regarded as dangerous troublemakers, whose presence undermined the spiritual as well as the physical health of their neighbours.⁸⁶ Having been pronounced leprous by an inquest held on 20 November 1499, Alice was ordered to pack her bags before 14 February following, under threat of a £10 fine, by far the largest hitherto recorded in the history of Yarmouth's four leet courts.⁸⁷ After a brief display of defiance she departed.

This chapter began with a quotation from one Victorian antiquary, and it seems appropriate to end in a similar vein. A couple of decades after Riley compiled his report on the Hythe borough archives, F.J. Baigent and J.E. Millard published a selection of material from Basingstoke's medieval court rolls. 'It will be seen that the sanitary arrangements are of a more extended character than might be supposed', they observed with apparent surprise, noting the precautions that were taken to avoid the blockage of drains and ditches, and the fact that 'the keeping of the streets, thoroughfares, and market place free from dust heaps,

⁸⁶ Rawcliffe, *Leprosy in Medieval England*, pp. 282-284. In June 1463, for example, William Powtwyn 'struck with leprosy' was bound over in sureties ranging from 40d. to 100s. by each of Yarmouth's four leet courts to leave the town and 'the society of people'. The conditions varied: one court ordered him to depart by 7 July, while another allowed eight days after 'reasonable notice'. At the same time, two prostitutes were given until 29 August to remove themselves under penalties of 20s. each, as part of what was clearly an integrated campaign against moral and physical nuisances: NRO, Y/C4/167, rot. 21r-v.

⁸⁷ NRO, Y/C4/202, rot. 4v; Rawcliffe, *Leprosy*, pp. 252-253. An almost complete sequence of rolls survives from 1366/7, which makes Alice's fine the heaviest in 133 years.

refuse or other obstructions, claimed equal attention'.⁸⁸ Their comments not only reflect the great value of records such as these to historians of public health, but also confirm that even the smallest medieval urban communities were far less tolerant of environmental nuisances than has often been supposed. Even so, over a century later, research on this topic still remains in its infancy, partly because of entrenched assumptions regarding the apparent squalor of English towns and cities.

The fact that material relating to the enforcement of sanitary regulations at a local level has generally to be extracted from records that deal with a wide range of other legal, financial, and administrative matters also tends to downplay its importance. In contrast to Italy, it was unusual for official activities concerning communal health and public utilities to be documented separately - or at least for any such documentation to survive.⁸⁹ Thus, for example, whereas Lucca's *Curia viarum* and Bologna's magistracy for dirt (*fango*) maintained their own discrete, if admittedly cumbersome, archives,⁹⁰ evidence of the effort and expense involved in Lynn's acquisition and upkeep of an extensive system of pipes, aqueducts and conduits is widely scattered. Between 1431 and 1515, the port's Hall Books alone record at least 42 mayoral directives for the repair and cleansing of watercourses, while, as we have seen, a long series of leet rolls documents the application of these directives on a street by street basis. The time-consuming challenge of retrieving this type of information from diverse and often intractable manuscript sources helps to explain why the topic of public health has been neglected by English medievalists for so long, and why the temptation to 'cherry-pick' the more sensational cases from printed collections can prove hard to resist.⁹¹ Yet the effort is demonstrably worthwhile, not least since it furnishes us with such a valuable insight into popular responses to issues of communal health and wellbeing.

⁸⁸ Baigent and Millard, *A History of the Ancient Town and Manor of Basingstoke*, p. 246.

⁸⁹ The London Assize of Nuisance furnishes one notable exception: *The London Assize of Nuisance*, ed. Chew and Kellaway.

⁹⁰ Geltner, 'Healthscaping a Medieval City', pp. 395-415; Geltner, 'Finding Matter Out of Place', pp. 307-321.

⁹¹ Rawcliffe, 'Sources for the Study of Public Health', pp. 183-184.

BIBLIOGRAPHY

Archival sources

Arundel Castle, Archives of the duke of Norfolk, MD 1478

Dorset Record Office, DC/LR B1/2 nos 9, 13, 19

King's Lynn Borough Archives, KL/C 17/8/1/1; KL/C 17/13, 14, 16, 19, 22

Norfolk Record Office, NCR, 5D/1-3; 5C/10; 18A/7, Chamberlains' account book, 1541-1550; Y/C4/135, 147, 167, 186, 202; Y/C18/1, Yarmouth Book of Oaths and Ordinances

The National Archives, Kew, KB 27/758

Printed primary sources

The Black Book of the Admiralty, ed. by Sir Travers Twiss, 4 vols. (London: Longman, 1871-1876)

A Book of London English, ed. by R.W. Chambers and Marjorie Daunt (Oxford: Clarendon Press, 1931)

Calendar of Plea and Memoranda Rolls of the City of London, 1323-1364, ed. by Arthur Hermann Thomas (Cambridge: Cambridge University Press, 1926)

Calendar of Plea and Memoranda Rolls of the City of London, 1364-1381, ed. by Arthur Hermann Thomas (Cambridge: Cambridge University Press, 1929)

Calendar of Plea and Memoranda Rolls of the City of London, 1413-1437, ed. by Arthur Hermann Thomas (Cambridge: Cambridge University Press, 1943)

Court Leet Records, Vol 1, Part 1, 1550-1577, ed. by Fossey J.C. Hearnshaw and D.M. Hearnshaw (Southampton: Southampton Record Society, 1, 1905)

Court Rolls of the Borough of Colchester, ed. by Isaac Herbert Jeayes, 3 vols. (Colchester: Colchester Town Council, 1921-1941)

The Court Rolls of the Manor of Wakefield from 19 October 1436 to 6 September 1437, ed. by Brian J. Barber (Leeds: Wakefield Court Rolls Series of the Yorkshire Archaeological Society, 17, 2014)

The Coventry Leet Book, ed. by Mary Dormer Harris (London: Early English Text Society, original series, 134, 1907)

The Early Records of Medieval Coventry, ed. by Peter R. Coss (London: Records of Social and Economic History, new series, 11, 1986)

Leet Jurisdiction in the City of Norwich during the XIIIth and XIVth centuries, ed. by William Hudson (London: Selden Society, 5, 1892)

The London Assize of Nuisance 1301-1431, ed. by Helena M. Chew and William Kellaway (London: London Record Society, 10, 1973)

The Making of King's Lynn: A Documentary Survey, ed. by Dorothy M. Owen (Oxford: Records of Social and Economic History, new series, 9, 1984)

Munimenta Gildhallae Londoniensis, ed. by Henry Thomas Riley, 3 vols. (London: Longman, 1859-1862)

The Oath Book or Red Parchment Book of Colchester, ed. by William Gurney Benham (Colchester: Essex County Standard Office, 1907)

Records of the Borough of Crossgate, Durham, 1312-1531, ed. by Richard Britnell (Woodbridge: Surtees Society, 212, 2008)

Records of the Borough of Nottingham, III, 1485-1547, ed. by William Henry Stevenson (London: Quaritch, 1885)

The Royal Commission on Historical Manuscripts: Fourth Report (London: Her Majesty's Stationery Office, 1874)

Select Cases on Defamation to 1600 ed. by R.H. Helmholz (London: Selden Society, 101, 1985)

A Selection from the Prescott Court Leet and Other Records, 1447-1600, ed. by Francis Arthur Bailey (*sine loco*: Lancashire and Cheshire Records Society, 89, 1937)

Printed secondary sources

Baigent, Francis Joseph, and Millard, James Elwin, *A History of the Ancient Town and Manor of Basingstoke* (Basingstoke: C.J. Jacob, 1889)

Baker, John Hamilton, *An Introduction to English Legal History* (London: Butterworth, 1979)

Baker, John Hamilton, *The Oxford History of the Laws of England: Volume VI 1483-1558* (Oxford: Oxford University Press, 2003)

Barron, Caroline M., 'Lay Solidarities: The Wards of Medieval London', in *Law, Laity and Solidarities: Essays in Honour of Susan Reynolds*, ed. by Pauline Stafford and others (Manchester: Manchester University Press, 2001), pp. 218-234

Barron, Caroline M., *London in the Late Middle Ages: Government and People 1200-1500* (Oxford: Oxford University Press, 2004)

Bateson, Mary, 'The English and the Latin Versions of a Peterborough Court Leet, 1461', *English Historical Review*, 19 (1904), 526-528

Bonney, Margaret, *Lordship and the Urban Community: Durham and its Overlords, 1250-1540* (Cambridge: Cambridge University Press, 1990)

Britnell, Richard H., 'Colchester Courts and Court Records, 1310-1525', *Essex Archaeology and History*, third series, 17 (1986), 133-140

Britnell, Richard H., *Growth and Decline in Colchester, 1300-1525* (Cambridge: Cambridge University Press, 1986)

Butler, Sara M., *Forensic Medicine and Death Investigation in Medieval England* (London and New York: Routledge, 2015)

Carell, Helen, 'The Ideology of Punishment in Late Medieval English Towns', *Social History*, 34 (2009), 301-322

Cavill, Paul, 'The Problem of Labour and the Parliament of 1495', *The Fifteenth Century*, 5 (2005), 141-155

DeWindt, Anne Reiber, 'Local Government in a Small Town: A Medieval Leet Jury and its Constituents', *Albion*, 23 (1991), 627-654

Geltner, G., 'Public Health and the Pre-Modern City: A Research Agenda', *History Compass*, 10 (2012), 231-245

Geltner, G., 'Healthscaping a Medieval City: Lucca's *Curia viarum* and the Future of Public Health History', *Urban History*, 40 (2013), 395-415

Geltner, G., 'Finding Matter out of Place: Bologna's 'Dirt' (Fango) Officials in the History of Premodern Public Health', in *The Far-Sighted Gaze of Capital Cities. Essays in Honor of Francesca Bocchi*, ed. by Rosa Smurra and others (Rome: Viella, 2014), pp. 307-321

Harding, Alan, *The Law Courts of Medieval England* (London: Allen and Unwin, 1973)

Hearnshaw, Fossey J.C., *Leet Jurisdiction in England* (Southampton: Cox & Sharland, 1908)

Hudson, John, *The Oxford History of the Laws of England: Volume II 817-1216* (Oxford: Oxford University Press, 2012)

Jørgensen, Dolly, 'Cooperative Sanitation: Managing Streets and Gutters in Late Medieval England and Scandinavia', *Technology and Culture*, 49 (2008), 547-567

King, Walter J., 'Untapped Resource for Social Historians: Court Leet Rolls', *Journal of Social History*, 15 (1982), 699-705

King, Walter, 'How High is Too High? The Disposal of Dung in Seventeenth-Century Prescot', *Sixteenth-Century Journal*, 23 (1992), 443-457

Maddock, Susan, 'Neighbours, Nuisances and Night-Walkers in Early Fifteenth-Century Lynn', *Bulletin of the Norfolk Archaeological and Historical Research Group*, 24 (2015), 44-51

McIntosh, Marjorie Keniston, *Controlling Misbehavior in England, 1370-1600* (Cambridge: Cambridge University Press, 1998)

Morris, William Alfred, *The Frankpledge System* (London: Longmans, 1910)

Pollock, Sir Frederick, and Maitland, Frederic William, *The History of English Law before the Time of Edward I*, 2 vols. (Cambridge: Cambridge University Press, 1911)

Rawcliffe, Carole, *Leprosy in Medieval England* (Woodbridge: Boydell, 2006)

Rawcliffe, Carole, 'Sources for the Study of Public Health in the Medieval City', in *Understanding Medieval Primary Sources*, ed. by Joel T. Rosenthal (London and New York: Routledge, 2012), pp. 177-195

Rawcliffe, Carole, *Urban Bodies: Communal Health in Late Medieval English Towns and Cities* (Woodbridge: Boydell, 2013)

Rees Jones, Sarah, 'Household, Work and the Problem of Mobile Labour: The Regulation of Labour in Medieval English Towns', in *The Problem of Labour in Fourteenth Century England*, ed. by James Bothwell and others (York: York Medieval Press, 2000)

Rees Jones, Sarah, 'The Word on the Street: Chaucer and the Regulation of Nuisance in Post-Plague London', in *Roadworks. Medieval Britain: Medieval Roads*, ed. by Valerie Allen and Ruth Evans (Manchester: Manchester University Press, 2016)

Rexroth, Frank, *Deviance and Power in Late Medieval London* (Cambridge: Cambridge University Press, 2007)

Sabine, Ernest L., 'Butchering in Mediaeval London', *Speculum*, 8 (1933), 335-353

Sagui, Samantha, 'A Prosopography of the Capital Pledges of Medieval Norwich', *Medieval Prosopography*, 31 (2016), 97-114

Skelton, Leona, 'Beadles, Dunghills and Noisome Excrements: Regulating the Environment in Seventeenth-Century Carlisle', *International Journal of Regional and Local History*, 9 (2014), 44-62

Wallis, Patrick, 'Controlling Commodities: Search and Reconciliation in the Early Modern Livery Companies', in *Guild, Society and Economy in London, 1450-1800*, ed. Patrick Wallis and Ian Anders Gadd (London: Centre for Metropolitan History, 2002), pp. 85-100

Winter, Christine L., 'The Portsoken Presentments: An Analysis of a London Ward in the Fifteenth Century', *Transactions of the London and Middlesex Archaeological Society*, 56 (2005), 97-161

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CHAPTER THREE

Urban *Viarii* and the Prosecution of Public Health Offenders in Late Medieval Italy¹

G. Geltner

Abstract

Roads officials (*viarii*) were integral to many Italian cities' strategies for combatting disease and promoting health. Yet their significance for the history of environmental policing remains largely unrecognised. This chapter begins by mapping the contours of the office in the peninsula's centre and north between the thirteenth and fifteenth centuries. It then explores the activities of *viarii* in that period and region through recourse to the records of Lucca and Bologna. An examination of the Bolognese archival series throws new light on the resources that urban regimes dedicated to communal wellbeing, as well as the strategies required to implement their policies. These records offer a 'bottom-up' perspective on environmental health and the tensions underlying the exercise of premodern bio-power.

Key words: Italian city-states; Bologna; Lucca; public health; environment; fango; roads masters

In their quest to define and safeguard urban order, regimes across later medieval Italy staked claims on sites that were either understood or promoted as impacting upon communal health and welfare. Magistrates accordingly endowed infrastructures such as streets, sewers, fountains, and walls with life-preserving and life-threatening qualities, and denunciations and litigation concerning their misuse regularly invoked the protection, not only of a general public good (*bonum communis*), but also of local populations' health (*sanitas hominum*).² Central, if hardly exclusive, agents bringing offenders to justice in this context were small

¹ For this publication I received research support from 'Healthscaping Urban Europe' (European Research Council grant no. 724114).

² Bocchi, 'Regulation of the Urban Environment'; Bocchi, *Attraverso le città italiane nel Medioevo*, pp. 107-127; Balestracci, 'The Regulation of Public Health'; Greci, 'Il problema dello smaltimento dei rifiuti'; Szabò, 'La politica stradale dei comuni medievali italiani'.

outfits of ‘works’ or ‘roads’ officials, often known as *viarii*. In some cases, their remit came to include the maintenance and supervision of urban infrastructures and the right to fine people who appeared to undermine them by creating safety hazards and spreading pollution. To be sure, these efforts were only one aspect of an evolving and multi-pronged approach to urban healthscaping.³ Yet, while the hiring of communal physicians, the foundation of *leprosaria* and hospitals, and the implementation of emergency anti-plague measures have won the lion’s share of scholarly attention, the somewhat pedestrian routines of Italian *viarii* provide fresh insights into premodern approaches to public health. From this volume’s perspective, moreover, *viarii*’s actions certainly included prosecutions and above all summary judicial procedures, whose role and function in the context of urban policing on the one hand and population-level prophylactic interventions on the other remain understudied.⁴

Contrary to the contention of Michel Foucault and his followers, the negotiation of power at the level of individual or communal life (‘bio-power’) far predates the eighteenth century.⁵ Across the Italian peninsula, numerous medieval municipalities were cognizant of the political and economic benefits of touting the positive health outcomes of their policies, and nudged residents accordingly into adopting certain behaviours construed in this light.⁶ The complex entities that Italian urban societies were in the later Middle Ages, and the environmental pressures to which they were subject, could make certain interventions at the central level seem more palatable and efficient than before. However, such interventions were not always and everywhere welcome; indeed, as we will see, there is ample evidence that apathy, disagreement, and outright resistance to top-down initiatives were common, part of a bio-power brokering that could lead to the prosecution of public health offenders. Conversely, preventative programmes, or at least their attempted enforcement, were not uniquely top-down, as ostensible ‘peripheries’ to formal political ‘centres’ also participated in shaping them.

To spotlight these dynamics, the present essay begins by distilling the preventative strategies that emerge from a large number of urban statute collections, and then proceeds to

³ Cohen and Farley, *Prescription for a Healthy Nation*; Geltner, ‘Healthscaping a Medieval City’, especially section III.

⁴ See pp. 124, 150-151 below.

⁵ Foucault, ‘The Birth of Biopolitics’; and p. 15 above.

⁶ Geltner, *Roads to Health*, especially Chapter two. On the public good in a medieval urban context, see Lecuppre-Desjardin and Van Bruaene (eds.), *De Bono Communi*.

juxtapose these promulgations with the mostly neglected records of Bologna's and Lucca's *viarii*. The first group of documents, issued by 115 individual councils governing some 70 cities, sought to regulate diverse aspects of social, political, cultural, and economic life. Virtually every collection of extant statutes laid down some rules about public safety and wellbeing, frequently in connection with the condition and management of roads and other types of infrastructure. Evidence of roads officials' practices, however, is more difficult to come by, either because it is integrated into more comprehensive sets of financial or criminal court records which consequently require much sifting through, or because it has been lost or destroyed over time. Thankfully, for at least two cities the roads officials' records have partly survived and, as the final section of this essay demonstrates, they can throw much new light on how medieval prophylactic measures were implemented, what real or perceived dangers they addressed, and how well- or ill-received they were.

Health Discourses and the Public Sphere

Contrary to medieval governments' modern reputation for apathy, numerous statute collections redacted between the early-thirteenth and the late-fifteenth century construed various substances and human and animal activities as posing health threats. Householders and other residents were commonly expected to clean outside the gates of their homes and ensure that adjacent streets and waterways (including gutters, ditches, and sewers running between and along property boundaries) remained unobstructed. And they specifically ordained that woodpiles, work-related equipment, and dirt should not block any traffic on land or water, or impede the flow of polluted, not to mention clean, water throughout the city and its hinterland. Yet there was an equally if not more serious threat, often emanating from *within* private homes. In 1296 Spoleto, for instance, all residents were required to enclose private drains and latrines running onto a public street for a distance of ten *pedes* (about 3.5 metres), in order to prevent filth from being visible (the statute does not mention odour) to neighbours and by implication to reduce the risk of disease by intromission.⁷ And in Ravenna, a prohibition on discarding trash and excrement dating to 1327 applied to any public street, square, or gutter where 'passers-by might be harmed'.⁸

⁷ *Statuti di Spoleto del 1296*, ed. Antonelli, Breve populi XXV, LXI (pp. 40, 55). On the medieval theory of intromission, see Rawcliffe, *Urban Bodies*, pp. 125-126; and pp. 22-23 above.

⁸ *Statuto ravennate di Ostasio da Polenta (1327-1346)*, ed. Zaccarini, III, 25 (p. 235): 'transeuntes possint offendi'.

While neither text required homeowners to bury gutters within their property or store trash and faeces as they would outside, both send a clear message about the danger involved in handling matters otherwise. Such typical promulgations, in other words, sought to revise a conceptual boundary between private and communal space from a health perspective and by recourse to a medical discourse. Other regimes used different tactics to insinuate themselves into and expand a public sphere. In Bergamo, as elsewhere in this period, heralds announced prohibitions on littering in public and letting pigs run loose, yet they also communicated information about best practices in burning dung, a potentially risky (and also miasmatic) activity that could take place inside one's kitchen, on one's roof, or in one's yard.⁹ Once again, such bylaws and their public proclamation implied that protecting communal wellbeing required policing the movement of matter, bodies, sights, and scents (and hence air) across a seemingly rigorous private/public divide.

With similar goals in mind, legislators in 1394 Castelfranco di Sopra set fines for creating blockages, neglecting to clean before one's house and workshop, leaving trash within or without the city's walls and gates, and causing intentional damage to civic infrastructure. As is typical throughout these sources, moreover, residents were warned not to dispose of filthy water (*acqua bructa*) from their windows and balconies before the curfew bell rang; and, even then, they had to alert passers-by explicitly to the impending downpour.¹⁰ Nor was this a unique case: the same ruling can be found almost verbatim in the ordinances of Montepulciano, Pirano, and Scarperia as well.¹¹

In another attempt to redefine the government's policing remit, the 1408 statutes of Figline assigned the podestà general responsibility for the city's cleanliness, and repeatedly and at length prohibited residents from keeping dung and firewood outside their homes. They were also to clean their forecourts and adjacent squares every Saturday, and refrain from leaving carcasses in public ways, throwing filth from their windows at any time, drying skins, letting pigs run loose in the piazzas, and allowing latrines to drain freely onto public

⁹ *Lo statuto de Bergamo del 1331*, ed. Storti Storch, Collatio IV, III, VIII, VII, XII, XV (pp. 99, 128, 130, 217-237). On heralds' communications regarding health measures 'in locis consuetis', see also *Statuti inediti della Città di Pisa*, ed. Bonaini, anno 1286, III, LVII (pp. 440-441).

¹⁰ *Statuti dei comuni di Castelfranco di Sopra (1394)*, ed. Camerani Marri, II, XLIII (p. 95).

¹¹ *Statuto del Comune di Montepulciano (1337)*, ed. Morandi, IV, CXX (p. 367). And see *Gli statuti del Comune di Pirano del 1307*, ed. de Franceschi, III, X (p. 50); *Gli Statuti di Scarperia del XV secolo*, ed. Arrighi, 36 (p. 89).

thoroughfares.¹² In the late-fifteenth century, Dronero's statutes reminded residents to ensure that their drain water did not harm (*noceat*) their neighbours' property or damage public roads; and ruled that no one should allow a latrine to evacuate onto or near such a road in a way that would permit excrement or any other horrible refuse (*extercora vel aliquid aliud oribile cadens*) to be seen by passers-by. A fine of three *soldi* would be imposed on anyone littering the street with faeces, blood, skins, or dung, and on those letting a sow or its piglets refresh themselves outside the home. Watering animals at communal fountains or washing clothes in them would also be punished by a fine of twelve *denari*, roughly double a semi-skilled labourer's daily wage.¹³

Preventative prescriptions of this kind are usually silent about the resources allocated to enforce them and whether the political circumstances made direct control practical or even feasible. Magistrates sometimes did implicitly try to pre-empt non-compliance, either positively, for instance by offering to share with accusers any sums extracted as fines from offenders (carrots), or more commonly through the threat of fines for neglecting to report violations (sticks). Yet however opaque these texts are about social realities, they certainly underscore their programmes' health benefits for the population at large and thus engage in a premodern form of bio-power negotiation. For instance, when Pistoian legislators in 1296 prohibited certain artisans from working within the city walls, they justified their action by claiming that 'it is civil and expedient for the preservation of people's health that the city of Pistoia be cleared of stench, from which the air is corrupted and pestilential diseases arise'.¹⁴

¹² *Statuti di Figline*, ed. Berti and Mantovani, XII, XVI-XVIII, XXVI, XXXIII, CXV (pp. 9, 12-13, 15-16, 18, 61).

¹³ *Gli Statuti di Dronero (1478)*, ed. Gullino, 268, 272, 387, 388, 400 (pp. 157, 158, 191, 194).

¹⁴ *Statutum Potestatis Communis Pistorii (1296)*, ed. Zdekauer, III, CLXII (pp. 150-151): 'Quoniam civile est et expedit pro salute hominum conservanda quod civitas Pistorii sit purgata fetoribus, ex quibus aer corumpitur et pestilenciales egretudines oriuntur; ideo hac lege sancimus, quod nullus artifex possit vel debeat exercere vel facere infra muros vel circulas civitatis Pistorii aliquam artem vel aliquod laborerium, unde fetor oriatur, sed debeat talem artem et laborerium, exercere extra muros et circulas civitatis, in locis, unde fetor venire non possit civibus Pistoriensibus. Et quod nulla putredo, de qua fetor resultet, teneatur in aliqua apotecha seu proiciatur in aliquam viam publicam intra circulas civitatis.'

The text alludes to Hippocratic and Galenic medical theory, according to which air purity and by implication public health is compromised by foul odours.¹⁵ Presumably a shared understanding of such theories (at least among certain elites) made their invocation a useful tool for denouncing violations by private persons or artisanal production sites in the name of civic decorum, safety, and health.¹⁶ L'Aquila's leather workers were similarly prohibited in 1315 from operating within 100 *candas* (about 210 metres) of the episcopal palace, royal palace, and communal square, 'because the tanning of skins infects the air and disfigures the city'; and local dyers were discouraged from pouring away tainted or otherwise putrid water 'from whose stench their neighbors and other passers-by could be hurt'.¹⁷

These rubrics' appeal to miasma theory was a routine affair, although it remains a legitimate question to what extent a grasp of the underlying medical concepts was shared by contemporaries and integrated into popular notions of health (other than by means of these very statutes, of course). At any rate, public health historians, including scholars of medieval Italy, often burdened with the albatross of modernity, tend to agree that urban governments had neither the resources nor the clout to implement the public health programmes laid out in their statutes, and surmise that rulers were either hopelessly ambitious or else insincere about healthscaping.¹⁸ As we shall soon see, however, there is far more evidence than law codes for evaluating regimes' capacity for policing the urban environment, and much of it remains overlooked.

Enforcing Public Hygiene: Site Managers and *Viarii*

Whatever their actual reach into private homes, urban governments claimed direct responsibility for - and thus appropriated - certain sites, resources, and facilities. In Montepulciano, for instance, a cleaner of the communal square was installed from at least 1337, a duty he was to carry out every Saturday.¹⁹ Contemporary Florentines elected two men

¹⁵ Coomans and Geltner, 'On the Street and in the Bathhouse'; Jørgensen, 'The Medieval Sense of Smell'; Ciecieszki, 'The Stench of Disease'; and pp. 19-21 above.

¹⁶ See pp. 55-57 above.

¹⁷ *Statuta Civitatis Aquile*, ed. Clementi, 269, 271 (p. 182): '[Q]uod molza pelliczariorum [...] aerem inficit [et] Civitatem deturpat'; 'unde vicini eorum, et alii transeuntes exinde, ex fetore predictorum offendi.'

¹⁸ Mazzi, *Salute e società nel Medioevo*, pp. 21, 39; Baroni and Berti, *Spazio alla vita*, p. 26; Zupko and Laurens, 'Straws in the Wind'.

¹⁹ *Statuto del Comune di Montepulciano (1337)*, ed. Morandi, IV, CLVIII (p. 385).

to clean the city's wells once annually;²⁰ and Ravenna tasked its tax collector with cleaning the public square at least twice a month.²¹ The latter's peers in Figline were likewise required to clean the market square four times a year, namely on All Saints Day (1 November), at Christmas and Easter, and on the feast of the Holy Cross (3 May), thereby creating a palpable link between physical and spiritual cleanliness.²² Fountains are another case in point. L'Aquila's Fontana della Rivera had its own guards,²³ as did Perugia's Fontana Maggiore.²⁴ The guards' duties in L'Aquila, however, were confined to protecting the site against damage and did not involve its active repair or maintenance. The division of labour in such cases emerges clearly from the statutes, which held other officials responsible or called for *ad hoc* appointments. In 1315 L'Aquila that duty belonged to the city's chief executive, or chamberlain, who would also fine anyone for throwing waste in the conduit leading to the fountain.²⁵

Offices and duties related to urban hygiene thus far predate the onset of the plague epidemic known as the Black Death (1347-1351), which historians tend to see as a singular trigger to premodern public health interventions. Yet beyond targeting specific at-risk sites and urging rulers to keep cities clean, Italian statutes also document the creation of unique government bodies charged with maintaining a group of urban infrastructures, often bundled together under the general category of 'roads' (*vie*).²⁶ Indeed, most cities issuing the legal compilations mentioned so far designated a 'roads' official (*viarius*) sometime between the mid-thirteenth and the late-fifteenth century. The process by which they began to dot the peninsula's administrative landscape was neither linear nor concurrent across cities, let alone inevitable; and, where and when it did take place, politics and the vicissitudes of cost-efficiency likely influenced its pace and timing. Broadly speaking, however, it is possible to trace in the rise of the urban roads official a convergence of accumulating expertise in the hands of individuals or groups on the one hand, and a marked desire for centralization on the other.

²⁰ *Statuti della Repubblica Fiorentina*, ed. Caggese, II, Statuto del podestà, IV, XL (II, p. 309).

²¹ *Statuto ravennate di Ostasio da Polenta*, ed. Zaccarini, III, 69 (pp. 260-261).

²² *Statuti di Figline*, ed. Berti and Mantovani, XV (p. 11).

²³ *Statuta Civitatis Aquile*, ed. Clementi, 281 (p. 188).

²⁴ *Statuto del comune e del popolo di Perugia del 1342*, ed. Elsheikh, IV, 1 (II, pp. 333-340). And see Gunzburg, 'The Perugia Fountain'.

²⁵ *Statuta Civitatis Aquile*, ed. Clementi, 93, 255 (pp. 77-78, 175).

²⁶ Balestracci and Piccinni, *Siena nel Trecento*, p. 45.

Treviso serves as a particularly helpful example owing to the superior preservation of its earliest statutes. Here, at some point after 1207, the podestà appointed two men from each of the city's quarters to deal with the commune's roads, streets, and squares, an instruction repeated verbatim in a later addition to the statutes.²⁷ By the 1230s, however, the city's quarters were no longer mentioned in the revised instructions regarding the election of the four individuals who were to be responsible for clearing the roads 'so that the usual course of water through the streets will not be impeded'.²⁸ The move to centralize their election is unexceptional in the broader context of maintaining Treviso's infrastructure. A subsequent rubric made provision for the election of another group of four to oversee a distinctly centralized campaign: once every three years all of the public works (*omnes publice*) in Treviso and its hinterland were to be inspected and repaired, as were water facilities that were considered to be public (*aque que publice sint*), and bridges built on public roads (*in viis publicis et stratis*). The magistrates behind this redaction were clearly bent on claiming certain sites and spaces as communal, both within and beyond the city walls, and their tactic in doing so entailed the creation of a central, if still temporary, municipal outfit. By the early 1280s, all public facilities within the city were placed under the jurisdiction of a new and permanent office of public works (*officium publicorum*), which was given a very similar mandate.²⁹

Significantly, this move coincides with one of the earliest extant invocations of medical theory in the context of urban order and cleanliness. In the very same redaction of the Trevisan statutes, a rubric dealing with waste disposal underscores the importance of removing dung and other forms of filth in a timely manner, because these substances 'infect the air and create a pestilence, on account of which human bodies become infirm and even suffer death'.³⁰ The invocation of miasma theory was not an isolated event, as we have already seen. Nor was it a single instance within Treviso's statutes. An early fourteenth-century *additio* to the text admonishes residents against allowing pigs to roam the city freely,

²⁷ *Gli Statuti del Comune di Treviso*, ed. Liberali, 1208-1218, XLIX, CV (I, pp. 45, 72).

²⁸ *Gli Statuti del Comune di Treviso*, ed. Liberali, 1231-1233, CCCLVIII (II, p. 133): '[I]ta quod consuetus cursus aquarum non impediatur in viis.'

²⁹ *Gli Statuti del Comune di Treviso*, ed. Betto, 1283-1284, I, CCLXI [CCXLVIII] (I, pp. 212-213).

³⁰ *Gli Statuti del Comune di Treviso*, ed. Betto, 1283-1284, I, CCXXXVIII (I, pp. 192-193): '[T]alia aeram inflicunt et faciunt pestilentem – propter quod hominum corpora ad infirmitates veniunt atque mortem incurrunt.'

not because they threaten the physical safety of passers-by, as one might expect, but since they pollute the air and ‘from the infection of the air, a great danger befalls people’s health’.³¹

Medieval roads offices were thus an amalgamation of several agendas and duties centred on a number of at-risk sites. What they shared from officialdom’s standpoint was their need for protection and upkeep, be it in order to avoid contamination and blockage (which, as we have seen, was often associated with the creation of miasmas), or simply for fear of dilapidation, which could cause injury or fire. Whatever the office’s specific remit and the officers’ terms of employment, and before delving briefly into their actual practices, it is clear that *viarii* were ubiquitous and that their mandate involved healthscaping. Underscoring the potential impact of their work on population-level health and its preventative nature with regard to the containment of disease does not involve a form of administrative retro-diagnosis; a key role in sanitary policing was intended by those who appointed them and was clear to those whose behaviour they sought to monitor. The areas and facilities falling under most *viarii*’s cognizance were designated in numerous statutes: places whose poor upkeep and supervision would likely result in air or water pollution, or threaten the safety of local residents and passers-by. Whether the main challenge they faced was neglect, apathy, opportunism, or outright vandalism, material and human factors converged to place this office at the centre of daily efforts to promote health and fight disease.

Enforcement and Prosecution: Lucca and Bologna

The prosecution of public health offenders in later medieval Italy remains a scholarly lacuna. No study exists that focuses specifically, let alone systematically, on this aspect of urban policing, despite the peninsula’s rich criminal court archives and its highly developed legal and criminal historiography.³² Certainly, scholars have unearthed pertinent cases, but since these are rarely gathered in a single type of source, collating them into a coherent whole from lists of fines, court protocols, and witness testimonies is an understandably daunting task.³³ The appearance in such diverse sources of charges related to environmental pollution and

³¹ *Gli Statuti del Comune di Treviso*, ed. Betto, Additiones 1315, IX (I, pp. 666-667): ‘[Q]uoniam ex infectione aeris saluti hominum grande preiudicium infertur.’

³² Dean, *Crime and Punishment*; Zorzi, *L’amministrazione della giustizia penale*; Vallerani, *Medieval Public Justice*; Blanshei, *Politics and Justice*.

³³ Dean (ed. and trans.), *The Towns of Italy in the Later Middle Ages*, p. 54; Vallerani *Il sistema giudiziario del comune di Perugia*; Rawcliffe, ‘Sources for the Study of Public Health’, pp. 183-185.

other behaviours perceived as threatening to the population at large is itself indicative of the type of attention these risks received in this period, that is, outside the context of an environmental court *avant le lettre* or a designated health board. On the other hand, there is no reason to assume that each government throughout a city's history took the same approach when it came to prosecuting violators of environmental policies, and it is here that *viarii*'s records provide some useful guidance.

Viarii's mandates differed across time and geography, as we have already seen. In itself variety (or inconsistency) is a poor indication of how high or low environmental protection ranked among governments' priorities, since numerous officers from the *podestà* downwards throughout the hierarchy could and did occupy themselves with it, not to mention ordinary citizens, guilds, and the Church. On occasion, however, we do encounter cases in which governments allocated a regular role to roads officials in the implementation of prophylactic measures and – no less important – where these officers' records have come down to us and are thus relatively easy to identify and access. Lucca and Bologna are two cases in point, and in what follows I briefly describe their roads officials' profiles and draw preliminary conclusions about their prosecutorial activities.

Viarii operated in Lucca and Bologna at least from the late-thirteenth century and continued to do so in one form or another through to the fifteenth.³⁴ While the Tuscan city employed the fairly common appellation of roads official (*ufficiale delle vie*), Bologna used the unique title of a *fango* ('dirt' or 'mud') official, long foreshadowing Mary Douglas's acclaimed definition of dirt as 'matter out of place'.³⁵ In both cities the outfit was small, consisting of one officer and a notary, and tasked predominantly with commissioning and on occasion executing public works, including the construction and maintenance of roads, bridges, walls, fountains, troughs, and canals to be used by the public at large. The Lucchese *viarii* have left us eleven registers, covering the years 1332-1377 fragmentarily, and mostly documenting their summary procedures: allegations made and fines exacted, but rarely explicit witness testimony or details of any other business associated with a routine civic or criminal trial. Their Bolognese colleagues, by contrast, have left behind hundreds of ledgers, which illuminate their construction assignments and their finances, as well as their enforcement strategies, including frequent site visits to the city's workshops and markets.

³⁴ Geltner, 'Healthscaping a Medieval City'; Geltner, 'Public Health and the Pre-Modern City'.

³⁵ Douglas, *Purity and Danger*, p. 35.

In both cases, the sources confirm that the officers' paramount concern, at least in financial terms, was to carry out the regime's urban development and maintenance programme. Yet the officers' constant presence on the city's streets and in local workshops and markets brought them into regular contact with its human, animal, man-made, and natural fabric, including its vulnerable airs and waters. As officialdom's eyes, ears, and noses on the ground, these men were in a privileged (if hardly exclusive) position to detect and decry pollution and safety hazards, and their almost daily reports fill numerous folios in the surviving registers. In other words, roads officials not only supervised construction, they also monitored the urban environment, including the condition of its material fabric and the behaviour of humans and animals, in order to determine whether matter was or was about to be out of place and if people's conduct posed a danger to the population at large. They were, in sum, agents of policing and of promoting a particular view of urban order, and as such they enrich our view of how this order was construed, what kind of resources regimes allocated to impose it, the scale and scope of the resistance they met, and how these various factors changed over time. Let us briefly review what that meant in each city.

Lucca

In Lucca the *viarii*'s preventative programmes comprised four activities in particular. The first and most obvious was the construction and maintenance of roads, bridges, canals, and walls. The upkeep of structures, which included ensuring their viability on land and water, was explicitly linked by the pertinent statutes 'to the wellbeing and health of men and the people of Lucca[']s territory] and city'.³⁶ Second, and related to this agenda, was monitoring these sites, either in person or by serving as an address for posting (often clandestine) reports of incidents that caused pollution or damage. The *viarii*'s registers amply attest their direct observation of hazards and investigation of complaints brought to their court by third parties (who could include other government officials), and it is these charges that could, when systematically analysed, help us trace the contours of what contemporaries did to uphold and undermine residents' wellbeing, at least from officialdom's perspective. A third preventative programme was to inform locals and visitors about new and existing regulations concerning safety and health. The registers capture several (apparently routine) instances in which the roads official dispatched the communal herald to 'the accustomed places' in order to

³⁶ Archivio di Stato di Lucca, Statuti 3 (1321), V, liii (fol. 247r): '[P]ro bono statu et sanitate hominum et personarum Lucani et civitatis.'

pronounce prohibitions and their attendant fines, for instance regarding the misuse of ovens, waste disposal, watering animals, keeping illicit animals, and preventing blockages. To maximize impact the texts were written and presumably read out in the vernacular.³⁷

Fourth and last, if holding people accountable for their abuses (and those of their household members and animals) can be considered at least in part a deterrent measure, then bringing culprits to justice concludes our list of preventative interventions. Here we are mostly dealing with a summary procedure by which *viarii* confronted alleged violators, sometimes on-site, at others after the fact, and then proceeded either to fine or exonerate them. As a rule, conviction rates were high and procedures brief. Cases that involved extended litigation, including eyewitness testimony, are infrequent in the extant registers, although it is possible that on occasion more complex (and perhaps more acute) cases migrated to a regular criminal tribunal. A statistical study of the extensive data contained in these registers remains a desideratum, but to offer a flavour of the roads official's caseload, let us look at one fascicule of one ledger, covering the period between late July and late September 1354.³⁸

Coming to the roads official's attention during these two months were 38 individuals and corporate entities, including Simone Rozetti of San Lorenzo, who was condemned for diverting water from a millrun and into his own property; the officials of Santa Maria de Albrano, whose representative or *sindaco* failed to appear before the *curia viarum* after being summoned twice; Datuccio Pieri, a *stufaiuolo* of San Michele in Lucca, convicted of allowing putrid water to spill out of his stove and onto a public street; the residents of Montuolo, found collectively guilty of not cleaning their roads; Barto di Menchi of Montuolo, a citizen of Lucca, condemned for blocking a public road; Andrea Nelli of Montuolo, accused of the same offence, although no decision is recorded; three men of Ponte San Pietro and Paolo Gucci of Furci, all charged with causing damage by building a certain platform in the river Serchio under and near the bridge of San Pietro; three men condemned for occupying a public way in Saltocchio; and Giovanni Benucci of San Genaro, for obstructing a public way with wood. All remaining 24 charges were brought against parishes and rural communes in Lucca's hinterland (including San Lorenzo, Gattaiola, Cerreo, San Gemignano, Volgiano,

³⁷ Archivio di Stato di Lucca, Curia delle vie e de' pubblici, 1-13. For transcriptions of these texts see *Bandi Lucchesi del secolo decimoquattro*, ed. Bongi, pp. 188-190; and Geltner, 'Healthscaping a Medieval City', appendix 2.

³⁸ Archivio di Stato di Lucca, Curia delle vie e de' pubblici 10 (1354), fasc. 4.

Subgrano, Tramonte, Decimo, San Ilario, San Genesi, San Pietro di Ambrebbio, and San Iusto) for neglecting the upkeep of roads.

While it would be premature to endorse this list as representative, some of its characteristics resonate with those of other registers. To begin with, all *named* defendants are men, an unsurprising fact given that heads of household were typically male and that the charges brought mostly related to construction activities, another predominantly male occupation in this period. Even if female heads of household approved of, or indeed initiated and participated in, these actions, it is nowhere stated. As other records attest, *viarii* were hardly blind to female offenders, but women's deviance was more likely to manifest itself in the market (selling illicit wares, trading out of hours, or outside designated commercial areas) or else in connection with the illicit disposal of domestic waste. Men are equally dominant, unsurprisingly, as formal community leaders, who comprised most defendants (26 out of 38; 68 per cent). Next, there is a significant presence of individual culprits from rural communes and of the latter as corporations, illustrating that Lucca's control over its hinterland was being exercised through this channel as well, although neither the urban centre nor its suburbs was neglected.³⁹ Finally, except in Datuccio Pieri's case, the allegations raised do not mention or imply pollution, but they do often employ the broader term 'damage' (*dampnum*) to describe the consequence of illicit actions, which could and often did extend to human bodies and beyond, since neglecting and harming infrastructures was certainly framed by Lucca's magistrates as putting public health at risk.

Bologna's *fango* officials have left behind more numerous records than Lucca's (and any other Italian city, for that matter), attracting a modest amount of scholarly attention.⁴⁰ No study, however, has yet digested the hundreds of extant registers in full, or focused on them as sources for public health or policing history.⁴¹ The available data are extraordinarily rich

³⁹ Bratchell, *Medieval Lucca*.

⁴⁰ Greci, 'Il controllo della città'; Breveglieri, 'Il notaio del fango'; Pazzi, 'L'organizzazione dei servizi sanitari d'urgenza'; Maragi, 'La santé publique dans les anciens statuts de la ville de Bologne'; Tosi Brandi, 'Igiene e decoro'; Albertani, 'Igiene e decoro'; Geltner, 'Finding Matter out of Place'.

⁴¹ For the documents pertinent to the office's prosecutorial activities until 1400, see Archivio di Stato di Bologna [henceforth ASBo], Curia del podesta [henceforth Podesta], Ufficio delle acque, strade, ponti, calanchi, selciate e fango [henceforth Fango], bb. 1-27, 30, 32. Much information can also be gleaned from the Capitano

and very rewarding for the same reasons as Lucca's. Here too we are dealing with a modest public works outfit, headed since the late-thirteenth century by one official, whose remit straddled the city and its hinterland. The office had a regular budget for building and upkeep, acquiring materials, and hiring labourers; and in their perambulations throughout and beyond the city fango officials promoted preventative programmes much like their Lucchese counterparts, namely by detecting violations and deterring people from committing them through their physical presence, willingness to hear complaints, and penal actions. Finally, as in Lucca, they employed heralds from time to time to communicate with the population at large.⁴²

Fango officials were visible. Between December 1329 and June 1330, for instance, they recorded a total of 90 site visits. In the next semester their number rose to 94, or more than one every other day.⁴³ In subsequent terms during the period 1334-1337 a modest decline can be traced, but the average of nearly 67 excursions, that is just over one every three days, underscores the officials' regular presence on Bologna's streets and in its markets and workshops.⁴⁴ At any rate, it seems that these perambulations identified few violations, since most reports conclude with *nichil inveni* ('I found nothing'), presumably by way of real or potential damage. To a certain extent, of course, the officer's presence may have acted as an efficient deterrent on would-be offenders, yet misbehaviour did come frequently enough to the official's attention, either directly or by a third party. It is these lists of allegations and fines that furnish us with plentiful data on health-related violations.

To begin with caseloads: in a selection of nine registers from across the fourteenth century, comprising a total of 43 months, fango notaries recorded 2107 charges or an average of 49 cases per month.⁴⁵ Bologna's regular criminal court, by comparison, dealt with an

del popolo's judges' records for the period during which the office fell under his jurisdiction, but they are not explored here.

⁴² ASBo, Podesta, Fango 7, reg. 3, fol. 8r.

⁴³ ASBo, Podesta, Fango, 18, reg. 4, fols. 16r-21v (December 1329-June 1330); reg. 5, fols. 17r-20v, 22r-25r (June-December 1330).

⁴⁴ ASBo Podesta, Fango, 19, reg. 10, fols. 17r-20r (June-December 1334) (74 visits); 20, reg. 1, fols. 17v-18v (December 1334-June 1335) (86); reg. 2, fols. 16r-18r (June-December 1335) (70); reg. 3, fols. 21r-23v (December 1335-June 1336) (65); reg. 4, fols. 17r-19v (June-December 1336) (56); reg. 5, fols. 19r-21v (December 1336-June 1337) (60); reg. 6, fols. 25r-27v (June-December 1337) (57).

⁴⁵ ASBo, Podesta, Fango, 8, reg. 3 (1300-1301); 15, reg. 2 (1317); 20, reg. 1 (1334-1335); 20, reg. 2 (1335); 22, reg. 4 (1361); 24, reg. 4 (1369); 27, reg. 8 (1378-1379).

average of around 120 cases per month in the late-thirteenth century, as few as twenty cases a month in the early and mid-fourteenth century, and about 40 cases a month in the late-fourteenth century.⁴⁶ The caseload was thus quite substantial, especially considering that, unlike administrators presiding over regular civic and criminal tribunals, fango officials could dedicate only a fraction of their time to prosecuting offenders. However, given the nature of most offences adjudicated in this way, verdicts could easily be pronounced on the basis of confessions and eyewitness testimony (not infrequently the official's own), and sentences (mostly fines) meted out and presently collected. The officials' direct gain from their share of the collected fines may certainly have helped to speed up procedures, yet criminal court records and statutes do not support the otherwise reasonable hypothesis that this increased the attendant risk of over-zealous prosecution.

Despite their summary character, the extant entries certainly illuminate detection and prosecution activities at a higher resolution, for instance in terms of charges made, persons involved, location, and outcome. To begin with deviance itself: one way to impose some order on the matter is to place the offences under the rubrics of commerce, neglect, filth, animals, blockages, and safety (in 17 per cent of the cases I could not establish the charge).

⁴⁶ Private correspondence with Samuel K. Cohn, Jr., Trevor Dean, and Sarah Blanshei is the basis of the statistics on criminal prosecutions in Bologna. For broader contextualization see Bonfiglio Dosio, 'Criminalità ed emarginazione a Brescia'; Verga, 'Le sentenze criminali dei podestà milanesi'; Dorini, *Il diritto penale e la delinquenza in Firenze nel secolo XIV*; Cohn, 'Repression of Popular Revolt'; and note 31 above.

Fig. 3.1. General distribution of charges in a selection of registers, 1300-1379

Source: ASBo, Podesta, Fango, 8, reg. 3 (1300-1301); 15, reg. 2 (1317); 20, reg. 1 (1334-1335); 20, reg. 2 (1335); 22, reg. 4 (1361); 24, reg. 4 (1369); 27, reg. 8 (1378-1379).

As is true of most categorizations and taxonomies, these rubrics subsume diverse types of offences. Yet the intention here is to demonstrate the interconnection between Bolognese concepts of civic order and public health. For instance, most offences under the heading of commerce concern the sale of goods outside official opening hours and/or away from designated locations. But operating off-hours and off-site also meant avoiding the quality-control officials appointed in order to ensure that residents purchased healthy fish, meat, wine, and vegetables, and that these commodities and their byproducts were not discarded in a way that endangered residents' health. The use of illegal weights and measures comprises another major sub-category within commerce, and here too the link with public health may appear to be tenuous. However, such violations could trigger a moral domino-effect; and there were certain misuses of weights and measures that could have an immediately adverse impact on health, for instance regarding the accurate use of recipes and safety of dosages. At any event, while promoting health may have been the impetus leading to prosecution in some cases, it is more likely that foremost on the magistrates' minds was a desire to encourage

honesty and transparency, thereby protecting the unity of the civic body. Once again, we observe how the spiritual and physical attributes of health were difficult to tell apart.⁴⁷

From a more familiar modern perspective, other rubrics can be easily connected to the enforcement of preventative programmes, such as attempts to improve public safety. Prominent among this category of charges are artisans using ovens or dangerous industrial materials recklessly and carters accused of neglecting the supervision of their wagons and beasts of burden. Carters charged with neglect differ from owners of animals whose presence in the public domain was generally forbidden, and who comprise the majority of cases falling under the rubric of animals (and we will accordingly see below how broad the spatial distribution of such allegations was). But even here the overlap between safety and health is substantial, as animals could endanger residents physically by attacking them or by scattering filth in inappropriate places.

Blockage and neglect (of infrastructure) are likewise potentially overlapping categories. The main distinction here is between intentional and seemingly unintentional offences: for instance, piling wood deep into a portico, as opposed to the ownership of a leaking drain or gutter, and their respective potential consequences. Of course, depending on *what* was leaking from the gutter, an offence could be easily placed in the final category, namely filth. However, only when complaints explicitly mention environmental deterioration or threats to public health (for their potential as generators of miasmas or as hazards to the visual or olfactory senses) have they been included in the latter category. As the above chart shows, overall these allegations made up a minority (16 per cent) of cases. But using this figure to gauge public health concerns in Bologna is somewhat misleading. As already noted, various insanitary nuisances lay just beneath the surface of numerous other offences, suggesting that the category of ‘filth’ unnecessarily constrains us to think about public health from the limiting perspective of modernity. Either way, it is helpful to see these diverse charges as reflecting a nexus of threats that, at least in officialdom’s eyes, impacted upon health at the population level and hence defined one way of promoting it.

A closer look into the frequency and location of alleged violations reveals a dynamic and complex picture of both continuity and change across the fourteenth century.

Note, for instance, the fall in number of filth- and blockage-related charges and the disappearance of animal-related prosecutions and neglect after 1347-1351 (Black Death), as

⁴⁷ The point is fundamental in Rawcliffe, *Urban Bodies*; and Henderson, *The Renaissance Hospital*.

well as the modest and significant rise, respectively, in safety- and commerce-related charges. While explaining these trajectories remains a desideratum, the continuity of government efforts and residents' complaints is itself significant. That is, plague may have impacted upon the pattern of problems experienced and official responses to them, but it is unlikely to have sparked an interest in developing public health interventions in the first place, or conversely to have triggered a breakdown of mutual aid or government services.⁴⁸

The same data allow us to explore specific issues, such as the role of gender in the prosecution of public health offenders. Women, for example, comprise an average of 11 per cent of those charged with environmental offences. If we look at gender divisions by offence, however, some categories, such as gambling and safety, are entirely male domains, while

Fig. 3.2. Distribution of charges in a selection of registers, 1300-1379

Source: ASBo, Podesta, Fango, 8, reg. 3 (1300-1301); 15, reg. 2 (1317); 20, reg. 1 (1334-1335); 20, reg. 2 (1335); 22, reg. 4 (1361); 24, reg. 4 (1369); 27, reg. 8 (1378-1379)

women are somewhat more prominent (if still a minority) among deviant market vendors (16 per cent). And even here female culprits are mostly grocers and herbalists detected working off-hours or off-site, while their male counterparts, especially fishmongers and butchers,

⁴⁸ Here I am consciously siding with a 'continuist' view of Bolognese society brilliantly demonstrated by Wray, *Communities and Crisis*.

clearly commanded most of the fango's attention during market operating hours. The discrepancy between women's strong presence in the public eye, particularly in markets, and their marginalization in these records also remains to be explained, but it echoes governments' tendency in this period to embrace a more restrictive definition of female deviancy.⁴⁹

Conclusion

As urban centres, late medieval Lucca and Bologna shared a similar scale and key topographical characteristics. From the perspective of environmental protection, they also developed comparable legal norms and enforcement outfits, which moreover carried out a similar admixture of tasks. Set against the background of numerous contemporary sources, these developments appear to have been typical, and collectively they reveal an often-hidden aspect of premodern urban policing and judicial systems. Historians of medieval public health have tended to forego an empirical evaluation of cities' preventative health and safety regulations, often owing to a perceived lack of pertinent sources. In this sense, the study of *viarii*'s records and their regional parallels paves a future research path for establishing what resources premodern municipalities dedicated to fighting disease and promoting health, and in doing so they challenge claims based solely on normative sources.

Alongside public health historians, scholars of crime and punishment may also benefit from exploring this type of social deviancy and its attendant documentation. After all, and despite the relatively minor penalties meted out to public health offenders, their actions were certainly perceived as dangerous, potentially even deadly. It is, indeed, remarkable that, despite the acknowledged life-threatening nature of the violations being detected and pursued by roads officials, offences were not treated at the normative level as possible crimes. One way to explain the apparent discrepancy is that the immediate damage tended to be limited to physical structures and animals and rarely impacted directly upon human beings. Had the consequences been otherwise, resulting in injury, infection, or even death, the charge would have likely been levelled in a criminal court rather than being consigned to a summary judicial procedure. Such eventualities, however, are not explicitly treated in the legal sources regulating *viarii*'s conduct and remain beyond the scope of the present essay. Sporadic evidence from elsewhere (as mentioned above) suggests that what in most cases were

⁴⁹ Geltner, 'A Cell of their Own'.

perceived as minor environmental offences could occasionally result in grave injuries and be persecuted as such in a criminal procedure. Either way, adding a healthscaping element to such analyses promises to enrich our understanding of premodern judicial systems and their attendant policing procedures.

BIBLIOGRAPHY

Archival sources

Archivio di Stato do Bologna (ASBo), Comune, Curia del podesta, Ufficio delle acque, strade, ponti, calanchi, selciate, e fango, bb. 1-27, 30, 32

Archivio di Stato di Lucca, Curia delle vie e de' pubblici, 1-13; Statuti, 3

Printed primary sources

Bandi Lucchesi del secolo decimoquarto, ed. by Salvatore Bongi (Bologna: Tipografia del Progresso, 1863)

Statuta Civitatis Aquile, ed. by Alessandro Clementi (Rome: Istituto Storico Italiano per il Medio Evo, 1977)

Gli statuti del Comune di Pirano del 1307 confrontati con quelli del 1332 e del 1358, ed. by Camillo De Franceschi (Venice: Deputazione di Storia Patria per le Venezie, 1960)

Gli Statuti del Comune di Treviso, ed. by Giuseppe Liberali, 2 vols. (Venice: Deputazione di Storia Patria per le Venezie, 1950-1951)

Gli Statuti del Comune di Treviso (sec. XIII-XIV), ed. by Bianca Betto, 2 vols. (Rome: Istituto Storico Italiano per il Medio Evo, 1984-1986)

Statuti dei Comuni di Castelfranco di Sopra (1394) e Castiglione degli Ubertini (1397), ed. by Giulia Camerani Marri (Florence: Leo S. Olschki, 1963)

Statuti della Repubblica Fiorentina, ed. by Romolo Caggese, rev. ed. by Giuliano Pinto and others, vol. 1, *Statuto del capitano del popolo degli anni 1322-25*; vol. 2, *Statuto del podestà dell' anno 1325* (Florence: Leo S. Olschki, 1999)

Gli Statuti di Dronero (1478), ed. by Giuseppe Gullino (Cuneo: Società per gli Studi Storici, Archaeologici ed Artistici della Provincia di Cuneo, 2005)

Statuti di Figline, ed. by Fausto Berti and Mario Mantovani (Figline: Blanche Grafica Edizioni, 1985)

Gli Statuti di Scarperia del XV secolo, ed. by Vanna Arrighi (Florence: Edizioni Firenze, 2004)

Statuti di Spoleto del 1296, ed. by Giovanni Antonelli (Florence: Leo S. Olschki, 1962)

Statuti inediti della Città di Pisa, dal XII al XIV secolo, ed. by Francesco Bonaini, 3 vols. (Florence: G.P. Vieusseux, 1854-1870)

Lo statuto de Bergamo del 1331, ed. by Claudia Storti Storchi (Milan: Giuffrè, 1986)

Statuto del Comune di Montepulciano (1337), ed. by Ubaldo Morandi (Florence: Le Monnier, 1966)

Statuto del comune e del popolo di Perugia del 1342 in volgare, ed. by Mahmoud Salem Elsheikh, 3 vols. (Perugia: Deputazione di Storia Patria per l'Umbria, 2000)

Statuto ravenne di Ostasio da Polenta (1327-1346), ed. by Umberto Zaccarini (Bologna: Deputazione di Storia Patria per le Province di Romagna, 1998)

Statutum Potestatis Comunis Pistorii (1296), ed. by Lodovico Zdekauer (Milan: Hoepli, 1888), reprinted in *Statuti pistoiesi del secolo XIII. Studi e testi*, III, ed. by Renzo Nelli and Giuliano Pinto (Pistoia: Società Pistoiese di Storia Patria, 2002)

The Towns of Italy in the Later Middle Ages, ed. and trans. by Trevor Dean (Manchester: Manchester University Press, 2000)

Printed secondary sources

Albertani, Germana, 'Igiene e decoro. Bologna secondo il registro del "notaio del fango" (1285)', *Storia Urbana*, 116 (2007), 19-36

Balestracci, Duccio, 'The Regulation of Public Health in Italian Medieval Towns', in *Die Vielfalt der Dinge: Neue Wege zur Analyse mittelalterlicher Sachkultur*, ed. Harry Kühnel and others (Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 1998), pp. 345-357

- Balestracci, Duccio, and Piccinni, Gabriella, *Siena nel Trecento: assetto urbano e strutture edilizie* (Florence: CLUSF, 1977)
- Baroni, Giorgio and Berti, Giorgio, *Spazio alla vita. Il servizio di pulizia nei secoli e oggi nel mondo. Per una nuova immagine degli operatori del settore* (Milan: Rights Answer, 1993)
- Blanshei, Sarah Rubin, *Politics and Justice in Late Medieval Bologna* (Leiden: Brill, 2010)
- Bocchi, Francesca, *Attraverso le città italiane nel Medioevo* (Casalecchio di Reno: Grafis, 1987)
- Bocchi, Francesca, '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
- Bonfiglio Dosio, Giorgetta, 'Criminalità ed emarginazione a Brescia nel primo Quattrocento', *Archivio Storico Italiano*, 136 (1978), 113-164
- Bratchell, M.E., *Medieval Lucca and the Evolution of the Renaissance State* (Oxford: Oxford University Press, 2008)
- Breveglieri, Bruno, 'Il notaio del fango', *Atti e Memorie della Deputazione di Storia Patria per le Province di Romagna*, new series, 56 (2005), 95-152
- Ciecieznski, N. J., 'The Stench of Disease: Public Health and the Environment in Late-Medieval English Towns and Cities', *Health, Culture and Society*, 4 (2013), 92-104
- Cohn, Samuel K., Jr., 'Repression of Popular Revolt in Late Medieval and Early Renaissance Italy', in *The Culture of Violence in Renaissance Italy: Proceedings of the International Conference, Georgetown University at Villa le Balze, 3-4 May 2010*, ed. by Samuel K. Cohn, Jr., and Fabrizio Ricciardelli (Florence: Le Lettere, 2012), pp. 99-122
- Coomans, Janna, and Geltner, G., 'On the Street and in the Bathhouse: Medieval Galenism in Action?', *Añuario de Estudios Medievales*, 43 (2013), 53-82
- Dean, Trevor, *Crime and Punishment in Late Medieval Italy* (Manchester: Manchester University Press, 2007)
- Dorini, Umberto, *Il diritto penale e la delinquenza in Firenze nel secolo XIV* (Lucca: D. Corsi, 1923)

Douglas, Mary, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo* (New York: Praeger, 1966)

Farley, Tom, and Cohen, Deborah A., *Prescription for a Healthy Nation: A New Approach to Improving our Lives by Fixing our Everyday World* (Boston: Beacon Press, 2005)

Foucault, Michel, 'The Birth of Biopolitics', in *The Essential Works 1954-1984*, gen. ed. Paul Rabinow, trans. by Robert Hurley and others, 3 vols. (New York: The New Press, 1997), I, pp. 73-80

Geltner, G., 'Public Health and the Pre-Modern City: A Research Agenda', *History Compass*, 10 (2012), 231-245

Geltner, G., 'A Cell of their Own: The Incarceration of Women in Late Medieval Italy', *Signs*, 30 (2013), 27-51

Geltner, G., 'Healthscaping a Medieval City: The *Curia viarum* of Lucca and the Future of Public Health History', *Urban History*, 40 (2013), 395-415

Geltner, G., 'Finding Matter out of Place: Bologna's 'Dirt' (Fango) Officials in the History of Premodern Public Health', in *The Far-Sighted Gaze of Capital Cities. Essays in Honor of Francesca Bocchi*, ed. Rosa Smurra and others (Rome: Viella, 2014), pp. 307-321

Geltner, G., *Roads to Health: Infrastructure and Urban Wellbeing in Later Medieval Italy* (Philadelphia: University of Pennsylvania, 2019)

Greci, Roberto, 'Il problema dello smaltimento dei rifiuti nei centri urbani dell'Italia medievale', in *Città e servizi sociali nell'Italia dei secoli XII-XV* (Pistoia: Centro italiano di studi di storia d'arte, 1990), pp. 439-464

Greci, Roberto, 'Il controllo della città: l'ufficio dei fanghi e strade a Bologna nel XIII secolo', *Nuova Rivista Storica*, 75 (1991), 650-661

Gunzburg, Darrelyn, 'The Perugia Fountain: An Encyclopaedia of Sky, Culture and Society,' in *Sky and Symbol*, ed. by Nicholas Campion and Liz Greene (Lampeter: Sophia Centre Press, 2013), pp. 103-118

Henderson, John, *The Renaissance Hospital: Healing the Body and Healing the Soul* (New Haven, CT: Yale University Press, 2006)

Jørgensen, Dolly, 'The Medieval Sense of Smell, Stench and Sanitation', in *Les cinq sens de la ville du Moyen Âge à nos jours*, ed. by Ulrike Krampl and others (Tours: Presses universitaires François-Rabelais, 2013), pp. 301-313

Lecuppre-Desjardin, Elodie, and Bruaene, Anne-Laure van (eds.), *De Bono Communi: The Discourse and Practice of the Common Good in the European City (13th-16th c.)* (Turnhout: Brepols, 2010)

Maragi, Mario, 'La santé publique dans les anciens statuts de la ville de Bologne (1245-1288)', *Histoire des sciences médicales*, 17 (1982), 81-87

Mazzi, Maria Serena, *Salute e società nel Medioevo* (Florence: La nuova Italia, 1978)

Pazzi, Muzio, 'L'organizzazione dei servizi sanitari d'urgenza nel medio evo, con particolari riguardi a Bologna', *Atti e memorie della R. Deputazione di storia patria per le provincie di Romagna*, 4 (1912), 18-40

Rawcliffe, Carole, 'Sources for the Study of Public Health in the Medieval City', in *Understanding Medieval Primary Sources: Using Historical Sources to Discover Medieval Europe*, ed. by Joel T. Rosenthal (London: Routledge, 2012), pp. 177-195

Rawcliffe, Carole, *Urban Bodies: Communal Health in Late Medieval English Towns and Cities* (Wodbridge: Boydell, 2013)

Szabò, Thomas, 'La politica stradale dei comuni medievali italiani', *Quaderni Storici*, 21 (1986), 77-115

Tosi Brandi, Elisa, 'Igiene e decoro: Bologna e Rimini tra XIII e XIV secolo', *Storia Urbana*, 116 (2007), 7-18

Vallerani, Massimo, *Il sistema giudiziario del comune di Perugia: conflitti, reati e processi nella seconda metà del XIII secolo* (Perugia: Deputazione di storia patria per l'Umbria, 1991)

Vallerani, Massimo, *Medieval Public Justice*, trans. by Sarah Rubin Blanshei (Washington, D.C.: Catholic University of America Press, 2012)

Verga, Ettore, 'Le sentenze criminali dei podestà milanesi 1385-1429', *Archivio Storico Lombardo*, 28 (1901), 96-142

Wray, Shona Kelly, *Communities and Crisis: Bologna during the Black Death* (Leiden: Brill, 2009)

Zorzi, Andrea, *L'amministrazione della giustizia penale nella Repubblica fiorentina: aspetti e problemi* (Florence: Leo S. Olschki, 1988)

Zupko, Ronald E. and Laures, Robert A., *'Straws in the Wind': Medieval Urban Environmental Law* (Boulder, CO: Westview Press, 1996)

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CHAPTER FOUR

Food Offenders: Public Health and the Marketplace in the Late Medieval Low Countries¹

Janna Coomans

Abstract

In the Low Countries, market squares were the site of numerous threats to public health and efforts to contain them, notably by the officials who inspected, guarded, and protected these spaces. This chapter explores the ways in which urban authorities and other corporate bodies attempted to police markets, and improve levels of sanitation, environmental health, and food safety. It utilizes archival material from several Netherlandish cities, including financial records and public decrees, bylaws, and the statutes of trade and craft guilds (which furnish important evidence about the ways in which medical theories informed attitudes to food standards). An analysis of registered fines and information about the punishment of offenders highlights the tensions that existed between customers, vendors, guilds, and magistrates.

Key words: public health; food trade; markets; Low Countries; butchering

In 1476, the urban authorities of Leiden punished three men who had attempted to sell meat from a cow they had bought and slaughtered in nearby Wassenaar. As a result, Leiden's market supervisors had been unable to inspect the animal alive, and therefore:

[N]o one knew if it had died by itself or had any deficiencies or nasty diseases that would have rendered the meat unsuitable for consumption or use. This is an evil,

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nasty, and unseemly matter, which could have badly affected many people, and which the magistrates will tolerate from no one.²

The accused not only had to pay a fine for their transgression, but were also required to redeem themselves through a ritual penance, namely to present a two-pound wax cow in each of the city's three parish churches on the following Sunday. We shall return later to this remarkable act of atonement, but might note here that, in addition to the magistrates' strongly worded rhetoric in their denunciation of the crime, such a humiliating public spectacle would have gravely undermined the reputation of those involved.

Authorities in medieval European towns carefully regulated and policed food exchange, including the sale of meat. Urban bylaws and guilds' statutes prescribed how traders were to preserve and transport wares and select healthy animals, and specified the conditions under which they should sell their merchandise, including pricing, location, and time of day. Urban authorities across the Low Countries, one of the most urbanized regions in late medieval Europe, commonly restricted the marketing of meat, fish, and grain to specific locations, each equipped with its own mechanisms for supervision. They often explicitly prohibited sales elsewhere. Concerns regarding its perishable nature explain why transactions involving meat were so tightly controlled, while fear of shortage – potentially followed by social unrest – stimulated magistrates' desire to monitor the sale of grain.³ Yet urban officialdom's desire to consolidate its power over food markets, defined here as designated urban spaces for the policing of food quality, at times clashed with the ways in which vendors negotiated, contested, resisted, or avoided such interventions. Thus, desired norms could succumb to other pressures, which required systems of enforcement to be set in place.

The magistrates of Leiden explicitly framed the offence described above as a threat to the wellbeing of the urban community – the desire to protect public health was unequivocally behind their intervention. While behaviour of this kind was seized upon to rhetorically justify

² '[E]nde want men niet en weet wat gebrec dattet beest hadde soe als gestortet lach oft die moert yet geslege hadde of andere quade evele ziekten of gebreken gehad mocht hebben, wairbij men dat vleesch niet schuldich en hadde geweest te eten, te vercopen off te gebruycken, twelke een quade ende lelike onbehoirlike saken is dair veele menschen bij misquame mochte gecrige ende tgerecht sulke saken te hanteeren van nyement en staet te lyden.' Stadsarchief Leiden [hereafter SAL], 0508, 4B: 'Correctieboek' B, fol. 265v.

³ An exception to this process of centralisation was perhaps the sale of food at annual fairs: Beek-Mulder and Polman, *De Hallen in Haarlem*, pp. 37-40. See more generally on the regulation of the victualing trades, Nicholas, *The Growth of the Medieval City*, pp. 194-195; Isenmann, *Die deutsche Stadt*, p. 112; Romano, *Markets and Marketplaces*; Welch, *Shopping in the Renaissance*; Rawcliffe, *Urban Bodies*, pp. 261-262.

the exercise of governmental control over the urban food trades, the detail and extensiveness of regulation suggest more than a simple quest for power by an urban elite. Food policies were part of a broader concern about communal welfare on the part of magistrates. This was not an expression of altruism, but a means of protecting a town's political and economic interests, because (epidemic) disease would harm the collective body, and poor-quality wares on sale in the market would damage its reputation. Moreover, concerns about the sale of unwholesome commodities resonated with ideas stemming from contemporary medical literature. Such prescriptive texts attributed great importance to a good diet for maintaining health, both at an individual level and for the population as a whole, and directly linked the consumption of substandard food and drink to the generation of disease. Magistrates across the Low Countries could, indeed, be informed about these matters by resident physicians and surgeons, as they commonly appointed qualified healers into municipal service.⁴

The extensive scholarship on late medieval marketplaces has carefully demonstrated the importance of this multifaceted public space for the urban community.⁵ It has outlined the political and economic function of facilities for the central sale of foodstuffs, including taxation and the monopolization of exchange, the control of licences to trade, the monitoring of prices, and mediation in conflict resolution. However, the role of public health concerns in the spatial production and governance of the food market has remained understudied. Nor has the copious evidence of the enforcement of health regulations and of subsequent tensions between the public health officials who policed the market and food traders, acting in their own interests, received the attention it deserves. This is mainly because market transgressions were not separately documented, and court records have not been adequately indexed, thereby posing a considerable challenge to historians.⁶

This chapter will make good such neglect and further explore the role that food markets played in the development of public health practices. It will also assess the impact of perceived health risks on the regulation of food trades, on the spatial layout of markets and on

⁴ Ladan, *Gezondheidszorg in Leiden*, pp. 113-116, 163-172; Huizenga, *Tussen autoriteit en empirie*, pp. 234, 447-450. See also pp. 18-23 above.

⁵ Laleman, 'Espaces publics dans les villes Flamandes au Moyen Âge'; Arnade, *Realms of Ritual*, p. 47; Romano, *Markets and Marketplaces*; Lopez, *The Commercial Revolution*; Howell, *Commerce before Capitalism*; Boone, 'Een Middeleeuwse Metropool', pp. 55-56; Stabel, 'The Market Place'. See also a number of relevant articles in *De Bono Communi*, ed. Lecuppre-Desjardin and Van Bruaene.

⁶ For similar challenges see pp. 91, 99, 105-106 above.

the management of the social interactions that took place in them. It argues that health interests and preventative care at a popular level were key to officialdom's definition of good governance of the marketplace. Urban authorities in the Low Countries employed strategies for governing and policing that have often been deemed nonexistent in late medieval society, namely those targeting the urban population's health through the supervision of food quality and provision as part of a wider enhancement of authority. Or, in more Foucauldian terms, the policing of food markets accords with an approach to governance that embraces bio-power. This prompted rulers to integrate expert knowledge about health and the population's life forces into the governance of their subjects, and to use it as a disciplinary and administrative tool.⁷

The marketplace reflected and reproduced in many ways the power structures of urban government. The links between unity, identity, quality, profit, and health are manifest in a concept often employed in urban records to justify such interventions, namely that of the common good (*ghemenen oirbair*). As I hope to demonstrate below, public health concerns were clearly part of a premodern perception of the common good on the part of urban magistrates. A close examination of food policies and their enforcement from the late-thirteenth to the fifteenth century suggests that preventative health agendas were realized through altering, coordinating, and monitoring the food market as a strategic location, which was, moreover, one of several visible focal points or at-risk sites within the city. If we adopt an approach pioneered by Henri Lefebvre, these markets and halls can be broken down into three types of spaces. They were physical places, but also political and legal constructions, with attendant mental boundaries and constraints. And they were socially and morally charged spaces: endowed with religious and ethical connotations, and with (un)written rules and restrictions about social interactions, behaviour, and status according to class, gender, and occupation.⁸

This chapter first takes a closer look at the established mental boundaries and physical divisions of market space. It will briefly outline contemporary medical theories about food, with particular focus on the meat trade, and link these ideas to the ways in which various Netherlandish cities sought to realize the ideal of a healthy and prosperous food market.

⁷ Nadesan, *Governmentality, Biopower, and Everyday Life*, pp. 2-9; Gordon and others, 'Governmental Rationality', pp. 2-14.

⁸ Lefebvre, *The Production of Space*; Romano, *Markets and Marketplaces*; Romano, 'Gender and the Urban Geography of Renaissance Venice'; Welch, *Shopping in the Renaissance*.

Secondly, it offers a tentative exploration of the evidence regarding enforcement. Recorded fines from two of the largest cities in this highly urbanized region – Ghent and Ypres – dating from the late-thirteenth to the early-fourteenth century, offer especially well-documented case studies. In addition, the variety of punishments exacted for offences committed by food vendors as recorded in fifteenth-century Leiden can tell us more about the perception and communication of a sense of market morality in the context of attempts to protect public health. An investigation of regulation, as well as enforcement, suggests that officials – in the personae of specially appointed market inspectors – and probably also vendors not only seem to have been aware of, but also actually applied, knowledge about health-preservation and disease risks, thus demonstrating a certain level of health literacy. It also reveals that such concerns had an impact on the spatial organization of late medieval food markets.

Principles underlying a healthy food market

Contemporary medical literature emphasized the importance of consuming the right combination of food and drink and preparing it safely. Vernacular medical tracts, propagating humoral or Galenic theories, precisely described the qualities or characteristics (cold/hot, dry/moist) and impact of each food type on the body, depending on age, gender, season, and environment. Food and drink were the main constituents of, and means of replenishing, the four humours, with the stomach as the ‘oven’ cooking whatever was consumed, before the fluids that had been further processed in the liver were distributed throughout the body. Ideas about food and the preservation of health were disseminated in specially produced *regimina*, as well as other genres, such as recipe books, and spread among urban *literati* across the Low Countries during the late Middle Ages.⁹ But these works also made it clear that consumers of the wrong kinds of food and drink – or even the wrong amounts – risked falling ill. First, eating spoiled food or the flesh of diseased animals would corrupt the humours, and therefore engender disease. This was also likely to happen if one of the humours gained the upper hand and distorted the body’s balance, notably through the consumption of food that was too hot, cold, moist or dry. Conversely, both types of humoral defect – corruption or imbalance – could in principle be cured by the right counter-diet or other measures designed to restore equilibrium, such as bloodletting or bathing.¹⁰ Finally, the pollution of the environment

⁹ Rawcliffe, *Medicine and Society in Later Medieval England*, pp. 29-40; Huizenga, *Tussen autoriteit en empirie*; and pp. 18-22 above.

¹⁰ Baker and others, *Medicine and Space*.

through infected air (*miasma*) was another potential health risk stemming from contaminated wares. This not only arose from the negligent disposal of leftovers and waste; foetid meat displayed in the market (hall) also appeared to inflict illnesses, including plague, upon the community through the corruption of the surrounding air, which then spread through the entire town.¹¹

Various studies have demonstrated that late medieval urban authorities, as well as the bulk of the populace, took very seriously the threat of corruption arising from butchers' waste and other residues from food production. Initiatives against pollution ranged from establishing demarcated work zones in or near towns to introducing specific systems or places for refuse disposal and delegating supervisory responsibilities to guilds.¹² Municipal initiatives for the containment of health threats caused by the sale and consumption of contaminated food can occasionally appear more obscure. Yet market regulations across the Low Countries articulated a range of such perceived concerns in a very specific discourse. Food needed to be safe for consumption, but the problems (especially regarding preservation) were numerous. First, it could spoil or become rancid because too much time had passed since an animal had been killed or victuals prepared or cooked. Many ordinances and other records employ generally negative terms to refer to this corrupted state: 'bad', 'defective', 'dirty', or 'stinking', the last of which reflects the importance of smell in the detection of offences during inspections.¹³ Towns issued prohibitions: no rotting fish, mouldy (*vunstich*) bread, or anything other than wholesome (*gave*) goods should be found on vendors' stalls. Indeed, anything that 'smells, looks, or cooks bad' was forbidden.¹⁴

Second, where the sale of meat was concerned, animals could be diseased, which, according to contemporary medical theory, made their flesh even more dangerous to eat. Illness and infection among pigs in particular raised concern. Urban statutes refer specifically to swine with blisters or lumps under the tongue or on in the meat, employing the terms

¹¹ Rawcliffe, *Urban Bodies*, pp. 234-239.

¹² Sabine, 'Butchering in Mediaeval London'; Carr, 'Controlling the Butchers'; Ciecieszki, 'The Stench of Disease', pp. 95-98; Rawcliffe, "Great Stenches, Horrible Sights and Deadly Abominations".

¹³ 'Quaat, ongans, ontemelic, insuffisantelik, vuyl, van gebrec': Latin: 'malus'; French 'mauvais', 'vilaine'. See Keure van Hazebroek, ed. Gailliard, pp. 194-245; Coutume de la ville de Gand, ed. Gheldolf, p. 406 (1280 edict); 'Les Keures d'Ypres', ed. De Smet, pp. 404-412.

¹⁴ Rechtsbronnen Aardenburg, ed. Vorsterman van Oyen, p. 126; Keurboeken Leiden, ed. Hamaker, p. 265 (1477).

‘gortig’, ‘vinnich’, or ‘verzaaid’, meaning spoiled or marred by disease, and occasionally even ‘leprous’.¹⁵ Finally, the usual qualities – in a Galenic sense – of the meat could be transformed if the animal was in an ‘altered state’ before it was killed. This assumption seems to have been closely related to humoral theory and differs most obviously from modern Western conceptions of food hygiene. Anxiety extended to cows and pigs in heat, cows that had just mated with a bull, infertile pigs, and any animal that had recently given birth and was suckling. Such conditions changed the natural characteristics of the meat, which meant that consuming it would have a different, potentially injurious, impact on the body.¹⁶ By contrast, bulls’ and rams’ meat seemed dangerous in its natural state, being suffused with corrupt blood, and therefore could not be sold unless the animal had first been ‘warmed’. In England, bulls had therefore to be baited by dogs, although there is less evidence of this practice in the Low Countries.¹⁷ In sum, while magistrates rarely referred to medical theories explicitly, regulations concerning the inspection and sale of meat in particular suggest that ideas about the preservation of health informed government policies.¹⁸

But striving for a safe and salubrious market entailed much more than the prohibition of spoiled wares; it also impacted upon spatial organization. With regard to food, the preservation of health demanded a clearly demarcated and orderly environment for exchange. To invoke Mary Douglas’ celebrated adage, everything had to be in its ‘right place’ – as determined by those in power.¹⁹ Market spaces did not develop ‘naturally’ as part of the late medieval urban fabric; their shape and organization, including the creation of commercial halls (such as Ghent’s Great Meat Hall, built in 1408 and still standing today), were often a product of political and economic intervention on the part of magistrates, who were no less concerned about health. For example, the rulers of Haarlem stated in 1386 that, in order to create a ‘good city’, it was ‘honest, useful, and beneficial to have a clean (*reyne*) meat hall, to prevent bad and spoiled meat’, thus establishing that meat should be sold in a designated,

¹⁵ Gailliard lists similar regulations from Avignon, Sluis (1379), Sneek (1456), St. Hubert, Arnstadt (1543), Dinant (1546), Antwerp (fifteenth century), Diest, Amersfoort (1523), and Liege (1487): *Keure van Hazebroek*, pp. 229-232. See also *Stadrechten Nijmegen*, ed. Krom and Pols, p. 58 (fifteenth century); *Rechtsbronnen Breda*, ed. Bezemer, p. 11 (1373).

¹⁶ However, taste could also differ and play a role here: *Keure van Hazebroek*, ed. Gailliard, I, pp. 217-223.

¹⁷ *Keure van Hazebroek*, ed. Gailliard, I, pp. 217-223; Rawcliffe, *Urban Bodies*, pp. 153, 242-243.

¹⁸ The lack of explicit references is noted in Nicoud, ‘L’alimentation’, p. 150.

¹⁹ Douglas, *Purity and Danger*, pp. 2-5.

hygienic building.²⁰ And during the reconstruction of the city hall in 1415, Leiden's authorities incorporated their meat hall into the very same building. Such multipurpose structures, common in a number of Netherlandish cities, underscore the close relationship between the development of urban government and the policing of food commerce.²¹

Most generally, health-promoting practices in the marketplace ideally involved the provision of sufficient supplies of good quality food that was accurately weighed and sold for fair prices. Weights and assizes were subject to detailed and often-repeated ordinances, as well as regular inspections. Policing the market also entailed the regulation of time: from specifying the duration of fairs, market weekdays, and working hours, to restricting the time spent on production processes and introducing expiry dates for the sale of food.²² Another core issue concerned spatial organization within the marketplace itself: the size and location of benches and stalls, as well as the distance to be maintained between traders selling different types of meat, fish, and fowl were all matters of sanitary importance.²³ Moreover, a healthy food market was also a clean market, which would incorporate arrangements and infrastructures for waste disposal. There are references to refuse containers in a significant number of Netherlandish towns from the fifteenth century onward, for example on the fish market in Leiden.²⁴ Public wells and fountains were another regular feature of market spaces,

²⁰ 'In goede stede eerlicke, nuttelicke and oerbaerlicken es een goet reyne vleysshuys, dat men hiet een hall, om te verhoeden quaet ende ongave vleysch.' *Rechtsbronnen Haarlem*, ed. Huizinga, p. 97. The phenomenon of the commercial hall occurred across Europe, yet the meat hall seems to have been particularly common in towns throughout the Low Countries: Beek-Mulder and Polman, *De Hallen in Haarlem*, pp. 37-40; Nicholas, *The Growth of the Medieval City*, pp. 194-195; Isenmann, *Die deutsche Stadt*, p. 112; Romano, *Markets and Marketplaces*; Welch, *Shopping in the Renaissance*; Rawcliffe, *Urban Bodies*, pp. 261-262.

²¹ *Keurboeken Leiden*, ed. Hamaker, p. 229 (1450); Schneider, *Slachten En Keuren*, pp. 16-19. See also Stabel, 'The Market Place', pp. 53-56.

²² Bells and clocks were central to structuring time and communication within the market space: Naegle, 'Armes à double tranchant?', pp. 55-56; Rawcliffe, *Urban Bodies*, pp. 271-273; Slechte, *Geschiedenis van Deventer*, pp. 240-250; Symes, 'Out in the Open, in Arras', pp. 279-302; Le Goff, *Time, Work and Culture*, pp. 48-49.

²³ *Keurboeken Leiden*, ed. Hamaker, pp. 227-228 (1450); Stadsarchief Gent [hereafter SAG], Voorgeboden, 108-2, fol. 5v (2 December 1404); and for fish Voorgeboden, 108-2, fols. 8r (1405), 10r (1406), 67r (28 April 1419).

²⁴ Leiden established a new fish market with waste bins in 1461: SAL, 0501, 382 'Vroedschapssboeken 1465-1504', fol. 16r. Ghent's aldermen demanded that each fishmonger should have a barrel (*cupe*) 'to put their dirt in and carry it away': SAG, Voorgeboden 93-46, fol. 2r (1483). See also Stadsarchief Dordrecht [hereafter SADor], Klepboek 6, fols. 77r (1452), 93v (1457); *Rechtsbronnen Gouda*, ed. Rollin, pp. 203, 240, 368.

4.1. *View of the Fish Market in Leiden* (c. 1600), oil on panel by an anonymous artist. The waste bin, which is first mentioned in fifteenth-century records, is depicted to the right of the centre.

as indicated by both archaeological and historical evidence.²⁵ Finally, cleaners were hired to improve levels of sanitation and to coordinate traffic during market days, while food sellers often had to contribute towards the cost of disposing of market waste.²⁶ In sum, such initiatives reflect a desire to protect the environment from miasmatic threats stemming from stench, and create a space that facilitated the enforcement of public health policies. Here, the protection of food markets as a common good clearly entailed broad-based concerns about communal wellbeing, but also notably focused on the sale of specific types of foodstuffs, namely fish, meat, and grain. We have considerably fewer extant sources regarding vegetables and dairy produce.

Market inspectors or overseers (*vinders* or *keurmeesters*), more than one often being employed in each market or hall, were key agents with regard to the enforcement of food standards. These inspectors were frequently charged with the collection of market taxes, which usually remained distinct from, or supplementary to, any import levies payable at gates or harbours.²⁷ Another responsibility that fell to them was to monitor the arrival of wares and

²⁵ Deligne, 'Powers over Space', p. 27; Billen, 'Dire le Bien Commun dans l'espace public', p. 84; Stabel, 'The Market Place', p. 57; Laleman and Vermeiren, 'Ruimte en bebouwing'.

²⁶ See my PhD thesis, 'In Pursuit of a Healthy City'.

²⁷ Werveke, *De Gentsche Stadsfinancien*, pp. 203-214; Boone, *Geld en macht*, pp. 144-145. See for Leiden Marsilje, *Het financiële beleid*, pp. 114-119; Benders, *Bestuursstructuur en schriftcultuur*, pp. 122-123; Soly, 'Continuity and Change', pp. 102-103; Uytven, 'Stedelijke Openbare Diensten', p. 32.

to supervise the appropriate deployment of transport.²⁸ Most importantly, they had to inspect the quality and wholesomeness of consumables, manage the allocation of market stalls, and check if they were being used according to the regulations. As we have seen, many towns in the Low Countries insisted on the inspection of animals while they were still alive (*levende besien*).²⁹ And, to prevent the sale of spoiled or outdated wares, bylaws and guild statutes generally prescribed the number of ‘times’ (*malen*) that meat and fish could be offered for sale before it had to be salted or cured, varying from one to four days depending on the season and local custom.³⁰

A court case between three butchers and the meat hall overseers in Leiden gives us some indication of how rigidly food regulations were enforced and what market inspection entailed in practice. The overseers defended their claim to the fine that they had imposed by asserting that they had acted precisely in accordance with their oath as elected officials. They emphasized their close ties with the civic magistrates – whose official headquarters, as noted above, were located in the very same building:

Because the law demands that no one brings any goods for consumption to the market other than decent ones [...] the sworn overseers have found in the meat hall, in which there is a daily meat market, a consignment of meat belonging to the said [three butchers], which meat the overseers have fined [and rejected], and furthermore showed it to the aldermen, who also deemed the meat bad and spoiled (*quaet ende ongans*). And the said overseers have, in accordance with their oath, reported the transgression to the aldermen, as is required.³¹

²⁸ *Voorgeboden der stad Gent*, ed. de Pauw, pp. 5 (1337), 30 (1338); SAG, *Voorgeboden* 108-2, fol. 88v (1427).

²⁹ *Keure van Hazebroek*, ed. Gailliard, I, pp. 202-204. In Deventer, the animal had to eat something to prove that it was healthy: Stadsarchief Deventer [henceforward SAdDev], ID 0690, 4-1 ‘Copienboek’, fol. 93r.

³⁰ A *male* was usually one part of a day, morning or afternoon, and inspection was required at every turn: SAG, *Voorgeboden* 108-2, fol. 87v. Gailliard notes the following rules regarding the number of turns allowed: 1 [day in summer] or 2 [day in winter] at Sluis (1441); 1.5 or 2 Arnhem (1354); 1.5 or 2 Zutphen (1387); 2 or 3 Harderwijk (1470); 2 or 3 Liege (1414); 2 or 2.5 Leiden (1406); 3 or 5 Leeuwarden (sixteenth century); and 1.5 days all year round in Utrecht (1391): *Keure van Hazebroek*, I, pp. 209-216.

³¹ The aldermen’s court treated the dispute over a fine as a financial matter – a debt contested between two litigating parties that required settlement: ‘[A]lsoe die keure inhoudet dat nyemant geen goet dat men eten mach ter marct brengen en sel anders dan gave ende goed is, ende soe die gesworen vindere vande stede bevonden hebben inder vleyschhalle, daer dat die dagelick vleysche marct is, een deel vleysch toe behorende [Willem Spronck, Pieter Willem Sproncxzoon ende Pieter Janszoon, vleyschouwers] bekeurt hebben ende dat vleysch den scepenen laten besien diet ook quaet ende ongans geordelt hebben, ende die voirs vindere hebben by hoeren

The three butchers, however, ‘denied all allegations’, and sought the repayment of their 18s (*schellingen*) fine, as well as having the litigation costs additionally charged to them waived.³² They attempted to undermine the market inspectors’ authority, claiming that such officials were ‘only ordered to price good meat and food and reject bad meat, and regulate times (*malen*) and market [hours]’. Accusations regarding the sale of ‘bad meat’, the butchers said, should be ‘inspected and investigated by the aldermen’.³³ The butchers lost their case, yet no additional penalty seems to have been exacted for this display of judicial resistance against the market officials. It clearly demonstrates, however, that the inspectors functioned as the government’s eyes and especially noses in the meat hall.

Through elected officials, urban authorities assumed a proactive attitude towards the monitoring of food trades, which extended well beyond the market space. Perhaps local complainants informed them, or they routinely made rounds through the rest of the city. For example, Leiden’s magistrates forbade the import of poultry, cooked or uncooked, without inspection for a 100-*roede* radius (*c.* 376 metres) outside town.³⁴ An ordinance from Dordrecht threatened to impose a fine of three pounds (*lb.*), the equivalent of about fifteen days’ wages for an unskilled workman, upon anyone who ‘verbally assaults the inspectors of birds when they come into houses or on the streets to find birds to inspect, [or] about anything pertaining to their duty’.³⁵ Thus, while the sale of poultry was only allowed in the

eede den voirs brueke den scepenen an gebrocht alse recht is. Ende soe wat brueken die vindere by hoeren eede an brengen daer of en selmen tot gheenre ontsoude staen.’ SAL, ‘Kenningboek’ C, fols. 244v-5r (29 March 1469).

³² The standard money of account in most sources used in this chapter is the Vlaamse groot (*gr.* VI.) consisting of pounds (*libra*, *lb.*), divided into 12 schellingen (*solidi*, *s.*), and 240 penningen (*denarii*, *d.*). However, Dordrecht’s authorities used the Hollandse pond (*lb.* Holl.) in their decrees, while Ghent’s also expressed sums in *grooten paris* (*Par.*) in their decrees and bailiffs’ accounts. The Parisian pound was probably also used in Ypres’ *Role de condamnations*. The ratios between these currencies are: 1 *lb.* *gr.* VI. = 12 *lb.* *Par.*; 1 *lb.* Holl. = 30*d.* *gr.* VI.

³³ ‘[W]ant die vindere voirs niet anders bevolen en zijn, dan alle goed vleesch ende spijs te prijsen, ende dat quade vleesch te laken, ende malen ende marct te verbieden, ende soe wie alsdan daer en boven wederhorich waer, ende quaet stinckende vleesch vercofte, dat waermen alsdan schuldich te besoicken ende te ondervinden mit scepenen.’ SAL, ‘Kenningboek’ C, fols. 244v-5r.

³⁴ *Keurboeken Leiden*, ed. Hamaker, pp. 121 (1390), 57 (1406).

³⁵ ‘De vindere van de vogelen als zij komen in de huizen of voer opter straten daer sij vogelen vinden ende die besien onstandelijke woerde en geve om sake will die sij hantiere an hare dienst op 3 *lb.*’ SADor, Klepboek 6, fols. 51r (1449), 59r (1449), 87v (1454). On currencies, see note 32 above. A fine of 3 *lb.* Holl. = 90*d.* *gr.* VI.

market, inspectors seem to have gone beyond their customary remit by entering homes and scrutinizing domestic premises, thus crossing public/private boundaries in a move that was justified by the requirement that they should protect monopolies, ensure quality, and maintain standards of health. Finally, some cities also explicitly affirmed the personal liability of the inspectors in cases of negligence. If they had approved spoiled or substandard goods, or, as a bylaw in Leiden decreed, ‘inspected wares anywhere else than in front of the hall’, they were at risk of paying a fine or even being expelled from office.³⁶ In sum, these officials were multi-skilled specialists with specific jurisdictions, and, although their ability to read and write remains very difficult to assess, they brought a medically-informed working knowledge about food quality and health threats to their work.

Enforcement: finding market fines

In contrast to the overwhelming amount of material about late medieval market regulation, identifying evidence for the routine enforcement of such rules has proved more challenging. Urban governments generally punished food violations with a monetary fine, commonly levied by the market inspectors. Yet no written documentation produced by any of these men survives, if it ever existed. Disputes very rarely led to a court case or public condemnation, and the examples mentioned above, although highly illuminating, are part of a small corpus of formal prosecutions. Fortunately, some fragments concerning the administration of fines in two of the largest cities in the Low Countries, Ghent and Ypres, offer further insight into the enforcement of market regulations.³⁷

Around 1500, a craftsman in Flanders (carpenter, mason, or slater) earned around 12*d. gr.* VI. a day. Servants and unskilled workmen commonly received 5*d.* or 6*d. gr.* VI.: *Prijzen en lonen*, ed. Verlinden and others, II, pp. xxxii, 98-160, 386-399.

³⁶ *Keurboeken Leiden*, ed. Hamaker, p. 57; *Rechtsbronnen Utrecht*, ed. Muller, I, p. 122 (1380).

³⁷ Ypres had *c.* 40,000 and Ghent *c.* 60,000 inhabitants before 1348. Leiden grew from *c.* 5000 inhabitants in 1400 to almost double that number a century later: Werveke, *De Gentsche stadsfinancien*, p. 85; Mus and Houtte, *Prisma van de Geschiedenis van Ieper*, pp. xiv–xv; Brand, *Over macht en overwicht*, p. 17.

Figure 4.1. Ghent, Baljuwsrekeningen (1299-1336, 11 rolls)

Ghent, Baljuwsrekeningen (1299-1336, 11 rolls)³⁹	
Market offence	# of offenders
Fish	108
Meat	70
Bread and wheat	69
Wine	63
Bad measures	29
Birds	10
Illegal sale	8
Total	357

Already in the late twelfth century, Ghent's aldermen could collect fines, which were commonly divided between the regional lord, the city, and any lesser official or informant involved.³⁸ However, records of the city's share of collected fines, including all market fines, have disappeared almost without a trace. Most relevant data, therefore, come from the accounts of the bailiffs who represented the count of Flanders. During the early fourteenth century, these accounts began to prioritize the income raised from more profitable dispute settlements and no longer itemized market violations. Therefore, relevant here are only the earliest extant accounts, eleven rolls from 1299, 1304-1308, and 1336, listing the revenues collected for the count – his share of the fines – for parts of the year (Figure 4.1).

The fines relating to food and drink collectively reveal a focus on policing sales of fish, meat, grain, and, another important trade in Ghent, wine, with considerably less interest being shown in vegetables and dairy products.³⁹ The entries are brief and list only the names of offenders and the amount of their fines under a general heading, such as 'for infringing the rules on meat (*de ban brisiet de char*)'. Market violations nonetheless comprise a substantial part of these early accounts. For instance, in 1304-1305, the bailiff collected a total of 200 *lb.* of fines in Ghent, levied on 92 offenders. Ten of the fines related to food markets and raised

³⁸ The division of fines was common throughout the Low Countries: *Coutumes*, ed. Gheldolf, p. 387 (1176-1178); Van Werveke, *De Gentsche stadsfinanciën*, pp. 186-188; *Keurboeken Leiden*, ed. Hamaker, p. 230 (1450).

³⁹ Nicholas, *The Metamorphosis of a Medieval City*, pp. 182-183, 226-228; Boone, *Geld en macht*, pp. 22, 132-133.

over 8 *lb.*⁴⁰ In the following annual account (1305-1306), however, the total from fines amounted to over 300 *lb.* from 147 individuals. Among them were 39 violators of food and drink regulations, who brought in a far higher total of almost 44 *lb.*⁴¹ By the end of the following year, the bailiff had collected around 83 *lb.* from 79 offenders in breach of these same regulations, among whom were 53 victuallers, each fined 11 *s.* for ‘selling sea fish against the prohibition’.⁴² The large number of sea fishmongers to be penalized suggests that enforcers could specifically target certain groups or issues at hand. The total revenue had also increased to 999 *lb.* raised from 200 people, including 65 ‘for fighting (*de melleie*)’. Thus, while the percentage of food-related charges grew steadily over these three years (11 to 26 to 39 per cent), that of market fines relating to food and drink as a proportion of the total declined. The rapid increase in the number of violators might have been one of the reasons why the bailiff stopped documenting in detail these minor offences, compared, for example, to transgressions for violence. Another explanation is the increasing challenge posed by Ghent’s authorities to seigniorial jurisdiction.⁴³

⁴⁰ *Stads-en baljuwsrekeningen*, ed. Vuylsteke and Werveke, pp. 8-9 (1304-1305).

⁴¹ *Stads-en baljuwsrekeningen*, ed. Vuylsteke and Werveke, pp. 18-20 (1305-1306).

⁴² ‘De vendre pisson de mer encontre le ban’: *Stads-en baljuwsrekeningen*, ed. Vuylsteke and Werveke, pp. 27-31 (1306-1307).

⁴³ In 1336, only eleven food-related fines were noted: *Stads-en baljuwsrekeningen*, ed. Vuylsteke and Werveke, pp. 1015-1116. See also Rompaey, ‘Het Compositierecht’; Rompaey, *Het Grafelijk Baljuwsambt*.

Figure 4.2. Ypres, Rôles de condamnations (1267, 1280, and 1281)

Ypres, Rôles de condamnations (1267, 1280, 1281)		
Market offence	# of offenders	Nature of offence
Meat	91	73 % spoiled (<i>malus, rancidus</i>) 14 % illicit sale (<i>bankene</i>) 10 % altered state (<i>carne suina/taurina</i>)
Fish	140	44 % spoiled (<i>malus, fetidus, putridus, quade</i>) 46% avoided inspection & illegal locations 10 % illicit sale (<i>banckene</i>)
Bread	104	53 % too light (<i>parvo pane</i>) 43 % 'in domum panificum' ⁴⁸ 2% badly milled (<i>malis molendaria</i>)
Total		335

While Ghent's municipal ordinances demonstrate that a desire to safeguard the quality of supplies and to maintain public health influenced the regulation of consumables, the precise nature of individual fines is rarely explained. Data from the nearby city of Ypres are therefore more helpful. Three extant so-called *rôles de condamnations* itemize fines collected by the urban authorities. These rolls offer exceptionally useful evidence, also from an early period, predating most extant regulations. In contrast to Ghent's bailiffs' accounts, most recorded offences listed in these *rôles* were discovered during trade inspections made by officials named *circuitores* – a term that suggests the proactive decision to move around.⁴⁴ Fines regarding the sale of food are usually grouped together, an arrangement which likely corresponds to the way that they were collected from three locations within the city: the fish market, the meat hall, and the bread and grain market. A total of 125 offences committed in these markets involved 334 individual offenders. Another 50 miscreants were penalized for selling unspecified goods at unauthorized places and times, mainly at night, thus avoiding both taxation and supervision.⁴⁵ The records provide a brief description, which makes it possible to categorize the market fines (Figure 4.2). For example, fines for bread were imposed on loaves that were too small or light weight (*parvo pane*), produced 'against regulation', or made from badly milled wheat (*malis molendaria*).⁴⁶

⁴⁴ They also supervised prices: *Comptes d'Ypres*, ed. Des Marez and De Sagher, I, p. 32.

⁴⁵ *Comptes d'Ypres*, ed. Des Marez and De Sagher, I, pp. 6, 7, 9, 14, 27, 32, 33, 35, 36, 42, 44, 46, 48, 49-53, 56.

⁴⁶ *Comptes d'Ypres*, ed. Des Marez and De Sagher, I, pp. 3, 4, 34, 10, 61, 49.

In the meat market the principal battle was fought against the sale of corrupt wares. While some fines were levied on stalls (*bankene*), probably because the holder lacked formal permission to trade,⁴⁷ most entries – 66 out of 91 fines (73 per cent) – explicitly mention bad (*malus*) or rancid (*rancidus*) meat.⁴⁸ In addition, some other references to unacceptable types of meat seem connected to the various prohibitions regarding flesh in an ‘altered’ or dangerous state noted above. This is attested by the fact that two women were fined for selling pork from a sow (*carne suina*) and another vendor for offering meat from a bull (*carne taurina*) that had presumably not been bated.⁴⁹ By the same token, around half of the entries relating to fish explicitly mentioned spoiled or rotten wares: ‘*malus*’, ‘*fetidus*’, ‘*putridus*’, or, in instances when the scribe did not bother to translate, ‘*quade*’.⁵⁰ While the rolls sometimes just report generic transgressions for selling ‘bad fish’, they usually describe the kind of fish involved, thus furnishing us with a valuable insight into the variety available in late thirteenth-century Ypres, from eel and herring to seal and porpoise (*meerswijn*), which were then not regarded as mammals. The other half concerned offences arising from commercial malpractices, in which health and safety concerns also played an important role: the disputed or unauthorized use of stalls (*bankene*), evasion of inspection, and attempts to sell unlicensed varieties of fish in the market.⁵¹ Finally, two individuals received 5s. and 8s. fines, the lowest recorded in these documents, ‘for allowing fish intestines to be thrown on the market floor’.⁵² These comparatively modest sums might reflect the fact that, in this earlier period, concerns about the provision of wholesome food were taken more seriously than the risk of miasmatic air; or perhaps the poverty of the offenders – they could have been negligent cleaners – was taken into consideration. Yet even the smaller fines were substantial sums, equivalent to wages for a couple of days’ work.⁵³

⁴⁷ *Comptes d’Ypres*, ed. Des Marez and De Sagher, I, pp. 36, 37.

⁴⁸ *Comptes d’Ypres*, ed. Des Marez and De Sagher, I, pp. 4, 7, 36, 46, 67.

⁴⁹ *Comptes d’Ypres*, ed. Des Marez and De Sagher, I, pp. 36, 67.

⁵⁰ *Comptes d’Ypres*, ed. Des Marez and De Sagher, I, pp. 32, 33, 46, 48, 49, 61.

⁵¹ *Comptes d’Ypres*, ed. Des Marez and De Sagher, I, pp. 3, 32, 33, 48, 49, 61.

⁵² ‘Hanninus Gerlere 5s. de permittendo jacere interiora piscium supra forum’: *Comptes d’Ypres*, ed. Des Marez and De Sagher, I, pp. 32, 49 (1280).

⁵³ A fine of 5sc. Par. = 5d. gr. VI. In Ghent in the 1320s a labourer or mason’s assistant earned between 1d. gr. and 4d. gr. VI. a day, and in Bruges in 1363 around 3d. gr. VI. Blockmans and Preventier, ‘Armoede in de Nederlanden’, p. 506. See also note 32 above.

The relative scale of the fines levied largely corresponds with the monetary penalties prescribed for many offences in Ypres' first extant book of bylaws, produced around 1300. The overwhelming majority of people who appear in the *rôles* for selling bad fish had to pay 20s., which was the customary amount set in the bylaws. For transgressions concerning bread and flour, however, the standard official fine was notably higher (60s.) than those actually levied in the late-thirteenth century, which were all 20s.⁵⁴ The fines imposed in the bylaws for selling substandard meat varied between 20s. and 60s.⁵⁵ In practice, many offenders were charged no more than the customary 20s., but thirteen of them had to pay 3 *lb.*, which is on the higher side of the spectrum.

In sum, the records from Ypres and Ghent confirm, on the one hand, that these decrees were enforced and markets were routinely policed. The seven fines for disobedience or insulting behaviour against inspectors levied in Ypres indicate the occasional outbreak of tension between government agents and vendors.⁵⁶ On the other hand, the evidence suggests that the imposition of fines was not an exceptional activity but a routine aspect of market life. This conclusion casts a slightly different light on Ernest Sabine's thesis that London butchers generally complied with the rules and that transgressions, especially concerning the sale of bad meat, should be regarded as isolated instances, confined to periods of plague or famine.⁵⁷ And, while the evidence is too fragmented to document any meaningful chronology, it does establish with regard to the Low Countries that the development of strategies for the regular implementation of food regulations was by no means a post-Black Death phenomenon, nor was it mainly instigated in reaction to crisis.

Conflicts and strategic punishments

As was common throughout the region, Leiden's aldermen did not customarily record individual market fines on parchment or paper. Yet, from 1434 onward, having recently obtained from their overlord a wider jurisdiction over criminal offences in the city, they did note any publicly proclaimed convictions obtained by them and the sheriff in so-called

⁵⁴ 'Les Keures d'Ypres', ed. De Smet, pp. 404-409 (issued between 1289-1307), 424-429 (issued between 1290-1309).

⁵⁵ 'Les Keures d'Ypres', ed. De Smet, I, pp. 409-411 (1286, 1293, 1309).

⁵⁶ *Comptes d'Ypres*, ed. Des Marez and De Sagher, I, pp. 32, 33, 35, 44, 46, 49, 56.

⁵⁷ Sabine, 'Butchering in Mediaeval London', pp. 335-340; Rawcliffe, *Urban Bodies*, pp. 243-245.

‘books of corrections (*Correctieboeken*)’.⁵⁸ These registers offer an opportunity to investigate conflicts between food vendors and the urban authorities. The sampling of evidence from a period of 54 years during the fifteenth century (1436-1490) has yielded a total of 810 convictions across the board for all manner of offences, with more than one individual sometimes being charged with the same offence. Transgressions concerning the food market are noted in eight of these years and involved a total of 56 offenders.⁵⁹

Records of the public condemnation of food vendors in the *Correctieboeken* are quite rare and incidental, being far less frequent than the market fines recorded in Ypres and Ghent, even when we take into account the fact that Leiden was a smaller town. It is therefore important to recognize the different purpose behind the imposition of standard financial penalties on the one hand and the condemnation in public of offenders or their prosecution in the law courts on the other. Various reasons might explain why the authorities deemed some market violations grave enough to merit an open condemnation, probably in addition to the routine but unreported levying of fines.⁶⁰ Generally, these were either serious cases (perhaps involving recidivism) or were treated as such because of special circumstances. First, urban authorities reacted strongly to deliberate scams, repeat offenders, and resistance to market officials, which were subject to additional punitive sanctions. Second, there is some correlation with crises, most notably famine and epidemics. Two peaks in the number of health-related convictions in Leiden correspond with plague outbreaks (1457 and 1484), while two more coincide with recorded famines or periods of severe food shortages, followed by visitations of plague in the city, namely between 1437 and 1439, and 1481 and 1484. For example, in 1437 Leiden’s magistrates publicly broadcast a series of punishments of fishmongers, which also illustrate possible strategies for undermining market inspections: intransigence towards officials, selling wares that had not been inspected, regrating, and the case of two men and a woman who ‘held their own fish market in front of their doors and did

⁵⁸ Leiden imposed 12s. and 18s. as standard market fines: Marsilje, *Het financiële beleid*, pp. 26-28.

⁵⁹ SAL, 0508, ‘Correctieboeken’ 4A-D (1434-1490); 5E (1465-1470) [sampled years 1434, 1436-1437, 1446-1447, 1450, 1455-57, 1460, 1466-1467, 1470, 1476-1477, 1483-1484, 1486-1487, 1490]. The categories of transgressions are: cloth fraud (36 per cent), public disturbance (17 per cent), assault (14 per cent), insulting the government (11 per cent), theft (5 per cent), tax evasion (4 per cent), unspecified infringements of the regulations (2 per cent), and other (5 per cent). Health-related offences occurred in 1437, 1438, 1446, 1447, 1457, 1476, 1484, and 1487.

⁶⁰ Rawcliffe, *Urban Bodies*, p. 264.

not bring the fish to the market as the bylaws prescribe'.⁶¹ Although not stated explicitly, a growing demand for food could have sparked attempts to circumvent inspections, as well as prompting additional, unwelcome checks by officials. However, a plague epidemic in 1467 seems not to have provoked a response in terms of increased market supervision.⁶²

Targeting marketplaces and certain foodstuffs as a public health measure in reaction to the threat of epidemic disease was part of a wider trend. Throughout the Low Countries, from the fifteenth century onward, plague ordinances routinely prescribed isolation and in-house quarantine for infected inhabitants. These decrees often explicitly prohibited the sale of anything from infected houses in markets, while warning suspects to keep their distance. For instance, in late fifteenth-century Ghent, the authorities demanded that people who had been in contact with plague victims should stay away from the fish market and meat halls. Nor could dairy produce and eggs from infected locations – both in and out of town, and here Ghent's aldermen explicitly mentioned Bruges – be brought into the city's markets.⁶³ Further, in 1448 the rulers of Gouda forbade any farmers who had been infected to sell their dairy produce in the town, although they could trade outside the gates. As was also clearly ordained in Leiden, people who had been in contact with plague victims, whether farmers or residents, could only enter the market if they carried a white stick to alert others.⁶⁴ Food vendors in particular had to comply with such rules. For instance, in November 1483, Leiden's magistrates punished two fruit sellers and a baker, all living near the Reynsburgerpoort, 'who had deaths and illness due to pestilence [in their homes] but did not hang straw hats in front of their houses in accordance with the decree, nor visibly carried a white stick in their hands'.⁶⁵

The various types of punishment deemed appropriate for the 56 food-related offences can be further analysed as a strategy in themselves, since they communicated specific

⁶¹ SAL, 'Correctieboek' A, 24 June 1437, p. 77.

⁶² Ladan, *Gezondheidszorg in Leiden*, p. 59.

⁶³ SAG, Voorgeboden, 108-2, fol. 70r; Voorgeboden 93-46, fols. 4v, 12v. See also *Rechtsbronnen Dordrecht*, pp. 313 (1458), 327 (1469); *Rechtsbronnen Amsterdam*, p. 303 (1493).

⁶⁴ The apparently contradictory ruling of 1448 might have been related to food shortages: *Rechtsbronnen Gouda*, ed. Rollin Couquerque and Meerkamp van Embden, pp. 172 (1488), 185 (c. 1500). On plague policies and enforcement in Leiden, see Ladan, *Gezondheidszorg in Leiden*, pp. 62-66.

⁶⁵ '[Welke] dooden ende sieke vander pestilencie gehadt hebbe ende navolgende dat gebodt vande stee de gheen stroehoeden voir hoir huys hangende gehouden en hebben, noch mit witte stocke in hoir hant ghedraghem.' The fine was 1,000 stones per person: SAL, 'Correctieboek' C, fol. 122r (3 November 1483).

messages to the urban community. As in fourteenth-century Italy, the penalties for health-related offences were generally of a financial nature, but, in common with medieval England, some also contained performative and symbolic elements.⁶⁶ Of all those documented in the *Correctieboeken*, the three most common – often imposed in combination – were the ‘donation’ of stone for repairing the city wall, penal pilgrimage, and exile. Starting with the last, while no food vendors were exiled from Leiden because of market offences, two women were permanently prohibited from following their occupation. The authorities punished one for baking bread deemed too light in weight, and excluded another as meat vendor because she had ‘sold diseased lard on the market many times, and many [consignments of] useless lard’.⁶⁷ This sentence is similar to others handed down in Ypres to twelve persons, among whom were eight women, who were all banned from their work for a year in 1268 for regrating fish, as well as to another man in 1280 for selling poultry illicitly from his house.⁶⁸

The donation of stone for the walls, computed in units of one thousand bricks, offered the culprit another way of redeeming himself or herself. Although uncommon in many other parts of Europe, this was a customary punishment for criminal offences and misdemeanours in a number of Netherlandish cities.⁶⁹ A forced contribution towards building or repairing the defences was as much an overtly symbolic gesture – they represented the common good, particularly in terms of collective cohesion and safety – as a practical solution which provided funding for expensive public works. Finally, punitive pilgrimages, perhaps more often associated with ecclesiastical courts, were another common sanction in the Low Countries.⁷⁰ This type of punishment offered the aldermen an opportunity to present themselves as preservers of morality. Penal pilgrimages could be regarded as a means of cleansing the stain spread by repeated transgressions against God, and therefore helped to restore the spiritual health of the urban body. They highlight the moral dimension of premodern communal health measures and the perceived importance of Christian conduct in the marketplace, as well as the gravity of the deception involved in selling inferior wares,

⁶⁶ See pp. 84-85 above.

⁶⁷ ‘Also Claes Coppinsoen wijf goerdatic spec tot veel tijden op die marct vercoft heeft ende tot veel tijden veel onnutts specx op die marct vercoft heeft.’ SAL, ‘Correctieboek’ A, p. 77 (1437). See also p. 176 (1446).

⁶⁸ ‘[Twelve persons] 20s. quilibet et officium per annum quia pisces emerunt citra Stenstratam, et vendiderunt Ypris’: *Comptes d’Ypres*, ed. Des Marez and De Sagher, I, p. 3 (November 1267-1268); ‘Laurentius Platevoet, 20s. eo quod emit averium in sua domo, et officium suum per annum’: *ibid.*, p. 36 (January - October 1280).

⁶⁹ Win, *De schandstraffen*; Camphuijsen, ‘Scripting Justice’, pp. 193, 199-200.

⁷⁰ For more on this subject, see Herwaarden, *Opgelegde bedevaarten*.

especially to the poor. The policy of forcing offenders to make obligatory gifts to hospitals reflects a similar symbolism. The presentation of such gifts ‘without any compensation’ to the House of the Holy Spirit was a customary punishment for butchers in Deventer if their meat failed to pass inspection.⁷¹ In Leiden, all rejected consumables, including mouldy bread and rotten fish, were to be donated to St. Catherine’s hospital.⁷² This hospital was also entitled to various other confiscated goods, such as substandard butter, textiles, and peat, as well as half of the wandering pigs taken into custody as a sanitary nuisance.⁷³ The practice of offering spoiled meat to the sick was not as cruel as it might seem to a modern reader, because contemporary medical theory maintained that the humoral imbalance of a diseased person rendered him or her immune to the threats otherwise posed by corrupt food.⁷⁴

Both the donation of stone for the benefit of the urban community and penal pilgrimages occurred frequently as punishments for violations in the food markets of Leiden. Seventeen culprits had to make a pilgrimage, many for attempting to evade inspection or actively resisting officials. Destinations varied from The Hague (20 km), Bergen (65 km), and Den Bosch (95 km), to Aachen (210 km).⁷⁵ The great majority of market offenders (31 persons) had, however, to pay for stones used in building the city walls. For instance, a refusal to donate a ‘bad and spoiled bird’ to St. Catherine’s hospital in 1446 was punished with a fine of 2,000 stones (worth around 3 *lb.*).⁷⁶ In July 1447, a time of severe dearth, which might have forced people to use corrupt grain, one civic regulation specifically forbade ‘the sale of bread baked with mouldy wheat or rye that causes disease and pestilence’. As the last major plague epidemic in Leiden had occurred in 1439 and was next followed by an outbreak in 1450, this demonstrates the city’s intention to *prevent* plague rather than just fight it once it had arrived.⁷⁷ An inspection by the aldermen – and not the market inspectors, which highlights the importance accorded to a measure designed to protect the urban poor, in particular – identified as many as twelve bakers who had used rotten grain and were therefore each forced to pay for 2,000 stones. Even so, their fines were dwarfed by the steep 22,000-

⁷¹ SAdDev, ‘Copienboek’, fols. 91r-2v.

⁷² *Keurboeken Leiden*, ed. Hamaker, pp. 54, 57 (c. 1406).

⁷³ *Keurboeken Leiden*, ed. Hamaker, pp. 28, 31, 50, 57, 71, 96, 305.

⁷⁴ Rawcliffe, *Urban Bodies*, p. 236; Carr, ‘Controlling the Butchers’, p. 459.

⁷⁵ SAL, ‘Correctieboek’ A, pp. 76-77 (1437); ‘Correctieboek’ B, fol. 274r (1476).

⁷⁶ SAL, ‘Correctieboek’ A, p. 214 (1446).

⁷⁷ SAL, ‘Correctieboek’ A, p. 230 (1447); Ladan, *Gezondheidszorg in Leiden*, pp. 59, 236.

stone penalty that a man and woman incurred when they were exposed as swindlers a decade earlier, having sold rye flour secretly mixed with ground grey peas.⁷⁸ Magistrates also demanded donations of stone in cases involving the sale of corrupt meat and fish, such as that of Hobbe the fishmonger, who flagrantly tried to circumvent market officials by reselling a tub of condemned herring.⁷⁹ Leiden clearly preferred this kind of punishment to the imposition of less specific pecuniary fines, as only six of the 56 food-related violations were redeemed with money. Yet even an ordinary fine could still be endowed with symbolism. A man convicted of buying and reselling substandard bread ‘among the poor, which greatly harms [them]’, received the hefty fine of 10 *lb*. This substantial sum had an explicit exemplary function – ‘to prevent others from doing so’ - as well as a religious and ritual aspect, since it was to be donated to the masters of two alms houses ‘for the benefit of the poor and for the sake of God’.⁸⁰

Finally, some food market offences incurred a more overtly ritual penance. As we saw at the start of this chapter, each of the three men found guilty of importing uninspected meat into Leiden from Wassenaar had to offer one wax cow in each of the three local parish churches, in addition to donating stone for the walls. Performed on a Sunday before packed congregations, their act of atonement would have assumed an element of theatre, as, indeed, was the intention. A similar instance concerns Dirk Dirxz *alias* Bralpot, a butcher who verbally resisted when the city’s meat inspectors fined him for selling spoiled wares.⁸¹ His defiance cost him dearly: a pilgrimage and a bareheaded walk to the town hall, followed by a public plea for forgiveness in front of the urban authorities.⁸² The loss of reputation attendant upon such a humiliating spectacle probably involved a corresponding loss of income. Reputation was a crucial factor for anyone who wanted to earn money by selling or trading goods, because men and women had to be trustworthy to attract customers and raise loans.⁸³ The fear of defamation might therefore have been an incentive for many vendors to employ the tactic of outright denial, as did Aene, wife of Jacop Dircx, who ‘refused to confess’ to the

⁷⁸ ‘Correctieboek’ B, fol. 100v (1457).

⁷⁹ SAL, ‘Correctieboek’ C, fol. 56r (1487).

⁸⁰ ‘Dat Jacop Bosch voorcoop gedaen heeft van broot dat hij binnen Leyden in gecoft heeft ende weder bij penningwairden onder den armen vercoft heeft, dair die armen zeer by bescadicht worden’: SAL, ‘Correctieboek’ A, p. 83 (1438).

⁸¹ The pilgrimage was to St. Quirijn, probably in Nuenen, Brabant: SAL, ‘Correctieboek’ B, fol. 274r (1476).

⁸² This penalty was imposed in several towns: Camphuijsen, ‘Scripting Justice’, pp. 87-88.

⁸³ Fenster and Smail, *Fama*; Rosser, ‘Crafts, Guilds and Negotiation’, pp. 9-11.

meat inspectors that she had brought ‘bad spoiled food to the market’. Summoned to court, she had yelled at the overseer ‘you lie about this, you did not summon me!’, to which the aldermen reacted by demanding a fine of 3000 stones, to be paid within a day.⁸⁴

In sum, attempts to control food markets and to exclude health risks and pollution led at times to tensions and conflicts between vendors and officialdom. It is very difficult for the modern reader to move beyond the latter’s view of the food trades and share the perspective from the other side of the divide. This is largely, to change metaphors, because the voices of traders, sellers, and consumers are often only, if ever, audible through the mediation of municipal records. But the evidence discussed above suggests that they made themselves heard in various ways, and that policing the market in the name of public health or ‘common’ interests – the collective good – could encounter resistance.

Conclusion

Around the mid-nineteenth century, many cities in and beyond the Netherlands liberalized and privatized the meat business and other victualing trades, leading to widespread complaints about abuses and breaches of quality. In response, both national and urban authorities attempted to improve hygiene through the institution of municipal slaughterhouses. Finally, in 1919, a national Meat Inspection Act aimed to eliminate insanitary nuisances that in premodernity had long been regulated and intensely supervised at a local level for basically the same reasons.⁸⁵ This chapter has sought to explore and explain some earlier motives for the promotion of public health through the supervision of food quality. The study of prescriptive sources in combination with documents of practice reveals that health concerns were key factors in shaping relations between urban governments and their subjects within the civic space of the food market, where they intersected with economic and political interests.

In order to implement health-promoting strategies on a daily basis, municipal authorities and other agents materially and through regulation established, intervened in, and manipulated the market. They sought to exclude wares deemed unsafe for consumption, which in turn affected social interactions within these spaces. And, while it remains challenging to bridge the gap between medical literature and urban policy, regulations concerning the meat trade in particular reflect a significant level of applied health literacy.

⁸⁴ SAL, ‘Correctieboek’ A, p. 213 (1446).

⁸⁵ Beek-Mulder and Polman, *De Hallen in Haarlem*; Schneider, *Slachten En keuren*.

Although the evidence presented here is fragmentary, and to document any meaningful chronological development requires much more research, it suggests that policing food trades by levying fines was the rule rather than the exception, and was by no means a post-plague phenomenon. Offering a rather different perspective than that available from the analysis of routine fines, Leiden's public condemnations reveal that there was, nonetheless, an increased awareness of health issues and higher levels of scrutiny during crises and epidemics. We can also trace a developing link between market morality and public health, between spiritual and communal wellbeing, that is worth further exploration.

BIBLIOGRAPHY

Archival sources

Stadsarchief Deventer: ID0690, 4-1 ‘Olde in papier gescreven copienboick’

Regionaal archief Dordrecht: 1 Stadsarchieven - de grafelijke tijd, 1200-1572, 6 ‘Klepboek’

Stadsarchief Gent De Zwarte Doos: Voorgeboden - Reeks 108, 2 (c. 1402-1436); Reeks 93, 46 (1482-1500)

Erfgoed Leiden en Omstreken: 0508, ‘Schepenbank (Oud Rechterlijk archief)’, 4A-4D ‘Correctieboeken’; 0501, SA I (1290-1575), 381-382, ‘Vroedschapsboeken’

Printed primary sources

Comptes de la ville d’Ypres de 1267 à 1329, ed. by Guillaume des Marez and Emile Henri de Sagher, 2 vols. (Brussels: Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique, Commission Royale d’Histoire, 1909)

Coutumes des pays et comté de Flandre: Coutume de la ville de Gand, ed. by Albert E. M. Gheldolf, *Coutumes des pays et comté de Flandre* vol 1; *Recueil des anciennes coutumes de la Belgique* (Brussels: Gobbaerts, 1868)

De Keure van Hazebroek van 1336, met aantekeningen en glossarium, ed. by Edward Gailliard, 5 vols. (Ghent: Siffer, 1894)

De middeleeuwsche rechtsbronnen der stad Utrecht, ed. by Samuel Muller, 5 vols. (The Hague: M. Nijhoff, 1883)

De middeneeuwsche keurboeken van de stad Leiden, ed. by Henrik G. Hamaker (Leiden: Van Doesburgh, 1873)

De oudste rechten der stad Dordrecht en van het Baljuwschap van Zuid-Holland, ed. by Jacobus A. Fruin (The Hague: M. Nijhoff, 1882)

De Voorgeboden der stad Gent in de XIVe eeuw (1337-1382), ed. by Napoleon de Pauw (Ghent: Annoot-Braeckman, 1885)

Dokumenten voor de geschiedenis van prijzen en lonen in Vlaanderen en Brabant, II: XIVe-XIXe eeuw, ed. by Charles Verlinden and others, 2 vols. (Bruges: De Tempel, 1965)

Gentsche stads- en baljuwsrekeningen 1280-1336, ed. by Julius P. Vuylsteke and Alfons van Werveke (Ghent: Meyer-van Loo, 1900)

‘Les keures inédites du plus ancien livre de keures d’Ypres’, ed. by J. de Smet, *Bulletin de la Commission Royale*, 94 (1930), 389-482

Oude rechtsbronnen der stad Breda, ed. by Willem Bezemer (The Hague, M. Nijhoff, 1892)

Rechtsbronnen der stad Aardenburg, ed. by George A. Vorsterman van Oyen (The Hague: M. Nijhoff, 1892)

Rechtsbronnen der stad Amsterdam, ed. by Johannes C. Breen (The Hague: M. Nijhoff, 1902)

Rechtsbronnen der stad Gouda, ed. by Louis M. Rollin Couquerque and Adriaan Meerkamp van Embden (The Hague: M. Nijhoff, 1917)

Rechtsbronnen der stad Haarlem, ed. by Johan Huizinga (The Hague: M. Nijhoff, 1911)

Stadrechten van Nijmegen, ed. by Cornelis C.N. Krom and M.S. Pols (The Hague: Nijhoff, 1894)

Printed secondary sources

Arnade, Peter J., *Realms of Ritual: Burgundian Ceremony and Civic Life in Late Medieval Ghent* (Ithaca, N.Y.: Cornell University Press, 1996)

Baker, Patricia Anne, and others (eds.), *Medicine and Space: Body, Surroundings and Borders in Antiquity and the Middle Ages* (Leiden and Boston: Brill, 2012)

Beek-Mulder, Irene van, and Polman, Mariette, *De Hallen in Haarlem: De Vis-, Vlees- En Verweyhal op de Grote Markt in Haarlem* (Zwolle: Waanders, 1993)

Benders, Jeroen F., *Bestuursstructuur en schriftcultuur: Een analyse van de bestuurlijke verschriftelijking in Deventer tot het eind van de 15de eeuw* (Hilversum: Verloren, 2004)

Billen, Claire, 'Dire le Bien Commun dans l'espace public: matérialité épigraphique et monumentale du Bien Commun dans les villes des Pays-Bas, à la fin du Moyen Âge', in *De Bono Communi: The Discourse and Practice of the Common Good in the European City (13th-16th C.)*, ed. by Elodie Lecuppre-Desjardin and Anne-Laure Van Bruaene (Turnhout: Brepols, 2010), pp. 71-88

Blockmans, Willem P., and Prevenier, Walter, 'Armoede in de Nederlanden van de 14e tot het midden van de 16e eeuw: bronnen problemen', *Tijdschrift voor Geschiedenis*, 88 (1975), 501-538

Boone, Marc, 'Openbare diensten en initiatieven te Gent tijdens de late Middeleeuwen (14de-15de Eeuw)', in *L'initiative publique des communes en Belgique: Fondements historiques (Ancien Régime)* (Brussels: Credit Communal de Belgique, 1984), pp. 71-114

Boone, Marc, *Geld en macht: De Gentse stadsfinanciën en de Bourgondische staatsvorming (1384-1453)* (Ghent: Maatschappij voor Geschiedenis en Oudheidkunde, 1990)

Boone, Marc, 'Een Middeleeuwse Metropool', in *Gent: Stad van alle tijden*, ed. by Marc Boone and Gita Deneckere (Brussels: Mercatorfonds, 2010), pp. 50-95

Brand, Hanno, *Over macht en overwicht: Stedelijke elites in Leiden (1420-1510)* (Leuven and Apeldoorn: Garant, 1996)

Carr, David R., 'Controlling the Butchers in Late Medieval English Towns', *The Historian*, 70 (2008), 450-461

Ciecieznski, Nathalie J., 'The Stench of Disease: Public Health and the Environment in Late-Medieval English Towns and Cities', *Health, Culture and Society*, 4 (2013), 92-104

Deligne, Chlo, 'Powers over Space, Spaces of Powers: The Constitution of Town Squares in the Cities of the Low Countries (12th - 14th Century)', in *The Power of Space in Late Medieval and Early Modern Europe: The Cities of Italy, Northern France and the Low Countries*, ed. by Marc Boone and Martha Howell (Turnhout: Brepols, 2013), pp. 21-28

Fenster, Thelma Susan, and Smail, Daniel Lord, (eds.), *Fama: The Politics of Talk and Reputation in Medieval Europe* (Ithaca, N.Y.: Cornell University Press, 2003)

Gordon, Colin, 'Governmental Rationality: An Introduction', in *The Foucault Effect: Studies in Governmentality*, ed. by Graham Burchell and others (Chicago: University of Chicago Press, 1991), pp. 1-53

Herwaarden, Jan van, *Opgelegde bedevaarten: Een studie over de praktijk van opleggen van bedevaarten (met name in de stedelijke rechtspraak) in de Nederlanden gedurende de Late Middeleeuwen (ca 1300 - ca 1550)* (Assen: Van Gorcum, 1978)

Howell, Martha C., *Commerce before Capitalism in Europe, 1300-1600* (Cambridge: Cambridge University Press, 2010)

Huizenga, Erwin, *Een nuttelike practijke van chirurgien: Geneeskunde en astrologie in het Middelnederlandse handschrift Wenen, sterreichische Nationalbibliothek*, 2818 (Hilversum: Verloren, 1997)

Huizenga, Erwin, *Tussen autoriteit en empirie: De Middelnederlandse chirurgien in de veertiende en vijftiende eeuw en hun maatschappelijke context* (Hilversum: Verloren, 2003)

Isenmann, Eberhard, *Die deutsche Stadt im Mittelalter 1150-1550: Stadtgestalt, Recht, Verfassung, Stadtreigement, Kirche, Gesellschaft, Wirtschaft* (Cologne: Bhlau, 2014)

Ladan, Rudolf, *Gezondheidszorg in Leiden in de late middeleeuwen* (Hilversum: Verloren, 2012)

Laleman, Marie-Christine, 'Espaces publics dans les villes flamandes au Moyen Âge: l'apport de l'archéologie urbaine', in *Shaping Urban Identity in Late Medieval Europe*, ed. by Marc Boone and Peter Stabel (Leuven: Garant, 2000), pp. 25-41

Laleman, Marie-Christine, and Vermeiren, Geert, 'Ruimte en bebouwing in het centrum van het middeleeuwse Gent', *Handelingen der Maatschappij voor Geschiedenis en Oudheidkunde te Gent*, 64 (2010), 3-56

Lefebvre, Henri, *The Production of Space*, trans. by Donald Nicholson-Smith (Oxford: Wiley Blackwell, 1992)

Le Goff, Jacques, *Time, Work and Culture in the Middle Ages*, trans. by Arthur Goldhammer (Chicago: University of Chicago Press, 1980)

Lopez, Roberto S., *The Commercial Revolution of the Middle Ages, 950-1350* (Cambridge: Cambridge University Press, 1976)

Marsilje, Jannis, *Het financiële beleid van Leiden in de Laat-Beierse en Bourgondische Periode ± 1390-1477* (Hilversum: Verloren, 1985)

Mus, Octaaf, and van Houtte, Jan Albert, *Prisma van de geschiedenis van Ieper* (Ieper: Stadsbestuur, 1974)

Nadesan, Majia Holmer, *Governmentality, Biopower, and Everyday Life* (London and New York: Routledge, 2008)

Naegle, Gisela, 'Armes à double tranchant? Bien Commun et chose publique dans les villes Françaises au Moyen Âge', in *De Bono Communi: The Discourse and Practice of the Common Good in the European City (13th-16th C.)*, ed. by Elodie Lecuppre-Desjardin and Anne-Laure Van Bruaene (Turnhout: Brepols, 2010), pp. 55-70

Nicholas, David, *The Metamorphosis of a Medieval City: Ghent in the Age of the Artevelde, 1302-1390* (Lincoln: University of Nebraska Press, 1987)

Nicholas, David, *The Growth of the Medieval City: From Late Antiquity to the Early Fourteenth Century* (London and New York: Routledge, 2014)

Nicoud, Marilyn, 'L'alimentation, un risque pour la santé? Discours médical et pratiques alimentaires au Moyen Âge', *Médiévales: Langues, Textes, Histoire*, 69 (2015), 149-170

Rawcliffe, Carole, *Medicine and Society in Later Medieval England* (Stroud: Sutton, 1995)

Rawcliffe, Carole, *Urban Bodies: Communal Health in Late Medieval English Towns and Cities* (Woodbridge: Boydell, 2013)

Rawcliffe, Carole, "'Great Stenches, Horrible Sights and Deadly Abominations": Butchery and the Battle against Plague in late Medieval English Towns', in *Plague and the City*, ed. by Lukas Engelmann and others (London and New York: Routledge, 2018), pp. 18-38

Romano, Dennis, 'Gender and the Urban Geography of Renaissance Venice', *Journal of Social History*, 23 (1989), 339-353

Romano, Dennis, *Markets and Marketplaces in Medieval Italy, C. 1100 to C. 1440* (New Haven, Conn., and London: Yale University Press, 2015)

Rompaey, Jan van, 'Het compositierecht in Vlaanderen van de veertiende tot de achttiende eeuw', *Tijdschrift voor Rechtsgeschiedenis*, 43 (1961), 43-79

Rompaey, Jan van, *Het grafelijk Baljuwsambt in Vlaanderen tijdens de Boergondische periode* (Brussels: Paleis der Academiën, 1967)

Rosser, Gervase, 'Crafts, Guilds, and the Negotiation of Work in the Medieval Town', *Past & Present*, 154 (1997), 3-31

Sabine, Ernest. L., 'Butchering in Mediaeval London', *Speculum*, 8 (1933), 335-353

Schneider, J. W., *Slachten en keuren: Schets van de vleesvoorziening der stad Leiden van de Middeleeuwen tot de Huidige Tijd* (Leiden: Stenfert Kroese, 1953)

Slechte, Christiaan H., and others (eds.), *Geschiedenis van Deventer I: oorsprong en Middeleeuwen* (Zutphen: Walburg Pers, 2010)

Soly, Hugo, 'Continuity and Change: Attitudes towards Poor Relief and Health Care in Early Modern Antwerp', in *Health Care and Poor Relief in Protestant Europe, 1500-1700*, ed. by Andrew Cunningham and Ole Peter Grell (New York: Routledge, 1997), pp. 84-107

Stabel, Peter, 'The Market-Place and Civic Identity in Late Medieval Flanders', in *Shaping Urban Identity in Late Medieval Europe*, ed. by Marc Boone and Peter Stabel (Leuven: Garant, 2000), pp. 43-64

Symes, Carol Lynne, 'Out in the Open, in Arras: Sightlines, Soundscapes and the Shaping of a Medieval Public Sphere', in *Cities, Texts and Social Networks, 400-1500: Experiences and Perceptions of Medieval Urban Space*, ed. by Caroline Goodson and others (Farnham: Ashgate, 2010), pp. 279-302

Uytven, Raymond van, 'Stedelijke openbare diensten te Leuven tijdens het Ancien Régime', in *L'initiative publique des communes en Belgique: Fondements historiques (Ancien Régime)* (Brussels: Credit Communal de Belgique, 1984), pp. 21-43

Welch, Evelyn S., *Shopping in the Renaissance: Consumer Cultures in Italy 1400-1600* (New Haven, Conn., and London: Yale University Press, 2005)

Werveke, Hans van, *De Gentsche Stadsfinancien in de Middeleeuwen* (Brussels: Palais des Académies, 1934)

Win, Paul de, *De schandstraffen in het wereldlijk strafrecht in de Zuidelijke Nederlanden van de Middeleeuwen tot de Franse Tijd bestudeerd in Europees perspectief* (Brussels: Paleis der Academiën, 1991)

Unpublished theses

Camphuijsen, Frans, 'Scripting Justice: Legal Practice and Communication in the Late Medieval Law Courts of Utrecht, York and Paris' (PhD Thesis, University of Amsterdam, 2016)

Coomans, Janna, 'In Pursuit of a Healthy City: Sanitation and the Common Good in the Late Medieval Low Countries' (PhD Thesis, University of Amsterdam, 2018)

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CHAPTER FIVE

Policing the Environment of Late Medieval Dordrecht¹

Patrick Naaktgeboren

Abstract

An important Dutch trading centre, Dordrecht experienced considerable population growth and many environmental challenges during the later Middle Ages. Surviving administrative, financial, and legal records help us to establish which bylaws were implemented, and the extent to which conflicts reached the courts. We can document official policies regarding urban space, sanitation, and nuisances, while also determining the responsibilities of residents in matters of public health. Magistrates often reissued regulations concerning the construction of buildings, the disposal of rubbish and offal, and public morality and safety, while a variety of officials monitored compliance, imposing on-the-spot fines when necessary. Since Dordrecht's wealth derived from trade, disturbances, dirt, and the diseases, fires, and floods that suggested divine displeasure could threaten its prosperity.

Key words: environment; Dordrecht; infrastructure; sanitation; litigation

As Dordrecht and other cities in the Low Countries obtained civic rights (*stadsrecht*) and became densely populated in the later Middle Ages, the need arose to formalize customary rules by recording them in books and introducing new bylaws. These urban bylaws addressed multiple issues that were related to the organization of daily life, including the regulation of the environment and public health, alongside economic, social, and political affairs. As

¹ This chapter is based on my unpublished MA thesis, “‘Hoe dichter bij Dordt, hoe *heerlicher* het wordt.’ Ruimte, geur en geluid in laatmiddeleeuws Dordrecht’ (Leiden University, 2015). I would like to thank L.H.J. Sicking for his constructive feedback and the editors of this volume for their help in converting my thesis into a publication.

legislators, city governments, such as that of Dordrecht, thereby obtained the judicial and legislative means to police the urban environment, in a bid to shape and improve it.²

In today's popular culture, as we can see in many films and books, late medieval societies are still often portrayed as superstitious and backward. From this perspective, city governments would have been incapable of establishing efficient sanitation and waste disposal systems, the absence of which would have resulted in filthy living conditions. Henk 't Jong has deconstructed these misconceptions in the context of several late medieval cities in Holland, including Dordrecht. Following Thorndike and Sabine, he has argued that, when analysing bylaws, it is important to consider the process through which customary law evolved into more formal collections of regulations. However, he maintains that there are relatively few entries concerning environmental bylaws and violations thereof in the administrative sources from Holland. Public hygiene was apparently not one of the main legislative concerns of late medieval city governments.³ Nonetheless, Dutch and Flemish environmental studies of the early modern period (1500-1800) have demonstrated that sanitation and the organization of waste disposal were further professionalized as a result of increasing population density, thereby continuing a development that had actually begun much earlier.⁴ It is also important to bear in mind that definitions of precisely what constituted a threat to public health were far broader in the fourteenth and fifteenth centuries than they are today. Replicating the need for harmony and balance within the human body, good relations between neighbours were, for example, evidence of communal wellbeing, while discord over such issues as property boundaries and shared facilities undermined the social as well as the physical fabric of the city.⁵ For this reason, the process of mediation, described below, performed a vital prophylactic function, as well as containing the spread of insanitary nuisances and keeping the peace.

In recent years, the emphasis in medieval public health studies has shifted from researching health hazards *per se* to examining preventive strategies, or, in other words, the relationship between the protection of the urban environment and the care for residents'

² Bocchi, 'Regulation of the Urban Environment', pp. 63-78; Balestracci, 'Regulation of Public Health', pp. 345-57; Porter, *Health, Civilization and the State*, pp. 1-4; Rawcliffe, *Urban Bodies*, Chapter three.

³ Thorndike, 'Sanitation, Baths and Street-Cleaning', pp. 200-201; Sabine, 'City Cleaning', p. 19; 't Jong, 'De mythe van de vuilnisbelt', pp. 68-91.

⁴ Hulshof, "'Om het gemeyne welvaren behoeff'"; Poulussen, *Van burenlust tot milieuhinder*.

⁵ Rawcliffe, *Urban Bodies*, pp. 88-89.

health and well-being. Guy Geltner, for example, has argued that the Black Death did not cause the government of Lucca to begin regulating the urban environment, but rather that many relevant bylaws had already been issued and an ‘environmental board’ (*Curia viarum*) established before the outbreak of the first plague epidemic in 1347.⁶ Cities in the Low Countries experienced the same environmental challenges and developments. In this chapter, Dordrecht, which was the most important trading centre in late medieval Holland, will serve as a case study. Through an analysis of its late medieval statutes and court records, I shall attempt to establish which environmental bylaws were issued by the city government, what factors influenced its decisions, and how these bylaws were implemented or enforced in daily life. To provide some insight into different aspects of the urban environment, I will first offer a short description of the government’s administrative structure, the relevant sources, and the process of urbanization. This will be followed by an analysis of the authorities’ environmental policies and the methods adopted for enforcing them. In these sections, the emphasis will lie on regulations issued during the period from about 1400 to 1510. Because of the large amount of unpublished material in these records, I will focus on three decades (1400-1410, 1445-1455, and 1500-1510), which allows me to examine the various rulings in context, making it possible to trace developments and changes over a period of more than a century. In addition, I will analyse the surviving books of bylaws kept by individual guilds and some ledgers of official civic accounts (*stadsrekeningen*). Unfortunately, however, most ledgers from the fifteenth century have been lost, which severely hampers a systematic study of the city’s expenditure on public health.

Dordrecht’s administrative structure and the surviving sources⁷

In about 1200, Dordrecht acquired independent rights from the count of Holland, allowing the city government to determine its own bylaws in council meetings. Before a new regulation could take effect, it had to be approved by the *landsheer* (ruler). The *schout*, *schepenen* (aldermen) and *raden* (advisors), all of whom were appointed by the *landsheer*, constituted the main administrative body, the *gerecht* or *camere*, which exercised legislative as well as judicial powers. Whereas the *schout* was responsible for detaining and prosecuting

⁶ Geltner, ‘Public Health and the Pre-Modern City’, pp. 231-245; Geltner, ‘Healthscaping a Medieval City’, pp. 395-414; and see pp. 103, 105-107 above.

⁷ The following two paragraphs are based on Van Herwaarden, *Geschiedenis van Dordrecht*, pp. 102-123; Horsman, *Abuysen en desordien*, pp. 33-56; and Hendriks and Koonings, *Van der stede muere*, pp. 11-13.

criminals, the *schepenen* passed sentence in accordance with the *raden*'s advice. Consequently, as chairman of the local court, it was the duty of the *schout*, whose main concern was safety and public order, to ensure that any verdict was implemented. The oldest known document mentioning *schepenen* (*scabini*) is a charter issued in 1200. Another of 1282 shows that there were nine *schepenen* and five *raden*, enabling us to reconstruct the composition of Dordrecht's ruling body. After their term of office ended, former *schepenen en raden* (*oudschepenen* and *oudraden*) remained involved in the business of government by giving advice on urgent matters and on the creation and adaptation of bylaws. As demonstrated by a bylaw issued in 1467, this administrative advisory board was known as the *Oudraad*, which would become the city's main administrative body in the early modern period.

With the introduction of more specialized appointments, the government grew increasingly complex over the course of the later Middle Ages. The earliest record of *burgemeesters* appears in an account ledger of 1285. Initially, their principal task concerned the management of the city's finances, but, over the decades, their responsibilities evolved to become largely administrative, giving them a more prominent position in the *gerecht* and thus a greater say in matters of governance. In the fifteenth century, there were two *burgemeesters*, one of whom was appointed by the *landsheer* (*burgemeester van 's herenwege*), while the other (*burgemeester van gemeentewege*) was chosen by the College van Achten (College of Eight), a board on which the various craft and trade guilds were represented. The first *burgemeester* was also a *schepen* and, owing to his training in law, he became the *gerecht*'s chairman, while the other *burgemeester*, who might also be a *schepen*, was responsible for safeguarding the city's privileges. One major consequence of this change in the duties of the *burgemeesters* was the appointment of a *thesaurier* (city treasurer). At the beginning of the sixteenth century, probably between 1522 and 1527, the government decided to reorganize the way in which its account ledgers were compiled. From that point on, there were two *thesauriers*, one of whom was accountable for the income and expenditure of the *Groot Comptoir* (Main Office, wages and loan repayments), the other being answerable for the *Klein Comptoir* (Lower Office, public works and maintenance). Finally, the above-mentioned College van Achten was an assembly in which representatives from the guilds could discuss their activities with the *gerecht*. The opening sentences of many bylaws reveal

that, in addition to the *gerecht*, *burgemeesters*, and *Oudraad*, this body was also involved in the process of compiling new regulations.⁸

The city government was concerned with all sorts of issues, such as safety, security, and the preservation of the urban environment. During the thirteenth and fourteenth centuries, new bylaws appear to have been recorded in the same register. At the beginning of the fifteenth century, however, the government decided that a new copy of this register should be produced, because frequent alterations had made it difficult to interpret the rules correctly and to enforce them in daily life. Consequently, in 1401, the *keurboek* came into being, which ten years later was supplemented with additional articles. The *klepboeken*, a register that was created at the end of the fourteenth century, and in which only judgments were originally recorded, was also used for registering new bylaws from around 1403 onward. The word *klep* (clapper) refers to the sounding of a bell in front of the city hall when the authorities wanted to proclaim new regulations or pronounce sentences (*actum per campanam*). Finally, also from 1403, the rulings of the local court, which dealt with numerous conflicts, were registered in the *aktenboeken* (court records).⁹

Dordrecht's natural environment

The river delta, which marked the confluence of many rivers, including the Lek, Meuse (Maas), Merwede, and Waal, had a major impact on the structure of the landscape and on the economic development of settlements in the Low Countries. Several floods in the twelfth century proved especially beneficial for Dordrecht, bestowing upon it a central position in the river and toll network, creating a faster shipping route to Flanders, and allowing it to develop from a village into a trading centre for the trans-shipment of goods in the thirteenth and fourteenth centuries. In 1299 and 1355, the count of Holland conferred staple rights (*stapelrecht en Maasrecht*) on Dordrecht, stipulating that merchants had to offer their goods for sale at the local market. The difference between the *stapelrecht* and *Maasrecht* hinged upon the number of rivers involved. Whereas the first privilege only pertained to merchandise travelling along the Lek and Merwede, Dordrecht's staple rights were later extended to the

⁸ Van Herwaarden, *Geschiedenis van Dordrecht*, pp. 102-123; Horsman, *Abuysen en desordiën*, pp. 33-56.

⁹ *Klepboeken* for only the years 1383-1474, 1483-1487, and 1509-1510 have survived. The *aktenboeken*, which are still complete, are divided into three parts (1403-1425, 1425-1469, and 1469-1532). A substantial proportion of the entries has been edited by Jacobus Fruin: *De oudste rechten*, I, pp. i-xvii, 1-2; Van Herwaarden, *Geschiedenis van Dordrecht*, pp. 131-134; and Horsman, *Abuysen en desordiën*, pp. 107-110.

Rhine, the Meuse, the Waal, and the Hollandsche IJssel. Such a notable increase in trading activities with Dutch, Flemish, and German cities enabled Dordrecht to flourish as a commercial centre in the later Middle Ages.¹⁰

5.1. Map of the river delta

¹⁰ Van Herwaarden, *Geschiedenis van Dordrecht*, pp. 79-88; Sarfatij, *Archeologie van een deltastad*, pp. 35-45, 295-299.

As a consequence of successive phases of expansion, the map of Dordrecht changed drastically over this period. The Oude Haven, the central harbour, divided the city into two parts, namely the Poortzijde (harbour side) and the Landzijde (land side). The main streets, the Wijnstraat and the Voorstraat, were located on either side of the Oude Haven and this small strip of land remains one of the oldest areas of the city. In addition, from the thirteenth century, ships could moor on the waterfront, which was located north west of the city centre.

5.2. Map of Dordrecht in c. 1600.

In 1410, the Nieuwe Haven was created through the construction of an embankment between the waterfront and a nearby sandbank, thereby protecting these ships from dangerous weather conditions. The government also had to deal with the consequences of soil erosion on the Poortzijde, which meant that some embankments had to be raised by five or six metres and that the earth needed to be reinforced with wooden constructions, clay, rubbish, and construction debris. Two major floods, occurring in 1421 and 1424 (St. Elisabethsvloeden), curtailed Dordrecht's further development in the following decades. Nevertheless, the population steadily increased, reaching approximately 11,000 inhabitants in about 1560, a growth which inevitably affected the urban landscape. We can conclude from Figure 5.2 that, in comparison to other cities, Dordrecht's high population density had already prompted its magistrates to take steps to protect the urban environment at an early stage.¹¹

¹¹ Van Herwaarden, *Geschiedenis van Dordrecht*, pp. 245-24; Sarfatij, *Archeologie van een deltastad*, pp. 45, 72-86, 253-280, 297-298; Van Oosten, *De stad, het vuil en de beerput*, pp. 165-168, 310.

The interacting processes of urbanization and commercialization meant that many late medieval cities began to experience exponential growth. Feeling such pressure acutely, the government of Dordrecht had to accommodate the residents' need for living space at a time when the city was becoming overpopulated. The demand for space could lead to complaints and social tensions related to housing and property boundaries, eventually resulting in legal disputes. The magistrates tried to prevent conflict at all costs, since, as acknowledged in a bylaw of 1457 based upon earlier rulings (subsequently reissued and amended in 1594), they were regarded as a waste of money, time, and effort, and, above all, could cause 'great

Figure 5.1: Urban development of Dordrecht

(based on Van Oosten, *De stad, het vuil en de beerput*, p. 165) Legenda: A: ca. 1200; B: ca. 1250; C: ca. 1300 (A+B+C = 16 ha); D: ca. 1350 (56 ha); E: ca. 1500-1525 (+ 3,5 ha); F: 1550 (+ 3 ha); G: ca. 1575-1600 (+ 1,5 ha); H: ca. 1700-1725

Figure 5.2: Population density (estimated population and hectares)

	1300	1400	In around 1575
Dordrecht	383 (5,940; 16)	149 (8,320; 56)	191 (11,830; 62)
Leiden	89 (1,900; 21)	54 (5,250; 97)	129 (12,456; 97)
Den Bosch	X	125 (14,526; 116)	148 (17,120; 116)

(based on Van Oosten, *De stad, het vuil en de beerput*, pp. 308, 311)

hostility and irreconcilable hatred'.¹² Since divisions in the urban body were to be avoided at all costs, a well thought-out environmental policy through which the duties and rights of the residents could be clearly established was essential to prevent nuisances escalating into outright confrontation.¹³ The following sections describe the policies of containment pursued by the government of Dordrecht with respect to urban planning, public health, and communal safety.

Construction policy

A charter of 1293 shows that the city government was already concerned with the occupation of urban space by the late thirteenth century, in this case the area between the Visbrug and the Grote or Onze-Lieve-Vrouwe Kerk (Church of Our Lady) on the Landzijde. The building of houses in this part of the city was forbidden, and existing ones had to be demolished. The construction of a Franciscan convent (*minderbroedersklooster*), which was located at the other side of the Visbrug, precluded any further expansion in that area, too. The underlying reasons for this ruling are not explicitly stated, but the charter indicates that the government was committed to developing the Landzijde.¹⁴ In any event, archaeological research has revealed that the process of (re)division of land parcels, the development of a street plan, and the introduction of a building line to limit incursions into the main streets changed the city's infrastructure. Consequently, the concentration and height of houses in the now more crowded streets would increase, while the land parcels would become narrower, allowing public and private space to be utilized more effectively.¹⁵

The *keurboek* contains six articles relating to the construction of houses. It should be emphasised that these normative rules do not necessarily reflect actual enforcement practices. However, in this case, they indicate that the government was concerned with two major issues. First, great attention was paid to the conservation and use of building materials, a

¹² '[T]ot voorcominge ende verhoedinge van veelderhande questien, processen ende geschillen [...] onder den burgers en ingesetenen [...] ende naer vele costen, moyten en versuymenisse van tijt, neringe ende welvaeren, causeren ende veroersaeken groote onvrienscap ende onversoelijcken haet ende nijt.' *De oudste rechten*, ed. Fruin, I, p. 200.

¹³ Poulussen, 'Alles heeft een prijs', p. 224.

¹⁴ *Oorkondenboek van Holland en Zeeland*, ed. Dijkhof and Kruisheer, pp. 340-341.

¹⁵ Van Herwaarden, *Geschiedenis van Dordrecht*, pp. 77-78; Sarfatij, *Archeologie van een deltastad*, pp. 259-264, 268-271.

development that probably followed the devastating city fires of 1332 and 1338.¹⁶ Home-owners were now prohibited from dismantling stone walls and removing the stone for reuse in another town. Furthermore, residents wishing to build a new house within 100 feet (31 metres) of the two main streets were obliged to adopt slate roofs, which were less combustible than thatch. Beyond this range, reed roofing was only permitted when clay had been employed as a building material and when the height of a house did not exceed *anderhalf staedze* (one and a half floors). A slate roof was mandatory for taller houses. Indeed, a fine of ten pounds could be imposed if existing tiles were replaced by thatch, a notorious fire hazard. Secondly, other bylaws sought to organize and regulate public space. Thus, for example, the poles in the Oude Haven and the Oude Gracht, a canal between the Oude Haven and Spuihaven, were not to be used for the construction of ‘additions’ without official approval.¹⁷ From the scale of the fines – in this case ten pounds payable by the carpenter and sixty by the owner – we can infer that the harbour passageway was vital for the access of merchants’ ships to the city centre and had therefore to remain free of obstructions.¹⁸

At the beginning of the fifteenth century, two *reetrekkers* (land surveyors) were assigned the task of ascertaining whether the residents adhered to building regulations and respected property boundaries. In cases of infringement, they were authorized to fine trespassers. Their instructions and judgments were binding in matters such as the construction of a revetment (*stabboem*) or in disagreements about the erection and the load-bearing capacity of separating walls. In addition, they gave advice to the government about the structural condition of domestic buildings. If an edifice seemed in danger of collapsing, the owner would be forced either to pull it down or to rebuild it safely.¹⁹ A verdict of August

¹⁶ For English comparisons, see Rawcliffe, *Urban Bodies*, pp. 168-175.

¹⁷ It is unclear from this bylaw what function the poles (in Middle Dutch *pinnen* = *palen*) may have performed in the first place. For a discussion about the city walls and the names and locations of the canals, see: Hendriks and Koonings, *Van der stede muere*, pp. 103-109.

¹⁸ *De oudste rechten*, ed. Fruin, I, pp. 22-24; Van Herwaarden, *Geschiedenis van Dordrecht*, pp. 164-165. Because many *stadsrekeningen* have not been preserved, it is unknown what workers earned around 1400. At the end of the fifteenth century, carpenters and bricklayers earned approximately 5 *stuivers* a day, but rates were dependent on many different factors, such as the availability of seasonal work and their personal expertise. Noordergraaf and Schoenmakers, *Daglonen in Holland*, pp. 118-122; Noordergraaf, *Hollands welvaren?*, pp. 52-95.

¹⁹ Van Herwaarden, *Geschiedenis van Dordrecht*, pp. 225-233; *De oudste rechten*, ed. Fruin, II, p. 80.

1403 shows that the *reetrekkers* were also employed by the *schepenen* to provide expert evidence in disputes relating to boundaries and the construction of new houses. In this case, a *reetrekker* confirmed that Yde van Rijnenburch had built a house at the harbour on her neighbours' property. The court ruled that the owner of the new dwelling would have to buy the land in question from them.²⁰

After the deadly fire of 1457, which destroyed much of the city centre, it was decided that *all* thatched roofs throughout the entire city should be removed and replaced with tile.²¹ In contrast to the authorities of Leiden and Utrecht, who subsidized the conversion to slate roofs by providing home-owners with specific sums of money, Dordrecht's magistrates proved less open handed.²² Indeed, on the advice of the *reetrekkers*, they issued another new bylaw at this time regarding the construction of houses and walls. Compared to the rulings in the *keurboek*, this bylaw is more detailed, which suggests that it may have been influenced by recent developments in jurisprudence. Significantly, earlier testimonies provided by the *reetrekkers* and previous verdicts based upon them were integrated into this new set of regulations. The first four articles are concerned with land parcels, stipulating that neighbours had to reach an agreement regarding the position and height of party walls and the drainage of rainwater. When disputes occurred, the initiator was at liberty to build a wall on his side of the property line. However, if the counterparty (his neighbour) changed his mind at a later stage and decided to erect a higher building or wall, he would become responsible for drainage in order to ensure that the original initiator did not experience flooding and the attendant threat of miasmatic air. Two more articles, which explicitly mention the two main streets of Dordrecht, specified the minimum width of the space that should remain between houses (*druipruimte* or *drop*) because of its importance for drainage and the building of extensions (*loeve*). Anyone who extended his property had likewise to take appropriate precautions against flooding, which, as other chapters of this volume testify, could prove a major urban hazard. No doubt for this reason, neighbours were also obliged to come to terms over the *druipruimte*. Finally, the last article decreed that woodwork should be replaced when the timber became rotten.²³

²⁰ Regionaal Archief Dordrecht [hereafter RAD], Archief 1, inv. no. 13, fol. 1r.

²¹ *De oudste rechten*, ed. Fruin, I, pp. 310-311.

²² *Keurboeken van de stad Leiden*, ed. Hamaker, pp. 5, 136-137, 143-145; *Rechtsbronnen der stad Utrecht*, ed. Muller, I, pp. 20, 90, 96, 199, 221, 231.

²³ *De oudste rechten*, ed. Fruin, I, pp. 308-309.

In addition to domestic premises, the city government was also concerned with the construction and upkeep of streets and harbours. The oldest surviving account ledgers (1283-1287) reveal that road workers (*calsidemaker*) were hired to carry out repairs on some of the cobbled streets at this time.²⁴ As a preventive measure, in 1465, carts or wagons were specifically banned from these streets because their wheels might damage the carefully paved surface, making them harder to sweep clean and keep free of refuse.²⁵ The harbours posed a far greater challenge, as they had to be periodically deepened in order to counteract natural phenomena such as sedimentation. For this purpose, the government appointed five *havenmeesters* (harbour overseers), who were in charge of the maintenance works and were held accountable for the budget.²⁶ The construction of revetments also helped to maintain the desirable depth of the harbours. In September 1411, for example, people living nearby were ordered to repair the *stabboemen* or build new ones before the beginning of the annual market, which took place in October, under threat of a substantial fine of three pounds.²⁷ In 1448, when the government announced that the eastern side of the Oude Gracht was going to be dug out, house-owners in that area were offered a financial incentive to erect a wooden *stabboem*. If they contacted the *reetrekkers* before Easter and followed their instructions, they could reclaim their expenses. At the same time, it was decreed that privies (*privaat, stillen, heymelicheit*) on the Oude Gracht should be located inside the *stabboem* and not above the harbour, where they not only presented a greater nuisance and hindrance for ships, but also in terms of the generation of miasmatic vapours and filth.²⁸ House-owners had to remove any offending constructions immediately.²⁹ In 1495, the *grachtmeesters* (canal overseers) were held responsible for determining whether the *stabboemen* were being built according to the appropriate regulations. In case of any shortcomings, the government would contract the work to a third party and recover the costs from the negligent citizen.³⁰ As we shall see below, by the early sixteenth century a direct connection was being made in official

²⁴ *De oudste stadsrekeningen*, ed. Burgers and Dijkhof, pp. 46, 57.

²⁵ *De oudste rechten*, ed. Fruin, I, p. 327; Rawcliffe, *Urban Bodies*, pp. 139-140.

²⁶ Two *havenmeestersrekeningen* (ledgers of civic accounts, harbour overseers) survive for 1452 and 1461/1462 respectively: Denessen, 'Twee havenuitdiepingsprojecten', pp. 10-12, 15-21.

²⁷ *De oudste rechten*, ed. Fruin, I, p. 256.

²⁸ See p. 22 above for similar concerns in Venice.

²⁹ RAD, Archief 1, inv. no. 6, fol. 41v.

³⁰ *De oudste rechten*, ed. Fruin, II, pp. 187-189.

pronouncements between the state of the harbour and the quality of the city's air, but such concerns were hardly new.

Sanitation and the removal of refuse

The government endeavoured to keep waste matter out of sight.³¹ Archaeological research in Dordrecht has revealed that wooden and brick cesspits were widely used for the collection of faeces. Herbert Sarfatij has analysed the position of these facilities in houses in the Groenmarkt and Wijnstraat and the smaller side street known as Tolbrugstraat-Waterzijde on the Poortzijde. Most houses in the Wijnstraat had a cesspit that was located at some distance from the main buildings at the back of the plot in question, while at other dwellings in the Tolbrugstraat the remains of privies have been found inside the houses. This difference can be explained from both a spatial and social perspective, as most wealthy citizens owned a backyard.³² Roos Van Oosten's work on cesspits in Dordrecht draws on additional archaeological data. Her analysis shows that approximately three-quarters of all the cesspits included were made of wood in the thirteenth and fourteenth century (58 in total), as well as in the fifteenth and sixteenth century (103 in total). This high percentage of timber constructions over brick probably reflects the dangers of shifting peat soil caused by digging. Moreover, trading activities ensured that a copious supply of wood and barrels was constantly available, which meant that these materials were far cheaper than bricks. Roos van Oosten has argued that there is a direct correlation between the number of cesspits and population density, as the former rose directly in response to population growth. In the seventeenth century, this relationship no longer held good because cesspits were slowly being replaced by sewers (*secreetgoten*).³³

The archaeological findings can be supplemented with written sources.³⁴ According to 't Jong, only six out of 234 bylaws (*keurboek* 1401) related to insanitary nuisances (his definition: '*hinderkeuren*') in the public space. For example, two bylaws recorded in the *keurboek* are concerned with the disposal of waste, offal, and mud, which was not to be thrown from bridges or houses into the harbour. As an additional sanitary measure, handmaids (*joncwiven*) had to sweep the streets in front of their masters' houses every

³¹ For the concept of dirt as 'matter out of place, see Douglas, *Purity and Danger*, p. 35.

³² Sarfatij, *Archeologie van een deltastad*, pp. 184-186.

³³ Van Oosten, *De stad, het vuil en de beerput*, pp. 70-76, 168-169, 198-201.

³⁴ Jørgensen, 'Cooperative Sanitation', pp. 558-561.

Saturday; and all residents living on the Oude Gracht were expected to clean their waterfront (part of the canal).³⁵ Whereas the provisions in the *keurboek* are generic, regulations noted in the *klepboeken* and in court rolls mention specific locations, such as a jetty (Rotterdamsche stegher) (1441) and the Roedermont crane in the Nieuwe Haven (1455).³⁶ Entries in the *klepboeken* reveal that these bylaws (*'hinderkeuren'*) were regularly reiterated over the course of a single year. These reminders might have been prompted by an urgent matter, such as a forthcoming event, or a complaint, but might also have served as a means of periodically refreshing the residents' memory of the rules.³⁷ As another preventive measure, wooden or brick *kajuten* (sheds) where refuse could be disposed of ready for removal were erected in public spaces for communal use. On the other hand, if anyone had attached one of these sheds to his house, causing an obstruction on the street, he was obliged to remove it within three days. Not surprisingly in view of the fire hazard, it was forbidden to burn refuse inside the city walls and throw the smouldering material into a *kajuut*.³⁸

The government appointed refuse collectors for the removal and disposal of waste from at least some parts of the city. As we can see from a civic account book of 1490, a man named Willem van Loven received a small fee for this work, which he probably regarded as a supplementary source of income, and in return for which he had to clean an area on the Poortzijde. What exactly had to be done with the refuse is not stated, but he probably either dumped it in the river or sold it to other parties.³⁹ In contrast to their peers in Dordrecht, lower status residents of Utrecht known as *slijkbuffers* could earn rights of temporary citizenship by cleaning and maintaining a central location in the city that was associated with trade, such as a bridge or market. They were also authorized to fine offenders and keep a

³⁵ 't Jong, 'De mythe van de vuilnisbelt', pp. 68, 75-79, 82-83; *De oudste rechten*, ed. Fruin, I, pp. 71, 73; The same Middle Dutch words relating to refuse and the nuisance caused by stench are used repeatedly in the *klepboeken*: *vuyt* or *vuylnisse* (decomposing corpses and carrion, or rotten food and beverages); *onreinicheyt* (animal faeces and manure); *slijck* (mud); and *afval* (remains of products, such as wood splinters and offal): *Middelnederlandsch Handwoordenboek*, ed. Verdam, pp. 30, 417, 547, 672 (<http://gtb.inl.nl/>). For an overview of the attitude towards smell and stench in late medieval society, see Jørgensen, 'The Medieval Sense of Smell', pp. 301-3; Woolgar, *The Senses in Late Medieval England*, pp. 115-146.

³⁶ RAD, Archief 1, inv. no. 6, fol. 18v; Archief 9, inv. no. 222, fol. 8r.

³⁷ 't Jong, 'De mythe van de vuilnisbelt', pp. 89-90.

³⁸ RAD, Archief 9, inv. no. 222, fols. 13v, 16r; *De oudste rechten*, ed. Fruin, I, p. 310; 't Jong, 'De mythe van de vuilnisbelt', p. 88.

³⁹ RAD, Archief 1, inv. no. 438, fol. 401r.

share of the money. However, if the magistrates found that their performance was unsatisfactory, these privileges could be withdrawn.⁴⁰

When, according to documentary sources, the first outbreak of plague reached Dordrecht in 1450, the government's environmental policy became more stringent.⁴¹ For instance, in 1451, people living in the Vleeshouwersstraat (Butcher Street) or at the Nieuwe Haven were ordered to clean the streets within three days. A year later, residents were reminded that offal could only be deposited in the river Merwede; and that it was strictly forbidden to throw it into a *kajuut*.⁴² In 1509, fear of plague was one of the main reasons for the government to deepen the harbours in order 'to prevent death from pestilence, which is usually caused by bad smells and stench that comes from [them]'.⁴³ This explanation clearly invokes Hippocratic and Galenic miasma theory regarding the transmission of disease, which maintained that noxious vapours could contaminate a person's vital spirit and spread corruption throughout the body. To minimize the likelihood of an epidemic, airborne pollution in cities had to be contained.⁴⁴

It was also understood at this time that plague might be transmitted by direct contact between human beings.⁴⁵ The government of Dordrecht issued multiple bylaws in the fifteenth century and at the beginning of the sixteenth in response to the dual threats of contagion and miasma. In 1450, it was decreed that the dead should be buried instantly. During later plague outbreaks, as in 1458 and 1509, it was forbidden to enter the house of

⁴⁰ Kwakman, 'Slijkburgers in Utrecht', pp. 167-171.

⁴¹ It is unclear to what extent cities in the Low Countries were struck by plague epidemics in the period 1347-1450: De Boer, *Graaf en grafiek*, pp. 30-39. For a chronological overview, see Noordergraaf and Valk, *De gave Gods*, pp. 225-234. Appendix 1 to Curtis and Roosen, 'The Sex-selective Impact of the Black Death', provides a survey of possible plague outbreaks in the Low Countries (1349-1499), including the Northern Netherlands. Dordrecht is mentioned from 1450 onward. However, it seems implausible that the government did not have to deal with visitations of plague before then, because administrative records and several peak flows in mortality rates indicate that nearby towns in Holland, such as Gorinchem and Leiden, were probably affected between 1349 and 1450.

⁴² RAD, Archief 1, inv. no. 6, fols. 69r, 77r.

⁴³ *De oudste rechten*, ed. Fruin, I, p. 347: 'Ende oeck om te verhoeden sterfte van pestilentie, die gemeenlicke coemt van quaden luchten ende stanken, die uut die graften comen mochten.'

⁴⁴ Rawcliffe, 'The Concept of Health', pp. 320-327; Gil Sotres, 'The Regimens of Health', pp. 300-314; and see pp. 19-22 above.

⁴⁵ Carmichael, *Plague and the Poor*, pp. 96-126; Kinzelbach, 'Infection', pp. 370-384; Porter, *Health, Civilization and the State*, pp. 26-39.

plague victims for a period of six weeks after their demise. Straw on which the patient had slept had, meanwhile, to be safely deposited outside the city walls. Furthermore, barbers who had purged any blood from their patients through phlebotomy had to bury it in the ground. The prohibition imposed on the dumping of these noxious waste products and offal into the harbour was primarily intended to combat the spread of noisome air, but other measures addressed the dangers of personal contact and its prevention. Plague victims were, for example, forced to stay in plague houses or in separate rooms in the guest-houses commandeered for their use. Significantly, the *cellebroeders* (Alexian brothers) and the *cellezusters* (Franciscan sisters) who looked after them were prohibited from attending public meetings, and had to avoid mixing with other people.⁴⁶

Public health and morality

The detrimental effect of plague on society was not only explained in medical terms, but was also regarded as a mark of divine punishment.⁴⁷ Urban communities hoped that, by undertaking charitable works and organizing religious ceremonies, they could persuade God to protect them from disease and warfare.⁴⁸ Two processions, the *Grote Ommegang* (on the first Sunday after the feast of St. Mary Magdalen, the ultimate repentant sinner, on 22 July) and the *Kleine Ommegang* (on the first Sunday after the feast of Saints Peter and Paul on 29 June), commemorated the miraculous survival of treasured relics. One was the *heilig sacrament* (holy sacrament) in its Heilig Sacramentsgasthuis (in the reliquary chapel at the hospital of the Holy Sacrament) (1338) and the other the *heilig hout* (a fragment of the true

⁴⁶ *De oudste rechten*, ed. Fruin, I, pp. 294, 313-314, 341-342; Kool-Blokland, *Van Heilig Sacramentsgasthuis*, pp. 98-99; Noordergraaf and Valk, *De gave Gods*, pp. 193-211. The *cellebroeders* and *cellezusters* were also known as the *grauwbroeders* and *grauwzusters* because of their grey habits. It is unknown when they arrived in Dordrecht, but their names appear in the ledgers from the 1330s and 1340s. Both congregations initially followed the rule of St Augustine, but they received permission from the bishop of Utrecht to join the Third Order of the Franciscans, the *cellebroeders* in 1463 and the *cellezusters* in 1464. Administrative sources indicate that the *cellebroeders* had a convent in the Suikerstraat and the *cellezusters* in the Raamstraat, also known as Bethlehem convent, where they took care of sick people and begged for alms: *Geschiedenis van Dordrecht*, pp. 347-350.

⁴⁷ Noordergraaf and Valk, *De gave Gods*, pp. 110-15; Horden, 'Ritual and Public Health', pp. 18-30; Rawcliffe, *Urban Bodies*, pp. 89-97.

⁴⁸ RAD, Archief 1, inv. no. 11, p. 14: 'Ende oeck devotelick te bidden dat God almachtich will behoeden ende bescermen dese lande van alle plaghe ende verdriet, bysonder van pestilentie ende oerloghe.' See also pp. 23-25 above.

cross) in the Grote Kerk (1457). There were some doubts concerning the authenticity of the *heilig hout*, but, after its escape from the fire of 1457, throngs of people who were looking for physical or mental relief came to Dordrecht to visit the church and venerate it. The *mirakelboek* of Dordrecht records many stories in which people suffering from various disabilities and diseases, such as blindness and tumours, were healed.⁴⁹

On 28 July 1509, the city government issued a bylaw stipulating that residents had to clean the streets in which they lived on the eve of these important religious events, thereby ensuring an appropriate level of physical as well as spiritual hygiene. The beginning of a procession was announced by the pealing of church bells, after which the magistrates, the craftsmen, and all the other participants followed a fixed route and various stories from the Old and New Testaments were enacted or recited. People were convinced that evil spirits, and thus, by extension, the miasmas of plague, could be expelled by singing, praying, and ringing hand bells. The authorities invested in the production of lavish decorations for these ceremonies, which attracted large crowds to the city centre.⁵⁰

Noise levels and public order had to be regulated on other days as well. The government could determine when bells were sounded, an important factor in establishing the rhythm of daily life. Magistrates exercised this prerogative to manage the utilization of public space (such as markets) more effectively, to prevent disorder, and to avoid nocturnal disturbances, as well as to preserve the *status quo*.⁵¹ The bells in the Wijnkoperskapel rang at 9 p.m., heralding the night curfew and warning people to stay indoors. Those returning to their homes were expected to carry a lantern, which would reassure others of their good intentions. This particular peal was also known as the *ruymstrate* (meaning ‘clear or vacate the street’). Tavern keepers had to close their doors one hour later at 10 p.m.⁵² Other measures which clearly reflect the same combination of sanitary, social, and moral concerns, related to the removal of prostitutes from the city centre in a bid to exercise moral zoning. Brothel keepers and their employees were supposed to reside near the city wall, on the other

⁴⁹ Verhoeven, ‘Het mirakelboek’, pp. 104-136; Verhoeven, ‘De cultus van het heilig hout’, pp. 200-223; Van Herwaarden, *Geschiedenis van Dordrecht*, pp. 166-171.

⁵⁰ *De oudste rechten*, ed. Fruin, I, pp. 343-345; II, pp. 191-192; Kool-Blokland, *Van heilig sacramentsgasthuis*, pp. 18-19; Woolgar, *The Senses in Late Medieval England*, pp. 70-73.

⁵¹ Garrioch, ‘Sounds of the City’, pp. 15-20; Kotkas, *Royal Police Ordinances*, pp. 21-23; Van Uytven, *De zinnelijke middeleeuwen*, pp. 203-209.

⁵² *De oudste rechten*, ed. Fruin, I, pp. 148-153, 272.

side of the Oude Gracht. In this way, magistrates hoped to ‘protect’ residents and visitors from members of a ‘morally reprehensible’ group, whom they ranked among the principal vectors of diseases such as plague and leprosy.⁵³ Unruly children and adolescents could also ‘disturb’ public order. In 1449, on St. Martin’s eve (10 November), several young men were held responsible for damaging the interior of the Grote Kerk, for assaulting young women, and for removing wood from houses and subsequently using it to start fires in the streets. Their parents were made financially accountable for the damage and were warned to ensure that repeat offences did not occur.⁵⁴

At night-time, the headmen (*hoofdmannen*), each of whom was charged with keeping order in a number of city streets, had to make sure that the areas under their surveillance remained quiet and safe. They were accompanied by guards (*wakers*), who had to carry a lantern. In 1455, the authorities were forced to intervene because some *wakers* were sleeping in the guardhouse instead of walking their beat. This dereliction of duty led to a ruling that the *wakers* would henceforward be subordinate to the *hoofdmannen* and should behave accordingly. In the event of an emergency, residents had to follow the instructions of the local *hoofdman*. For instance, they were obliged to hang burning lanterns outside their homes if a criminal was on the run. In matters of public safety and order, the *klokwachter* also had some important tasks to perform. He announced the opening and the closing of the city gates by playing a tune on a wind instrument. When he noticed a fire, he used cymbals to alert the *wakers*, who could then rouse the townspeople so that it could be extinguished.⁵⁵

The sounding of the bells marked the beginning and the end of the working day for labourers and artisans. Guild bylaws, such as those of the Carpenters and the Shipwrights, do not provide any information about working hours, although craftsmen were not permitted to work on holy days as a mark of reverence and because they were expected to join in the festivities.⁵⁶ Most of them lived on the Landzijde of the city. A bylaw of March 1486 reveals that the Shipwrights’ guild had requested the city government to find another place for their activities. A move to the Dwarsdijk was suggested; and from June they were not allowed to

⁵³ *De oudste rechten*, ed. Fruin, I, pp. 16-17, 266, 293, 337; Van Herwaarden, *Geschiedenis van Dordrecht*, pp. 134-136; Van Baarsel, *Van Aardappelmarkt tot Zwijndrechts Veerhoofd*, pp. 86-87; Rawcliffe, *Urban Bodies*, pp. 104-115; Coomans and Geltner, ‘On the Street’, p. 71.

⁵⁴ *De oudste rechten*, ed. Fruin, I, pp. 292-293, 336.

⁵⁵ RAD, Archief 1, inv. no. 11, pp. 15-20; inv. no. 434, fol. 57v; *De oudste rechten*, ed. Fruin, I, pp. 149-152.

⁵⁶ Van Vollenhoven, *Ambachten en neringen*, pp. 102, 108, 120.

work at the previous location, which lay between the Grote Kerk and the Baljuwstraat, because of the fire hazard that they presented. Shipwrights who did not adhere to this rule then faced an official fine.⁵⁷ Another bylaw, issued in January 1489, confirms that neighbours had complained about the noise caused by shipwrights working and quarrelling during the night. In addition, because highly inflammable pitch was being employed by candlelight for the caulking of ships, there was an even more serious risk of fire damage than usual. As a result, the authorities stipulated that pitch was only to be used in daylight. This example clearly demonstrates that residents were concerned with safety issues and that complaints could initiate new regulations.⁵⁸ We should also note that, from a late medieval medical perspective, noise pollution (especially at night) posed a serious threat to health, since it agitated the animal spirits, while also preventing sleep and thus the effective conversion of food into humoral matter.⁵⁹ Fear of nocturnal crime and disorder, too, could take a heavy toll in this respect. In 1299, the French physician, Bernard Gordon, urged his students to enquire about any disturbances caused by industrial activities, barking dogs, loud drunks, and similar drawbacks of urban life when making a diagnosis. Not surprisingly, some practitioners advised their patients to decamp to the countryside, where it was quieter, but this option was clearly not available to ordinary people, who relied upon the ruling elite to act on their behalf.⁶⁰

The presence of animals, sometimes in unacceptable numbers, was also subject to regulation. In 1449, citizens and foreign merchants complained about the large number of pigs in the streets, which gave rise to filth and disease.⁶¹ Consequently, the authorities reiterated a bylaw issued three years earlier, in which detailed rules concerning the keeping of pigs had first been established. For instance, they had to remain securely in a pigsty in the owner's backyard and be well looked after. Informants who reported to the local magistrates that a household owned more pigs than permitted would be rewarded with a third part of the dead animal(s), while the *landsheer* and the government retained the other two. The monitoring of one's fellow citizens was thus incentivized by the prospect of financial gain. In

⁵⁷ RAD, Archief 1, inv. no. 8, fol. 11r.

⁵⁸ *Rekeningen van de gilden*, ed. Overvoorde, pp. 211-212.

⁵⁹ See pp. 18-19 above and 252-254 below.

⁶⁰ Rawcliffe, *Urban Bodies*, pp. 164, 167-168.

⁶¹ RAD, Archief 1, inv. no. 6, fol. 49r: 'Dat van quader gewoonte veel varcken opter straten vuyl ende onnut gaen.'

addition to pigs, dogs that ran untethered in the streets also caused problems because they intimidated children and adults alike. For instance, in both 1446 and 1509, the government ordered the owners of such animals to bring them to a ship, for removal to an unknown destination. As a further deterrent, *hondenslayers* or *kreeften* (dogcatchers or dog-beaters) were required to collect and remove stray dogs from the city. Sometimes a thief was obliged to perform this invidious task as part of his punishment.⁶²

Finally, the government took responsibility for organizing the weekly *beestenmarkten* (livestock markets). Traders could only sell their animals at specifically designated locations, and, when the market in question closed for the day, offal and dung had to be disposed of in the river Merwede.⁶³ The inhabitants of the area around the Heilig Sacramentsgasthuis took offence at the presence of the fish market situated next to their homes. The noise, the smell, and the refuse that was left behind by the stallholders at the walls led them to submit numerous complaints to the authorities, who duly insisted that the nuisance should be minimized.⁶⁴

In my analysis of Dordrecht's environmental policy, the emphasis has so far been placed on the composition of bylaws aimed at improving the urban environment and protecting the city from threats to its survival, such as social unrest, fire, and epidemics. Because Dordrecht's wealth was based on trade, the government paid considerable attention to the maintenance of the city centre's infrastructure, its facilities for waste disposal, and the enforcement of public order. After all, economic prosperity could be seriously undermined by negligence in this respect.⁶⁵ Moreover, from a cultural perspective, the city and its inhabitants derived their identity and their financial and political status from the material features of the urban landscape. For this reason, it was essential that the city centre appeared well-organized and carefully planned in spatial and aesthetic terms. By promulgating rules to which the residents had to adhere, and imposing social and ethical norms upon them, magistrates tried

⁶² *De oudste rechten*, ed. Fruin, I, pp. 287-288, 298-299, 339-340, 351; Van Herwaarden, *Geschiedenis van Dordrecht*, p. 106; 't Jong, 'De mythe van de vuilnisbelt', pp. 85-86; Camphuijsen and Coomans, 'De middeleeuwse stad', pp. 141-146.

⁶³ RAD, Archief 1, inv. no. 11, pp. 25-26.

⁶⁴ RAD, Archief 1, inv. no. 6, fol. 42v; Kool-Blokland, *Van heilig sacramentsgasthuis*, pp. 22-23.

⁶⁵ Davis, 'The English Medieval Urban Environment', pp. 75-78.

to influence both collective and individual behaviour. Nevertheless, their negotiation with members of the community over the use of public space proved to be a long-term process.⁶⁶

With regard to the implementation of bylaws, it became increasingly necessary to appoint reliable officials who could carry out inspections and collect fines. The tasks and responsibilities of the *reetrekkers*, rubbish collectors, and other civic employees have already been discussed, but, since many of Dordrecht's medieval ledger books have been lost, it is impossible to determine exactly when these officials first appeared. However, by analogy with many English cities, which also faced the same environmental challenges, it is safe to assume that the number of specialist appointments grew in Dordrecht during the late Middle Ages.⁶⁷ In the next and final section, Dordrecht's law enforcement policy and the relationship between its magistrates and officials and the rest of the community will be further examined.

Fines and court cases

The *klepboeken* and *aktenboeken* provide valuable information on how environmental bylaws were enforced in practice and how environmental problems were addressed. By imposing fines upon offenders, the government tried to police the use of public space and thereby modify the behaviour of residents and visitors alike. Indeed, trespassers who were caught illegally dumping refuse had to pay a penalty on the spot (*sonder verdrach*). In 1455, for instance, a man called Adryaen Danckertssoen was ordered to fine people who disposed of their waste at the Vuilpoort, which had just been cleared. Residents were, moreover, warned not to hinder him in the performance of his duties.⁶⁸ Although the written sources do not tell us if Adryaen was allowed to keep any of the money, or had to hand all of it over to the authorities, examples from other urban centres, such as Bologna in Italy and the German free cities, confirm that such revenues were often shared between the officials in question and the authorities.⁶⁹ Compared to disputes involving other types of nuisance, hardly any cases of the illicit disposal of refuse are recorded in the *klep- en aktenboeken*, which suggests that policing these offences was probably not one of the main priorities of the local magistrates, and that disagreements would often have been settled at a lower level without their

⁶⁶ Howell, 'The Spaces of Medieval Urbanity', pp. 17-19.

⁶⁷ Jørgensen, "'All Good Rule of the Citee'", p. 302.

⁶⁸ RAD, Archief 1, inv. no. 6, fol. 92v.

⁶⁹ See pp. 111, 132 above and 246, 249 below.

intervention.⁷⁰ Most of the relevant court cases found in the *aktenboeken* relate to the use and maintenance of privies. For instance, in 1521, Jan van Driel Pieterszoen (a member of the ruling elite) and Gherit Boegaert (licentiate in law), who lived near the Visbrug and shared a *privaat*, disagreed about who should next empty it. The *reetrekkers* looked into the situation and concluded that this time Gherit was to be responsible for clearing the cesspit and disposing of its contents. A man of his social status would have hired someone to perform this unpleasant task, which could prove expensive, and it is interesting to note that future maintenance costs were to be shared between both parties. Although it remains unclear why Gherit was found liable on this occasion, the case demonstrates that *privaten* were emptied regularly.⁷¹

Other comparable conflicts between neighbours are described in the *aktenboeken*. These court cases arose over such contentious matters as the location and height of party walls, the drainage of rainwater, obstructions to natural daylight, and access to property. In them the judicial concept of easement or service (*servitus*), or in other words of the rights and obligations legally binding between neighbours, which already existed in Roman law and became an integral part of the *Codex Justinianus*, is clearly apparent. In the context of a densely populated urban environment, rights of easement generally related to the negotiation of property boundaries so that people could enter and leave their homes unhindered. For instance, an agreement might be reached about the use of a path on one neighbour's land so that another neighbour could enjoy unimpeded access to his back door.⁷²

In 1450, a dispute arose between some people living in the Wijngaardstraat and the churchwardens (*kerkmeesters*) of the Nieuwe Kerk over the use of the adjoining graveyard as a back entrance to certain properties. The local magistrates decided that the householders should pay a fee to the churchwardens if they wanted to continue using the graveyard in this way or to erect buildings against the perimeter wall in future. However, they were forbidden to locate pigsties and privies within a certain distance of the wall lest such an obvious source of miasmatic air should cause a nuisance to the church and its congregation.⁷³ In the same year, the Magdalena convent (Magdalenaklooster) and Dirc Aertsoen fell out about the use of the wall that separated their properties. The final verdict was that Dirc could build against it,

⁷⁰ 't Jong, 'De mythe van de vuilnisbelt', p. 8.

⁷¹ *De oudste rechten*, ed. Fruin, II, pp. 215-216.

⁷² Van Acht, *Burenrecht*, pp. 27-43; De ruysscher, 'Ter minster schade', pp. 86-89.

⁷³ RAD, archief 1, inv. no. 14, fol. 239r.

but was not to insert a window in it. In this way, the sisters' private space was guaranteed and their vows of seclusion respected.⁷⁴ One is struck when studying the *aktenboeken* by the fact that litigation of this type constituted only a fraction of the total number of cases dealt with by local magistrates. Before people decided to invoke the law, lengthy negotiations between the two parties had probably already taken place. Thus, it can be assumed that most conflicts were solved at an early stage by an informal process of compromise in keeping with the ideals of good neighbourliness that maintained the health of the urban body.⁷⁵

Many of the verdicts recorded in the *klepboeken* concern disturbances involving noise produced at unreasonable hours.⁷⁶ Residents who violated public order during the night, perhaps as a result of drunkenness or loud disputes, were punished accordingly with either a fine or a period of community service.⁷⁷ In addition, the *secular* authorities adopted harsh measures against people who used 'improper words' in church. This response can partly be explained from a religious and sociocultural perspective. As noted in the Introduction to this volume, magistrates feared that blasphemy would incite the wrath of God, most notably in the form of fire, famine, or epidemic disease, and consequently offenders were heavily fined and sometimes even expelled from the city and obliged to go on a pilgrimage. In the *klepboeken* issued in the fourteenth century, these punishments are mentioned quite frequently, but after 1400 they were only rarely imposed because it was uncertain whether they had the desirable effect on the spiritual health of penitents. Furthermore, the absence of workers or craftsmen for long periods could potentially cause economic problems for the city.⁷⁸

This short overview of Dordrecht's approach to the enforcement of bylaws reveals that the government generally tried to implement these rulings in practice and daily life. The selection of regulations and verdicts presented here suggests that its environmental policy was efficiently managed, but in the fifteenth century, as the result of natural disasters and the growth of other Dutch commercial centres, such as Amsterdam and Rotterdam, the city experienced an economic downturn. Consequently, investments in public services were

⁷⁴ *De oudste rechten*, ed. Fruin, II, pp. 113-114.

⁷⁵ Bogaers, *Aards, betrokken en zelfbewust*, pp. 85-86; Dinges, 'The Uses of Justice', pp. 159-162. See also pp. 31, 34, 88-89 above and 225, 254-255 below.

⁷⁶ Bailey, 'Breaking the Sound Barrier', p. 50; Cockayne, *Hubbub*, pp. 112-113.

⁷⁷ For example, RAD, Archief 1, inv. no. 4, fol. 34r; inv. no. 6, fols. 47r, 57r, 58r.

⁷⁸ For example, RAD, Archief 1, inv. no. 6, fols. 65v-66r; Van Herwaarden, *Opgelegde bedevaarten*, pp. 297-308; Veldhuizen, *De ongetemde tong*, pp. 114-132. See also pp. 23-24, 140 above.

postponed and official appointments reduced to a minimum. In this respect, the authorities were dependent on loans and the goodwill of the citizens. It can, indeed, be argued that the process of bureaucratization and specialization was precarious in the later Middle Ages, although the government's organizational structure was robust enough to adapt to new challenges in the early modern period when the population increased as a result of land reclamation.⁷⁹

Conclusion

This chapter has argued that the governors of Dordrecht pursued an environmental policy in which rules were imposed from above on the inhabitants, but in which input from below at a local level formed part of the decision-making process. A state of equilibrium had to be maintained between the acceptable use of public spaces, which had to be managed as efficiently and in as hygienic a manner as possible, and the community's daily needs and activities. Originally, bylaws derived predominantly from customary law, but, as a consequence of the city's growth, of the change from an oral to a written culture, and of developments in the reception of Roman law and jurisprudence, new decrees were regularly issued and existing rules rephrased. As a result, several officials were appointed by the authorities to monitor people's compliance, and some of them were assigned, when necessary, to settle disputes and to fine offenders. Additionally, the government appealed to Christian ethics in its bid to exercise social control. In this sense, regulations can be regarded as guidelines that structured society and laid down the boundaries which residents had to observe.

The government's attitude and rationale may be understood from three different perspectives. Firstly, from a commercial point of view, it was vital that the city centre and other important public spaces should remain easily accessible and attractive to tradesmen and visitors. For this reason, the main harbours were regularly deepened and the principal streets, which might be compared to the city's veins or arteries, were cleaned (through the urban equivalent of phlebotomy). Secondly, Dordrecht's economic prosperity was not only threatened by natural disasters, but also by outbreaks of disease and fires, shocks that could disrupt the pattern of life severely. Through the proclamation of additional bylaws, attempts

⁷⁹ Van Herwaarden, *Geschiedenis van Dordrecht*, pp. 182-185; Denessen, 'Twee havenuitdiepingsprojecten', p. 20; Van der Heijden, *Civic Duty*, p. 50; *Oude Dordtse lijfrenten*, pp. 7-19, 130-132; Jørgensen, "All good rule of the citee", pp. 301-307.

were made either to prevent these unexpected events or to minimize their possible consequences. In other words, the government did whatever it could to create an environment in which communal health and well-being could be preserved. Thirdly, the teachings of the Church, especially with regard to the consequences of sin, proved extremely influential; considerable attention was, for example, paid to the organization of processions, designed to protect the city from divine punishment. Yet, as in the case of measures for the removal of prostitutes from the centre, it is not always easy (or historically desirable) to distinguish between the moral and sanitary imperatives involved.

In general, magistrates sprang into action when the city's well-being seemed at risk from a variety of internal and external environmental factors. Drawing upon current medical knowledge, they pursued a coherent policy that tried to stabilize and, where possible, improve the urban environment. The many bylaws that were (re)issued confirm that the authorities were concerned with this problem and that they discussed it regularly in council meetings. From a comparative standpoint, the conclusions presented here are similar to the findings of studies of English, Italian, Dutch, and Flemish cities. However, the main difference between Dordrecht and, for instance, Lucca is that some urban governments, especially in Italy, established designated health boards, whereas Dordrecht relied solely upon a variety of officials with little independent authority. Nevertheless, during the late Middle Ages, Dordrecht enjoyed unprecedented prosperity, as a result of which the foundations of the bustling city centre were laid and measures introduced for its upkeep as a clean and attractive public space.

BIBLIOGRAPHY

Archival sources

Regionaal Archief Dordrecht Archief 1, Stadsarchieven: de grafelijke tijd, 1200-1572; inv. no. 4, Klep- en aktenboek (1383-1438), no. 6, Klepboek (1438-1474), no. 8, Klepboek (1483-1487), no. 11, Klepboek (1509-1510), no. 13, Aktenboek (1403-1425), no. 14, Aktenboek (1425-1469), no. 15, Aktenboek (1469-1532), no. 434, Thesaurier van het groot comptoir en de reparaties. Rekening en verantwoording (1445), no. 438, Thesaurier van het groot comptoir en de reparaties. Rekening en verantwoording (1490)

Archief 9, Gerecht van Dordrecht (1450-1811), inv. no. 222, Register van instructies en vonnissen in criminele zaken (1 April 1451-3 September 1475)

Printed primary sources

De middeleeuwsche rechtsbronnen der stad Utrecht, ed. by Samuel Muller, 4 vols. (The Hague: Martinus Nijhoff, 1883-1885)

De middeneeuwsche keurboeken van de stad Leiden, ed. by Hendrik G. Hamaker (Leiden: Van Doesburgh, 1873)

Oorkondenboek van Holland en Zeeland tot 1299. V. 1291 tot 1299, ed. by Eef C. Dijkhof and Jaap G. Kruisheer (Assen: Van Gorcum, 2005)

De oudste rechten der stad Dordrecht en van het baljuwschap van Zuid-Holland, ed. by Jacobus A. Fruin, 2 vols. (The Hague: Martinus Nijhoff, 1882)

De oudste stadsrekeningen van Dordrecht, 1283-1287, ed. by Jan W.J. Burgers and Eef C. Dijkhof (Hilversum: Verloren, 1995)

Rekeningen van de gilden van Dordrecht (1438-1600), ed. by Jacobus C. Overvoorde (The Hague: Martinus Nijhoff, 1894)

Printed secondary sources

Acht, René J.J. van, *Burenrecht* (Deventer: Uitgeverij Kluwer, 1990)

Baarsel, Mieke van, *Van Aardappelmarkt tot Zwijndrechts Veerhoofd: De straatnamen van de historische binnenstad van Dordrecht* (Hilversum: Verloren, 1992)

Bailey, 'Breaking the Sound Barrier: A Historian Listens to Noise', *Body and Society*, 2 (1996), 49-66

Balestracci, Duccio, 'The Regulation of Public Health in Italian Medieval Towns', in *Die Vielfalt der Dinge: Neue Wege zur Analyse mittelalterlicher Sachkultur*, ed. by Harry Kühnel and others (Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 1998), pp. 345-357

Bocchi, Francesca, '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

Boer, D. E. H. de, *Graaf en grafiek: Sociale en economische ontwikkelingen in het middeleeuwse 'Noordholland' tussen ± 1345 en ± 1415* (Leiden: New Rhine, 1978)

Bogaers, Llewellyn, *Aards, betrokken en zelfbewust: De verwevenheid van cultuur en religie in katholiek Utrecht, 1300-1600* (Utrecht: Levend Verleden, 2008)

Camphuijsen, Frans, and Coomans, Janna, 'De middeleeuwse stad en zijn varkens', *Madoc. Tijdschrift over de Middeleeuwen*, 28 (2014), 140-148

Carmicheal, Ann G., *Plague and the Poor in Renaissance Florence* (Cambridge: Cambridge University Press, 1986)

Cockayne, Emily, *Hubbub: Filth, Noise and Stench in England* (New Haven: Yale University Press, 2007)

Coomans, Janna, and Geltner, G., 'On the Street and in the Bathhouse: Medieval Galenism in Action?', *Añuario de Estudios Medievales*, 43 (2013), 53-82

Curtis, Daniel R., and Roosen, Joris, 'The Sex-selective Impact of the Black Death and Recurring Plagues in the Southern Netherlands, 1349-1450', *American Journal of Physical Anthropology*, 164 (2017), 1-15

Davis, Miriam C., 'The English Medieval Urban Environment before the Black Death: Learned Views and Popular Practice', *Medieval Perspectives*, 13 (1998), 69-83

Denessen, Henny, 'Twee havenuitdiepingsprojecten in vijftiende-eeuws Dordrecht', *Tijdschrift voor Zeegegeschiedenis*, 25 (2006), 10-22

Dinges, Martin, 'The Uses of Justice as a Form of Social Control in Early Modern Europe', in *Social Control in Europe, 1500-1800*, ed. by Herman W. Roodenburg and Pieter Spierenburg (Columbus: Ohio State University Press, 2004), pp. 159-174

Douglas, Mary, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo* (New York: Praeger, 1966)

Garrioch, David, 'Sounds of the City: The Soundscape of Early Modern European Towns', *Urban History*, 30 (2003), 5-25

Geltner, G., 'Public Health and the Pre-Modern City: A Research Agenda', *Historical Compass*, 10 (2012), 231-245

Geltner, G., 'Healthscaping a Medieval City: Lucca's *Curia Viarum* and the Future of Public Health', *Urban History*, 40 (2013), 395-414

Gil Sotres, Pedro, 'The Regimens of Health', in *Western Medical Thought from Antiquity to the Middle Ages*, ed. by Mirko D. Grmek (Cambridge, MA: Harvard University Press, 1998), pp. 291-318

Hendriks, Johan, and Koonings, Jan, *Van der stede muere: Beschrijving van de stadsmuur van Dordrecht* (Dordrecht: Oud-Dordrecht, 2001)

Herwaarden, Jan van, *Opgelegde bedevaarten: Een studie over de praktijk van opleggen van bedevaarten (met name in de stedelijke rechtspraak) in de Nederlanden gedurende de late middeleeuwen (ca 1300 - ca 1550)* (Assen: Van Gorcum, 1978)

Herwaarden, Jan van, and others (eds.), *Geschiedenis van Dordrecht tot 1572* (Hilversum: Verloren, 1996)

Horden, Peregrine, 'Ritual and Public Health in the Early Medieval City', in *Body and City: Histories of Urban Public Health*, ed. by Sally Sheard and Helen J. Power (Aldershot: Ashgate, 2000), pp. 17-40

Horsman, Peter J., *Abuysen ende desordiën: Archiefvorming in Dordrecht 1200-1920* (The Hague: Stichting Archiefpublicaties, 2011)

Howell, Martha C., 'The Spaces of Late Medieval Urbanity', in *Shaping Urban Identity in Late Medieval Europe*, ed. by Marc Boone and Peter Stabel (Leuven: Garant Uitgevers, 2000), pp. 3-24

't Jong, Henk C., 'De mythe van de vuilnisbelt: Een nieuwe benadering van hinderkeuren uit laatmiddeleeuwse steden', *Millennium: Tijdschrift voor Middeleeuwse Studies*, 22 (2008), 68-91

Jørgensen, Dolly, 'Cooperative Sanitation: Managing Streets and Gutters in Late Medieval England and Scandinavia', *Technology and Culture*, 49 (2008), 547-567

Jørgensen, Dolly, "'All good rule of the citee": Sanitation and Civic Government in England, 1400-1600', *Journal of Urban History*, 36 (2010), 300-315

Jørgensen, Dolly, 'The Medieval Sense of Smell, Stench and Sanitation', in *Les cinq sens de la ville: Du Moyen Âge à nos jours*, ed. by Robert Beck and others (Tours: Presses universitaires François-Rabelais, 2013), pp. 301-313

Kinzelbach, Annemarie, 'Infection, Contagion, and Public Health in Late Medieval and Early Modern German Imperial Towns', *Journal of the History of Medicine*, 61 (2006), 369-389

Kool-Blokland, J.L., *Van heilig sacramentsgasthuis tot Merwedeziekenhuis: Zeven eeuwen ziekenverzorging in Dordrecht en Sliedrecht* (Dordrecht: Morks Drukkerij en Uitgeverij, 1995)

Kotkas, Toomas, *Royal Police Ordinances in Early Modern Sweden: The Emergence of Voluntaristic Understanding of Law* (Leiden: Brill, 2014)

Kwakman, Carla, 'Slijkburgers in Utrecht', *Madoc: Tijdschrift over de Middeleeuwen*, 19 (2005), 167-174

Middelnederlandsch handwoordenboek, ed. by Jacob Verdam (The Hague: Martinus Nijhoff, 1911)

Noordergraaf, Leo, and Schoenmakers, Jan T., *Daglonen in Holland, 1450-1600* (Amsterdam: Historisch Seminarium van de Universiteit van Amsterdam, 1984)

Noordergraaf, Leo, *Hollands welvaren? Levensstandaard in Holland, 1450-1650* (Bergen: Uitgeverij Octavo, 1985)

Noordergraaf, Leo, and Valk, Gerrit, *De gave Gods: De pest in Holland vanaf de late middeleeuwen* (Bergen: Uitgeverij Octavo, 1988)

Oosten, Roos M.R. van, *De stad, het vuil en de beerput: De opkomst, verbreiding en neergang van de beerput in stedelijke context* (Leiden: Sidestone Press, 2015)

Porter, Dorothy, *Health, Civilization and the State: A History of Public Health from Ancient to Modern Times* (London: Routledge, 1999)

Poulussen, Peter, *Van burenlust tot milieuhinder: Het stedelijk leefmilieu, 1500-1800* (Kapellen: Uitgeverij Pelckmans, 1987)

Poulussen, Peter, 'Alles heeft een prijs. Het stedelijk leefmilieu in de Zuidelijke Nederlanden (1500-1800)', *Spiegel Historiael*, 28 (1993), 224-228

Rawcliffe, Carole, 'The concept of Health in Late Medieval Society', in *Le interazioni fra economia e ambiente biologico nell'Europa preindustriale secc. XIII-XVIII*, ed. by Simonetta Cavaciocchi (Florence: Florence University Press, 2010), pp. 317-334

Rawcliffe, Carole, *Urban Bodies: Communal Health in Late Medieval English Towns and Cities* (Woodbridge: Boydell, 2013)

Ruysscher, Dave De, "'Ter minster schade". Milieurecht en -rechtspraak tussen burens te Antwerpen en Mechelen tijdens de zestiende en zeventiende eeuw', in *Tussen dierenliefde en milieubeleid: Tien jaar ecologische geschiedschrijving in België en Nederland*, ed. by Henny J. van der Windt (Hilversum: Jaarboek voor Ecologische Geschiedenis, Verloren, 2007), pp. 82-98

Sabine, Ernest, L., 'City Cleaning in Mediaeval London', *Speculum*, 12 (1937), 19-43

Sarfati, Herbert, *Archeologie van een deltastad: Opgravingen in de binnenstad van Dordrecht* (Utrecht: Uitgeverij Matrijs, 2007)

Thorndike, Lynn, 'Sanitation, Baths, and Street-Cleaning in the Middle Ages and Renaissance', *Speculum*, 3 (1928), 192-203

Uytven, Raymond van, *De zinnelijke middeleeuwen* (third edn., Leuven: Davidsfonds, 1999)

Veldhuizen, Martine, *De ongetemde tong: Opvattingen over zondige, onvertogen en misdadige woorden in het Middelnederlands (1300-1550)* (Hilversum: Verloren, 2014)

Verhoeven, Gerrit, 'Het mirakelboek van het heilig hout te Dordrecht', *Archief voor de Geschiedenis van de Katholieke Kerk in Nederland*, 27 (1985), 104-139

Verhoeven, Gerrit, 'De cultus van het heilig hout te Dordrecht: het ontstaan van een bedevaart in de late middeleeuwen', in *In de schaduw van de eeuwigheid: Tien studies over religie en samenleving in laatmiddeleeuws Nederland aangeboden aan prof. dr. A.H. Bredero*, ed. by Nico Lettinck and Jaap J. van Moolenbroek (Utrecht: HES Uitgevers, 1986), pp. 200-223

Verloren van Themaat, Lambertus M. (ed.), *Oude Dordtse lijfrenten: Stedelijke financiering in de vijftiende eeuw* (Amsterdam: Verloren, 1983)

Vollenhoven, Adriaan van, *Ambachten en neringen in Dordrecht* (The Hague: Martinus Nijhoff, 1923)

Woolgar, Christopher M., *The Senses in Late Medieval England* (New Haven: Yale University Press, 2006)

Electronic sources

Instituut voor de Nederlandse Taal, *Historische woordenboeken op het internet*
<http://gtb.inl.nl/>, last consulted 15 January 2019

Unpublished theses

Hulshof, Martha, "'Om het gemeyne welvaren behoeff': Het leefmilieu in Gouda, Haarlem en Leiden circa 1400-1700' (PhD Thesis, Free University of Amsterdam, 1994)

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CHAPTER SIX

Muddy Waters in Medieval Montpellier

Catherine Dubé and Geneviève Dumas

Abstract

Medieval Montpellier occupied an aquatic setting, which gave rise to numerous sanitary and environmental problems. Summer storms caused heavy floods; drains became blocked, filling the streets with filth; and the ditches that encircled the city often overran with stagnant water. Magistrates had to ensure that there was an adequate supply of uncontaminated water for domestic and industrial use, while keeping the hydraulic infrastructure in working order. They had also to maintain the river that conveyed merchandise to the town centre, provide for the effective disposal of dirty water, and guard against pollution. Using Montpellier's rich civic archive, this chapter examines the strategies and regulations developed by the authorities in order to minimise the health risks arising from these issues.

Key words: Montpellier; public health; waterworks; sanitation; floods

The study of premodern water management and the development of water supplies is enjoying something of a renaissance, especially in England and Italy.¹ Recent research tends to demonstrate that even small towns were not devoid of rational sanitary provisions, especially when it came to the supply of uncontaminated water, a valuable resource in the Middle Ages.² As in most medieval urban communities, water in Montpellier gave rise to multiple sanitary and environmental concerns. The vagaries of the weather frequently caused floods. *Intra-muros*, sewers were subject to overflows and filled the streets with mud and

¹ The subject has not sparked the same interest in France, aside from Leguay, *L'eau dans la ville*; and Benoît and Rouillard, 'Medieval Hydraulics in France'. For an exploration of why that should be, see Bednarski, 'Changing Landscapes'.

² Holt, 'Medieval England's Water-Related Technologies'; Lee, 'Piped Water Supplies'; Keene, 'Issues of Water'; Magnusson, *Water Technology*; Blair, *Waterways and Canal-Building in Medieval England*; Stoye, *Water in the City*.

filth. The city council had to cope with numerous problems related to water, including the provision of a reliable supply of fresh water by means of fountains, and other hydraulic infrastructures, as well as river maintenance, the upkeep of sewers, and the management of wastewater and water pollution. Using Montpellier's rich medieval archives, this chapter will examine the various means by which the council attempted to police the urban environment in order to cope with health risks caused by water-related issues.

Montpellier stands on a group of hills which constitute a link between the low ridge of the Cevennes Mountains and the coastline, being furnished with a number of ponds. These three sand hills provided a suitable site for the establishment of a human settlement. Their altitude, although not high (50 metres for Le Puy-Arquinel, 49 metres for Notre-Dame-des-Tables, and 37 metres for Montpelliéret), was sufficient to protect the settlement from the ravages of frequent floods from the torrential waters of the Merdanson, the main tributary of the small coastal river, the Lez, which brings Montpellier in direct communication with the Mediterranean. Between the urban settlement and the sandbank lay navigable marshes with bottleneck accesses to the sea. Montpellier was also crossed by two rivers and enclosed by a wall and a ditch. Inside the town, an underground water system provided clean water to the inhabitants and an open sewer system drained away waste. Water was abundant: in addition to an underground lake, many small streams, today channelled or covered, flowed along the slopes to join the course of the Merdanson.³

Clean water

This abundance of water in Montpellier benefited countless industries. The city's specialty was the dyeing of imported northern cloth with a scarlet pigment obtained from the cochineal, a parasite of the kermes oak that grew in the nearby *garrigue*. Two of the first attested neighbourhoods were of the *Flocaria* (wool workers) and the *Blancaria* (tanners of leather), representing major crafts for the urban economy.⁴ The drapers were the most prominent members of the elite and composed a significant part of the elected council.⁵ There were several mills along the water courses for milling grain and fulling cloth.⁶ All of these activities required a great deal of water and thus limited the possibilities for domestic

³ Peyron, 'Montpellier médiéval', p. 255.

⁴ Gouron, *La réglementation des métiers*, pp. 68-69.

⁵ Reyerson, 'Le rôle de Montpellier', pp. 17-40.

⁶ Durand, *Jeux d'eau*.

6.1. Map of Montpellier in 1665, showing the three hills on which it was built

consumption.⁷ One of the city council's most enduring tasks was to negotiate the tensions between industrial and artisanal needs and those of the rest of the population.⁸ It did so by regulating those crafts and policing the markets to make sure that waste did not soil uncontaminated conduits.⁹

The consuls (city councillors) were well aware of the health hazards posed by polluted water and often complained in their petitions to the king that the lack of clear water sources in Montpellier was of great inconvenience to the inhabitants.¹⁰ Montpellier boasted one of the first Western medical schools and many of its famous regent masters provided textual information on the subject of water and hygiene.¹¹ Medical authorities warned about the

⁷ On Montpellier's industries and commercial activities see Reyerson, *Business, Banking and Finance*, especially Chapter one, pp. 1-8; and Germain, *Histoire du commerce à Montpellier*, both volumes.

⁸ This was the case in most medieval cities: 'In the provision of piped water supplies, urban authorities had to consider the purity, reliability and volume of supply, as well as striking a balance between the needs of domestic and industrial consumers, the latter seeking larger quantities of water.' Lee, 'Piped Water Supplies', p. 370.

⁹ Amongst other legislation, the *mazeliers* (butchers) were forbidden to dispose of offal and other waste in private drains. Like the fishmongers, they had to use a designated central drain to ensure that supplies of clean water were not polluted: Archives municipales de Montpellier [hereafter AMM], BB non coté, fol. 87r.

¹⁰ See, for example, the king's reply in 1456: 'Et avec ce nous ont fait remonstrer que nos la dicte ville esl très mal pourueue d'eau douce et que à la dicte cause se sont, le temps passé, ensuiz plusieurs grans inconvénients'. AMM, Louvet, no 653.

¹¹ Such literature came in the form of regimens of health or *regimina sanitatis*. One of the most frequently copied was written by Montpellier's most celebrated physician, Arnaldus de Villanova. See his *Opera Medica*

dangers of putrefied water and stagnant ponds that were deemed unhealthy and a source of outbreaks of the plague and other epidemic diseases. For example, Michel Boet, a master regent of the Faculty of Medicine, advised on the preferred location for building a house in his treatise on plague of about 1421, which was addressed to the consulate (city council):

Let a person choose a place that is not too high or too low, not in a valley, *nor near putrefied bodies of water, nor stagnant water, nor near infected latrines*, nor in places where there is fecal matter or dead bodies or animals that are not properly buried or covered, even corpses that have been burned a long time ago.¹²

If formal contacts between the city and its university were scarce before the end of the fourteenth century, the consulate seems to have absorbed learned medicine's warnings about the quality of drinkable water.¹³ Water was included among the 'six non-naturals' that could alter the balance of the qualities and humours of the human body, according to the Galenic medicine of the Middle Ages.¹⁴ As early as the thirteenth century, the residents of Montpellier began searching for potable water around its walls, and, from that time on, it was an eternal quest. An ingenious project to bring the waters of the Lironde, stemming from the source of the Lez at Saint-Clément's, to the city was devised in 1272.¹⁵ King James I of Aragon and Mallorca had authorized the elected council of *probi homini*, known as the *consulat* ('consulate'), to levy a tax to finance it.¹⁶ The project may have been too ambitious, as, decades later, nothing had been done. In 1317, the King of France, Philip V, as the new lord of half the city, allowed the seneschal of Beaucaire and the rector of the *Part Antique* to purchase land to divert the Lironde's course. At the same time, Sanche I of Aragon, lord of

Omnia. Vol. X.1. Regimen sanitatis ad regem Aragonum. See also Nicoud, 'Les régimes de santé de l'aire montpelliéraine', pp. 233-251; and Gil Sotres, 'The Regimens of Health', pp. 292-318.

¹² '[...] [Q]uod eligatur aer purus vel locus qui non multum est altus vel bassus non vallosus nec juxta aquas putrefactas, nec juxta stanna nec juxta loca infectionum et latrinas, ne ubi stramina nec fecalia sint, nec ubi multa corpora humana nec animalia sint mortua et male sepulta vel cooperta, ideo antiquitus comburebantur corpora mortua.' Boet, 'Pestschriften', p. 47. Medieval physicians followed the recommendations of Galen and Avicenna regarding the quality of water beneficial to their patients' health.

¹³ Dumas, *Santé et société à Montpellier*, pp. 259-270.

¹⁴ Garcia-Ballester, 'On the Origin of the "Six Non-Natural Things"'; Rather, 'The "Six Things Non-Natural"'; and see pp. 18-19, 50-53 above.

¹⁵ The source of the Lez emerges from a resurgence of the karstic complex underlying the Garrigues north of Montpellier, on the southern slope of an elevation located north of the commune of Saint-Clément-de-Rivière.

¹⁶ AMM, Louvet, no 4248, p. 379.

the other part, permitted the consulate to collect, for three years, one *denier* for each donkey, large animal, or cart passing through the town to finance the same project.¹⁷ Again, the challenge could not be met. In 1399, a craftsman named Pierre Gérard was charged with the task of reassessing the entire enterprise. An expert from Nîmes, Esteve Salvador, was consulted in 1410, and confirmed that it would be feasible with a system of pipes to bring water to the church of Notre-Dame-des-Tables. Finally, in 1456, King Charles VII approved another ten-year levy to be collected for the conveyance of the Lironde's course by way of subterranean aqueducts. The ordinance was prompted by another petition from the consulate reminding the king that Montpellier was not well supplied with clean water.¹⁸ In the end, the endeavour never succeeded; the city had to wait until 1751 to see it come to fruition.

Wells

Meanwhile, the inhabitants of Montpellier derived much of their drinking water from the open wells that could be found in the yards of most houses.¹⁹ Water was also available through common or public wells. The toponymy of the city attests to their proliferation.²⁰ There was a *rue du Puits de Valfère*, *rue du Puits du Palais*, *rue du Puits des Esquilles*, and a *rue du Puits de Fer*. Some of these wells were known and preserved for their abundant supply. The well of the Babotte tower provided a continuous flow to the public baths, and the sound of its rushing water was thought to come from an underground current.²¹ It is, at times, difficult to determine whether a well was public or private. In 1257, for example, the apothecary Nicolas Vézian bequeathed his garden of Valmagne, with a well, to the city. It

¹⁷ Montpellier represented the union of two settlements: one, Montpelliéret, belonged to the bishop of Maguelone, the other to the aristocratic dynasty of the Guilhem and passed by marriage to the crown of Aragon in 1204. In 1293, the king of France, Philip the Fair, bought Montpelliéret (*Part Antique*) and in 1349 the Aragonese part was sold to his descendant Philip VI. For such basic historical facts, see Germain, *Histoire de la commune*; and Fabre and Lochard, *Montpellier, la ville médiévale*.

¹⁸ The documents concerning this project are today scattered among several different archives, but an archivist, Joseph Berthelé, transcribed them in a single dossier: *Archives de la ville de Montpellier: Inventaires et documents*, ed. Castets and others, III, pp. 506-512.

¹⁹ *Archives de la ville de Montpellier: Inventaires et documents*, ed. Castets and others, 'Éclaircissements topographiques', pp. 350-379. Such a well, dating from the thirteenth century, was discovered in 1995 alongside the Jewish *mikve* at 1 Rue de la Barallerie: Leenhardt and others, 'Un puits'.

²⁰ Family names also attest to the importance of wells in the landscape; names such as del Pos, del Puech, and Posandier are all related to the proximity, usufruct, or ownership of wells.

²¹ Guiraud, *Recherches topographiques sur Montpellier au Moyen Âge*, pp. 91-92.

was stipulated that everybody could draw its water in daylight, but that his heirs might close it from dusk till dawn.²² In 1231, the *prieur* (prior) of the church of Saint-Firmin sold a piece of land with a well to Bernard Roux. He had to keep the well clean and furnish it with a rope and bucket so that anybody who wished could, at any time, make use of it.²³ He had to pay rent toward the alms of the church, but, in 1269, the city counsellors also demanded rent for the well, stating that their title had been valid for over 30 years, therefore claiming it as a public amenity. The parties agreed to compromise by sharing their rights. All in all, the authorities made sure that people who did not have a private well had ready access to water from public ones.

The city was divided into six, later seven, fiscal districts: Sainte-Anne, Sainte-Croix, Saint-Mathieu, Sainte-Foy, Saint-Paul, Saint-Thomas, and Saint-Firmin. Each individual property was described in the fiscal records in topographical detail, including a note regarding the presence or proximity of wells. From these entries, we have found the names of no fewer than 70 wells in the city.²⁴ Although some of them were difficult to locate, the twenty most important could easily be identified on a map.²⁵ Each appears regularly in the archival sources over a long period of time, which reflects continuity of use; and each lay relatively near the centre where the demand for water was greatest. Surprisingly, since the city stands on three hills, the water table was not very deep. A tale tells of the building of Sainte-Anne's church in 1869, when water was found a mere four metres below the surface. This phenomenon derives from the nature of the subsoil, which retains and stores

²² *Archives de la ville de Montpellier: Inventaires et documents*, ed. Castets and others, XII, p. 52.

²³ *Archives de la ville de Montpellier: Inventaires et documents*, ed. Castets and others, I, pp. 252-253 (probably the *Puits de fer*).

²⁴ Some are hard to distinguish. For example, the *Puits des Esquilles* and the *Puits du Vestiaire*, located so near to each other, may be one and the same. The *Puits de la caras* and the *Puits de la casas* may result from a scribe's mistake. It is likely that the *Puits d'en fermat* and the *Puits d'en fumat* are also the same well.

²⁵ Evidence of these locations derives from the fiscal records called the *compoix* in the Archives municipales, for which see *Archives de la ville de Montpellier: Inventaires et documents*, ed. Castets and others, VI. The archivist Maurice Oudot de Dainville had already extracted all references to wells found in the *compoix*. These names were collated with references in other indexes from the municipal archives. They were then sought in Guiraud, *Recherches topographiques*, and the map of the medieval city reconstructed by her. Finally, they were also located on the map of the medieval city reconstructed by Fabre de Morlon, *Regards nouveaux sur le vieux Montpellier*.

6.2 Location of the most important common wells in medieval Montpellier

rain that has fallen on the surface in aquifers.²⁶ The shallow water table proved to be a major problem for the upkeep of wells; they were rapidly contaminated by floods and their water became muddy and insalubrious.²⁷ The consulate, therefore, was always eager to find sources of spring water from which to supply fountains in order to ensure a steadier and more stable supply of fresh water. This, however, involved a more complex technology, one that required the construction of subterranean conduits.²⁸

Fountains

Montpellier, in contrast to many meridional cities, has no antique past. Aside from the ancient *Via Domitia* that crossed the site in Roman times, there are no other Roman remains. Therefore, if water technology was to be used to harness supplies of fresh water, a new underground system would be needed from the outset. Unfortunately, very little evidence can be found in the archives to document these first attempts at building fountains. Two of Montpellier's four public fountains may date from as far back as the early thirteenth century, and they appear regularly in the city accounts because of the maintenance operations that they required. Most complex urban water systems are products of the thirteenth century onward, and Montpellier seems to have been in line with the rest of Europe in this regard; certainly, the first specific references to fountains date from the end of the century.²⁹ The oldest is probably the fountain on the road to the port of Lattes, called *Fontaine de Priveyrargues* or *Fontaine de Lattes*.³⁰ Already in existence in 1273, it served as one of the city's boundaries in a surveying campaign to settle a feud between the king of Aragon and the bishop of Maguelone.³¹ Lattes was a Roman port (*Lattara*), but the fountain does not appear to belong

²⁶ Coste, 'Les anciennes fontaines', p. 354.

²⁷ A deliberation by the city council in 1656 lamented that the inhabitants only had access to well water, and the university physicians were concerned about the many diseases that ensued: Coste, 'Les anciennes fontaines', p. 379.

²⁸ On aqueduct technology, see de Feo and others, 'Historical and Technical Notes'; and Lee, 'Piped Water Supplies'.

²⁹ Magnusson, *Water Technology*, p. 19.

³⁰ Montpellier did not have direct access to a port on the sea, but used the marshes to bring merchandise into town. The port on the lagoon was situated near the small town of Lattes.

³¹ 'Et einde descendit per rectam viam usque ad vadum Juvenale et ex ipso vado Juvenali per rectam viam usque ad Aygarelam nigram, que transit juxta fontem de Priveiranicis [...].' *Cartulaire de Maguelone*, ed. Rouquette and Villemagne, Register 3, fol. 118v.

to that era. In any case, it was on the road leading to the port and, as a result, its management was entrusted by the consulate to a sub-committee of civic officials named the *consuls de mer*.³² Their main prerogatives and responsibilities were to tax goods on their arrival at Lattes, then to commit this income to the development and maintenance of the port's infrastructures and the safety of the road from Lattes to Montpellier.³³

A document of 1364 describes in detail the *consuls de mer* hiring Esteve Solgras, master mason, for work on the fountain. By the terms of the contract, he had to build, channel, shoulder, and cover the aqueduct, coat it with oil-based cement and repair the drinking trough attached to it. The price stipulated for his labour and the cement (the city provided the stone, lime, and sand) was 35 gold florins.³⁴ Six years later, a specialist from Lodève, named Boyer, was called in to refurbish the fountain. The *fontainier* made a bridge-aqueduct across the flowing creek of the *Ayguerelles*, near the drinking troughs, with a new arch over which the water was to pass. Along this bridge, the aqueduct was laid in closed, airtight pipes that ran to the tower of the fountain, which he decorated with a new griffin mouth.³⁵ He was hired again to build a vault under the tower and line three underground chambers.³⁶ Boyer did not use, as Solgras did, pipes coated with oil and bitumen, but rather made the conduits in stone and the aqueducts in ceramics (*canones terreas*).³⁷

A register of accounts from the office of the *consulat de mer* illustrates in great detail the consuls' activities for the year 1381. They earned 125 *francs* from the port tax and the *oboles* for the upkeep of the road, plus three *francs* and eighteen *sous* of overdue debts. They undertook major repairs to the fountain, the account for which records that 34 dumpers of stones had been brought by the carter Antoine de Villeneuve to pave the road leading to the

³² De Valroger, *Étude sur l'institution des consuls de la mer*, pp. 60-64.

³³ Germain, *Histoire du commerce*, II, pp. 69-75.

³⁴ AMM, BB 5, fol. 31v. Most contracts for general repairs were negotiated by the city in lump sums ranging from 15 to 35 *livres*. In 1479, a *peyrier* called James Bousquet was paid 13 *livres* for 78 days' work at 3 *sous* and 4 *deniers* a day: AMM, Joffre 559, fol. 55r.

³⁵ AMM, BB 12, fol. 5v. See above, Appendix I.

³⁶ 'Item etiam promitto pavimentare tres cameras conductorum aque decurrentis in dictam fontem bene et sufficienter quod sint una juxta campum C. de Montejudeo, alia juxta campum Andree Dominici et alia prope et juxta partem domus recluse itineris predicti.' AMM, BB 12, fol. 12r.

³⁷ 'Promitto etiam facere canones terreas canali per quem dicta aqua transcurreret ad die tum fontem juxta campum heredis G. paratoris quondam, scilicet a quadramo ipsius campi superiori usque primam cameram desversue ipsius, et circa hec habebitis omnia in predictis necessaria.' AMM, BB 12, fol. 12r.

font. It took him eight days of work to transport these stones from the nearby precinct of the Friars Minor, to carry twelve earthen pipes, and bring the oil for the asphalt to bituminise and seal the pipes and the pillars of the font. At the same time, he had to sharpen the two pickaxes needed to make the covers of the font and gather up the stones that had been scattered on the road.³⁸ To provide for the good condition of the road and fountain, the *consuls de mer* made sure that no one was caught disposing of stones, wood, or any other detritus that might hinder the safe passage of the water supply or pollute the fountain. A decree of 1387 warned that no one should presume to wash his feet, his legs, woollen sheets, or fresh or salted fish in the water that flowed from the fountain of Lattes into the drinking trough.³⁹ They issued statements by means of a public crier, and imposed a fine of ten *sous* for violating these rules.⁴⁰ The *consulat de mer* was thus responsible for maintaining the resources and policing the use of the water supply from the fountain of Lattes. It exercised jurisdiction in all but serious criminal cases over the territories integrated into the consular domain, which meant that the consuls themselves could prosecute offenders.⁴¹

The fountain of Saint-Berthomieu (Saint-Bathélémy) also dates to the late thirteenth century. It was located near the Saint-Berthomieu cemetery, and the aqueduct supplying it ran very close to the ground. At the source, the water was exceptionally good and abundant. Léon Coste, who measured its flow in 1886, found it to be of eleven litres per minute in times of drought.⁴² It is difficult to say when the system of canals, extending 640 metres, that brought its water to the centre of town was built. As it ran at ground level, its exposed position meant that the aqueduct was easily flooded with rain water, heated by the sun, and contaminated by insects and debris of all kinds, and soon became putrid and unhealthy.⁴³ Not surprisingly, this was the fountain that required the most attention. References abound in the city accounts, some of which are quite detailed.⁴⁴ The consulate paid for repairs in November 1404, but by

³⁸ *Archives de la ville de Montpellier: Inventaires et documents*, ed. Castets and others, XI, p. 23.

³⁹ Chastang, 'Le gouvernement urbain'. See also Galano, 'Montpellier et sa lagune', I, p. 279.

⁴⁰ Archives départementales de l'Hérault, 8B29 (roll), 1387. See below, Appendix II.

⁴¹ Chastang, 'Le gouvernement urbain'.

⁴² Coste, 'Les anciennes fontaines', p. 514, note 4.

⁴³ Coste, 'Les anciennes fontaines', p. 515.

⁴⁴ The city accounts have been inconsistently preserved. Only one register from the fourteenth century has survived. There are a few from the beginning of the fifteenth century, and they become serial by the middle of the century. References to repairs at the fountain of Saint-Berthomieu are already numerous in the first register of 1403-1404.

January 1405 maintenance of the aqueducts was needed again and provided by Andreas Viridari for five *moutons*.⁴⁵ It seems that the conduits had to be dredged every year. Beginning in 1444, the accounts document ordinary labourers being hired for this purpose.⁴⁶ By 1475, a specialist was allocated an annual salary for the upkeep of the pipes.⁴⁷ During the fifteenth century, these pipes underwent major repairs. In 1470, for example, new canals were constructed; and, in 1498, the system was overhauled completely because someone had stolen a part of the conduit measuring 65 *cadastas* and thus cut off the water supply to the town.⁴⁸

The underlying problem was that both fountains – those of Lattes and Saint-Berthomieu – were located on the same side of town, leaving the north side devoid of a fresh water supply. Two more sites were chosen in the fifteenth century for new fountains.⁴⁹ One was built by two merchants, Jean Ratte and Jean Besson. In 1465, they asked the consulate for permission to demolish an old delapidated fountain at the Juvenal bridge in order to use the stone to finish work on the fountain they were constructing over a spring they had recently found further down, behind the hospital of the Saint-Esprit. They were quick to point out that it would benefit the city and was for the common good. The consuls granted permission on the condition that the arms of the consulate should be engraved on the new fountain, advertising it as a public amenity.⁵⁰ It was to be known as the fountain of the Pila Saint-Gely and was still in use in the 1900s. When first built, it tapped a source that was situated on the left bank of the river Merdanson, which proved to be a poor choice. The river could become dangerous and one had to cross it at one's peril when the narrow, low bridge

⁴⁵ AMM, Joffre 529, 1403-1404, fols. 20r, 21r, 23r; Joffre 530, 1404-1405, fol. 23r.

⁴⁶ AMM, Joffre 534, 1444-1445, fol. 9r.

⁴⁷ AMM, Joffre 555, 1474-1475, fol. 73r.

⁴⁸ AMM, BB 95, fol. 27r.

⁴⁹ We have no idea how arduous this task might have been. As Magnusson observes: 'The potential sponsor of a medieval conduit had to solve two immediate problems: the acquisition of a supply of fresh water and access to a continuous strip of land with a suitable gradient between the source and the destination.' *Water Technology*, p. 186.

⁵⁰ 'Et ulterius dixerunt quod prope pontem Gadii Juvenalis est quidam fons et lapides qui de nihilo serviunt, ideo requisiverunt dictos dominos consules quatenus velint et dignentur sibi licenciam dare demoliendi dictum fontem pro convertendo materiam in reparationibus predictis, nam redundabit in utilitatem et commodum reipublice dicte ville, et dicti domini consules, premissis auditis et consideratis, licenciam eisdem dederunt demoliendi dictum fontem et materiam predictam implicandi in reparationibus fontis noviter reperti, dumtamen arma consulatus in edificio fiendo habeant ponere, et dicti habitatores ita promiserunt.' AMM, BB 77, fol. 21v; Renouvier and Ricard, *Maîtres de pierre*, p. 140.

6.3. Public fountains in Montpellier in the fifteenth century

was submersed in muddy water. It was, therefore, necessary in 1739 to move the fountain to the opposite bank, where it was safer to use, but too close to a muddy brook.⁵¹ In any case, the construction of a fountain so near the Merdanson was a mistake in sanitary terms, since the river received most of the city's waste water.

The last fountain built in the Middle Ages is more celebrated because it owed its existence to the king's *argentier*, Jacques Coeur, one of the town's most famous benefactors.⁵² The fate that befell this powerful merchant when he was tried and judged by King Charles VII is well known, resulting in his imprisonment and the dispersal of his fortune.⁵³ In a request to the consuls in 1457, Louis Dandrea, receiver of royal taxes, asked to be reimbursed for his expenses. Ten years earlier he had invested 185 *livres* and twelve *sous* in the construction of a fountain near the church of the Carmelites called *Fontaine Putanelle*, with no other guarantee of repayment than Jacques Coeur's word. He claimed that the city, at Jacques' instigation, had agreed to build the said fountain. The financier in turn had promised to petition the king for the surrender of a proportion of the royal taxes present and future with

⁵¹ Coste, 'Les anciennes fontaines', pp. 357-364.

⁵² Reyerson, *Jacques Cœur*.

⁵³ Reyerson, 'Le procès de Jacques Cœur', pp. 122-144.

which to reimburse the consulate for its expenses. After the debacle involving his associate, Dandrea was turning to the city in the hope of obtaining justice, since the fountain now belonged to it.⁵⁴ The consuls replied that none of their predecessors had ever commissioned the work, and that they should not be held accountable for projects that they had never sponsored.⁵⁵

In the late Middle Ages, then, the city of Montpellier boasted at least four public fountains and allocated a significant amount of time, money, and resources to maintain and repair them. Fountains were among the costliest and most demanding infrastructures of the town, aside from roads and bridges.

Water damage, floods, and overflows

In 1503, the Friars Minor of Montpellier were faced with an unpleasant situation involving the drain that was contiguous to their convent. As a result of major blockages, muddy water was accumulating everywhere, causing significant damage to the Franciscan sacristy. Measures had to be taken promptly to avoid further deterioration, as well as any attendant threats to health. The urban administration resorted to using labourers for the cleansing and repair of the drain.⁵⁶ As we shall see in more detail below, such punctual interventions were common, and this incident constitutes but one example of the many problems caused by flooding and waste water in late medieval Montpellier.

Indeed, the area around the city is subject to a Mediterranean climate, which means that it is particularly prone to humid winters and warm, dry summers with short and localized stormy precipitation. The most abundant and potentially destructive rains occur in late summer and fall when the region is sensitive to ‘Mediterranean or Cévenol episodes’. This meteorological phenomenon occurs when moisture-laden hot air flows back from the Iberian Peninsula. It leads to intense and rapid precipitation, caused by large accumulations of clouds being blown against the southern slopes of the Cévennes from the Mediterranean coastline. These violent thunderstorms can remain in the same spot for several days, and discharge huge quantities of rain.⁵⁷ The topography of the medieval site meant that it was ill-equipped to

⁵⁴ AMM, Louvet, DD, B5; Guiraud, *Recherches et conclusions*, pp. 89-93; Reyerson, *Jacques Cœur*, p. 86.

⁵⁵ AMM, Louvet, DD, B5; Guiraud, *Recherches et conclusions*, pp. 89-93; Reyerson, *Jacques Cœur*, p. 86. See also Coste, ‘Les anciennes fontaines’, pp. 369-371.

⁵⁶ AMM, Joffre 585, fol. 4v.

⁵⁷ Durand, *Les paysages médiévaux*, pp. 21-9. See also Dugrand, *La garrigue*, pp. 100-102.

absorb such torrential cloudbursts. The main streams of Montpellier, the Lez, the Merdanson, the Lironde, and the Aiguerelles, tended to overflow rapidly. Even today, the stagnation of surface water is very rapid and linked to the inadequate infiltration capacity of the soil and rainwater network. Saturation of the soil leads to an exceptional rise in the water level of the aquifers.⁵⁸ These topographic, geological, and climatic conditions made Montpellier very vulnerable to risk in terms of water damage, and consequently raised multiple sanitary and environmental issues.

Floods and heavy rains were always part of life for the inhabitants of Montpellier. In some years more than others the consequences of these inhospitable meteorological conditions proved to be particularly disastrous. In the town chronicle, kept in Montpellier's *Thalamus Parvus* (*Petit Thalamus*), are recorded most of the devastating or deadly weather episodes that occurred up to the year 1426.⁵⁹ Between 1331 and 1409, no fewer than twelve occurrences of flooding, heavy rain, or violent thunderstorms were important enough to be reported in the chronicle.⁶⁰ On 21 August 1331, for example, an overflow of the Lez killed 200 people. Several bridges, mills, and dams were also severely damaged.⁶¹ On the night of 12 September 1354, a violent thunderstorm struck Montpellier, causing considerable destruction, coupled with the impairment of urban infrastructures. A significant number of trees, among them the most previously resistant, were left broken and torn. Two church towers were demolished, as well as several houses. In addition to the property damage, seven beasts of burden and one resident were killed, drowned by the deluge.⁶²

The vagaries of the weather also had catastrophic effects on crops. Gathering sufficient quantities of wheat was a recurring challenge in Montpellier. The city council regularly had to buy wheat from other regions to prevent famines. After abundant rainfalls, fields were often flooded, leaving the crops completely ruined. Such a disaster occurred in 1374.⁶³ Just four years later excessive rainfall and the floodwaters of the Lez again inundated

⁵⁸ Ville de Montpellier, Risques 'inondations': <http://www.montpellier.fr/4060-inondations-risques-naturels.htm>.

⁵⁹ AMM, AA9, *Petit Thalamus*.

⁶⁰ See the table provided in Laumonier, 'Vivre seul', pp. 205-208.

⁶¹ AMM, AA9, *Petit Thalamus*, fol. 88r.

⁶² AMM, AA9, *Petit Thalamus*, fol. 97r.

⁶³ AMM, AA9, *Petit Thalamus*, fol. 134v.

wheat fields and vineyards. The death toll and the extent of the damage to infrastructure were, once again, devastating.⁶⁴

Within the walls of the city, dealing with superfluous water was an everyday experience for the urban administration. An open sewer system extended across the city, collecting waste water and conveying it to the Aiguerelles, where it was finally evacuated. These sewers were often subject to overflows and blockages and filled the streets with mud and filth. Furthermore, dozens of ditches encircled the town and its fortifications. Although some of them appear to have been equipped with drains, they, too, were often said to be saturated with stagnant and putrid water. All this surplus water and the various types of damage that it caused exposed the urban setting of Montpellier to environmental, infrastructural, and sanitary risks which greatly compromised the health and security of the population. These issues were all too familiar to the local authorities, who tried to address them through regulation, the introduction of preventative measures, and civic policies.

L'Œuvre de la commune clôture

One of the main protagonists in this quest for managing sewerage problems in the urban environment was an institution called the *Œuvre de la commune cloture* or *Obra de communa clauzura* in Occitan.⁶⁵ The *Obra* comprised a board of seven members, each designated by the title *Seigneur Ouvrier* (Lord Worker) and each elected within a system of political representation called *échelles* or *scalas* (ladders, a type of *cursus honorum*). In most cases, the *ouvriers* belonged to the merchant class.⁶⁶ The body was first established in 1196, shortly after the founding of the city. Its creation antedates that of the consulate, which was formed in 1206.⁶⁷ It may be regarded as the first official institution of Montpellier and 'in its administrative structure [...] it remained unique'.⁶⁸ From the beginning, the communal body was responsible for the financial and practical management of the construction of the wall around the city. These fortifications bore the name of *commune clôture* or *communa clausura* (common enclosure), and, at that time, their upkeep constituted the sole purpose of the *Œuvre*. As stated in the *Obra*'s statutes of 1284, one of its tasks was to ensure that the

⁶⁴ AMM, AA9, *Petit Thalamus*, fol. 140v.

⁶⁵ *Œuvre* or *obra* from the Latin *opus*, meaning works.

⁶⁶ Fabre and Lochard, *Montpellier: la ville médiévale*, p. 113.

⁶⁷ Gouron, *La réglementation des métiers*, pp. 95-101.

⁶⁸ For a general survey of the *Œuvre de la commune clôture*, see Reyerson, 'Medieval Walled Space', p. 96.

integrity of the wall and ditch was not compromised by detritus of any kind, particularly from sewers, latrines, or other channels for the expulsion of waste water that could result in miasma and corrupt air.⁶⁹

One salient feature of this institution is that it exercised complete financial autonomy. Even if the *Œuvre* maintained close relations with the consulate, it was never subject to any accountability.⁷⁰ As a result, it was an integral part of the physical governance of urban space and the symbolic referent of urban identity.⁷¹ Although their primary role was the maintenance of ramparts, gates, ditches, and the circular pathways surrounding the city, the Lord Workers also acquired, later, a quasi-monopoly of the patronage of the city chaplaincies. Indeed, they became the chief beneficiary and main executor of the citizens' wills and oversaw the administration of most of their alms, pious works, and other charitable bequests. They enjoyed a prestigious reputation, and were the designated guardians of civic memory.⁷²

Throughout the Middle Ages, the *Œuvre* remained responsible for the maintenance, enlargement, and repair work frequently required on the fortifications; over time, however, the institution assumed a variety of new roles in the urban administration. A letter of 1374 from King Charles V lists the functions and prerogatives of the *Ouvriers*: they were confirmed as custodians of the doors, towers, walls, and keys to the town.⁷³ They were also charged with overseeing the upkeep and rental of the ditches that surrounded Montpellier for a length of twelve *empans* (approximately 24 feet) on either side of the wall.⁷⁴ Alongside the interior wall, a road had already been built, in 1363, called *Les Douze Pans*, corresponding with this exact measurement. Another road ran alongside the exterior wall called *Les Douves*,

⁶⁹ AMM, Thalamus des ouvriers de la commune clôture, EE 2, fol. 14r.: 'Item quod in predictis [vallatis] vel aliquo premissorum non fiant vel fieri paciantur latrine, aquerie, cloaque, congregationes aquarum pluvialium vel aliarum aquarum, aut aliqua alia que redundant ad detrimentum et lesionem dicti muri et dictarum scamarum et aliorum superius dictorum et ad corruptionem aeris, et si aliquae sunt, removeantur et destruantur sine spe (sic) redeundi.'

⁷⁰ AMM, tome 12, EE 1: 'Guilhem, seigneur de Montpellier, fils de la duchesse Mathilde, promet à Peire de Conchis [...] administrateurs de la ville de Montpellier, de tenir et de ratifier tout ce qu'ils décideront quant à la clôture de la ville et donnent l'assurance qu'ils n'auront aucun compte à lui rendre.'

⁷¹ Oddo, 'Les ordres mendiants', pp. 108-112.

⁷² Reyerson, 'Medieval Walled Space', p. 105.

⁷³ Germain, *Histoire de la commune*, I, p. 175.

⁷⁴ See Figure 6.2.

bridges were used to cross the trenches, and the wall was staked with numerous towers and turrets. The Lord Workers oversaw all public works and sanitary maintenance on these contiguous areas of the fortifications, which happened to be extremely vulnerable to flooding, since they contained many sewers and were close to the Aiguerelles and other waste water streams. In 1336, for example, they authorized the collective construction, by several local property-owners, of a piped sewer system in the *doga* (Douve) of the furriers, whose working practices caused considerable pollution. It was to run from the house of a resident named Salas to the second sewer mouth, so that the waste water would flow into the ditch either of St-Guilhem or of the Porte du Peyrou, and they were to build the *scama* (canal) with good-quality stones at their own expense.⁷⁵

Public Works

We shall now examine in more detail the kind of projects that were carried out by the urban body to reduce and control the risks associated with flooding. As we have already seen, dealing with the heavy rains which poured copiously on the Montpellier area was a major challenge for the authorities. Primarily, it demanded the development of a functional and effective rainwater management network. Water pipes and drains were installed, while alterations were made to existing infrastructures to optimize and facilitate the effective disposal of rainwater. As early as the beginning of the thirteenth century, the *Œuvre de la commune clôture* commissioned works for the diversion of waste water. On 23 March 1232, with the approval of the consulate, the *Ouvriers* delegated two labourers to divert the water course that was then flowing out by the St. Martin portal by way of canals.⁷⁶ A lease of a ditch, dated 14 July 1293, mentions the pipe, located near the Peyrou portal, for disposing of rainwater.⁷⁷ Later documents show that the consulate also played a role in the upkeep of this system. An account register of 1478, for example, records the payment of a worker for six days' labour removing soil which was obstructing drainage pipes at the Montpelliéret portal.⁷⁸

⁷⁵ AMM, EE 258. See also Reyerson, 'Medieval Walled Space', p. 105.

⁷⁶ AMM, EE 15.

⁷⁷ AMM, EE 164.

⁷⁸ *Archives de la ville de Montpellier: Inventaires et documents*, ed. Castets and others, VIII; Joffre 558, 65, fol. 72v.

It was also common to modify the rooftops of urban buildings to facilitate the outflow of rainwater. These alterations applied particularly to towers. On 30 October 1273, in a deed for the sale of a ditch, the *Ouvriers de la commune clôture* asked the buyers to fulfill certain conditions. One of them was to equip the adjacent tower with two water pipes for the evacuation of rainwater.⁷⁹ On 6 August 1304, the *Seigneurs Ouvriers* gave permission to the leaseholder of a tower to cover its roof. He was, nevertheless, expected to find a way for rainwater to escape by way of a culvert.⁸⁰ These rain gutters could cause significant damage if they were not installed properly and directed towards safe terrain. In 1397, the Lord Workers and the consulate complained jointly to the king that, because many people had built home-made gutters on their roofs from which rainwater and other refuse fell directly onto the square below, a wall had collapsed, causing its ruin.⁸¹ The *Ouvriers* also initiated construction work in 1411 to prevent rainwater from infiltrating the royal palace. Adequate plumbing was put in place to convey the water out of the city.⁸²

The effective management of all this surplus water also required a well-developed and well-maintained sewer system. The configuration of the sewer system of Montpellier involved collaboration between the *Œuvre de la commune clôture* and the city council. While the former was responsible for the maintenance of the sewers located in the outskirts of the city, the latter ensured the proper functioning of those in the centre. The muddy and waterlogged environment experienced by the Friars Minor mentioned earlier in this chapter was a common one in medieval Montpellier. Sewer inlets were, indeed, prone to fouling and clogging. The archives of the *Œuvre de la commune clôture* and the account books of the city abound with references to maintenance work on the *gazilhans*, as they called them. The insertion of metal bars or gratings at the inlets appears to have been a preferred solution to prevent blockages. The users were, however, also asked to keep the surrounding area clean.⁸³

The *Œuvre de la commune clôture* was responsible for Montpellier's perimeter, but it was the consulate that supervised and undertook public works within the city. Street cleaners and road maintenance workers were hired directly by this branch of the urban administration. It also resorted to specialist craftsmen on a more temporary basis for the completion of

⁷⁹ AMM, EE 276.

⁸⁰ AMM, EE 255.

⁸¹ *Archives de la ville de Montpellier: Inventaires et documents*, ed. Castets and others, I, p. 63.

⁸² AMM, EE 85.

⁸³ AMM, EE 76.

specific public works. The consulate had its own designated maintenance squad that performed similar cleansing operations and repairs on the sewer system. By 1364, two municipal officers had been appointed by the consulate to inspect the condition and cleanliness of the roads and streets located inside the fortifications. These two *Ouvriers Carrériers*, as they are called in the account registers, were paid four *livres* a year to monitor cleaning and maintenance work. They set the tasks and allocated the various chores involved. In this case, the residents were expected to cooperate and obliged to keep the fronts of their houses or shops free of refuse and properly swept at all times. Although no evidence of any fines issued by these officials can be found, it is nonetheless clear that an important aspect of their work was to ensure that the population played its part in street cleaning.⁸⁴ The removal of debris was not only a vital sanitary measure, but also a necessary precaution against flooding. In 1403, torrential rains had caused significant damage, and several sewers in the city overflowed and cracked. The authorities assumed control of the repair of the *gazilhans des pelissiers* and one near the *Pont Juvenal* that was near various sources of potable water, such as the fountain on the road to Lattes.⁸⁵ The municipal archives hold the memorial registers of many civic notaries, who regularly reminded the consuls to attend to the upkeep and cleansing of the city's sewers.⁸⁶

Controlling and policing the urban environment

As in most medieval urban spaces, the maintenance of separate systems for transporting clean and waste water was a difficult task that had to be shouldered by many different people and that required the inhabitants' active collaboration.⁸⁷ The *Œuvre de la commune clôture* and the members of the city consulate gradually implemented regulations to prevent or at least contain problems concerning water. Their priorities were twofold. First, they monitored and controlled activities that could disrupt the circulation and evacuation of water within the city. Second, they established several rules to facilitate the containment and disposal of superfluous water occasioned by flooding. The area that fell under the jurisdiction of the

⁸⁴ AMM, Louvet 3040.

⁸⁵ AMM, *Liber receptarum et expensarum clavarie*, Joffre 529, fols. 2r, 14r. See also Dumas, 'Un registre de comptes'.

⁸⁶ AMM, Livre de mémoires du consulat, 1484-1489, BB 95; Livre de mémoires du consulat, 1491-1519, BB non coté; Livre de mémoire du consulat, 1401-1419, BB 120. See, Dumas, 'Le livre de mémoires'.

⁸⁷ Jørgensen, 'Cooperative Sanitation'; Rawcliffe, *Urban Bodies*, pp. 176-228.

Cœuvre de la commune clôture was densely populated and was occupied by many buildings and other items of infrastructure, not least being the city's walled defences. One particular ordinance forbade the construction of any latrine, gutter, or sewer, or the accumulation of pools of rainwater, or anything else that might damage the walls, towers, gates, bridges, and ditches, or engender miasmatic air (*corruptionem aeris*). To this end, the openings in the walls were to be filled with stones, so that nobody could throw water or refuse from them into the ditches.⁸⁸ These measures seemed particularly necessary because several private houses adjoined the fortifications, and the towers that overlooked the city walls were regularly rented to tenants by the *Ouvriers*.

A number of these leases survive in the municipal archives of Montpellier and provide an insight into the tight control the *Ouvriers* maintained in matters of water management. Indeed, most of the leases explicitly forbade the occupier to install a latrine or a sink (cistern).⁸⁹ Those who did not comply exposed themselves to fines, while, in accordance with the regulations, any illegal latrines were promptly dismantled. The *messenger* of the Lord Workers was responsible for conducting inspections three times a week and reporting any suspect structures and cases of non-compliance.⁹⁰ On 22 August 1284, for example, the *Ouvriers* instructed the bricklayer, Jean Rocols, to fill in the latrine that he had dug in the house of a certain 'Penne'; a fine of 50 *sous* was to be paid if the work was not duly completed.⁹¹ A few days later, the same situation arose for the carpenter, André d'Uchaud, and the ploughman, Guilhem de Jatlatto, both of whom were ordered to demolish the sinks that they had built in their houses.⁹² An arbitration award dated 15 May 1325 reveals that control over the use of water facilities was also exercised by the urban authorities. Pierre de Panat and Jean Bernard, two men disputing the ownership of a sink, were reminded that they could only use it to dispose of clean water.⁹³

⁸⁸ 'Item quod in predictis vel aliquo premissorum non fiant vel fieri paciantur latrine, aquerie, cloaque, congregationes aquarum pluvialium vel aliarum aquarum, aut aliqua alia que redundant ad detrimentum et lesionem dicti muri et dictarum scamorum et aliorum superius dictorum et ad corruptionem aeris, et, si aliquae sunt, removeantur et destruantur sine spe redeundi.' Renouvier and Ricard, *Maîtres de pierre*, p. 110.

⁸⁹ AMM, EE 21, EE 255, EE 274. See also, Reyerson, 'Urban Walled Space', pp. 102-104.

⁹⁰ Renouvier and Ricard, *Maîtres de pierre*, p. 11-12.

⁹¹ AMM, EE 262.

⁹² AMM, EE 263, EE 264.

⁹³ AMM, EE 759.

In 1401 the consuls complained to the king that, whereas formerly there had been gardens, orchards, and trees around the ditches of the city under the supervision of the Lord Workers, since the wars which had devastated all this green space the ditches had become full of brambles, thorns, lizards, and snakes.⁹⁴ It is certainly true that the ditches around the wall were used mainly for horticultural plots, which the *Ouvriers* leased to the inhabitants to grow vegetables and herbs. In 1558, Jacques de Chauchac, for example, rented two gardens, one at the *Fossé des Carmes* near the *Blancaria* and one at the *Fossé de la porte de Lattes*. He also rented a tower then known as the *Tour des cochons* (tower of pigs), which was likely so called because at the foot of this fortification and in the ditches surrounding it was deposited rubbish of all kinds that would have attracted foraging pigs.⁹⁵ It was customary to dump the most pestilential materials there, such as carcasses, putrefying waste, and manure. Even so, as early as 1292, well before the Black Death, measures were already in place for the sanitary policing of these ditches. The city council forbade the disposal of refuse in them, but the inhabitants required constant reminders on this score.⁹⁶ When ditches were equipped with a drain, it would inevitably be prone to blockages, which in turn necessitated regular dredging. Almost two hundred years later, the disposal of muck (which may in some instances have been used as a fertilizer) was still causing headaches for the urban administration. To limit the potential pollution caused by manure, especially during heavy rainfall, the consulate then forced the owners of dung heaps to erect a small wall to contain unwanted spillages.⁹⁷ These gardens were in fact quite profitable when they were kept clean and secure; and, in 1391, the consuls had to assert their privileges firmly, for the king wished to seize all revenues accruing from the ditches.⁹⁸

⁹⁴ AMM, Louvet 1249; *Archives de la ville de Montpellier: Inventaires et documents*, ed. Castets and others, I, p. 109.

⁹⁵ AMM, Thalamus de la commune clôture, fol. 234r; *Archives de la ville de Montpellier: Inventaires et documents*, ed. Castets and others, I, p. cix.

⁹⁶ AMM, Louvet 938; *Archives de la ville de Montpellier: Inventaires et documents*, ed. Castets and others, I, p. 8: 'Ils ordonnèrent de plus qu'on ne jetteroit plus de villenies ni de fumiers dans les fossés autour de la ville, et que les creus et cloaques seroient aplanis, afin que quelques eaues puantes ne vinsent à croupir et aussy qu'aucune personne de quelque estat et condition qu'il fut, net tint fumier dans les rues et chemins publics.'

⁹⁷ AMM, BB non coté, fol. 62r; *Archives de la ville de Montpellier: Inventaires et documents*, ed. Castets and others, XI, p. 85.

⁹⁸ AMM, Louvet 3377; *Archives de la ville de Montpellier: Inventaires et documents*, ed. Castets and others, I, p. 297.

Conclusion

As in most premodern cities, water was a troublesome issue for the people of Montpellier throughout the Middle Ages and beyond. Even if the responses to these challenges were not necessarily as comprehensive as those implemented much earlier in Italian cities, the consulate still felt responsible for providing clean, fresh water for the residents.⁹⁹ Although wells were plentiful and often public, they were not the healthiest source of potable water. Because the aquifer is so close to the surface, these wells were subject to the vagaries of the climate and were, as a result, constantly being contaminated by torrential rains and floods. Fountains provided safer water, but they necessitated expensive infrastructure and were both costly and time-consuming to maintain. An ambitious aqueduct project never saw the light of day, despite continuing efforts on the part of several French and Aragonese monarchs. Yet, at least four piped water systems were built in Montpellier for public fountains during the later Middle Ages, and they required constant upkeep. The city employed various types of hydraulic devices. Bituminized pottery pipes and stone- or cement-covered conduits seem to have been used for the transmission of both waste and clear water.

Floods and seasonal rain storms were the main problems that the city had to face. Gutter systems were set up to prevent sewers, ditches, trenches, and downpipes from overflowing. Regulations and prohibitions were implemented to keep these installations clean and free of waste, mire, and muck. And, when such systems and regulations failed to provide for the safe and effective evacuation of surplus water, practical measures were taken to repair, recondition, or renovate the appropriate infrastructure. Most of this campaign for risk prevention was undertaken by the Lord Workers of the *Œuvre de la commune clôture*, who were responsible for the city walls, the ditches, and the land surrounding them. This institution financed its public works by leasing out the ditches and the towers around the wall. It maintained tight control of the sewer system, issuing fines and orders to offenders. This prerogative was shared by the *consuls de mer* through their supervision of the traffic on the road to Lattes and of its fountain. They exercised their power of jurisdiction by way of public proclamations and decrees.

Many of the initiatives to install piped water supplies stemmed from the inhabitants themselves; the exercise was, therefore, a collaborative endeavour. Inside the walls, the city

⁹⁹ For communal responses to hydraulic problems in Italy see Trexler, 'Measures against Water Pollution'; Kucher, 'The Use of Water'; and Bocchi, 'Regulation of the Urban Environment'.

hired its own *ouvriers carrériers* as a cleaning squad for the maintenance of its open sewer system. Hydraulic infrastructures were labour intensive and expensive to keep. The city accounts bear witness to this constant struggle on the part of the consulate and the many ways in which it tried to cope with inclement weather and its devastating effect on urban space. This oversight intensified as time passed, and one can trace the evolution of health concerns in the surviving documents. Very scant at the beginning of the thirteenth century, these first regulations began to proliferate well before the Black Death. As has been demonstrated in England, Catalonia, Imperial Germany, and Italy, and contrary to the traditional historiography, concerns about miasma, corrupt air, and waste water predate the first outbreak of plague.¹⁰⁰ In Montpellier, they became overwhelming during the fourteenth century, as wars, floods, and epidemics successively blighted the city. By 1498, the consulate had appointed an inspector for roads and bridges (*mestre vysitor del pons et camins*) who oversaw fountains and sewers as well.¹⁰¹ The authorities understood the need to police the supply of fresh water, to safeguard the health of the population, and to protect their territory from damage and ruin.

Appendix I

Maintenance work on the fountain on the road to Lattes (Archives municipales de Montpellier, BB 12, fol. 5v, 29 April 1370; transcription, Renouvier and Ricard, *Maîtres de pierre*, p. 139):

Die xix aprilis, ego R. Boerii de Claromonte Lodovensis diocesis per me et meos promitto vobis consulibus maris facere reparationem fontis itineris de Latis prout continetur in rotulo papiri hic affixo, pro pretio sexaginta florenorum auri de Francia deu far maistre R. Boyer peirie en la fon de Latis aissi com dis apres. Item deu parti per adobar la fon sus al quap del quam dels eretie del Sen Gilhian paraire et segir la ma la paret del dich quam entro sus al pontil juxta los abeuradors. Item mais deu far 1. harc nou en que passe sus laigua al costat et del lonc del dich pontilh. Item mais deu far venir parten de lare laigua dintre la tore per

¹⁰⁰ Among others, see Rawcliffe, *Urban Bodies*, pp. 26-54; Arrizabalaga, 'Facing the Black Death', p. 276; Nicoud, 'Médecine, prévention et santé publique', p. 483; and pp. 238-240 below.

¹⁰¹ AMM, BB 95, 1498, fol. 27r.

conducts. Item mais deu enbatumar la dicha tore en tal manieira que estre ben apontz et adobar al megua bon esta lo griffo. Item mais deu metre trots los quanos en tohat de peira ben enmortaira e ben enbatumar los dich quanos. Item mais ben cubrir apontz los ditz quanos en tal manieira que la quauza estre ben apontz. Item los davan dits abeurados deu adobar et enbatumar que estien ben apontz e que sian tenens aygua. Item lo davan dit R. es tengut de aver totas sas airmas e sas guis, et maistrague de sas mas ses plus, et los senhors cossols devon aver totas las autras cau sas en ayssso necessarias. It. deu aver daquel pres fats desus ditz lb. fl. Item e lo davan dits R. Boyer es tengut que se la dicha fon prenne negun menesquap que fos per sa falta dayssi a 12 ans, que el dich R. o deu adobar del tot a sa mession.

Appendix II

Regulations against the dumping of detritus on the road to the fountain of Lattes (Archives départementales de l'Hérault, 8B29 (roll), 1387; Galano, 'Montpellier et sa lagune', I, p. 279; II, p. 190):

Encaras may's manda la davant dicha cort a la requesta dels ditz senhors cossols de mar de Montpellier que neguna persona estranha o privada de qualque condicion que sia, que non sia, tant auzarda que auze metre ni far metre al cami carratal de la peyra entro al portal de Latas ni daqui entro a la fon de Latas, rassilha, ni rasilhas de fustas, ni rausa, ni senradas, ni cagafer, ni esrobilhas, ni palha, ni terra, ni argila, ni teulas, ni peyras, ni aygas laias, ni far femoras, ni neguna manieyra dautre empachier ni far morradas davant las portas et qui las ya que las ne aia fachas levar dayssi a VIII jorns iserdavament venens sotz pena de X solidus et del banh acostumat.

BIBLIOGRAPHY

Archival sources

Archives municipales de Montpellier: AA9 Petit Thalamus; BB 5, Notaire Pierre Gilles (1364-1365); B 12, Notaire Pierre Gilles (1370-1371); BB 95, Livre de mémoires (1484-1489); BB 120, Livre de mémoires (1397-1419); BB non coté, Livre de mémoires (1491-1519); EE 1, 15, 21, 85, 76, 164, 255, 258, 262-4, 274, 276, 759; Joffre, 529-30, 534, 555, 558-9, 585; Louvet, DD, B5; 938, 1249, 3377

Archives départementales de l'Hérault: 8B29, Criées, 1387

Printed primary sources

Archives de la ville de Montpellier: Inventaires et documents, ed. by Ferdinand Castets and others, 13 vols. (Montpellier: J. Martel, Archives municipales, 1895-1984)

Arnaldus de Villanova, *Opera Medica Omnia. Vol. X.I. Regimen sanitatis ad regem Aragonum*, ed. by Luis García-Ballester and Michael R. McVaugh (Barcelona: University of Barcelona, 1996)

Boet, Michel, 'Pestschriften', *Sudhoffs Archiv*, 17 (1925), 47-49

Cartulaire de Maguelone, ed. by Jean Baptiste Rouquette and A. Villemagne, 7 vols. (Montpellier: Louis Valat, Archives municipales, 1912-1923)

Montel, Achille, 'Le livre des privilèges de Ouvriers de la Commune Clôture', *Revue des langues romanes*, 2 (1871), 85-108

Montel, Achille, 'L'inventaire des archives de la Commune Clôture', *Revue des langues romanes*, 3 (1872), 145-174

Printed secondary sources

Arrizabalaga, Jon, 'Facing the Black Death: Perceptions and Reactions of University Medical Practitioners', in *Practical Medicine from Salerno to the Black Death*, ed. Luis Garcia-Ballester and others (Cambridge: Cambridge University Press, 1994), pp. 237-287

Bednarski, Steven, 'Changing Landscapes: A Call for Renewed Approaches to Social History, Natural Environment, and Historical Climate in Late Medieval Provence', *Memini, travaux et documents*, 19-20 (2015-16), 423-458

Benoît, Paul, and Rouillard, Joséphine, 'Medieval Hydraulics in France', in *Working with Water in Medieval Europe. Technology and Resource-use*, ed. by Paolo Squatriti (Leiden: Brill, 2000), pp. 161-216

Blair, John, *Waterways and Canal-Building in Medieval England* (Oxford: Oxford University Press, 2007)

Bocchi, Francesca, '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

Chastang, Pierre, 'Le gouvernement urbain, la parole et l'écrit: Autour de quatre criées urbaines montpelliéraines des années 1330', in *Montpellier au Moyen Âge: Bilan et approches nouvelles*, ed. by Lucie Galano and Lucie Laumoniers (Turnhout: Brepols, 2017)

Clément, Pierre, *Jacques Cœur et Charles VII: l'administration, les finances, l'industrie, le commerce, les lettres et les arts au XVe siècle; étude historique précédée d'une notice sur la valeur des anciennes monnaies françaises* (Paris: Didier et cie, 1873)

Coste, Léon, 'Les anciennes fontaines de Montpellier', *Bulletin-Société languedocienne de géographie*, 9 (1886), 353-83, 509-26

Davis, James, *Medieval Market Morality: Life, Law and Ethics in the English Marketplace, 1200–1500* (Cambridge: Cambridge University Press, 2011)

De Feo, Giovanni and others, 'Historical and Technical Notes on Aqueducts from Prehistoric to Medieval Times', *Water*, 5 (2013), 1996-2025

Dugrand, Raymond, *La garrigue montpelliéraine: Essai d'explication d'un paysage* (Paris: Presses Universitaires de France, 1964)

Dumas, Geneviève, 'Un registre de comptes à Montpellier au XVe siècle: nouveau regard sur l'organisation communale médiévale', *Bulletin historique de la ville de Montpellier*, 35 (2013), 48-61

Dumas, Geneviève, 'Le livre de mémoires des notaires Bertrand Paul (1397-1400) et Jean du Pin (1401-1419): gestion documentaire et mémoire urbaine', in *Les identités urbaines au Moyen Âge*, ed. by Patrick Gilli and Enrica Salvatore (Turnhout: Brepols, Studies in European Urban History, 32, 2014), pp. 81-92

Dumas, Geneviève, *Santé et société à Montpellier à la fin du Moyen Âge* (Leiden: Brill, 2014)

Durand, Aline, *Les paysages médiévaux du Languedoc: Xe-XIIe siècles* (Toulouse: Presses Universitaires du Mirail, 2003)

Durand, Aline, *Jeux d'eau: moulins, meuniers et machines hydrauliques, XIe-XXe siècle: études offertes à Georges Comet* (Aix-en-Provence: Publications de l'Université de Provence, 2008)

Fabre, Ghyslaine and Lochard, Thierry, *Montpellier, la ville médiévale*, Montpellier: Service régional de l'Inventaire général, Éditions de l'Inventaire, 1992)

Fabre de Morlon, Jacques, *Regards nouveaux sur le vieux Montpellier* (Montpellier: Dehan, 1975)

García-Ballester, Luis, 'On the Origin of the "Six Non-Natural things" in Galen', in *Galen und das Hellenistische Erbe*, ed. by Jutta Kollesch and Diethard Nickel (Stuttgart: Franz Steiner Verlag, 1993), pp. 105-115

Gariel, Pierre, *Idée de Montpellier, recherchée et présentée aux honnestes gens* (Montpellier: D. Pech, 1665)

Germain, Alexandre, *Histoire de la commune de Montpellier*, 3 vols. (Montpellier: Jean Martel, 1851-1854)

Germain, Alexandre, *Histoire du commerce à Montpellier*, 2 vols. (Montpellier, Jean Martel, 1861)

Gil Sotres, Pedro, 'The Regimens of Health', in *Western Medical Thought from Antiquity to the Middle Ages*, ed. by Mirko D. Grmek and Bernardino Fantini (Harvard: Harvard University Press, 1998), pp. 292-318

Gouron, André, *La réglementation des métiers en Languedoc au Moyen Âge* (Geneva: E. Droz, 1958)

Guiraud, Louise, *Recherches topographiques sur Montpellier au Moyen Âge* (Montpellier: Camille Coulet, 1895)

Guiraud, Louise, *Recherches et conclusions nouvelles sur le prétendu rôle de Jacques Cœur* (Montpellier: A. Picard, 1900)

Holt, Richard, 'Medieval England's Water-Related Technologies', in *Working with Water in Medieval Europe: Technology and Resource-use*, ed. by Paolo Squatriti (Leiden: Brill, 2000), pp. 51-100

Jørgensen, Dolly, 'Co-operative Sanitation: Managing Streets and Gutters in Late Medieval England and Scandinavia', *Technology and Culture*, 49 (2008), 547-567

Jørgensen, Dolly, “‘All Good Rule of the Citee’: Sanitation and Civic Government in England, 1400-1600’, *Journal of Urban History*, 36 (2010), 300-315

Jørgensen, Dolly, ‘The Medieval Sense of Smell, Stench, and Sanitation’ in *Les cinq sens de la ville du Moyen Âge à nos jours*, ed. by Ulrike Krampl and others (Tours: Presses Universitaires François-Rabelais, 2013), pp. 301-313

Juuti, Petri S. and others, ‘Short Global History of Fountains’, *Water*, 7 (2015), 2314-2348

Keene, Derek, ‘Issues of Water in Medieval London to c. 1300’, *Urban History*, 28 (2001), 161-179

Kucher, Michael, ‘The Use of Water and its Regulation in Medieval Siena’, *Journal of Urban History*, 31 (2005), 504-536

Laumonier, Lucie, *Solitudes et Solidarités en ville. Montpellier, mi XIIIe-fin XVe siècles* (Turnhout: Brepols, 2015)

Lee, John S., ‘Piped Water Supplies Managed by Civic Bodies in Medieval English Towns’, *Urban History*, 41 (2014), 369-393

Leenhardt, Marie, and others, ‘Un puits: reflet de la vie quotidienne à Montpellier au XIIIe siècle’, *Archéologie du Midi médiéval*, 17 (1999), 109-186

Leguay, Jean-Pierre, *L’eau dans la ville au Moyen Âge* (Rennes: Presses universitaires de Rennes, 2002)

Magnusson, Roberta J., *Water Technology in the Middle Ages: Cities, Monasteries, and Waterworks after the Roman Empire* (Baltimore and London: Johns Hopkins University Press, 2003)

Nicoud, Marylin, ‘Médecine, prévention et santé publique en Italie à la fin du Moyen Âge’, in *Religion et société urbaine au Moyen âge: Études offertes à Jean-Louis Biget par ses*

anciens élèves, ed. by Jean-Louis Biget and others (Paris: Publications de la Sorbonne, 2000), pp. 483-498

Nicoud, Marilyn, 'Les régimes de santé de l'aire montpelliéraine: Affirmation et renouveau de l'ars dietae au XIV^e siècle', in *L'Université de médecine de Montpellier et son rayonnement (XIII^e-XV^e siècles)*, ed. by Daniel le Blévec (Turnhout: Brepols 2004), pp. 233-251

Peyron, Jacques, 'Montpellier médiéval: urbanisme et architecture', *Annales du Midi*, 91 (1979), 255-272

Rather, Lewis J., 'The "Six Things Non- Natural": A Note on the Origins and Fate of a Doctrine and a Phrase', *Clio Medica*, 3 (1968), 339-340

Rawcliffe, Carole, *Urban Bodies, Communal Health in Late Medieval English Towns and Cities* (Woodbridge: Boydell, 2013)

Renouvier, Jules, and Ricard, Adolphe, *Des maîtres de pierre et des autres artistes gothiques de Montpellier* (Montpellier: Jean Martel, 1844)

Reyerson, Kathryn, 'Le rôle de Montpellier dans le commerce du drap de laine avant 1350', *Annales du Midi*, 94 (1982), 17-40

Reyerson, Kathryn, *Business, Banking and Finance in Medieval Montpellier* (Toronto: Pontifical Institute for Mediaeval Studies, 1985)

Reyerson, Kathryn, 'Medieval Walled Space, Urban Development vs. Defense', in *City Walls: The Urban Enceinte in Global Perspective*, ed. by James D. Tracy (Cambridge: Cambridge University Press, 2000), pp. 88-116

Reyerson, Kathryn, *Jacques Coeur: Entrepreneur and King's Bursar* (New York: Longman, 2005)

Reyerson, Kathryn, 'Le procès de Jacques Cœur', in *Les procès politiques (XIV^e-XVII^e siècle)*, ed. by Yves-Marie Bercé (Rome: Collections de l'École française de Rome, 375, 2007), pp. 123-144

Stoyle, Mark, *Water and the City: The Aqueducts and Underground Passages of Exeter* (Exeter: Exeter University Press, 2014)

Teissier-Rolland, Jules, *Histoire des eaux de Nîmes et de l'aqueduc romain du Gard* (Nîmes: Ballivet et Fabre, 1851)

Trexler, Richard C., 'Measures against Water Pollution in Fifteenth-Century Florence', *Viator*, 5 (1974), 455-467

Valroger, Lucien de, *Étude sur l'institution des consuls de mer au moyen âge* (Paris: L. Larose et Forcel, 1891)

Electronic sources

<http://www.montpellier.fr/4060-inondations-risques-naturels.html>, last consulted 15 January 2019

<http://thalamus.huma-num.fr/annales-occitanes/annee-1331.html>: *Le Petit Thalamus de Montpellier*, last consulted 15 January 2019

Unpublished theses

Galano, Lucie, 'Montpellier et sa lagune, histoire sociale et culturelle d'un milieu naturel (XI^e-XV^e siècles)', 2 vols. (PhD Thesis, Université de Montpellier 3/Université de Sherbrooke, 2017)

Laumonier, Lucie, 'Vivre seul à Montpellier' (PhD Thesis, Université Montpellier 3/Université de Sherbrooke, 2013)

Oddo, Anthony, 'Les ordres mendiants à Montpellier et la médiation d'une identité urbaine, XIIIe-XVe siècle' (MA Thesis, Université de Sherbrooke, 2012)

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CHAPTER SEVEN

Regulating Water Sources in the Towns and Cities of Late Medieval Normandy

Elma Brenner

Abstract

This chapter examines the ways in which water supplies were maintained, and their cleanliness regulated, in fifteenth- and early sixteenth-century Normandy, focusing particularly upon the region's chief city, Rouen, for which rich manuscript sources survive. Concerns about the quality and availability of water had strong religious associations, which reinforced the moral and medical imperative to prevent the contamination of sources. Wealthy citizens made the provision and protection of hydraulic infrastructure a focus of their Christian charity; but the use and conservation of rivers, streams, piped water systems, sewers, ponds, and ditches, also operated in the context of late medieval ideas about health and disease especially regarding the threat posed by toxic air and the need to avoid polluted water.

Key words: public health; water; Normandy; Rouen; monasteries; urban infrastructure

The rivers and streams that ran through late medieval towns and cities were a source of ill health and sustenance alike. Contemporaries recognized that there was a connection between polluted water and disease, which could be understood in terms of both disease transmission via the corrupt air that emanated from waste-filled or stagnant water, and direct poisoning through drinking such water. At the same time, the ready availability of water for drinking, washing, and industrial processes such as dyeing cloth, as well as for waste disposal, was essential to the wellbeing and prosperity of the urban population. Water sources also supplied fish, a key component of the diet of medieval people, especially in the maritime region of Normandy in north-western France. Furthermore, bathing in certain waters was considered to alleviate the symptoms of illnesses such as leprosy, while also contributing significantly to spiritual health.

This chapter investigates how the regulation of water sources formed part of public health provision in the towns and cities of fifteenth- and early sixteenth-century Normandy.

As we shall see, however, the longevity of certain ideas and practices concerning water and health in Normandy is apparent from evidence dating back far earlier, to the twelfth century at least. The following analysis encompasses not only rivers and streams, but also piped water systems, wells, sewers, ponds, ditches, and marshy land, as well as the sea. It takes into account late medieval assumptions about health and disease, especially regarding the transmission of sickness via corrupt air and other types of environmental pollution. A key question is whether these assumptions, or other imperatives and priorities, influenced measures to maintain the cleanliness of water supplies.

Sanitary regulation was a vital aspect of environmental policing in medieval cities. The involvement of a range of protagonists, from royal authorities to monastic houses, with respect to the effective management of water in Normandy reveals a general recognition that regulation resided in working towards the acceptance and enforcement of standards that were deemed essential for health.¹ Among these protagonists, the French crown and its local agents feature prominently, demonstrating a connection between policing and the centralization of authority in the kingdom of France.² However, not all the impetus came from the top down, since ordinary citizens also voiced their concerns about sanitary matters. The chapter focuses particularly upon Normandy's chief city, Rouen, for which rich archival sources survive, but also considers smaller centres such as Caen and Le Havre. Rouen was one of the largest cities in medieval France, with a population of between 30,000 and 40,000 in the mid-thirteenth century. From the mid-fourteenth century onward, numbers were significantly depleted by plague epidemics and the effects of war, but by the first decades of the sixteenth century the number of inhabitants once more reached or exceeded that of the thirteenth century.³ A unique source for Rouen is the *Livre des fontaines* of Jacques Le Lieur, a manuscript volume completed in 1525 containing visual depictions of the water courses in and around the city. Other evidence includes municipal registers, royal ordinances, charters, and episcopal visitation records. These documents reflect the involvement of different, sometimes competing, authorities in the civic affairs of medieval Normandy, and the ways in which environmental considerations impacted upon many different aspects of urban life.

Water also had strong religious associations, especially with baptism and miraculous healing. Biblical rivers, such as the Jordan, offered models of purity and cleanliness that

¹ Kotkas, *Royal Police Ordinances*, p. 1.

² Kotkas, *Royal Police Ordinances*, p. 5.

³ Sadourny, 'L'Époque communale', p. 79; Mollat, 'Mue d'une ville médiévale', p. 159.

earthly waterways might emulate.⁴ The monastic way of life, particularly that followed by the Cistercians, emphasized the link between bodily and spiritual cleansing, proposing that physical ablution could prepare the soul for purification.⁵ Such beliefs represented an interesting inversion of the notion expressed in Canon 22 of the Fourth Lateran Council (1215) that care of the soul necessarily preceded that of the body.⁶ Concerns about the cleanliness and availability of water were coloured by these spiritual factors, which reinforced the moral imperative to protect the purity of water sources, and sometimes encouraged religious authorities to intervene alongside their secular counterparts. Wealthy citizens also made the quality and abundance of the water supply, which provided a fundamental resource and promoted communal health, one of the focuses of their Christian charity. The discussion that follows first explores the range of protagonists involved in these projects and the various motives that prompted them to act. It then considers the broader intellectual and cultural context for the regulation of urban water supplies, and the efforts that were made to improve infrastructure and prevent problems, such as contamination. A final section examines specific instances of active intervention intended to resolve disputes and safeguard public access to fresh and unpolluted water.

Protagonists and sources of authority

Medieval Normandy is notable for the emergence of municipal government structures from an early date. In the third quarter of the twelfth century, a document known as the *Établissements de Rouen* provided for the city to have a governing body composed of 100 sworn-in citizens and a mayor. The mayor was to be advised by twelve councillors and twelve aldermen selected from among the citizenry. Royal authority nonetheless remained very strong, both before and after the duchy of Normandy was ceded to the French king in 1204. The duke of Normandy, a title held by the king of England before 1204, and subsequently by the French crown, appointed the mayor of Rouen and retained superior judicial powers there, even though the mayor oversaw military and financial affairs.⁷ This

⁴ Smith, 'Caring for the Body and Soul with Water', p. 158, explores the belief that the spiritual power of the river Jordan was not confined to one place, 'but distributed throughout the waters of the world'.

⁵ Classen, 'Introduction', pp. 54-56.

⁶ *Decrees*, trans. and ed. Tanner, I, p. 245.

⁷ Musset, 'Rouen', pp. 61-63.

model of municipal government was adopted by many other towns in Normandy and western and south-western France.

In 1382, an uprising in Rouen led to the suppression of the mayoralty, and an increase in royal authority. A municipal assembly, headed by a group of councillors, was reinstated, but was now overseen by the *bailli*, the king's chief local representative. Other royal officials made their presence felt, such as the *lieutenant général*, who was responsible for enforcing justice, and the *vicomte*, who oversaw financial affairs relating to the royal domain.⁸

Throughout the period under consideration in this chapter, the archbishops of Rouen were also extremely powerful, frequently intervening in political and municipal affairs, both in Rouen and in other parts of Normandy. The abbots, abbesses, priors, and prioresses of monastic houses sometimes played an active role in the secular world, too, even if their prime motivation was to exert the economic and territorial rights of their own religious communities. These ecclesiastics, and the councillors of Rouen's municipal government, were often members of the Norman aristocracy, and owed their positions and influence to their elevated social status and family connections.

During and after the Hundred Years' War (1337-1453), especially under English occupation, the sources of authority in Rouen and in Normandy as a whole changed significantly, a development which it is not possible to explore fully here.⁹ The upheavals of this period necessitated stringent law enforcement, which was sometimes avoided or resisted. Letters of remission issued by King Henry VI of England (1422-1461, 1470-1471; disputed King of France 1422-1453) via his regent, John, Duke of Bedford, during the English occupation of Normandy, describe some of the violent crimes that were committed at this time. These letters granted pardons for offences that were usually punishable by death, following a petition by the accused or his or her relatives. A letter of January 1425, for example, recounts that Jehannecte, daughter of Thomas Troppé and widow of Thomas Baillet, of the parish of Maisy in the *vicomté* of Bayeux, had killed her husband in a fit of mental disturbance. She had been arrested and imprisoned in Bayeux, but the remission letter, while not releasing her, provided the option of confinement in a less distressing

⁸ Delsalle, *Rouen*, pp. 52-56.

⁹ On Rouen, Normandy, and the Hundred Years' War, see, for example, Sadourny, 'Des Débuts'; Delsalle, *Rouen*; and Curry, 'Harfleur'.

environment.¹⁰ Another letter, of February 1425, pardoned Simon Caget of Larchamp (*département* of Orne), who, with his companions, had been compelled by bandits to witness the murder of two girls (possibly prostitutes). After the bandits fled, Simon and his companions buried the bodies, and returned home without notifying the judiciary.¹¹ They apparently feared reprisals from the bandits, but another letter of August 1423, regarding a murder committed in self-defence, reveals that a petitioner had fled the kingdom because ‘he doubted the rigour of justice’.¹²

With regard to water, it is clear that, even during periods of political stability, the individuals involved in matters relating to the availability of this essential resource were not only the occupants of high governmental and ecclesiastical office, or the local officials who policed the city streets and rural areas. For example, we will see that in 1299 a procurator acted on behalf of the indigents residing in alms houses in Rouen, in order to safeguard the water supply serving their street.¹³ The fact that water was such a vital amenity and so intricately linked to health caused people of all social classes to defend their own interests and thereby express and assert their agency.

Water and sanitary regulation

In France, concerns about water and health predated the Black Death of the mid-fourteenth century. A road in the eastern part of Rouen was known as the rue Malpalu, literally meaning ‘bad marsh’, from at least the later eleventh century.¹⁴ This area might have been considered ‘bad’ because noxious airs emanated from the marshy land, as well as because of the other hazards that were associated with such an unprepossessing landscape. By the second half of the twelfth century, a residential area for the poor of Rouen, the rue de l’Aumône, had been established in the ditches of the old wall on the northern edge of the city. This too was probably perceived as a marginal, insalubrious area.¹⁵ During the ‘Lepers’ Plot’ of 1321, people with leprosy and Jews were accused of poisoning the water supply of the kingdom of

¹⁰ *Actes de la chancellerie d’Henri VI*, ed. Le Cacheux, I, pp. 181-184 (no. 75); discussed in Pfau, ‘Crimes of Passion’, pp. 120-121.

¹¹ *Actes de la chancellerie d’Henri VI*, ed. Le Cacheux, I, pp. 184-185 (no. 76).

¹² ‘[D]oubtant rigueur de justice.’ *Actes de la chancellerie d’Henri VI*, ed. Le Cacheux, I, pp. 47-49 (no. 20; quotation on p. 49).

¹³ See p. 000 below.

¹⁴ Periaux, *Dictionnaire*, p. 359.

¹⁵ Brenner, ‘The Care of the Sick and Needy’, pp. 358-360.

France so that people would die or become leprous.¹⁶ While there is no evidence that the ‘plot’ directly affected Normandy, the rumour is suggestive of strongly-felt and ingrained anxiety regarding the contamination of water.

By the fifteenth century, environmental health had become a matter of pressing importance in the towns and cities of Normandy, not least because of the urgency of protecting urban populations from the spread of disease through corrupt air (*miasma*). These developments were linked to plague epidemics, which recurred at regular intervals in Rouen from the Black Death onward.¹⁷ There was, as a result, a growing preoccupation with cleanliness, stench, ‘infection’, and the elimination of ‘pollution’, focusing on the presence in streets of human and animal waste, the by-products of butchery, open latrines, and other sources of filth.¹⁸ A set of ordinances against plague issued by the court of the royal Exchequer at Rouen in November 1512, following an epidemic of three years’ duration affecting the city and surrounding villages, and printed in September 1513, reveals that these concerns continued unabated into the sixteenth century. The regulations were enacted by an assembly convened by the court, consisting of ‘good and notable figures of the city, who hold the public good dear to them, are loving of police, and desire good order’.¹⁹ They included the abbots of two major Norman monastic houses, Fécamp and Saint-Ouen, representatives of the archbishop, doctors in medicine, the *bailli*’s *lieutenant général*, and civic councillors and officials.

Here, ‘police’ signifies good policy, oversight, and order, rather than the salaried officials responsible for keeping the peace. The word has a similar meaning in a municipal ordinance from Rouen dated December 1534 regarding the supervision of the vagrant poor, who were often stigmatized as vectors of disease.²⁰ The regulations of 1512 aimed to keep the streets free of rubbish, and to ensure that pestilence did not spread through close contact with infected persons, or with their clothes and other possessions. Money was to be set aside from the civic funds, which were presumably administered by the municipal assembly and

¹⁶ On this ‘plot’, see Barber, ‘Lepers, Jews and Moslems’, and Nirenberg, *Communities of Violence*, pp. 93-124 (focusing on the spread of the accusation to the Crown of Aragon).

¹⁷ Fournée, ‘Les Normands’, pp. 35-36; Sadourny, ‘Des Débuts’, p. 100; Porquet, *La Peste*, pp. 124, 128.

¹⁸ On pollution and public health measures in late medieval and early modern Rouen, see Lardin, ‘Les Rouennais et la pollution’, and Porquet, *La Peste*, pp. 123-128.

¹⁹ ‘[A]ssemblée daucuns bons et notables personnages de ladicte ville ayans le bien de la chose publique a cueur aymans pollice et desyrans bon ordre.’ *Ordonnances contre la peste*, ed. Lormier, unpaginated facsimile section.

²⁰ *Documents*, ed. Panel, I, pp. 16-17.

amassed through taxation, to pay two barber-surgeons and two physicians to attend plague victims. The same funds would also remunerate ‘sergeants of charity’, whose duty was to visit the houses of victims and take appropriate measures regarding those who lived closely with them, while also dealing with the clothes and other possessions of the sick. These officials were to wear a white cross on their clothing and avoid contact with other people; a large, prominent white cross was also to mark the entrance of houses where there was any risk of infection.²¹

The popular health manuals of the later Middle Ages, known collectively as *regimina sanitatis*, convey a strong belief in the adverse effects of noxious air, which was understood to result from intense smells and from the putrefaction of organic waste.²² In an urban setting, the cleanliness of the air was closely linked to the water supply, since water provided the means to clean streets and other places and to wash away the foul matter that generated miasma. As we have seen in previous chapters, it was imperative that the water sources themselves should remain clean, since contaminated water also produced bad smells that endangered health. Furthermore, everyone needed to drink pure water, since the absorption of polluted water into the digestive system could cause complaints such as fever or dropsy, and even death. These tenets about the impact of water upon health, which originated in ancient texts such as Hippocrates’s *Airs, Waters, Places*, and were elaborated by medieval authors such as Avicenna (980–1037), were disseminated widely through *regimina*, especially once these manuals began to be printed from the later fifteenth century onward.²³

The opening words of Jacques Le Lieur’s *Livre des fontaines* reiterate these ideas. Le Lieur was a member of a distinguished local family; his ancestors had occupied offices in Rouen’s municipal government since the end of the thirteenth century. He himself held both royal office, as a notary and secretary, and municipal office, as an alderman-councillor in 1517, 1518, 1520, 1524, 1526, and 1541. He was also a poet, thereby participating in the cultural and intellectual life of the region.²⁴ He oversaw the creation of a beautiful visual and written record of the water sources that supplied the city at this time, and symbolically

²¹ *Ordonnances contre la peste*, ed. Lormier, unpaginated facsimile section.

²² Gil Sotres, ‘Regimens’, p. 303 ; and see pp. 19-22 above.

²³ Rawcliffe, *Urban Bodies*, pp. 188-196; Bonfield, ‘Medical Advice’, pp. 3-8.

²⁴ De Jolimont, *Notice historique*, p. 7; *Dictionnaire de biographie*, ed. Balteau and others, fascicule 120, cols. 1339-1340.

offered it to the municipality.²⁵ The fact that he undertook this ambitious work testifies to the importance that was already accorded to Rouen's fountains, and to the considerable efforts of Le Lieur and his fellow councillors to improve the water supply within the city in the first decades of the sixteenth century. Indeed, he stressed that:

Philosophers and physicians [...] have written that the element of water, among the other elements and elementary bodies, is so profitable, useful and necessary to all living creatures that human life cannot be of long duration and persistence without the use of it. Furthermore, the abundance of water, as well as being necessary, helps to make human life more enjoyable, gay and in better disposition, by purging and cleansing infections in the places where it flows, thus making the air healthier and less corruptible.²⁶

Le Lieur alluded to the ways in which pure water improved the quality of human life, as well as playing an essential role in survival. His emphasis on the need to maintain high standards of living ties in with his role as a leading member of the civic government. He was also preoccupied with the beauty, order, and overall excellence of the city, as we can tell from the fact that he drew upon the ideal example of ancient Rome, where there was 'a great abundance of waters and fountains'.²⁷ The analogy with Rome perhaps reflects Le Lieur's immersion in the humanistic culture of the period, although comparisons between Rouen and Rome were already being made in the twelfth century.²⁸ An extensive and properly functioning hydraulic infrastructure was a key characteristic of the model city, which was, by definition, a healthy place.

Infrastructure and the protection of the water supply

From the twelfth century if not earlier, measures were put in place in towns and cities in

²⁵ Omont, 'Le Livre', p. 242.

²⁶ 'Les philosophes et phisiciens [...] ont escript que l'élément de l'eau entre les aultres élémentz et corps élémentaires est tant proufitable, utile et nécessaire à tous vivans que la vye humaine ne pourroit estre de longue durée et persistance sans l'usage d'iceluy et aussy que l'abondance de luy, oultre ce qu'il est nécessaire, est très décente et convenable pour rendre la vye humaine plus délectable, plus gaye et en meilleure disposition, en mundifiant, purgeant et nétoyant les infections des lieux et places où il flue et habonde, donc l'air est fait plus salubre et moyns corruptible.' *Le Livre des fontaines*, ed. Delsalle and others, I, unpaginated facsimile section.

²⁷ '[L]a grand habundance des eaulz et fontaines.' *Le Livre des fontaines*, ed. Delsalle and others, I, unpaginated facsimile section.

²⁸ Van Houts, 'Rouen as another Rome'; and pp. 45-46, 48 above.

Normandy, as well as at monastic houses sited in the countryside, to establish and manage water supplies. Many of these efforts were aimed at preventing water from becoming a disruptive force, and instead marshalling and conserving it as an essential, manageable asset. Rouen was situated on the river Seine, but the river water was polluted and unsuitable for drinking, brewing, or bathing. The city was supplied with clean water by a number of natural sources from the surrounding hills. The earliest and most important of these was the Gaalor stream, which sprang forth at the foot of the Mont-aux-Malades hill, north-west of Rouen. It was allowed to fill a small reservoir on the north-western edge of the city before being channelled along man-made stone canals to supply public fountains within the walls.²⁹ While the earliest documentary references to this source appear to date from the 1250s, it almost certainly flowed into the city long before then.³⁰ It supplied fountains at key locations, including the castle built by king Philip Augustus in the early thirteenth century, the rue de l'Aumône, and the priory of Saint-Lô, one of Rouen's most important monastic houses.³¹ According to Le Lieur's *Livre des fontaines*, at the source of the Gaalor spring was a vault carved out of the rock, 'and within it a small image of Our Lady, which was placed there a very long time ago'.³² The presence of this image imbued the source with religious significance, suggesting that those who originally channelled the water venerated and gave thanks to the Virgin for providing it, while eliciting her continued protection. It may also be no coincidence that this specific stream conveyed water to some of the neediest inhabitants of Rouen, as well as one of its devotional sites.

Water works were expensive and complex, requiring significant planning and financial investment. In January 1254/5, the nuns of the abbey of Saint-Amand in Rouen owed a debt of 400 *livres*, one third of their annual income, for the construction of a new aqueduct, completed because of necessity.³³ Saint-Amand was a wealthy religious community, but this costly project cannot have been undertaken lightly, evidently being considered essential for supplying the abbey with sufficient water. While Rouen's citizens had access to public fountains from at least the thirteenth century, the number of fountains

²⁹ Robinne, 'Origine et histoire des rues', p. 20.

³⁰ *Livre des fontaines*, ed. Delsalle and others, I, unpaginated facsimile section; Periaux, *Dictionnaire*, p. 232.

³¹ *Livre des fontaines*, ed. Delsalle and others, I, unpaginated facsimile section.

³² '[E]t là dedens a ung petit ymage de Nostre Dame, qui a esté mys de fort grand ancienneté.' *Livre des fontaines*, ed. Delsalle and others, I, unpaginated facsimile section.

³³ *Regestrum*, ed. Bonnin, p. 202; *Register*, ed. O'Sullivan, pp. 218-219.

within the city multiplied in the fifteenth century and the first decades of the sixteenth century, revealing that water supply was a major preoccupation in this period. Both the municipal government and the ecclesiastical authorities prioritized this aspect of the urban infrastructure, motivated by concerns about infectious disease and a zeal to improve the appearance and public facilities of the city. Indeed, Jacques Le Lieur argued that everyone holding governmental office had a responsibility to do all they could to provide towns and cities with adequate water sources.³⁴ The rulers of English towns and cities such as Kingston-upon-Hull, Exeter, and King's Lynn were engaged in similar projects at this time, the success of which depended on funding provided by wealthy residents, and collaboration with urban monastic houses.³⁵

In 1500 the Archbishop of Rouen, Cardinal Georges d'Amboise (1494–1510), undertook to supply the eastern part of the city with water by channelling the spring of Carville (or Darnétal).³⁶ This major project was financed by equal contributions from the common funds of the city and from those of the Archbishop, demonstrating the Church's investment in public works, although the Archbishop's involvement was partially motivated by a wish to provide his own palace, adjacent to the cathedral, with a private fountain.³⁷ Ten years later, the city councillors embarked on further works to direct another spring, coming from Yonville, to the area of the Vieux-Marché, Rouen's main market square. Here a new water supply was urgently required to clean away the waste material generated by the sale of cattle, pigs, and fish, which was said to be infecting the air and endangering the health of local inhabitants and, indeed, the whole city. This project, again financed from civic funds, was suspended in 1515 due to 'urgent' matters (likely a plague outbreak), but was brought to completion in 1518 by the councillors then in office, including Le Lieur himself, Jean Le Roux, and Guillaume Auber.³⁸ Le Roux and Auber reappear in February 1524 when, alongside fellow councillor Jean du Hamel, they inspected conditions at Mont-aux-Malades, Rouen's principal *leprosarium*. Their visit to Mont-aux-Malades reveals another dimension of the policing of the environment by the civic government, since it was important to monitor the incidence of leprosy, a disease that provoked general concern about public health.

³⁴ *Livre des fontaines*, ed. Delsalle and others, I, unpaginated facsimile section.

³⁵ Rawcliffe, *Urban Bodies*, pp. 181-185; Stoye, *Water and the City*.

³⁶ *Livre des fontaines*, ed. Delsalle and others, I, unpaginated facsimile section; Periaux, *Dictionnaire*, p. 235.

³⁷ Lardin, 'Les Rouennais et la pollution', p. 424.

³⁸ *Livre des fontaines*, ed. Delsalle and others, I, unpaginated facsimile section.

Although leprosy was not believed to be highly contagious, by the fifteenth and sixteenth centuries there was anxiety regarding its transmission through the air and by physical contact, as well as the possibility that the miasmatic odours associated with advanced cases might assist the spread of plague. Nonetheless, the account of the councillors' inspection suggests that their primary aim was to ensure that facilities for the leprous themselves were adequate, rather than to establish the prevalence or infectiousness of the disease.³⁹

Jacques Le Lieur undoubtedly placed special emphasis on Rouen's fountains because of his own involvement in their construction and maintenance. Yet they were also a prominent feature of the city, beautifying the urban landscape, as well as providing an essential resource. Fountains served as very public symbols of abundance and health. Some of Rouen's sixteenth-century fountains, such as that attached to the west front of the church of Saint-Maclou, are still *in situ*, albeit often heavily restored, and are elaborately carved in stone. Saint-Maclou's fountain is one of a number in Rouen that were close to, or integrated with, parish churches, and enabled parishioners to wash their hands and faces before entering the church, as a measure of bodily and spiritual cleansing.⁴⁰ The Saint-Maclou fountain was first installed in 1517, being replaced by the current stone fountain in the mid-sixteenth century. Its carved motifs include foliage and fruit, two male children urinating, and an open-mouthed monstrous face, from which the water descends into the bowl at the fountain's base.⁴¹ These motifs, shared by many other fountains elsewhere, make it a source of entertainment, while underscoring the fact that its water is plentiful and life-giving. By enhancing the vital spirits, such a pleasing sight contributed to the wellbeing and order of the urban population, as did the flowing water, which produced attractive and soothing sounds. The fountain's beneficial and invigorating effect upon the senses can be compared to that wrought by the external and internal decoration of Saint-Maclou and Rouen's many other parish churches. In theory, if perhaps less often in practice, these aesthetic and sensory factors would have enhanced the capacity of the urban environment itself to foster good and considerate behaviour; but the city's fountains, in turn, had to be protected and policed with a view to the promotion of communal health.⁴²

³⁹ Paris, AN, S4889B, doss. 13, last document, fols. 1r–2v; Brenner, 'Leprosy and Public Health', pp. 137–138.

⁴⁰ Periaux, *Dictionnaire*, p. 230.

⁴¹ Decaëns, 'L'Église Saint-Maclou', p. 43.

⁴² See pp. 50–53 above.

7.1 Engraving of the fountain of Saint-Maclou, Rouen, by Polyclès Langlois, dated 1835

In an account of his travels in France with Cardinal Louis of Aragon in 1517-1518, the Cardinal's Secretary and Chaplain Antonio de Beatis made special note of the numerous fountains in Rouen, suggesting that they were, indeed, a source of admiration.⁴³ The city appears to have been a centre of expertise in the construction of fountains and hydraulic systems at this time, since in the early sixteenth century the complicated water development project in Tours (département of Indre-et-Loire) was undertaken by 'a master fountain-builder from Rouen'.⁴⁴ Yet the same fountains could also have less positive connotations. According to a nineteenth-century account, one fountain, close to the priory of Saint-Lô, was known as the '*fons meretricum*' (fountain of the prostitutes), presumably because women of ill repute drew water there and gathered around it.⁴⁵ These women were possibly laundresses, a category of workers associated with immoral activities. Laundresses were certainly viewed with suspicion in English towns, not only because their work often contaminated the water supply, but also with regard to their presumed involvement in the moral pollution of prostitution. The ubiquity of measures to prevent them from washing clothing in public wells and streams, such as legislation enacted in fifteenth-century Leicester and Coventry, should be viewed as a manifestation of moral as well as sanitary policing.⁴⁶ A similar prohibition was introduced in Rouen in 1510, when the laundering of cloth was forbidden at all fountains and public wells.⁴⁷

A connection with prostitution would also have associated the fountain near the monastery of Saint-Lô with physical sickness, since prostitutes were widely regarded as the potential vectors of diseases such as leprosy.⁴⁸ At the same time, used or dirty clothing and sheets, especially those that had been in contact with plague victims, were widely believed to spread infection, since they appeared to retain corrupt air within their fibres.⁴⁹ Thus, for example, the ordinances against plague printed in Rouen in 1513 criticized the prior of the city's principal hospital, La Madeleine, for selling the clothes of plague victims without first

⁴³ Mollat, 'Mue d'une ville médiévale', p. 173.

⁴⁴ Benoit and Rouillard, 'Medieval Hydraulics', p. 200.

⁴⁵ Periaux, *Dictionnaire*, p. 232.

⁴⁶ Rawcliffe, *Urban Bodies*, pp. 198-199; Rawcliffe, 'A Marginal Occupation?'

⁴⁷ Porquet, *La Peste*, p. 126.

⁴⁸ Brenner, *Leprosy and Charity*, pp. 61-62.

⁴⁹ Henderson, 'Coping with Epidemics', p. 180.

having them washed. The epidemics that troubled the city were directly attributed to his negligence, since earlier instructions, now reissued, had required him to subject the clothing to a thorough cleansing process before selling it. All items were to be transported in barrels to Launay, in the département of Eure south of Rouen, washed there five or six times, and then left out to dry in the fields, where they could be exposed to the sun and wind.⁵⁰ These arrangements, and the manner in which they had been flouted by the hospital, suggest that financial expedients were sometimes more pressing than concerns about communal health. Staff at La Madeleine had quickly sold the garments previously worn by those infected by plague in order to raise funds. We might note that there was a ready market in the city for these goods, which were presumably far cheaper than anything on offer elsewhere. The regulations reveal an assumption that tainted cloth could be made safe by exposure to water and air. While corrupt air was a source of miasma, the fresh and invigorating breezes at Launay would carry away infection and render the clothing wearable once more.

Because drinking water generally came from fountains and wells, the cleanliness of river water was evidently a less pressing concern in many medieval cities. Indeed, rivers were often used for the disposal of rubbish and waste material, especially when a fast-flowing current could carry refuse safely away from populated areas. In Rouen, the major river was the Seine; its subsidiaries, the Robec, Aubette, and Renelle, flowed within the city. In 1394 residents were reminded ‘according to the ancient ordinance’ that bad fish should be thrown into the Seine; and in 1408 it was decided to install public latrines emptying directly into the same river. Royal ordinances concerning butcheries issued in 1432 and repeated in 1487 decreed that corrupt meat should be disposed of in the same way.⁵¹ Latrines also lined the subsidiary rivers within Rouen, and they formed part of the construction plan for the entrance to the new port at Le Havre in 1517. Here it was specified that public latrines should be located ‘in the cleanest possible place’, perhaps with a view to the comfort of those using them, as well as to minimize the generation of miasmatic air in a busy location.⁵² The positioning of latrines so that they issued into flowing water courses was undoubtedly preferable to the accumulation of human waste within the city streets, which generated foul,

⁵⁰ *Ordonnances contre la peste*, ed. Lormier, unpaginated facsimile section.

⁵¹ Brenner, ‘Leprosy and Public Health’, pp. 128-129.

⁵² Brenner, ‘Leprosy and Public Health’, p. 128; Lardin, ‘Les Rouennais et la pollution’, p. 419 note 89.

7.2. Plan of the course of the Gaalor water source, showing the priory church of Saint-Lô with its fountain, in the *Livre des fontaines* of Jacques Le Lieur, completed in 1525

infectious smells. Sewage was sometimes a problem in late medieval Rouen, as is apparent from certain street names such as the rue du Couaque.⁵³ In the later fifteenth century, an alleyway in the parish of Saint-Maclou was temporarily closed because of filth overflowing from a public latrine.⁵⁴ An ordinance issued by the *bailli* of Rouen in December 1507 reveals that anxiety about organic waste in the streets, especially the blood and other noxious matter produced by the butchers' trade, persisted. At the same time, he prohibited the use of 'streams

⁵³ In modern French, a *cloaque* is a cesspit: Robinne, 'Origine et histoire des rues', p. 18. Leguay, *L'Eau dans la ville*, p. 125, observes that more than 20 lesser streams ran through Rouen, 'famed for their insalubriousness and bearing names as evocative as the "Trou-Patin"'.

⁵⁴ Brenner, 'Leprosy and Public Health', p. 128.

or other public places' as sites for latrines, perhaps because of concern about overuse.⁵⁵

Urban rivers and streams were also polluted by industrial waste. In Rouen, tanners used the Renelle for the unpleasant processes involved in curing animal skins to make leather, while the Aubette and Robec were contaminated by the organic and chemical by-products of the dyeing and fulling of cloth, activities made possible by the water itself, which powered the many cloth mills situated along the banks of these rivers. The production of woollen cloth was a major activity in Normandy from as early as the eleventh century, in both towns and cities (such as Bayeux, Caen, and Rouen) and rural locations, including Bernay, Montivilliers, Saint-James de Beuvron, and Breteuil. The fulling of cloth, when it was beaten to remove natural oils and other impurities, depended on a copious supply of flowing water, which became polluted as a result. The ubiquity of fulling mills along water courses in Normandy, such as the five mills on the river Iton at Breteuil recorded in 1310, testifies to the scale of cloth production in the duchy and its direct impact upon the water supply.⁵⁶ Nonetheless, until the later fifteenth century, civic measures to regulate the cleanliness of water courses affected by industry were not necessarily motivated by public health concerns. It may have seemed more important to prevent these rivers and streams from becoming blocked or sluggish in order to protect the various lucrative industrial processes that depended upon them, as well as to prevent flooding. While efforts to ensure that the flow of waterways was not obstructed by dangerous waste in some ways mirrored the practice of phlebotomy upon humans, the prioritization of industry and economic prosperity often conflicted with the sanitary imperative for pure water.⁵⁷

By the early sixteenth century, at the same time as the proliferation of fountains in Rouen, anxiety about the health risks posed by polluted water courses was becoming more evident. Although Rouen's river Robec was not a source of drinking water, it had hitherto supplied the water with which local brewers made beer. In 1507, however, a royal official legislated against the use of water from the Robec for this purpose because of the 'dangers' occasioned by contamination with rubbish and waste material.⁵⁸ This concern plausibly resulted from increased levels of pollution, perhaps caused by a boom in industrial

⁵⁵ '[L]es ruisseaulx ne autres lieux publics': *Ordonnances contre la peste*, ed. Lormier, unpaginated facsimile section.

⁵⁶ Arnoux and Bottin, 'Autour de Rouen et Paris', pp. 166-169.

⁵⁷ See Rawcliffe, *Urban Bodies*, pp. 216-222.

⁵⁸ Lardin, 'Les Rouennais et la pollution', pp. 412-413, 423.

production. Yet the considerable efforts in Rouen to provide people with healthy sources of drinking water in the first decades of the sixteenth century also coincided with recurring outbreaks of pestilence and the impact of other epidemics, such as the newly arrived pox.⁵⁹ As we have already seen, the quality of the water supply was closely linked to health and sickness, not only in terms of its relationship with the air, but also because of its presumed effects upon the human body when it was ingested. Although the first revised Latin editions of the Hippocratic text known in English as *Airs, Waters, Places*, did not begin to circulate before the 1520s, late medieval advice literature placed great emphasis upon the need to consume pure water. Just as contaminated food would corrupt the natural spirits, making the body more vulnerable to miasmatic infections, so too the water (or other beverages) that one drank could easily result in sickness or even death.⁶⁰

Religious communities

The availability of water was a key consideration within the monastic houses of Normandy, especially since these communities aimed to be self-sufficient in terms of their resources and infrastructure.⁶¹ We know a significant amount about the water supply for the great Benedictine abbey of Le Bec, south west of Rouen.⁶² An aqueduct was constructed to bring piped water to the abbey in the third quarter of the twelfth century. Several decades later, Abbot Henry of Saint-Léger (1223-1247) undertook works to enable water from the aqueduct to flow properly, so that the latrines could be flushed effectively both within the main monastic buildings and in the infirmary. Significantly, this project was directed ‘towards the very great cleansing of the house, because previously, it is said, the monks could scarcely stay in the cloister on account of the stench’.⁶³ Already in the first half of the thirteenth century, therefore, there was concern about pungent air, which was both unpleasant and a perceived danger to health. Abbot Henry’s building works removed an environmental hazard, not only from the cloister but also from the infirmary, where the welfare of sick monks demanded particular attention to noxious air.

⁵⁹ See Arrizabalaga and others, *The Great Pox*.

⁶⁰ Fay, *Health and the City*, pp. 68-73; Rawcliffe, *Urban Bodies*, pp. 195-196. For Hippocrates, see p. 49 above.

⁶¹ For the wider context, see Tuten, ‘The Necessitas Naturae’.

⁶² Brenner, ‘Medical Knowledge and Practice’, pp. 310-312.

⁶³ ‘[A]d maximam domus emundationem, quia antea, ut dicitur, vix possent monachi in claustro propter foetorem diu stare.’ *Chronique du Bec*, ed. Porée, p. 33.

The benefits of improving the water supply to the abbey did not simply relate to the purity of the air. The availability of water, ideally clean water, was a vital matter for medieval monastic communities, for the purposes of laundry, cooking, brewing, cultivating gardens, agriculture, and sewerage, as well as for maintaining bodily and spiritual health.⁶⁴ The monks of Le Bec made efforts to obtain control over local water sources and to improve the supply to the abbey from the twelfth century onwards, if not earlier. In 1190, for example, a charter confirmed William de Boulai's donation of the water sources of Boulai at Saint-Martin-du-Parc to the abbey, in return for a counter-gift of 15 Angevin pounds (*livres*). His grant included 'the source which is in my field before my gate', a nearby piece of land, and a fishpond with the stream that fed it.⁶⁵ He referred to his father's previous donation, revealing that the present agreement in effect ratified one that had been made earlier.⁶⁶ Saint-Martin-du-Parc was very close to Le Bec, and this award marks the kind of arrangement with local landholders that many monastic houses negotiated during this period. Like many other monasteries, Le Bec also obtained possession of a fishpond, which supplied a key component of the monastic diet, besides providing access to another water source.

Water had important spiritual associations for monastic communities. Bathing and immersion in water, most obviously through baptism, could symbolize the cleansing and purification of the soul as well as the body. Like bloodletting, bathing was a feature of the calendar that governed the religious life of monks and nuns, and an aspect of the medical care that was available to them. Fishponds, like that created at Canterbury cathedral priory by Prior Wibert (c. 1153-1167) in the third quarter of the twelfth century, were also symbolic as well as practical. Both the flow of water in and out of the pond (made possible at Canterbury by a sophisticated new piping system) and the constant renewal of the fish supply represented abundant life and regeneration, themselves key biblical themes.⁶⁷ These spiritual connotations no doubt encouraged benefactors such as William de Boulai and his father to donate water sources to Le Bec, and prompted the abbots and monks to improve and maintain the abbey's hydraulic systems.

Intervention and arbitration

⁶⁴ Bond, 'Water Management', pp. 43-78.

⁶⁵ '[F]ontem qui est in agro meo ante portam meam.' *Chronique du Bec*, ed. Porée, p. 33, note 1.

⁶⁶ *Chronique du Bec*, ed. Porée, p. 33, note 1.

⁶⁷ Fergusson, 'Canterbury Cathedral Priory's Bath House', pp. 118, 123-127.

The regulation of water sources should also be understood in terms of specific flashpoints when issues relating to water caused problems or friction. Many of the protagonists whose involvement in creating and maintaining hydraulic infrastructures is discussed above also feature here. One predictable bone of contention was flooding, which could have a significant impact upon people's ability to conduct their daily lives, whether they lived in towns or the countryside.⁶⁸ Such disruption included attendance at church, as, for example, in 1240, when the villagers of Moulineaux, outside Rouen, were unable to reach the nearest parishes at Sahurs and Grand-Couronne because the fields were flooded. As a result, in September of that year, Archbishop Peter de Collemezzo (1236-1244) converted the chapel at Moulineaux into a parish church, thus enabling the residents to hear mass without the need to travel.⁶⁹

In 1299 the intervention of the *vicomte* of Rouen, as chief judicial officer in the city, was required to resolve a dispute between the religious of the priory of Saint-Lô and the poor residing in the alms houses of the nearby rue de l'Aumône, regarding the local water supply.⁷⁰ As we have seen, in this part of the city water had been channelled from the Gaalor source in order to serve the monastery, and a fountain had also been installed for the use of the poor of the rue de l'Aumône, presumably as an act of charity by the monks.⁷¹ The dispute of 1299 arose because the latter had diverted the water supply away from the paupers' fountain. The *vicomte* went in person to arbitrate between the two parties, in the presence of the prior of Saint-Lô and the procurator of the poor, as well as a group of carpenters, masons, and metal workers 'sworn in to the city'.⁷² While the procurator had perhaps been temporarily engaged by the paupers to represent their legal interests, the artisans contributed professional expertise certified by their previous service to the municipality. They had evidently been called upon to assess the state of the water course and the means by which it had been diverted. The *vicomte* found that the community of Saint-Lô had wrongfully interfered with the water supply, and ordered that it should be restored to the paupers' fountain, which the monks were henceforth to maintain at their own expense.⁷³

⁶⁸ See pp. 180, 191-192 below.

⁶⁹ Brenner, *Leprosy and Charity*, p. 165 (Appendix 2, no. 67(b)).

⁷⁰ For further details, see Brenner, 'The Care of the Sick and Needy', pp. 360-361.

⁷¹ De Glanville, *Histoire du prieuré de Saint-Lô*, I, pp. 175-176.

⁷² '[J]urez et sermentez de la ville de Rouen.' *Documents*, ed. Panel, I, p. 2.

⁷³ *Documents*, ed. Panel, I, pp. 1-2; De Glanville, *Histoire du prieuré de Saint-Lô*, I, pp. 177-180.

Conclusion

Over two centuries later, Jacques Le Lieur reported the dispute between the monks of Saint-Lô and the poor of Rouen in his *Livre des Fontaines*, suggesting that it marked a significant moment in the history of the city's water supply.⁷⁴ Although it would be many years before water became publicly available throughout Rouen, by the end of the thirteenth century it was already considered unreasonable and wrong to prevent a sector of the population from enjoying access to such an essential amenity. Saint-Lô's monks seemed especially reprehensible because their actions had not only affected the poor, who ranked among the most vulnerable of Rouen's inhabitants, but also contravened Christ's mandate regarding the performance of Comfortable Works for those in need [Matthew 25: vv. 32-36]. The *vicomte* of Rouen used his authority to protect the paupers' interests, indicating his awareness of the fundamental importance of water as a public good.

Indeed, water was central to life in medieval Normandy, underpinning health, hygiene, agriculture, and industry. The involvement of a range of protagonists in matters relating to it, from royal officials to monastic communities, reveals that it was a tool of power and authority, as well as a resource deployed to enact deeds of philanthropy and demonstrate civic pride. While ideas about the close association between water and the quality of the air may be documented from at least the thirteenth century, as shown by the implementation of sanitary measures at the abbey of Le Bec, by the fifteenth century the pollution of water supplies had become more directly associated with the spread of epidemic disease. Anxieties at this time regarding the situation of latrines and the spread of industrial pollution may well have been linked to an increased exploitation of water for purposes of waste disposal. The extensive efforts to provide the city of Rouen with fountains supplying fresh, pure water reflect the entrenched belief that human health was affected by the quality of the water imbibed into the body, as well as by the purity of the air breathed by the lungs. Water also had strong spiritual associations, which no doubt resonated especially during outbreaks of epidemic disease, which were frequently attributed to divine intervention. The regulation of water sources in late medieval Normandy both protected and afforded access to a key component of the physical environment, upon which health and wellbeing depended.

⁷⁴ De Glanville, *Histoire du prieuré de Saint-Lô*, I, pp. 177-180.

BIBLIOGRAPHY

Archival sources

Paris, Archives Nationales, S4889B, dossier 13

Printed primary sources

Actes de la chancellerie d'Henri VI concernant la Normandie sous la domination anglaise (1422-1435), ed. by Paul Le Cacheux, 2 vols. (Rouen: A. Lestringant, 1907-1908)

Chronique du Bec et chronique de François Carré, ed. by Abbé Porée (Rouen: Ch. Métérie, 1883)

Decrees of the Ecumenical Councils, trans. and ed. by Norman P. Tanner, 2 vols. (London: Sheed & Ward, 1990)

Documents concernant les pauvres de Rouen: extraits des archives de l'Hôtel-de-Ville, ed. by G. Panel, 3 vols. (Rouen: Lestringant, 1917-1919)

Le Livre des fontaines, ed. by Lucien-René Delsalle and others, 2 vols. and 4 plans ([Rouen]: Éditions Point de vues, 2005)

Ordonnances contre la peste, et autres ordonnances concernant la salubrité publique dans la ville de Rouen, rendues par la cour de l'échiquier de 1507 à 1513, ed. by Charles Lormier (Rouen: Henry Boissel, 1863)

Regestrum visitationum archiepiscopi Rothomagensis: Journal des visites pastorales d'Eude Rigaud, archevêque de Rouen. MCCXLVIII-MCCLXIX, ed. by Théodose Bonnin (Rouen: Le Brument, 1852)

The Register of Eudes of Rouen, trans. by Sydney M. Brown and ed. by Jeremiah F. O'Sullivan (New York: Columbia University Press, 1964)

Printed secondary sources

Arnoux, Mathieu, and Bottin, Jacques, 'Autour de Rouen et Paris: modalités d'intégration d'un espace drapier (XIII^e–XVI^e siècles)', *Revue d'histoire moderne et contemporaine*, 48 (2001-2002), 162-191

Arrizabalaga, Jon, and others, *The Great Pox: The French Disease in Renaissance Europe* (New Haven: Yale University Press, 1997)

Barber, Malcolm, 'Lepers, Jews and Moslems: The Plot to Overthrow Christendom in 1321', *History*, 66 (1981), 1-17

Benoit, Paul, and Rouillard, Joséphine, 'Medieval Hydraulics in France', in *Working with Water in Medieval Europe: Technology and Resource-Use*, ed. by Paolo Squatriti (Leiden: Brill, 2000), pp. 161-215

Bond, C.J., 'Water Management in the Urban Monastery', in *Advances in Monastic Archaeology*, ed. by Roberta Gilchrist and Harold Mytum (Oxford: British Archaeological Reports, British Series, 227, 1993), pp. 43-78

Bonfield, Christopher, 'Medical Advice and Public Health: Contextualizing the Supply and Regulation of Water in Late Medieval London and King's Lynn', *Poetica*, 72 (2009), 1-20

Brenner, Elma, 'Leprosy and Public Health in Late Medieval Rouen', in *The Fifteenth Century XII: Society in an Age of Plague*, ed. by Linda Clark and Carole Rawcliffe (Woodbridge: Boydell, 2013), pp. 123-138

Brenner, Elma, 'The Care of the Sick and Needy in Twelfth- and Thirteenth-Century Rouen', in *Society and Culture in Medieval Rouen, 911-1300*, ed. by Leonie V. Hicks and Elma

Brenner (Turnhout: Brepols, 2013), pp. 339-367

Brenner, Elma, *Leprosy and Charity in Medieval Rouen* (Woodbridge: Boydell, 2015)

Brenner, Elma, 'Medical Knowledge and Practice at Le Bec', in *A Companion to the Abbey of Le Bec in the Central Middle Ages (11th-13th Centuries)*, ed. by Benjamin Pohl and Laura L. Gathagan (Leiden: Brill, 2017), pp. 307-317

Classen, Albrecht, 'Introduction: Bathing, Health Care, Medicine, and Water in the Middle Ages and Early Modern Age', in *Bodily and Spiritual Hygiene in Medieval and Early Modern Literature: Explorations of Textual Presentations of Filth and Water*, ed. by Albrecht Classen (Berlin: De Gruyter, 2017), pp. 1-87

Curry, Anne, 'Harfleur Under English Rule 1415-1422', in *The Hundred Years War (Part III): Further Considerations*, ed. by L.J. Andrew Villalon and Donald J. Kagay (Leiden: Brill, 2013), pp. 259-284

Decaëns, Henry, 'L'Église Saint-Maclou', in *L'Église et l'autre Saint-Maclou, Rouen, Haute-Normandie*, ed. by Christiane Decaëns and others ([Rouen]: Région Haute-Normandie, 2012), pp. 7-51

De Glanville, L., *Histoire du prieuré de Saint-Lô de Rouen: ses prieurs, ses privilèges, ses revenus*, 2 vols. (Rouen: Cagniard, 1890-1891)

De Jolimont, T., *Notice historique sur la vie et les œuvres de Jacques Le Lieur, poète normand du XVI^e siècle* (Rouen: Le Brument, 1847)

Delsalle, Lucien René, *Rouen et les Rouennais au temps de Jeanne d'Arc, 1400-1470* (2nd. edn. Rouen: Éditions PTC, 2006)

Dictionnaire de biographie française, ed. by J. Balteau and others, fascicule 120 (Paris: Letouzey et Ané, 2011)

Fay, Isla, *Health and the City: Disease, Environment and Government in Norwich, 1200-1575* (Woodbridge: York Medieval Press, 2015)

Fergusson, Peter, 'Canterbury Cathedral Priory's Bath House and Fishpond', *Anglo-Norman Studies*, 37 (2015), 115-129

Fournée, Jean, 'Les Normands face à la peste', *Le Pays Bas-Normand*, 149 (1978)

Gil Sotres, Pedro, 'The Regimens of Health', in *Western Medical Thought from Antiquity to the Middle Ages*, ed. by Mirko D. Grmek and trans. by Antony Shugaar (Cambridge, MA: Harvard University Press, 1998), pp. 291-318

Henderson, John, 'Coping with Epidemics in Renaissance Italy: Plague and the Great Pox', in *The Fifteenth Century XII: Society in an Age of Plague*, ed. by Linda Clark and Carole Rawcliffe (Woodbridge: Boydell, 2013), pp. 175-194

Kotkas, Toomas, *Royal Police Ordinances in Early Modern Sweden: The Emergence of Voluntaristic Understanding of Law* (Leiden: Brill, 2014)

Lardin, Philippe, 'Les Rouennais et la pollution à la fin du Moyen Âge', in *Des Châteaux et des sources: Archéologie et histoire dans la Normandie médiévale. Mélanges en l'honneur d'Anne-Marie Flambard Héricher*, ed. by Élisabeth Lalou and others (Mont-Saint-Aignan: Université de Rouen et du Havre, 2008), pp. 399-427

Leguay, Jean Pierre, *L'Eau dans la ville au Moyen Âge* (Rennes: Presses Universitaires de Rennes, 2002)

Mollat, Michel, 'Mue d'une ville médiévale (environ 1475-milieu du XVIe siècle), in *Histoire de Rouen*, ed. by Michel Mollat (Toulouse: Privat 1979), pp. 145-178

Musset, Lucien, 'Rouen au temps des Francs et sous les ducs (Ve siècle-1204)', in *Histoire de Rouen*, ed. by Michel Mollat (Toulouse: Privat 1979), pp. 31-74

Nirenberg, David, *Communities of Violence: Persecution of Minorities in the Middle Ages* (Princeton, NJ: Princeton University Press, 1996)

Omont, Henri, 'Le Livre des fontaines de Rouen', *Journal des savants*, 10 (1912), 241-248

Periaux, Nicéas, *Dictionnaire indicateur et historique des rues et places de Rouen* (Rouen: A. Le Brument, 1870; reprinted Saint-Aubin-les-Elbeuf: Page de Garde, 1997)

Pfau, Aleksandra, 'Crimes of Passion: Emotion and Madness in French Remission Letters', in *Madness in Medieval Law and Custom*, ed. Wendy J. Turner (Leiden: Brill, 2010), pp. 97-122

Porquet, Louis, *La Peste en normandie du XIVe au XVIIe siècle* (Vire: Imprimerie René Eng, 1898)

Rawcliffe, Carole, 'A Marginal Occupation? The Medieval Laundress and her Work', *Gender and History*, 21 (2009), 147-169

Rawcliffe, Carole, *Urban Bodies: Communal Health in Late Medieval English Towns and Cities* (Woodbridge: Boydell, 2013)

Robinne, André, 'Origine et histoire des rues de Rouen', *Connaître Rouen*, 7 (1997)

Sadourny, Alain, 'L'Époque communale (1204—début du XIVe siècle' and 'Des Débuts de la guerre de cent ans à la Harelle', in *Histoire de Rouen*, ed. by Michel Mollat (Toulouse: Privat 1979), pp. 75-122

Smith, James L., 'Caring for the Body and Soul with Water: Gueric of Igny's *Fourth Sermon on the Epiphany*, Godfrey of Saint-Victor's *Fons Philosophiae*, and Peter of Celle's Letters', in *Bodily and Spiritual Hygiene in Medieval and Early Modern Literature: Explorations of Textual Presentations of Filth and Water*, ed. by Albrecht Classen (Berlin: De Gruyter, 2017), pp. 148-170

Stoyle, Mark, *Water and the City: The Aqueducts and Underground Passages of Exeter* (Exeter: Exeter University Press, 2014)

Tuten, Belle S., 'The Necessitas Naturae and Monastic Hygiene' in *Bodily and Spiritual Hygiene in Medieval and Early Modern Literature: Explorations of Textual Presentations of Filth and Water*, ed. by Albrecht Classen (Berlin: De Gruyter, 2017), pp. 129-147

Van Houts, Elisabeth, 'Rouen as Another Rome in the Twelfth Century', in *Society and Culture in Medieval Rouen, 911-1300*, ed. by Leonie V. Hicks and Elma Brenner (Turnhout: Brepols, 2013), pp. 101-124

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CHAPTER EIGHT

Policing the Environment in Premodern Imperial Cities and Towns: A Preliminary Approach

Annemarie Kinzelbach

Abstract

Recent historiographical studies of the Holy Roman Empire reveal that policy focused on defining and redefining the relationship between governors and citizens, largely through negotiating practices. Historians have applied these discoveries in limited ways when discussing public health policies in German-speaking areas, ignoring questions of compliance, resistance, or enforcement. Some *lacunae* result from archival losses, but survivals enable us to fill many gaps. In this chapter, relevant premodern statutes are first identified. Secondly, textual analysis of manifold sources uncovers implicit associations (for example, parallels between dirt and prostitution), while highlighting explicit relationships between communal health and such general issues as religion, morality, and the common good. Negotiation practices are unveiled, for instance, in modifications to statutes and regulations. Thirdly, contemporary chronicles, diaries, accounts, council minutes and administrative documents are examined for information about the implementation of laws and ordinances.

Key words: Holy Roman Empire; public health; common welfare; political practice; negotiations

In recent years, historiographical studies of the Holy Roman Empire have shown how early modern policies focused on defining and redefining the relationship between governors and citizens, and that they were – for a large part – shaped by negotiating practices. Historians have discussed such practices in the general context of politics and communication, as well as from more specialized perspectives, such as early modern criminal prosecution, and the

politics of migration or religion.¹ However, they have mostly neglected the field of premodern environmental politics.² The same applies to another emerging, crucial approach to analyses of premodern urban societies that examines ritual, communal, and symbolic activities.³

In contrast, although the history of the environment has been an established discipline in Germany for decades, guiding questions have concerned either the impact of the environment on human society or, vice versa, environmental change caused by economic activity or by the behaviour of the urban population.⁴ Moreover, research was often inspired by contemporary environmental problems and centred on the period from the middle of the eighteenth century onward, whereas the medieval and early modern periods were often glossed over or superficially regarded as a ‘dark’ precursor to subsequent developments.⁵ More nuanced interpretations have only recently been included in the general historiography of premodern society, despite Ulf Dirlmeier’s work in the 1980s on the environment-related politics of government in medieval towns and cities.⁶ Yet neither his findings nor those of similar research concerning early modern life have yet been integrated into the master narratives.⁷

¹ Brakensiek, ‘Akzeptanzorientierte Herrschaft’, pp. 398-403; Brendecke, ‘Informing the Council’, p. 243; Schlögl, ‘Power and Politics’, pp. 25-26; Schwerhoff, ‘Stadt und Öffentlichkeit’, pp. 11-25. See also Coy and others, *Holy Roman Empire*.

² Johann, *Kontrolle mit Konsens*; Härter, *Policey und Straffjustiz in Kurmainz*; Close, *Negotiated Reformation*; Louthan, *Diversity and Dissent*; Niggemann, ‘Craft Guilds’; Coy, ‘Magistrates, Beggars, and Labourers’.

³ Schilling, *Stadtrepublik und Selbstbehauptung*; Jancke and Schläppi, *Ökonomie sozialer Beziehungen*.

⁴ Reith, *Umweltgeschichte der Frühen Neuzeit*, pp. 71-134.

⁵ Three citations will serve to represent the shortcomings apparent from three decades of research: Münch, *Stadthygiene im 19. und 20. Jahrhundert*, pp. 22-25, 123-124, 126; Hardy, *Ärzte, Ingenieure*, pp. 37-62; Stippak, *Beharrliche Provisorien*, pp. 32-35.

⁶ Dirlmeier, ‘Kommunalpolitischen Zuständigkeiten’; Dirlmeier, ‘Zu den Lebensbedingungen’; Dirlmeier, ‘Zum städtischen Bauwesen’. See now Fuhrmann, ‘Beseitigung von Unrat’; and Laqua, ‘Aborte in Nachbarschaftsräumen’.

⁷ Among the earlier exceptions are Kinzelbach, *Gesundbleiben, Krankwerden, Armsein*, pp. 77-133 (which developed ‘Policing Health’ as an argument); and Bauer, *Bauch der Stadt*. Bauer, however, identified the period after the middle of the eighteenth century as decisive in the history of urban cleanliness (pp. 144-332). Archaeological studies have contributed greatly to a more nuanced view by analysing the earlier use of sewers, latrines, and privies. See most recently Wagener, *Aborte im Mittelalter*.

This chapter aims to support a nascent stage of development in European historiography and contribute to an emerging paradigm shift in German historical writing. The latter is evident, for instance, from the posthumous publication of one of Dirlmeier's lectures, together with most of his relevant articles from the 1980s and 1990s.⁸ In addition, still isolated recent studies by other authors have included analyses of such diverse (but ultimately connected) subjects as top-down policies for the achievement of greater collective security and for the removal of human faeces in Nuremberg.⁹ Another fresh approach examines the interrelation between politics and (re-)presentations of environmental knowledge in the Holy Roman Empire.¹⁰ The ground breaking studies of Florence by Giulia Calvi and Ann Carmichael have shown how governors, citizens, and the poor interacted during epidemics: a topic that still features in recent research on the Holy Roman Empire.¹¹ Even so, the link between polity, health, and the environment was often marginalized by these two authors (and others) as being little more than 'applied epidemiology'. Historians are still in the early stages of demonstrating that, in premodern societies, caring for a healthy environment was far more complex than fighting epidemic diseases, running hospitals, and organizing poor relief.¹²

I will focus here on urban communities in southern German-speaking areas with a high density of smaller towns and some of the most important large cities in the Holy Roman Empire. The imperial and free cities and towns were 'republics' with population numbers of between several hundred and about 40,000. From the late Middle Ages onward they were governed by burgomasters and council members, who together exercised legislative and executive, as well as judicial, power.¹³ These representatives were also responsible for the

⁸ Dirlmeier, 'Historische Umweltforschung'; Dirlmeier, *Menschen und Städte*.

⁹ See Rüther, 'Zwischen göttlicher Fügung', on the political issues raised by water and fire hazards and the more traditional aspects of catastrophe management; and Burger, "'Daran erkenn' ich meine Pappenheimer!'", and Burger, 'Eid und Ordnung', on the cleaning of privies.

¹⁰ Knoll, *Natur der menschlichen Welt*.

¹¹ Carmichael, *Plague and the Poor*, pp. 85-125; Calvi, *Storie di un anno di peste*; and Sturm, *Leben mit dem Tod*, on the Holy Roman Empire.

¹² Geltner, 'Healthscaping a Medieval City', p. 396; Rawcliffe, *Urban Bodies*, on medieval England; Geltner, 'Finding Matter Out of Place', on Italian cities, where Cavallo and Storey, *Healthy Living in Late Renaissance Italy*, pp. 1-47, diagnosed a 'culture of prevention'.

¹³ I will also refer to these officials as 'governors': Albrecht, 'Gute Herrschaft'.

oversight of religious practices and for the common wealth of all inhabitants.¹⁴ Furthermore, public health concerned everybody, from wealthy citizens to poor migrants: beggars, the needy, the middling sorts, members of the elite, and rulers – all were deeply involved. This chapter will examine legislation, actions, and attitudes regarding the urban environment, as well as matters concerning public health beyond epidemiology and curative practices. I am anxious to escape the confines of many earlier studies that dealt with the normative aspects of premodern economic and public health policies in the Holy Roman Empire or centred on the evolving medical professions.¹⁵ To date, only exceptional studies have tried to fathom attitudes towards particular aspects of public health and resistance against whatever legislation might ensue, and even fewer have explicitly discussed negotiations over public health measures in this period.¹⁶

In order to analyse these negotiation processes, I will first provide some background information on German society in premodern imperial towns and cities. A short opening section will look at legal texts, arguing that from the thirteenth century matters of public health and problems concerning the urban environment contributed to the articulation of concepts of common welfare, utility, and order.¹⁷ An increase in documentation, in the detail

¹⁴ Armer, *Friedenswahrung, Krisenmanagement*, pp. 34-51, 273-316, 434-440. Constant communication between imperial cities guaranteed that legislation was virtually uniform throughout the Holy Roman Empire: *Stadtbuch Augsburg*, ed. Meyer, p. xxvii.

¹⁵ For local studies see, for instance, Nübling, *Ulm's Lebensmittel-Gewerbe*; Heuschmid, 'Lebensmittel-Politik der Reichsstadt Überlingen'; Flachsbar, *Geschichte der Goslarer Wasserwirtschaft*; Fuchs, *Geschichte des Gesundheitswesens*; Steinhilber, *Gesundheitswesen im alten Heilbronn*, pp. 25-108; and Busch, 'Wasserversorgung des Mittelalters'. More recently see, for example, Kluger, *Historische Wasserwirtschaft*; Grohmann, 'Vom Umgang mit einer begrenzten Ressource'; and Mühlsteff, *Ursprünge deutscher Medizinalgesetzgebung*. Dirlmeier, in all cited publications, and Giehl, 'Entwicklung der Fleischhygiene', make use of earlier local studies. Such lacunae can be found also in studies of poor relief, hospitals, and epidemic diseases, as discussed in Reith, *Umweltgeschichte der Frühen Neuzeit*, pp. 93-103, 123-134. See also the most recent, but not exhaustive, bibliographies in Hof, *Ort der Gesundheit*; and Geltner and Coomans, 'Bibliography'.

¹⁶ Kromer, 'Wasser in jedweddes bürger's haus', provides information on the demand for fresh water. Bauer, *Bauch der Stadt*, addresses problems of waste, wastewater, and cleanliness in early modern Frankfurt (pp. 25-160), and discusses how inhabitants became active proponents of cleanliness after the middle of the eighteenth century (pp. 144-332). Kinzelbach, *Gesundbleiben, Krankwerden, Armsein*, pp. 77-133, describes the process of 'policing health' in the context of the urban environment. As mentioned above, such studies were revived by Fuhrmann, 'Beseitigung von Unrat', and Laqua, 'Aborte in Nachbarschaftsräumen'.

¹⁷ Kinzelbach, *Gesundbleiben, Krankwerden, Armsein*, pp. 77-133.

provided, and in linguistic precision reveals the employment of comprehensive concepts which were shared among leading citizens, chroniclers, scholars, and artisans. The next section examines legislation and political interaction, in order to outline elements of continuity and change in policies and practices geared towards ‘policing the environment’. On the basis of this evidence, I will deconstruct the argument that politicians learning from emergencies and conflicts generally only acted in response to these events; instead, they made policy-driven choices. This section will further maintain that a comprehensive approach resulted from the fact that, in all imperial cities and towns, designated government authorities (often called ‘*Bauherren*’ or ‘*Baumeister*’) were responsible for the implementation of specific regulations. They appointed officials who were assigned particular tasks by both governors and citizens. In addition, they oversaw and financed the respective activities involved, which ranged from building and repairing public structures to cleaning waterways, streets, ditches, and public facilities. Governors in imperial and Italian cities seem to have adopted similar practices.¹⁸ The last part of this chapter will consider the extent to which we can determine how far environment-related measures were accepted and successfully enforced, by analysing in greater detail the ways in which urban residents and governors negotiated public health and environmental policies.

Defining public health, the urban environment, and common welfare in the Holy Roman Empire

The limited historiography of environment-related policy and public health results in part from a slow transition to written legislation; the pace of change from oral to written legal communication fluctuated during the high and late Middle Ages and was intensified from the late-fifteenth to the seventeenth century.¹⁹ Nor do the main vernacular legal terms used by medieval German speakers and writers demonstrate any specific relation to the environment or to public health policies. The earliest relevant rules and regulations were embedded in composite collections of constitutions. These are arranged under headings such as *statuta* (constitution, rules), *Ordnung* (order, regulation, decree), *Ruf* (proclamation, decree), or

¹⁸ For the *Curia viarum* in Italy, see Geltner, ‘Healthscaping a Medieval City’, pp. 399-400; Geltner, ‘Finding Matter Out of Place’, pp. 320-321; and pp. 97-115 above.

¹⁹ On the (slow) transition from oral to written legislation, see Angenendt, ‘Verschriftlichte Mündlichkeit’; Goppold, ‘Norms, Symbols and Modes of Decision-Making’; Oelze, ‘Decision-Making and Civic Participation’; Frie, ‘Bedrohte Ordnungen’; and, most recently, Kluge, *Macht des Gedächtnisses*.

Policeij Ordnung.²⁰ They gradually became more structured when separate paragraphs were inserted and relevant issues identified under specific headings, such as ‘butchers’ regulations’.²¹ Moreover, printing made legal texts increasingly available.²² From the fifteenth century onward, a concern for public health becomes more tangible when titles begin to link general terms such as ‘regulation’ to content that is clearly environmental and health-related, such as bathing, the supply and handling of groceries and other types of food, the segregation of the sick, the availability of medical care and services, cleansing the urban environment, and even more specifically through the removal of waste water and excrement.²³

The absence of recognizable terminology does not mean that a comprehensive understanding of the connection between health and the environment was necessarily lacking in the Holy Roman Empire. In fact, the longevity and expansion of relevant legislation, as discussed below, seems to indicate the opposite. Preventative and sanitary policies are a recurrent feature in chronicles and epideictic literature. From the fourteenth century onward, chroniclers who were politically involved constantly observe the urban environment and comment on (pre)conditions such as the weather and food prices, as well as recording official actions that affected food provision, the water supply, and fire prevention. Authors in

²⁰ Producing editions of these constitutions became a local and national agenda, so that for some cities, such as Augsburg, several editions exist: *Vermischte Beyträge*, ed. Walch; *Sammlung deutscher Rechtsalterthümer*, ed. Freyberg; *Stadtbuch Augsburg*, ed. Meyer.

²¹ *Deutsche Stadtrechte des Mittelalters*, ed. Gaupp, pp. 68-70, 100-101; *Recht der Reichsstadt Rottweil*, ed. Greiner, pp. 143-148; *Buch der Stadt Ulm*, ed. Mollwo, pp. 62-63, 65-67, 120, 123-125, 157-162; *Stadtbuch Augsburg*, ed. Meyer, pp. 183-184 (*der Metzger brieße* was added, pp. 261-263).

²² Early prints are: Rat der Reichsstadt Nürnberg, *Reformacion der Statut* (1484); Rat der Reichsstadt Worms, *Reformacion statute[n]* (1509).

²³ Manuscript examples are: Ulm Stadtarchiv, A [6542], fol. 286r, *Ordnung, Badens halb im Selhuß* [...] 1454; A 3669, fol. 318r, *Erneuerung der Ordnung der blateerten menschen*; A [3087], *Ordnung der Medicin-Doctorum* [...] 1450; A 3669, fols. 122v-123v, *Gesatz, daß niemand Menschenkat noch Sewmist in die Garten noch auf die Wisen füren sölle* [...] 1494; fol. 325v, *Ain ruf von Gnyst, Vrbaw vnd Ascher in die Statt zu schütten* [...] 1506; A 3680, fols. 46r-47r, *Verbott des Wäschens bey den alten Röhren vnd bey den Kästen* 1487; A [3016], *Ordnung Wie es mit raumung vnd vßführung der Priuöt* [...] 1574; Überlingen Stadt- und Spitalarchiv, no. 1, *Ordnungen vnd Rechten vff dem Berg Hie Zu Vberlingen* [...] 1424; Stadtarchiv Nördlingen, Bestand Siechenhaus unverzeichnet 1487 *Siechen Ordnung*. Examples of prints: Rat der Reichsstadt Nürnberg, *Satzung* [...] *Fleysch* (1532); Rat der Reichsstadt Frankfurt, *Ordnung der Becker* (1540); Rat der Reichsstadt Augsburg, *Metzgeren Ordnung* (1549); Rat der Reichsstadt Nürnberg, *Vernere ordnung und satzung* [...] *Fleysch* (1607).

Augsburg, for instance, describe activities such as the paving of streets, the building of slaughter houses, and the digging of ditches. Merchants, monks, and patricians mention that new burial grounds were established outside the centre. The control over, and provision of, water and food, rules for avoiding stench, procedures for cleaning streets and washing laundry in or close to wells or for diseased persons, and efforts to ban prostitution constitute permanent topics.²⁴ Similar issues are documented elsewhere by chroniclers, diary writers, and eulogists; and they continue to be reported in even more detail during the early modern period, when artisans proudly eulogized their cities, as illustrated by the craftsman and ‘mastersinger’ Kunz Has (c. 1450-1527) in Nuremberg.²⁵

However, explicit and extensive references to public health are found only in early modern writings.²⁶ This may have to do with the fact that politically active citizens not only wrote chronicles but also engaged in discussions about public health, as is evident from their reading and the annotations that they made. Conrad Peutinger (1465-1547), a jurist, diplomat, and *Stadtschreiber* (*notarius*) in Augsburg, for instance, in 1485 extensively annotated the first full print of Leon Battista Alberti’s books on architecture, which included many references to hygienic concepts.²⁷ Last, but not least, the publication of recommendations by the physician Joachim Strupp (1530-1606) shows that these ideas were discussed not only by individual Italian Renaissance households but also in the urban communities of the Holy

²⁴ Descriptions from Augsburg include that by an anonymous author writing in the political context of the years 1368-1398: *Chroniken* 4, ed. Roth and Bayerische Akademie der Wissenschaften, pp. 1, 24, 30, 34, 38, 50, 67, 69, 71-72, 74, 75, 80-81, 94; by the merchant in the office of grain provision Burkard Zink (1396-c. 1475), *Chroniken* 2, ed. Bayerische Akademie der Wissenschaften, pp. 14, 33, 44, 72, 144-147, 154, 159-161, 168-169, 179-181, 186-187, 206, 208, 243, 256-257, 292-293, 302-303, 312, 336; by the Benedictine monk Sigmund Meisterlin (born c. 1434) and continued by the merchant and councillor Hektor Müllich (1420-1489/90), *Meisterlin, Müllich, Augsburger Chronik*, pp. 111, 112, 114, 116; by the patrician Wilhelm Rem (1462-1528/9), *Cronica*, ed. Von Hegel, Roth and Bayerische Akademie der Wissenschaften, pp. 4, 5, 9, 24, 26, 29-30, 37, 44-45, 55, 63, 65, 73-78, 82, 84, 97, 106-107, 132-133, 188; by the Benedictine monk Clemens Sender (1475-1537), *Chroniken* 4, ed. Roth and Bayerische Akademie der Wissenschaften, pp. 19-24, 28-30, 34, 37, 43, 46, 51-52, 66, 95-98, 111, 120, 127, 184, 203-204, 247, 327-328, 337, 359, 379.

²⁵ Haß, *Lobgedicht auf Nürnberg*, ed. Barack, pp. 25-27, 392-405, 452-461.

²⁶ Kinzelbach, *Gesundbleiben, Krankwerden, Armsein*, pp. 77-133.

²⁷ On Leon Battista Alberti’s hygienic concepts, see recently Pearson, *Humanism and the Urban World*, esp. pp. 90-93; and for greater detail Rodenwaldt, *Alberti, ein Hygieniker der Renaissance*. Peutinger made extensive notes on an incunabula print preserved in the Staats- und Stadtbibliothek Augsburg: Alberti, *De re aedificatoria* (1485); Hubay, *Incunabula der Staats- und Stadtbibliothek Augsburg*, p. 7. See also pp. 45-55 above.

Roman Empire.²⁸ In the second half of the sixteenth century this physician suggested an ‘amelioration of prosperity and health’ by merging in twelve short chapters ‘spiritual remedies’ and environmental concerns, including a comprehensive outline of public health measures in Frankfurt ‘and other places’.²⁹ Strupp’s holistic approach, published in 1573 under the heading ‘Valuable Reformation for Good Health and Christian Order’, was not directly adopted by his contemporaries.³⁰ Instead, many imperial cities, including Frankfurt, where Strupp had practised as a physician, and various territories issued increasingly detailed regulations for the medical market place and continued to publish separate rules concerning other environmental issues.³¹

Breaking down these legislative acts into discrete components allowed for indispensable flexibility. In the following sections I will discuss preventive legislation in imperial cities and towns in order to show that premodern urban societies neither preferred *ad hoc* problem solving nor acted with rigidity by issuing the same texts for centuries.

Policing the environment and health for the common good

Urban statutes contained paragraphs on preventive medicine even before imperial cities and towns became independent ‘republics’ from the twelfth century onwards. In 1164, the Emperor Frederick I enacted a *privilegium* for the small palatinate, later imperial town, of Hagenau.³² A number of regulations turned the selling of bread and meat from being solely a commercial affair into a public concern, by demanding the appointment of officials

²⁸ For sanitation in the household, see Cavallo and Storey, *Healthy Living in Late Renaissance Italy*.

²⁹ Strupp, *Nützliche Reformation*, ‘Vorrede’ and ‘Register vnd Inhalt dieser Reformation’ (s. pp.).

³⁰ Strupp, *Nützliche Reformation*. His role is overemphasized in Fischer, *Geschichte des Deutschen Gesundheitswesens*, I, pp. 174-182, 323; and following him in Mann, ‘Gesundheitswesen und Hygiene’, pp. 109-113; Stürzbecher, ‘Physici in German-Speaking Countries’, p. 125; and Bauer, *Bauch der Stadt*, pp. 40-44. Fischer assumed that the respective rules in Augsburg, Nuremberg, the Palatinate, and Hesse were influenced by Strupp’s ideas, yet he ignored the fact that these rules only covered the medical marketplace.

³¹ Augsburg Stadtarchiv, Collegium Medicum, *Doctores 1565-1791, Ordnung zwischen den Herren Doctorn Medicinae zu Augspurg* 1582, and a different version in 1607. Prints: Rat der Reichsstadt Frankfurt, *erneuerte Reformation* (1578); Rat der Reichsstadt Worms, *Reformatio und erneuerte Ordnung* (1582); Rat der Reichsstadt Nürnberg, *Gesetz, Ordnung vnd, Tax* (1593); Pfalzgraf Philipp Ludwig, *Reformation vnd Ordnung* (1595); Rat der Reichsstadt Speyer, *Ordnung der Apotecken* (1614); Rat der Reichsstadt Schwäbisch Hall, *Reformation: oder erneuerte Ordnung* (1651).

³² The population of Hagenau, up to 1648, was about 3000: Köbler, *Historisches Lexikon*, pp. 245-246. This figure and all that follow constitute rough estimates.

(*conjuratos civitatis*, '*Geschworene*') to supervise the market. Butchers were ordered not only to sell 'healthy' and fresh meat, but also threatened with banishment from the city if they were convicted of selling flesh that was 'leprous' or 'maculate'.³³ This ruling shows that concerns over leprosy had also spread to the food market in the twelfth century, albeit without explicit reference to the fact that the disease could apparently be transmitted by infected meat.³⁴ The statutes of the larger town of Strasbourg also illustrate how public health issues surface in early regulations.³⁵ Ox meat could be sold if the oxen had died of old age or over-work, but not if they had succumbed to a 'contagious' disease.³⁶ The term 'contagious' is used in Strasbourg in the Latin version without further explanation, but it is made explicit in the legal texts of Augsburg in 1276, where it is defined as the transfer of disease between livestock or from animals to men.³⁷

Unsurprisingly, the first preserved constitutions confirming the status of imperial and free cities and towns already demonstrate a widening concern for the urban environment. The *Stadtbuch* of Augsburg, one of the largest imperial cities, illustrates how by 1276 laws that included a broad range of preventive health measures were fixed in writing.³⁸ Some of them aimed at achieving cleanliness of the public space and the private body, as well as moral purity, by regulating the cleansing of cesspits, drains, streets, squares, and nooks, and by organizing the removal of carcasses, sick animals, and also 'leprous' persons from the streets. The process was both material and moral, taking on a symbolic meaning, and was ritually performed.³⁹ In the same context, provisions begin to mention the supervision of prostitutes

³³ *Deutsche Stadtrechte des Mittelalters*, ed. Gaupp, pp. 100-101: '[M]acellatores sanas et recentes carnes vender precipimus, ut si leprosas, vel quocunque modo commaculatats vendiderint [...]' For more relevant regulations, see pp. 68-70, 73.

³⁴ For reactions to lepers in the twelfth century, see Brenner, 'Leprous Body'; and more generally Rawcliffe, *Leprosy in Medieval England*. For the concept of 'leprous meat', see Rawcliffe, *Urban Bodies*, pp. 235-237; and p. 127 above.

³⁵ Strasbourg was an imperial city between the thirteenth and later seventeenth century. During the fifteenth century, its population numbered about 20,000: Eheberg, 'Strassburg's Bevölkerungszahl'.

³⁶ *Deutsche Stadtrechte des Mittelalters*, p. 73.

³⁷ *Stadtbuch Augsburg*, ed. Meyer, art. CXXI §7; and for the German term used see *DRW*, Lemma *Schelm I, II, III*. More generally: Carmichael, 'Contagion Theory and Contagion Practice'; Pelling, 'Contagion, Germ Theory, Specificity'; Kinzelbach, 'Infection, Contagion, and Public Health'.

³⁸ Estimates suggest about 30,000 inhabitants in 1500: *Augsburger Stadtlexikon*, Lemma *Einwohnerzahlen*.

³⁹ Contrary to Bähr, 'Abgötterei stinkt' (and his interpretation of Douglas, *Purity and Danger*), who dated such a preoccupation with order in German society to the early modern period.

in the streets, while their availability in public brothels was condoned. Yet pious donations aimed at saving their souls; and towards the end of the fifteenth century prostitution was banned altogether from the cities. Prostitutes were condemned as sinners, whose guilt stained the community and who should be either removed or redeemed.⁴⁰ In the early statutes the hangman was considered an expert on cleanliness and purity, which most probably should be seen in the context of his Janus-faced task: to eliminate the most abhorred sinners, namely those who had been sentenced to death. The suffering of these delinquents evoked the painful death of Christ and his martyrs and thus enhanced a sense of reconciliation with the community.⁴¹ In addition, to complete the provisions for a safe and healthy urban environment, a number of officials were charged with responsibility for the security of buildings, streets, and waterways. The quality and quantity of water, food, and health-related services for women and men involved in lawsuits were also subject to regulation.⁴²

During the following centuries environmental issues become more explicit and detailed, and are mentioned in general rules and specific decrees. However, there was no linear development in any such progress. On the contrary, legislative reactions to environmental and health problems differed, depending on time, space, and circumstances and have therefore to be analysed in context. This is illustrated, for instance, by rules concerning the ‘stench’ caused by animals, faeces and dirt, waste water, and decaying bodies. Removing these nuisances from the city regularly, and causing as little stench as possible,

⁴⁰ In late medieval Ulm the landlord of the brothel had to swear that prostitutes wishing to abstain from their ‘public sinful life’ would be released from their contracts. Moreover, he was required to collect money from them so that on Sunday evenings they could burn a candle in the cathedral in ‘praise and honour’ of the Virgin Mary and to comfort all Christian souls: Jäger, *Juristisches Magazin*, pp. 215-217. The contract entered by a pimp in Nuremberg bound him to allow his women time to attend mass: *Nürnberger Polizeiordnungen*, ed. Baader, p. 119. For the removal of prostitutes, see Rawcliffe, *Urban Bodies*, pp. 8, 104-109; for redemption, Cohen, *Evolution of Women's Asylums*, pp. 16-18, 127-128; and Schuster, *Frauenhaus: Städtische Bordelle*, pp. 142-157, 272. For a transition to ‘moral purity’, which included campaigns against prostitution in early modern Basel, see Burghartz, *Zeiten der Reinheit*, p. 13.

⁴¹ *Stadtbuch Augsburg*, ed. Meyer, art. XXVII §3, 5-8. For the interpretation of an executioner’s tasks, see Carlino, ‘Leichenzergliederung als soziales Drama’; Park, *Secrets of Women*, pp. 212-213; and Park, ‘Criminal and Sainly Body’.

⁴² *Stadtbuch Augsburg*, ed. Meyer, art. XXVII §3, 5-8, XLII, XLV, XLIX, LXIX, LXXXVIII, CIII, CIV, CXVIII, CXXI.

was a constant legislative concern (and subject of conflicts) in all imperial communities.⁴³ Yet during the thirteenth century the councillors of Augsburg, for example, felt that ‘the increasing number of inhabitants’ demanded juggling with the regulations for cleaning privies. The modified legal text removed the restrictions on dumping excrement from two downstream bridges over the river Lech and allowed the disposal of faeces from all nearby river banks. That these concessions were not the result of diminishing concerns about bad smells is apparent from the damage control that the governors introduced: the cleansing period was limited to nights in late autumn and winter. This restriction lessened the supposed danger of causing disease by corrupted air in two ways: the air was cooler at night and fewer people would be exposed to the danger occasioned by any ‘stench’. Other cities also adopted this practice and it continued to influence legislation until the end of the early modern period.⁴⁴

Medieval and early modern ‘police orders’ reveal the same kind of flexibility, though some modifications seem at variance with specific health concerns which were later made explicit. In general, pigs, except those under the care of swineherds outside the walls, were already banned from cities in the first medieval statutes.⁴⁵ However, variations and changes occurred as a result of political pressure, even within rather short periods of time. In 1355 in the imperial city of Frankfurt, for instance, the rules for bakers were put into writing, defining

⁴³ *Deutsche Stadtrechte des Mittelalters*, ed. Gaupp, pp. 68-70; *Stadtbuch Augsburg*, ed. Meyer, pp. 71, 136, 169-170; *Recht der Reichsstadt Rottweil*, ed. Greiner, §83; *Nürnberger Polizeiornungen*, ed. Baader, pp. 275-282, 288-289; Rat der Reichsstadt Nürnberg, *Reformation* (1484) tit. 35; Rat der Reichsstadt Worms, *Reformation* (1509), fol. 73r-5r, 86v; Rat der Reichsstadt Frankfurt, *Reformation* (1578), pp. 226-233; Rat der Reichsstadt Frankfurt, *Reformation* (1588), last chapter; Rat der Reichsstadt Frankfurt, *Reformation* (1611), pp. 546-552; Rat der Reichsstadt Ulm, *Bawordnung* (1612), pp. 22-42; Rat der Reichsstadt Ulm, *Reformirte Bau-Ordnung* (1683), pp. 12, 25-29; Tucher, *Baumeisterbuch* (1464-1475), pp. 113-114, 227-228, 231. See also Bauer, *Bauch der Stadt*, pp. 58-106; Dirlmeier, ‘Historische Umweltforschung’, pp. 223-228; and Rawcliffe, *Urban Bodies*, pp. 116-175.

⁴⁴ *Stadtbuch Augsburg*, ed. Meyer, p. 71 (before 1276). Terms such as ‘night carter’ were used to denote the work undertaken after dark in Nuremberg, where this kind of cleansing was limited to the colder period between late autumn and early spring: Burger, ‘Eid und Ordnung’, pp. 684-6; Stadtarchiv Nürnberg, B 1/II no. 942. For the medieval concept of corrupt air see, for example, Konrad [von Megenberg], *Buch der Natur*, pp. 63-64, 72-74v; and pp. 19-20 above.

⁴⁵ *Deutsche Stadtrechte des Mittelalters*, ed. Gaupp, pp. 69-70 (Strasbourg); Rat der Reichsstadt Straßburg, *Policeij Ordnung*, Appendix 8-9.

certain preconditions for keeping pigs inside the walls.⁴⁶ In accordance with ancient customary law, all bakers with the right to wear armour were granted permission to own eight pigs, whereas council members could have twelve.⁴⁷ These regulations reflected the outcome of negotiations between members of the guilds and the traditional patrician council in a conflict concerning the distribution of power.⁴⁸ The number of licensed pigs dropped to four and eight respectively in 1366, by which time guild members had lost much of their influence.⁴⁹ After a similar period during which the emperor, governing elites, and artisans negotiated new guild regulations, the approved quotas rose again to eight and ten; in addition, poorer citizens, namely all bakers in half-armour, were now included and allowed to keep four pigs in 1377.⁵⁰ Most probably also signalling a compromise, the period allowed for fattening pigs was limited, starting at the end of August and ending on 8 December in 1372 and at Christmas in 1377.⁵¹

The concern over pigs in the urban environment was associated with both representational and public health issues, as is particularly apparent in August 1481, when the councillors of Frankfurt underlined the fact that it ranked among the ‘honourable’ imperial cities. According to them, this necessitated keeping public places ‘*in erbarkeit und reynikeit*’ (respectable and clean). In this context, roaming pigs and their dung would cause bad odours, through which, as the councillors pointed out, ‘unhealthy conditions’ and ‘disregard’ would eventually ensue. To avoid such evils, everybody living in the old urban centre, irrespective of craft or status, was ordered to sell or slaughter all pigs of whatever size no later than St. Martin’s day (11 November) or to keep them in the suburbs.⁵² Only a few years later, in 1485, a connection between the ban on pigs and public health was articulated even more concisely by the patrician council of Nuremberg.⁵³ It considered the restrictions on the lawful

⁴⁶ The late medieval population of Frankfurt fluctuated around 10,000 inhabitants: Eheberg, ‘Strassburg’s Bevölkerungszahl’, pp. 56-66, 191-199.

⁴⁷ *Frankfurter Amts- und Zunfturkunden*, ed. Schmidt, p. 19.

⁴⁸ Kriegk, *Frankfurter Bürgerzwiste*, pp. 22-80.

⁴⁹ *Frankfurter Amts- und Zunfturkunden*, ed. Schmidt, p. 22; Kriegk, *Frankfurter Bürgerzwiste*, p. 81.

⁵⁰ *Frankfurter Amts- und Zunfturkunden*, ed. Schmidt, p. 25; Kriegk, *Frankfurter Bürgerzwiste*, pp. 81-103.

⁵¹ *Frankfurter Amts- und Zunfturkunden*, ed. Schmidt, pp. 19-31, 52.

⁵² *Frankfurter Amts- und Zunfturkunden*, ed. Schmidt, pp. 30-31.

⁵³ Late medieval and early modern Nuremberg, one of the largest imperial cities, counted between c. 20,000 and 35,000 inhabitants, plus the same number in its hinterlands: *Stadtlexikon Nürnberg*, Lemma *Bevölkerungsentwicklung*.

owning of pigs by bakers and the removal of others beyond the walls to be insufficient because these animals continued to generate ‘noticeable aversion, stench and complaints’. This, the council assumed, might have resulted, and still could result, in the ‘sickness of men and epidemic diseases’.⁵⁴

Flexibility regarding the modification of rules was also necessary to allow for more immediately pressing considerations of common wealth, such as the provision of an adequate food supply, as underpinned by some early modern examples. When meat became scarce and very expensive north of the Alps during the second half of the sixteenth century, urban governments reacted in various ways.⁵⁵ A relaxation of the legal requirements for keeping pigs and other animals in cities was among the measures taken. In 1595 the councillors of Frankfurt loosened these restrictions and even granted hired bakers permission to own pigs for domestic use, as well as geese and small livestock that could be fed on bran.⁵⁶ Such waivers could increase in periods of dearth during the Thirty Years’ War, simply to prevent starvation. In 1628, the council of Strasbourg, for example, permitted all residents to raise pigs, so long as they remained outside the city centre.⁵⁷

A pragmatic handling of rules was not the only means of survival in imperial cities. The governors also showed in their political actions how expediently they learned from environmental hazards.⁵⁸ This is illustrated by descriptions of bad weather and reports of attendant political activities in chronicles, rather than by surviving legislation.⁵⁹ The winter of 1442/3 saw extremely cold temperatures, when rivers and creeks in Swabia and Bavaria froze over and most mills stopped working. For three weeks no bread could be produced in

⁵⁴ *Nürnberger Polizeiordnungen*, ed. Baader, pp. 283-284.

⁵⁵ For problems with meat provision in Southern Germany, see Kinzelbach, *Gesundbleiben, Krankwerden, Armsein*, pp. 52, 110; Pfister, *Klimageschichte der Schweiz 1525-1860*, pp. 83-84.

⁵⁶ *Frankfurter Amts- und Zunfturkunden*, ed. Schmidt, p. 52. Poorer bakers did not produce and sell bread independently, but received grain from citizens or the governors in order to bake it and were compensated for their work.

⁵⁷ Rat der Reichsstadt Straßburg, *Policeij Ordnung*, Appendix 8-9; and for dearth in imperial cities in 1628, Kinzelbach, *Gesundbleiben, Krankwerden, Armsein*, pp. 125-126.

⁵⁸ For a recent analysis of ‘security policy’, including the handling of natural catastrophes, see Kampmann and Niggemann, *Sicherheit in der Frühen Neuzeit*; and especially Rüther, ‘Zwischen göttlicher Fügung’.

⁵⁹ That no connection was made between the two in the chronicles is important because of the chroniclers’ general bias: Rogge, ‘Vom Schweigen der Chronisten’.

Augsburg and trade was severely inhibited by snowfall.⁶⁰ In response, the city councillors fixed bread prices, prohibited its export, and then sent the hungry ‘poor’ to prepare a pathway through the snow and ice to the only working mill in the vicinity, about sixteen kilometres away.⁶¹ The governors also requested all abbots, abbesses, and heads of other religious houses to supply their carts and waggoners to transport the grain to the mill and then return with the flour, in order to make bread. Yet the council was not satisfied with such an *ad hoc* solution to a potentially recurrent problem. Six years later, an ambitious project was started to divert the only creek that previously had not been frozen, the Sinkelt, into Augsburg, where an additional mill was built.⁶² Political efforts to secure the food supply, especially of bread, are sometimes seen as a placatory form of action.⁶³ Yet physicians and other leading inhabitants of sixteenth-century imperial towns were acting in response to ancient and medieval concepts of health; they also provided arguments in support of such initiatives by emphasizing that persons who were underfed and living in poor conditions were most at risk of falling victim to (epidemic) disease.⁶⁴

The implementation of rules by officers and servants

The above-mentioned statutes and regulations and the discovery of sustainable solutions to environmental problems show that governors shared political awareness that the environment, public health, and general welfare were interrelated. Further evidence for ‘policing the environment’ can be found in the mere existence and increasing specialization of offices and services that were designed to implement these rules. Even at the outset they involved citizens in the highest echelons of government. The following section of this chapter demonstrates how, during the late medieval period, the relevant offices were hierarchically occupied by magistrates, concerned tradesmen, and knowledgeable artisans. Indeed,

⁶⁰ *Chroniken 2* [Zink], ed. Bayerische Akademie, pp. 159-161, 179-181.

⁶¹ Augsburg Stadtarchiv, *Ratsdekrete* 1442, II, fols. 13a, 17b, 19a; *Baumeisterrechnungen* 1442, fols. 1a, 27a; citation from *Chroniken 2* [Zink], ed. Bayerische Akademie, pp. 180-181, note 1.

⁶² *Chroniken 2* [Zink], ed. Bayerische Akademie, pp. 179-181, 187. The chronicler Burkhard Zink (d. c. 1475) does not suggest a connection between these events, but one is obvious.

⁶³ Reinhardt, *Überleben in der frühneuzeitlichen Stadt*, pp. 37-254; Slack, ‘Dearth and Social Policy’.

⁶⁴ Kinzelbach, ‘Infection, Contagion, and Public Health’, pp. 384-386 (for the Holy Roman Empire); Henderson, ‘Black Death’, pp. 138-143; and Carmichael, *Plague and the Poor*, pp. 116-125 (for Italy); Rawcliffe, *Urban Bodies*, Chapter five (for England).

environmental, communal services multiplied, and from the very beginning were assigned to persons at the margins of society.⁶⁵

Among the highest-ranking officers in imperial cities and towns were the *Bauherren* (governors of construction), *Baumeister* (master constructors or builders), and *Geschworene Schauer der Gebew vnd vrbew* (sworn inspectors of constructions and dilapidation). A small team of council members, often including the ‘old’ burgomaster and an expert artisan, was elected or nominated.⁶⁶ In late medieval Nuremberg, as well as in early modern Augsburg and Regensburg, members of well-known trading families, such as the Tuchers and the Fuggers, were attracted to the demanding post of *Baumeister*.⁶⁷ The number of officers varied between five and one, irrespective of the number of inhabitants; tasks and responsibilities also varied over time and place.⁶⁸ This does not simply indicate fluctuations in workload, or so at least my tentative analysis of the early modern protocols (decisions, reports, and notes) of these officers in Ulm suggests. There, the same number of two councillors and one, sometimes two, ‘work masters’ was confronted by challenges that could differ tremendously in scope. In some years, they seemingly only adjudicated a few conflicts, especially over cesspits and the disposal of waste water.⁶⁹ In certain decades, by contrast, they inspected buildings, ovens, firesides and chimneys, wells, fountains and bath houses, cesspits, and other

⁶⁵ The involvement of urban officials in legal processes is especially apparent in rituals surrounding the promulgation of death sentences: *Oberrheinische Stadtrechte*, ed. Geier and Badische Historische Kommission, II, pp. 160-162.

⁶⁶ Imperial towns and cities seemed to appoint the officers to permanent positions, in contrast to towns belonging to territorial parts of the Holy Roman Empire: Dirlmeier, ‘Zum städtischen Bauwesen’, pp. 352-353. In Augsburg they were elected from the ‘small’ council: Augsburger *Baumeisterrechnungen*; Schumann, *Verfassung*, pp. 44-45; Augsburg Stadtarchiv, Ratsprotokolle 15, fols. 68r, 115r-16r; Collegium Medicum, *Acta die Stadt- auch Pest- Physicos* betr. 20.11.1597. In Nuremberg and Ulm a close collaboration between council members and expert artisans was established: Tucher, *Baumeisterbuch*, ed. Lexer and Weech; Ulm Stadtarchiv, A [6799]-[6783].

⁶⁷ Tucher, *Baumeisterbuch*, ed. Lexer and Weech; Bauer, *Zeitungen vor der Zeitung*, p. 54; Meixner, ‘Regensburg’, p. 1743. A comparative study of this office and its occupants unfortunately does not exist. It could explain local variations in numbers, which most probably were caused by divergent responsibilities and political objectives.

⁶⁸ Augsburger *Baumeisterrechnungen*, p. 8; Guex, *Bruchstein, Kalk und Subventionen*, pp. 10-26. Zürich was a middle-sized imperial city: Schneider, ‘Stadtgründung’, p. 252. See further, Roeck, *Stadt*, pp. 264-267; Kopp, ‘Das Einnehmer- und das Baumeisteramt’, pp. 12-66; Fouquet, *Bauen*, p. 148; and Bauernfeind, ‘Baugericht’.

⁶⁹ Ulm Stadtarchiv, A [6779], single cases over the years 1487-1573.

items of sanitation, and they gave consent or advice on various installations, from shutters to privies and ditches, offering mediation in conflicts over these structures between neighbours. Although a fluctuation in the number of cases, from three in 1574 to almost 300 in 1626, followed by 36 in 1627, and none in 1628, in part reflects the survival of only fragmentary protocols and the impact of war, the context also indicates increasing and diminishing workloads, which rose and fell according to changes in tasks and responsibilities throughout the period between the late fifteenth and early eighteenth century.⁷⁰

Late medieval official protocols of the *Baumeister* also describe how responsibilities and tasks were assigned. In Nuremberg the offspring of a patrician and merchant family, the councillor Endres Tucher (1423-1507), was nominated *Baumeister* in 1461. In contrast to most *Baumeister* in other cities, Tucher was relieved of the duty of settling disputes in his field because a specific court existed in Nuremberg – the *Baugericht*. Moreover, he was in every respect supported by an experienced ‘*schaffer und anschicker*’ (work master and organizer). Together, between 1464 and 1475, they reported in detail on their observations and activities, including the responsibilities of all those men who assisted in safeguarding, maintaining, repairing, preserving, and cleaning rooms and houses belonging to the public, bridges and streets, water pipes and fountains, waterways, ditches, canals for transporting fresh water, and sewers.⁷¹ The diversity of tasks and the division of work and costs is best illustrated by the following two examples.

Although the cost-by-cause principle (*Verursacherprinzip*) was widely adopted in Nuremberg, Tucher’s notes in the protocols show that such an approach did not foster a lenient application of the rules.⁷² This is clearly apparent from the highly organized cleansing and repair of a brook diverted into a main ditch, the ‘*Fischbach*’, which served for transporting fresh water. The disposal of faeces and waste water into this brook was therefore forbidden inside the city, yet in 1466 a proclamation still banned the use of its water for preparing food.⁷³ As was the case elsewhere, this partly natural, partly artificial watercourse

⁷⁰ Ulm Stadt Archiv, A [6779], [6780].

⁷¹ Tucher, *Baumeisterbuch*, ed. Lexer and Weech, pp. 17-333. His report was edited in 1880 and has since been consulted by many historians, most recently Rütger, ‘Zwischen göttlicher Fügung’.

⁷² The less severe application of rules in cases involving privately financed facilities and hygienic measures is suggested by Bauer, *Bauch der Stadt*, pp. 81-160.

⁷³ Malting and the preparation of dough are mentioned explicitly: *Nürnberger Polizeiordnungen*, ed. Baader, p. 277.

was cleaned and renovated annually during the cooler autumnal season.⁷⁴ The precise dates were announced twice during mass in the cathedral eight days in advance, with a call to the public to assist. Tucher delegated most of the organizational work to a scribe and three ‘*Fischbach*’ masters nominated by him: a brewer, dyer, and tanner, who each had a stake in maintaining a flowing water supply and clean ditch. After the cleansing operation and the removal of the muck from the city, the ‘*Fischbach*’ masters, in cooperation with Tucher, organized repair work on the wooden floor and on the stone embankments. Finally, the three ‘*Fischbach*’ masters, two ushers (‘*püttel*’), and the scribe collected money from those living and working along the ditch to cover the expenses. Since Tucher and the masters aimed at sustainability, they selected and paid a journeyman for undertaking a daily patrol of this valuable resource.⁷⁵

Aesthetic appearances and ‘making the city green’ also featured among the responsibilities documented in the official protocols of the *Baumeister*. Tucher reports having organized and paid for the planting and replanting of 132 lime trees in marketplaces and church yards, as well as in hospital precincts and recreational areas in 1468 and 1470.⁷⁶ The appreciation of green and pleasant sights – or rather distress because of their destruction – is illustrated in.⁷⁷ In this image of the bleak landscape that once was the leprosy complex of Nördlingen, including the plague and pox hospitals, all of which had been destroyed as a defence measure in 1647, we can see that the citizens did not only regret the loss of buildings, here depicted as rubble. The artist also painstakingly recorded each and every tree and bush that had been cut down in this now ‘dreary place’: in the gardens behind the baths and the plague hospital, and in the church and graveyard.⁷⁸ As we have already seen in the course of this volume, visual impressions played an important role in medieval and early modern concepts of health, most notably in the context of intromission theory.⁷⁹

⁷⁴ In Ulm the question of funding for maintenance and cleaning was frequently discussed: Ulm Stadtarchiv, A [3016], [3338].

⁷⁵ Tucher, *Baumeisterbuch*, ed. Lexer and Weech, pp. 230-237.

⁷⁶ Tucher, *Baumeisterbuch*, ed. Lexer and Weech, pp. 290-291.

⁷⁷ My thanks to Patrick Sturm for sharing this photograph: Nördlingen Stadtarchiv, *Salbuch Johannis Pflege*.

⁷⁸ In another picture the buildings and trees are depicted before their destruction. Beginning in 1650, the complex was reconstructed: Nördlingen Stadtarchiv, *Salbuch Johannis Pflege*; Kinzelbach and Sturm, ‘Siechenhauskomplex vor den Toren Nördlingens’.

⁷⁹ Konrad von Megenberg (1309-1374) associates impressions received via the eyes with the transmission of disease (besides bad air, fog, and corrupt water): Megenberg, *Buch der Natur*, Chapters vii, ix, xiv-xvii, xxv,

8.1. Ruined leprosy complex with tree stumps, Nördlingen, 1647

Furthermore, buildings and the overall appearance of a city contributed to its self-image, as is apparent from the urban panegyrics to be found in contemporary chronicles and verse.⁸⁰ In imperial cities the *Baumeister* were responsible for many initiatives for transforming the environment into a representation of power, community, hygiene, and order.⁸¹

The interventions by the *Bauherren* or *Baumeister*, and what they paid others in regular or lump sums, should be apparent from their account books, which have been preserved in several archives.⁸² The information available from early accounts is not,

xxx. See also most recently, Gertsman, 'Multiplikation des Todes', p. 109; Biernoff, *Sight and Embodiment*, pp. 48-52; Kinzelbach, 'Infection, Contagion, and Public Health'; Kinzelbach, *Gesundbleiben, Krankwerden, Armsein*, pp. 99-102, 138, 143, 160, 298, 388; and pp. 22-23, 52-54, 99-100 above.

⁸⁰ Delarue, 'Bild Augsburgs als Stadt', pp. 37-38; Arnold, 'Städtelob und Stadtbeschreibung'; Schilling, 'Grammatiken der Repräsentation'; Meyer, 'Mächtige Mauern'; Roeck, *Elias Holl*, pp. 61-84. See also pp. 45-55 above.

⁸¹ Tucher, *Baumeisterbuch*, ed. Lexer and Weech; Ulm Stadtarchiv, A [6779], [6780], [6781], [6782], [6783]. See also the documentation in Guex, *Bruchstein, Kalk und Subventionen*, pp. 27-38, 139, 158, 164, 184-193.

⁸² 'Augsburger Baurechnungen', ed. Hoffmann; Guex, *Bruchstein, Kalk und Subventionen*; Gödel, 'Jahresrechnungen des Bamberger Stadtbauhofes'; Sander, 'Lüneburger Bauamtsrechnungen'; Dirlmeier, 'Zum städtischen Bauwesen'; Fouquet, *Bauen für die Stadt*; Augsburg Stadtarchiv, *Baumeisterrechnungen 1320-1806*; Frankfurt Institut für Stadtgeschichte, *Baumeisterbücher 1435-1442*; Ulm Stadtarchiv, *Baumeisterprotokolle A*

however, easy to disaggregate. For instance, during the 1320s the two *'bavmaister'* in Augsburg merely listed income and expenditure by dates and names, without necessarily mentioning the activities or purposes involved. It is clear that money was being spent on services and workmen, on constructing and repairing streets, ways, and bridges, and on public buildings. There were, moreover, investments in works on the river Lech and on water and sewage channels.⁸³ The two following examples show that entries in these accounts need to be supported by background information in order for us to establish any viable connection with prophylactic measures.

Payments to the hangman, for instance, feature among the regular disbursements.⁸⁴ Only in exemplary cases during the early 1320s are the costs broken down into specific items, such as wages, executions, or the cleansing of the sewers under public privies.⁸⁵ Without the above-mentioned legislation of 1276, we would not be able to appreciate the hangman's versatility. However, his tasks changed. In larger cities an increasing number of artisans, workers, and individuals providing public services shared these responsibilities. In late medieval Nuremberg teams of 'night masters' emptied and cleaned cesspits and privies.⁸⁶ The governors of Frankfurt introduced a *Grabenfegere* (cleaner of ditches), *Stöcker* (prison guard and controller of prostitutes), *Heymlichkeitfegere* (privy cleaner), and groups of *Kübelweiber* (tub women) to assist in the removal of dirt and faeces.⁸⁷ In Augsburg the accounts also confirm that more specialists were appointed and that expenditure on them increased. The *Scheyfelmaister* (shovel masters), for instance, had to clean streets, alleys, and nooks. In the years between 1493 and 1502 they received allowances for themselves and for

[6779]-[6783]. Less conclusive but still valuable information comes also from general accounts compiled in smaller towns, such as Nördlingen Stadtarchiv, *Stadtkammerrechnungen* 1430-1613; Überlingen Stadtarchiv, *Stadtrechnungen* 1377-mid eighteenth century.

⁸³ 'Augsburger Baurechnungen', ed. Hoffmann, pp. 8-189, 201-220; he also identified problems of interpretation (pp. 2-7). The earliest accounts of Augsburg, which were general account books, have been published by Voigt, *Augsburger Baumeisterbücher*, vol. 2; those up to the second half of the fifteenth century are presently being prepared for an online edition: see Würz, 'Konzeptionelle Überlegungen', for ongoing projects.

⁸⁴ 'Augsburger Baurechnungen', ed. Hoffmann, pp. 56-58, 61, 66, 68-69, 83, 97.

⁸⁵ 'Augsburger Baurechnungen', ed. Hoffmann, pp. 56, 61, 83.

⁸⁶ Burger, 'Eid und Ordnung'.

⁸⁷ *Frankfurter Amts- und Zunfturkunden*, ed. Bücher, II, pp. 93-111, 127; Bauer, *Bauch der Stadt*, pp. 144-146, 151.

the purchase of new brooms which are comparable to the disbursements on ‘paving masters’. The payments to the cleansing specialists, however, increased far above average by more than twenty-fold during the following century.⁸⁸

In contrast, the executioner’s work remained multifaceted in smaller towns such as Überlingen during the sixteenth and seventeenth centuries.⁸⁹ Here the *Nachrichter* (hangman, executioner) was remunerated not only for executing felons and administering corporal punishment, but also for activities with which we are familiar from earlier periods in large cities, although his supervision of prostitutes ceased, while other responsibilities concerning public health and oversight of the poor were added.⁹⁰ He was paid to empty cesspits and to clean streets, public places, and the grain market hall. Later his duties were transmuted to supervising the *bettelvogt* (beggars’ reeve) in the performance of these tasks. In addition, the executioner had to dispatch stray dogs and received compensation for skinning cattle, and removing and burying their carcasses. Perhaps as a result of his close contact with animals in Überlingen and its vicinity, he was also required to report any diseases among them. The executioner legitimately earned money as a healer (on the condition that he did not resort to black magic); and presumably because of this expertise he participated in the surveillance of the non-resident poor and of ‘lepers’, two interconnected groups which many well-established residents of the Holy Roman Empire (as elsewhere) considered a risk or a threat.⁹¹ Indeed, during the annual ‘*Armenfest*’ (festival of the poor) on All Saints and All Souls day, he was part of a team charged with safeguarding the community against the

⁸⁸ Augsburg Stadtarchiv, *Baumeisterbücher* 1493-1502, nos. 87-96; Ratsprotokoll 21, fol. 25v (2). Their expenses increased from 171 florins in 1495 to 4111 florins in 1606/7. The average rise in cost of other personnel was about six-fold: see graphs and tables in Kopp, ‘Das Einnehmer- und das Baumeisteramt’, pp. 90, 191-213.

⁸⁹ About 3000 people lived in the imperial town of Überlingen and a similar number in its hinterlands: Kinzelbach, *Gesundbleiben, Krankwerden, Armsein*, pp. 57-70.

⁹⁰ Ulm Stadtarchiv, A 3988, 3669, fols. 416r-418r. In Ulm, for example, the hangman was replaced by an officer charged with the oversight of prostitutes who was supervised by the *Bettelherrn* (lords of the beggars): Jäger, *Juristisches Magazin*; Roper, *Fromme Haus*, pp. 87-112; Schuster, *Freien Frauen*, pp. 102-120; Schuster, *Frauenhaus: Städtische Bordelle*, pp. 27-28, 83-110.

⁹¹ Since Thomas Fischer’s thorough analysis of poor relief in *Städtische Armut*, similar studies have multiplied, but only a few have connected the topics of poor relief and leprosy. See, for example, Jütte, ‘Stigma-Symbole: Kleidung als identitätsstiftendes Merkmal’; and more recently Dross and Kinzelbach, ‘Fremdheit und Aussatz’; and Landolt, ‘Marginalisierung zur Kriminalisierung’, pp. 66, 71, as well as pp. 303-304 below.

presence of several thousand vagrant paupers, including those from neighbouring villages and towns.⁹²

In other cases, legal amendments and evidence from later sources can help to flesh out the significance of brief entries in medieval accounts. In 1321, the lease of a house to the ‘*Wundarzet*’ (surgeon) master Heinrich is mentioned in the accounts of the *Baumeister* of Augsburg.⁹³ Over the following years Heinrich was paid for looking after wounded soldiers, as what was evidently part of a wider initiative.⁹⁴ Certainly, at about the same time, new paragraphs amended the laws concerning assault and made arrangements for surgical care.⁹⁵ Early modern accounts, administrative files, and protocols of decisions made by the councils and subordinate bodies further illuminate the role of the *Baumeister* with regard to public health in general. Each year they spent sums amounting to more than 10,000 florins (the value of about ten large houses) on communal hospitals where people suffering from stigmatized diseases might be treated.⁹⁶ These officials also regularly engaged the services of between four and seven surgeons, three and seven physicians, and twelve and 32 midwives and matrons or ‘sworn women’. They also paid quarterly allowances to them and lump sums to other medical personnel, including travelling healers.⁹⁷ When health commissions were established, the *Baumeister* mostly represented, or acted as, the formal head.⁹⁸

⁹² Überlingen Stadtarchiv, 55, no. 161; 77, no. 760; 78, no. 809; 79, no. 820; *Urfehden-Buch*, 1588-1626, fols. 257r-258r; *Oberrheinische Stadtrechte*, ed. Geier and Badische Historische Kommission, 2, pp. 227-228. A similar festival is recorded about 100 kilometres away from Überlingen in the imperial town of Memmingen, where in 1458 about 1100 persons participated in a comparable event: Schorer, *Memminger Chronick*, pp. 24, 76.

⁹³ ‘Augsburger Baurechnungen’ 1321, ed. Hoffmann, p. 13.

⁹⁴ ‘Augsburger Baurechnungen’, ed. Hoffmann, pp. 67, 69, 78, 93, 182.

⁹⁵ *Stadtbuch Augsburg*, ed. Meyer, p. 115. For the public duties of surgeons in early modern Ulm, see Kinzelbach, *Chirurgen und Chirurgiepraktiken*, pp. 7-34.

⁹⁶ For stigmatized diseases, see Kinzelbach, ‘“Schau” und Kontext’, pp. 275-282.

⁹⁷ Augsburg Stadtarchiv, Baumeisterbücher 1493-1567, nos. 87-160; Ratsprotokoll 14, fol. 167r; 15, fol. 116r; 36, fol. 67v (2); St. Martinstiftung, VII, 55; Collegium Medicum, Hiesige Ärzte, 26.4.1548, 10.12.1548, 4-9.2.1595, 10.12.1613, 7.6.1614, 12.6.1614; Collegium Medicum, Pfuscher betr. 1562-1793, fasc. 8 (1637).

⁹⁸ Augsburg Stadtarchiv, Collegium Medicum, Acta die Stadt- auch Pest- Physicos betr., fols. 1r-5r, and 29.8.1596, 28.11.1596, 10.12.1598, s. f.; Collegium Medicum, Deputatio ad officium Sanitatis, nos. 113, 309-310, 315-316, 323-324, 327-331; Collegium Medicum, Acta ad Materiam Contagionis, 19.7.1614, 21.8.1625, 10.6.1649, 18.9.1649.

Negotiating and policing the urban environment

Awareness of environmental hazards and their potential threat to human health cannot be limited to the premodern elite. A wider appreciation of such problems is illustrated in petitions from individuals and ‘neighbourhoods’, and in disputes between individual inhabitants or groups with conflicting interests, all of them increasingly recorded in council protocols and in the files of civic courts and accounts of mediation procedures in all imperial cities and towns. Depending on political preferences and archival tradition, such documents are preserved mainly among the reports of daily decisions of the council and corresponding administrative material, in files preserved in the context of building maintenance, or in books or files kept by the clerks of the *Baumeister*.⁹⁹ As we have already seen in Chapter Five, the settlement of disputes by arbitration or negotiation before they escalated into open conflict played a crucial role in maintaining the cohesion of the urban body. The belief that both physical and spiritual health involved concern for one’s neighbours and community was taken seriously at all levels. In purely pragmatic terms, policing at this time relied heavily upon the readiness of men and women to accept the need for compromise, and of officialdom to provide the necessary mechanisms for disagreements to be adjudicated at an early stage, especially if they concerned potentially hazardous sanitary nuisances.

The early documentation of legal practices provides information on discord between neighbours regarding issues such as access to ‘light’ and the draining away of waste water. In 1307, for instance, two quarrelling neighbours in Frankfurt received a sentence settling their dispute about the disposal of gutter water and obstructions to windows admitting natural light.¹⁰⁰ The attendant concerns over gutter water included the financial cost of guarding

⁹⁹ Ratsprotokolle in, for example, Augsburg, Nördlingen, Ulm, and Überlingen. Protocols of the *Baumeister* are seldom preserved as continuous series; often they exist as samples from several decades. For example, in Augsburg Stadtarchiv, *Baumeisteramt Protokolle* 1534-1546; in Frankfurt Institut für Stadtgeschichte, *Baumeisterbücher* 1435-1442; in Nürnberg Stadtarchiv, B1, I, 1-2, 1455-1468, 1500-1544; and supplementary B1, I, 6-8, *Brunnenbücher* 1419-1459, 1479; *Baumeisterbüchlein von den Röhrenbrunnen* 1501 (online research Bestände, B and relevant keywords). For some years the books deal with conflicts in Nuremberg: Nürnberg Stadtarchiv, B 14/III, nos. 96-8 (1558-1584). In Ulm protocols exist: Ulm Stadtarchiv, A [5710], [6779-6783] 1427-1702; and other files such as A [3016], [3338]. In Frankfurt, Bauer, *Bauch der Stadt*, also made use of specific legal files; records about individual buildings provide additional evidence of conflicts.

¹⁰⁰ Frankfurt Institut für Stadtgeschichte, Hausurkunden 1.637, fol. 1r (8.03.1307), Faust iServer, online keyword ‘Licht’.

against wet and mouldering walls.¹⁰¹ However, here also aspects of individual and public health are touched upon: such water was often transported in open or closed stone channels, together with wastewater from kitchen sinks or even from artisans' shops, provoking quarrels about contamination and miasma which are reported from the fifteenth century onwards.¹⁰² More detailed procedures for the settlement of contentious issues are recorded from the 1500s onward.

Councillors in some cities considered noise as a health threat for 'people, especially pregnant women, women in childbed, [and] ill persons'.¹⁰³ Processes of mediation between artisans and councillors concerning a reduction of this type of nuisance, in which other inhabitants supposedly were involved, are sometimes described in amended guild statutes and regulations. Between 1403 and the 1540s such amendments affected the *bender* (coopers, barrel makers) in Frankfurt. In particular, explanations and justifications recorded in the surviving sources hint at negotiations behind the scenes, at the resistance strategies deployed by artisans and, finally, at the guarded political approaches employed to overcome them.¹⁰⁴ In August 1402, the councillors bluntly imposed a one-year deadline on all barrel makers in the old centre for the transfer of their homes and workshops into the artisans' quarter, the *bendergasse*. The only alternative solution suggested was to move to the suburbs.¹⁰⁵ This ruling was not copied into the main guild book, but a revision of November 1403 offered a compromise. All artisans who either inhabited inherited houses or who had worked for more than ten years outside the *bendergasse* received permission to remain there for life, on condition that they made less noise by giving up the production of large barrels, which was

¹⁰¹ Such concern is clearly expressed in regulations: Rat der Reichsstadt Nürnberg, *Reformation* (1488), fol. 82v; Rat der Reichsstadt Worms, *Reformation* (1509), fol. 74r; Rat der Reichsstadt Frankfurt, *Reformation* (1578), fols. 222v-223r, 227v-228r; Rat der Reichsstadt Ulm, *Bawordnung*, p. 28.

¹⁰² Frankfurt Institut für Stadtgeschichte, Hausurkunden 13 (13.10.1441), 19 (09.07.1460), Faust iServer, online keyword 'Regenrinne'; for later conflicts, see Bauer, *Bauch der Stadt*, pp. 72-105; Nürnberg Stadtarchiv, F5, 3/II, fol. 240r (01.04.1590), B1/II, 593 (1610). See also Dirlmeier, 'Historische Umweltforschung', p. 223.

¹⁰³ Proclamations against the noise caused by firearms in 1471, 1485, and 1492: *Nürnberger Polizeiordnungen*, ed. Baader, p. 54. Dirlmeier, 'Historische Umweltforschung', pp. 223-225, mentions time slots allocated for noisy occupations. See also pp. 165-167 above.

¹⁰⁴ *Frankfurter Amts- und Zunfturkunden*, ed. Schmidt, pp. 90-123.

¹⁰⁵ *Frankfurter Amts- und Zunfturkunden*, ed. Schmidt p. 103, note 1. This first attempt was ahead of Alberti's recommendation that noisy trades should be confined to separate quarters: Rodenwaldt, *Alberti, ein Hygieniker der Renaissance*, p. 31. For late medieval England, see Rawcliffe, *Urban Bodies*, pp. 163-168.

henceforth to be confined to the previously assigned quarters. The council also aimed at the gradual elimination of all workshops outside the *bendergasse* by introducing two rules for permanent closure: the shutdown of premises after more than a year and a day without regular business and similarly after the death of an artisan without direct male or female heirs.¹⁰⁶ However, a century later in 1506, an ‘open council’ implicitly admitted that their noise-reduction policy had failed, by naming seventeen barrel makers still operating outside the designated area and by conceding that they had permission to continue their workshops with the use of (small) beaters during their lifetimes. By introducing the caveat ‘but no longer’, the governors tried to push towards a more effective segregation of crafts.¹⁰⁷ Five days later, a paragraph in the record hints at the evasive tactics of the artisans and the legitimization strategies of the councillors, as well as a move toward compromise, as the barrel makers somewhat disingenuously claimed ignorance of the legislation and voiced fears of sustaining ‘ruinous damage’. The councillors in turn referred to the ‘noticeable complaints of our citizens’ when insisting that the barrel makers should move to the assigned quarters. At the same time, the governors underscored their leniency in accepting ‘ignorance’ and ‘fear of ruin’ as a valid defence and permitted the named individuals to continue working with beaters for the rest of their lives. Nevertheless, to prevent subsequent evasion, the guild was assigned the task of keeping each new master informed about the rules. To enforce legislation in future and to convert prescription into practice, the threat of punishment was extended from the individually transgressive master to the imposition of additional fines upon the whole guild.¹⁰⁸ The fact that one generation later, in 1544, the barrel masters living outside the *bendergasse* were given just one year to transfer their workshops could reveal two different processes in Frankfurt.¹⁰⁹ It could be seen as evidence of an increasingly rigid approach by the council, but might also indicate an increase in pressure from indignant neighbours to which the councillors had reacted.¹¹⁰

That neighbours and neighbourhoods applied pressure on the governments of imperial cities and towns to free the environment from supposed health threats is recorded in many instances. Complaints and requests concerned artisans such as bakers and their pigs, barrel

¹⁰⁶ *Frankfurter Amts- und Zunfturkunden*, ed. Schmidt, p. 95.

¹⁰⁷ *Frankfurter Amts- und Zunfturkunden*, ed. Schmidt, p. 106.

¹⁰⁸ *Frankfurter Amts- und Zunfturkunden*, ed. Schmidt, pp. 103-104.

¹⁰⁹ *Frankfurter Amts- und Zunfturkunden*, ed. Schmidt, p. 112.

¹¹⁰ Schmidt, *Wandelbare Traditionen*, pp. 142-147.

makers (as mentioned above), beer brewers, smiths, and tanners.¹¹¹ Residents also petitioned against unsafe structures, the management of hospitals and nursing homes, and the situation of buildings occupied by grave diggers; they likewise insisted that burials should take place outside the walls during epidemics.¹¹² The complex process of negotiation between those involved is illustrated in a case against the butcher Hanß Schmidt, who lived in a humble suburb in Frankfurt. In this case Schmidt's opponents evoked public health as an important argument. On 27 September 1621, the *Bauherren* presented a supplicatory letter to the burgomaster and councillors.¹¹³ Eight neighbours stated their full names, while additionally mentioning 'other neighbours in the *Rittergaßen*' and artisans from elsewhere in the suburb of Sachsenhausen. We have seen above that malodorous pig-keeping and noisy trades had been transferred here. Yet even, or rather especially, because of these measures, as the text suggests, residents wanted to eliminate health-threatening environmental hazards. The neighbourhood collectively accused Schmidt, as well as his servants and wife, of illicitly producing gut string in their home and not at the approved places under running water, thereby polluting nearby wells. In particular, the well of the initiator of the complaint was reportedly made 'unclean', as exemplified by a length of gut found recently in it. To compound the nuisance, the butcher apparently kept eleven pigs which were free to roam, consumed disgusting foodstuffs, and even soiled neighbouring houses.¹¹⁴ As a result, the supplicants protested that they could not stay in their homes because of the abominable stench caused by pig faeces and remnants of offal dumped illegally on dung heaps. The first solution proposed was a total ban on the production of gut string, which, as the neighbours pointed out, was particularly desirable in a street already beset by the problem of 'unclean and stinking water in puddles'. They reinforced their argument by stressing that 'such unclean keeping of wells and the abominable and insufferable stench made men and livestock sick'. Indeed, the letter reached its climax by hinting that some people had already fallen ill

¹¹¹ Augsburg Stadtarchiv, Ratsprotokoll 16, fol. 129r (1537); Ratsprotokoll 18, fols. 92r-93r (2), 123v (1544); 33, fols. 10v-11r (2); 34, fol. 10v (1564); Überlingen Stadtarchiv, Ratsprotokoll 1554, fols. 103v-104r. See also Dirlmeier, 'Historische Umweltforschung', pp. 222-223.

¹¹² Quotations are from sources in Trometer, 'Augsburger Pilgerhaus', pp. 36, 40 (1552, 1570). See also Nürnberg Stadtarchiv, B 19, 548; Kinzelbach, 'Women and Healthcare', p. 627; Augsburg Stadtarchiv, Collegium Medicum, Acta ad Materiam Contagionis, 19.07.1614; Nördlingen Stadtarchiv, *Chronik Stoll*, fol. 54r (1521).

¹¹³ Frankfurt Institut für Stadtgeschichte, Ratssupplikation 1621, 2, fols 199r-200r.

¹¹⁴ Frankfurt Institut für Stadtgeschichte, Ratssupplikation 1621, 2, fol. 199r.

and warning that such insanitary behaviour could cause ‘infected’ air, which might spread ‘pestilential disease’ throughout the entire city and beyond.¹¹⁵ The following part of the letter suggests that the *Bauherren* had already tried to placate these outraged residents because they finally proposed an alternative and milder solution, whereby the council would threaten the butcher’s family with substantial fines and remind them of the relevant rules, namely that they should not produce gut strings outside their home or contaminate any wells. Significantly, the supplicants also drew attention to the fact that repugnant waste should only be desposited, as was mandatory, in prescribed places.¹¹⁶ The governors decided to complete the conciliatory process that the *Bauherren* had initiated by empowering them to proceed at their discretion.¹¹⁷

Conclusion

Focusing on imperial cities and towns in the Holy Roman Empire, this chapter has demonstrated that the process of ‘policing the environment’ was rooted in the earliest urban constitutions. It was also linked closely and explicitly to issues of public health from the Middle Ages onward. However, neither specific policies nor the precise nature of this relationship are easy to detect because of the slow transition to written legislation and the even more protracted process of keeping more detailed accounts of political interaction and individual responses. Yet material from a variety of local archives (sometimes in published form) can assist in an analysis of sources that on first sight disclose little relevant information. Additionally, the local context is important for us to be able more fully to understand actions and reactions to sanitary problems.

Legislation enacted in increasingly elaborate formats proves that governors perceived environment-related health threats as an important matter of common welfare, which was closely linked to a religious and moral agenda, as well as to the representation of their towns and cities. They devised preventive measures against the impact of natural forces and tried to avoid risks and nuisances caused by insanitary activities. Yet they did not necessarily achieve a cleaner, quieter, and more pleasing environment. Rather, each government was not only burdened with the duty of keeping the peace and providing justice, but also with the crucial task of balancing basic needs, such as the supply of sufficient and healthy food and fresh

¹¹⁵ Frankfurt Institut für Stadtgeschichte, Ratssupplikation 1621, 2, fol. 199v.

¹¹⁶ Frankfurt Institut für Stadtgeschichte, Ratssupplikation 1621, 2, fols. 199v-200r.

¹¹⁷ Frankfurt Institut für Stadtgeschichte, Bürgermeisterbücher 186, fol. 69v.

water, of supporting the local economy, and of maintaining regular communication with inhabitants in order to be able to appease individuals with opposing interests.

Such communication and the implementation of environmental standards was, in theory, guaranteed by one of the most important and distinguished offices in imperial cities: that occupied by the *Bauherren* or *Baumeister*, who were either exclusively members of the council or were teamed with one or two master artisans. They attended on-site inspections and offered mediation in conflicts between neighbours. Moreover, they were responsible for enforcing necessary controls and supervising or organizing public works. Last but not least, they appointed and paid for most of the officers, artisans, and servants who dealt with environmental and health-related issues. Although some account books attest that increasing sums of money were spent on promoting cleanliness and providing health care, it is nonetheless important to avoid reaching any hasty or sweeping conclusions. A comparative analysis of the activities undertaken by holders of this office could elucidate choices made in different towns and cities over time. However, such studies currently remain wanting.

The increase in the number and extent of written records is accompanied by an increase in the reported participation of individuals and groups from different social classes in matters concerning public health. As expected, chroniclers document their monitoring of the urban environment with increasing frequency from the fifteenth century. Furthermore, complaints from neighbours become an every-day experience for governors in council, at court, and in the relevant urban offices during the sixteenth, seventeenth, and eighteenth centuries. Through their complaints, people explicitly addressed perceived health threats to themselves as well as the public in general. They claimed that such threats resulted from the behaviour of individuals, families, and crafts which deliberately transgressed the rules, or from facilities which gave rise to unpleasant spectacles, evaporations, or effluents, thereby endangering residents' health. My exemplary case study of Hanß Schmidt illustrates how magistrates, neighbours, and culprits negotiated ways in which to find a solution that guaranteed a peaceful and salubrious community. Further research into the transition from oral to written processes will help to trace the fine network of decisive factors involved in sanitary policing.

Finally, I wish to point out that the nature and accidents of survival of most of the records kept by the offices considered above renders them unsuitable for long-term quantitative analysis, not least because of the variable recording habits adopted at different times and in different places. Moreover, the archives of Ulm suggest that no stable foundation exists for such methods because the remit of specific offices, too, changed over time. Even

so, the availability of more content- and context-related analyses of these sources will help us to reach an increasingly profound understanding of what ‘policing the environment’ meant in the Holy Roman Empire.

BIBLIOGRAPHY

Archival sources

Augsburg Stadtarchiv, Reichsstadt:

Baumeisterbücher

Baumeisterrechnungen

Collegium Medicum: Acta die Stadt- auch Pest Physicos betr. von 1548-1786, Fasc. 5; Acta ad Materiam Contagionis von 1708-1780 und Kontagions-Anstalten von 1563 bis 1724; Deputatio ad Officium Sanitatis von 1556 bis 1600, Tom. I; Doctores Med. Collegio Augustano adscriptorum von 1565-1791; Hiesige Ärzte; Pfuscher betr. 1562-1793, Fasc. 8

Ratsdekrete

Ratsprotokolle

St. Martinstiftung, box VII, no. 55

Bayerische Staatsbibliothek:

Meisterlin, Sigismundus, and Hektor Müllich, Augsburger Chronik – SuStB Augsburg 2 Cod H 1 mit Fortsetzung des Hektor Müllich (Augsburg [1457]) <[urn:nbn:de:bvb:12-bsb00090375-7](https://nbn-resolving.org/urn:nbn:de:bvb:12-bsb00090375-7)>

Frankfurt Institut für Stadtgeschichte:

Bürgermeisterbücher

Ratssupplikationen

Nördlingen Stadtarchiv:

Bestand Siechenhaus unverzeichnet 1487

Calculi senatorii

Chronik Stoll

Ratsprotokolle

Salbuch Johannis Pflege

Stadtkammerrechnungen

Nürnberg Stadtarchiv:

B 1/I nos. 938, 941, 957; B 1/II no. 593; B 1/II no. 942; B 19, no. 548; F 5, no. 3/II

Überlingen Stadtarchiv:

Ratsprotokolle

Stadtrechnungen

55, no. 161; 77, no. 760; 78, no. 809; 79, no. 820

Urfehden-Buch, 1588-1626

Spitalarchiv no. 1

Ulm Stadtarchiv:

A 3669, 3680, 3988, [3016], [3087], [3338], [5710], [6542], [6779]-[6783]

Universitätsbibliothek Heidelberg:

Konrad [von Megenberg], *Das Buch der Natur* (University Library Heidelberg, 1442)

[urn:nbn:de:bsz:16-diglit-22050](https://nbn-resolving.org/urn:nbn:de:bsz:16-diglit-22050)

Printed primary sources

Alberti, Leon Battista, *De re aedificatoria. Mit Widmungsbrief an Lorenzo de' Medici. Mit Gedicht an den Leser von Baptista Siculus* (Florence: Nicolaus Laurentii, 1[4]85)

‘Augsburger Baurechnungen 1320-1331’, ed. by Robert Hoffmann, *Zeitschrift des Historischen Vereins für Schwaben*, 5 (1878), 1-220

Die Chroniken der schwäbischen Städte: Augsburg 1, ed. by Karl v. Hegel and Bayerische Akademie der Wissenschaften, *Die Chroniken der deutschen Städte vom 14. bis ins 16. Jahrhundert*, 4 (Leipzig: Hirzel, 1865)

Die Chroniken der schwäbischen Städte: Augsburg 2 [Burkhard Zink] ed. by Bayerische Akademie der Wissenschaften, *Die Chroniken der deutschen Städte vom 14. bis ins 16. Jahrhundert*, 5 (Stuttgart, Gotha: Perthes, 1866)

Die Chroniken der schwäbischen Städte: Augsburg 4. Die Chronik von Clemens Sender von den ältesten Zeiten der Stadt bis zum Jahre 1536, ed. by Friedrich Roth and Bayerische Akademie der Wissenschaften (Leipzig: Hirzel, 1894)

Deutsche Stadtrechte des Mittelalters mit rechtsgeschichtlichen Erläuterungen, ed. by Ernst Theodor Gaupp (Breslau: Max, 1851)

Endres Tuchers Baumeisterbuch der Stadt Nürnberg (1464 - 1475), ed. by Matthias Lexer and Friedrich v. Weech (Stuttgart: Litterarischer Verein, 1862)

Frankfurter Amts- und Zunfturkunden bis zum Jahre 1612: 1.1. und 1.2. Frankfurter Zunfturkunden bis zum Jahre 1612, ed. by Benno Schmidt and Frankfurter Historische Kommission (Frankfurt a. M.: Baer, 1914)

Frankfurter Amts- und Zunfturkunden: Zweiter Teil: Amtsurkunden, ed. by Karl Bücher and others (Frankfurt a. M.: Baer, 1915)

Haß, Kunz, *Ein Lobgedicht auf Nürnberg aus dem Jahre 1490 von dem Meister-Sänger Kuntz Hass ein Beitrag zur deutschen Kulturgeschichte*, ed. by Karl A. Barack (Nürnberg: Bauer & Raspe, 1858 [1490])

Jäger, Tobias Ludwig Ulrich, *Juristisches Magazin für die deutschen Reichsstädte: 2* (Ulm: Wohler, 1791)

Nürnberger Polzeiordnungen aus dem XIII. bis XV. Jahrhundert, ed. by Joseph Baader (Stuttgart: Literarischer Verein, 1861)

Oberrheinische Stadtrechte: 2. Schwäbische Rechte, ed. by Fritz Geier and Badische Historische Kommission (Heidelberg: Winter, 1908)

Pfalzgraf Philipp Ludwig, *Reformation vnd Ordnung der Apotecken bey der Statt Neuburg*, (Lauingen: Reinmichel, 1595)

Rat der Reichsstadt Augsburg, *Der vonn Metzgern Ordnung. Anno M.D.XLIX [Ains Erbern Raths diser loblichen Stat Augspurg Ordnung un[d] satzung, wie es mit schlachtung, abstechung un[d] verkauffung alles flaisches, gehalten [...]; Actum, Afftermontag, den 24 Decembris [...] 1549]* ([Augsburg]: s.n., 1549)

Rat der Reichsstadt Frankfurt a. Main, *Ordnung der Becker wie sie in der löblichen Stadt Franckfurdt des Heyligen Römischen Reichß Camer gesetzt ist, vnnd gehalten werden soll* (Frankfurt a. M.: Cyriacus Jacobus, 1540)

Rat der Reichsstadt Frankfurt a. Main, *Der Statt Franckenfurt am Mayn erneuwerter Reformation* (Frankfurt a. M.: Rab und Feyerabend, 1578)

Rat der Reichsstadt Frankfurt a. Main, *Etliche zum theil verpesserte, zum theil erklärte Puncten der erneuerten Reformation [...] Der Schied vnd Brandtmawern, Der Cession vnd Ayds verdorbner Schuldner, Der Cautionis Iuratoriae, Der Frefel GerichtsOrdnung [...] Vnd letztlich der Profay vnd heimlichen Gemach halben, gehalten werden soll* (Frankfurt a. M.: s.n., 1588)

Rat der Reichsstadt Frankfurt a. Main, *Der Statt Franckfurt Am Mayn erneuerte Reformation: Wie Die in Anno 1578 außgangen, vnd publicirt [...] geendert, verbessert vnd vermehrt* (Frankfurt a. M.: Rosa, 1611)

Rat der Reichsstadt Nürnberg, *Reformacion der Statut vnd gesetze* (Nürnberg: Anton Koberger, 1484)

Rat der Reichsstadt Nürnberg, *Eyns Erborn Rats der Stat Nürenberg satzung vnnd ordnung, wie alles Fleysch durch das handtwerck der Metzger dieser zeyt vnd fürthan vnterschiedlich verkaufft werden soll* (s.l.: s.n., 1532)

Rat der Reichsstadt Nürnberg, *Gesetz, Ordnung vnd, Tax, Von einem E. Raht, der Statt Nuernberg, dem Collegio Medico, den Apotheckern, vnd andern angehærigen daselbsten, gegeben* (Nürnberg: Christoff Lochner, 1593)

Rat der Reichsstadt Nürnberg, *Eines Erbaren Raths vernere Ordnung und satzung, wie alles Fleisch durch das Handwerck der Metzker hie, zu Werdt, und Gostenhoff, dieser zeit unterschiedlich verkaufft, und bezahlt genomen werden soll Decretum in Senatu den 19. Spetemb. Anno 1607* (Einblattdruck, 1607)

Rat der Reichsstadt Schwäbisch Hall, *Reformation: oder erneuerte Ordnung deß Heiligen H. Reichs Statt Schwäbischen Hall, sambt angehengtem Tax, die respective Erhalt- und Wiederbringung der Leibs-gesundheit betreffend welche d. Medicis, Apotheckern, Wundärzten, u. andern Angehörigen [...] zur Nachricht ertheilt, u. in Dr. gegeben worden* (Schwäb[isch] Hall: Laidig, 1651)

Rat der Reichsstadt Speyer, *Ordnung der Apotecken, wie es mit denselben in der keiserlichen freyen Reichs-Stadt Speier soll gehalten werden: sampt verordneten Tax, wie nemlich und in was Werth, alle Artzneyen [...]* (Speier: Kembach, 1614)

Rat der Reichsstadt Straßburg, *Der Statt Straßburg Policeij Ordnung* (Straßburg: Johann Carolo, 1628)

Rat der Reichsstadt Ulm, *Eines Erbaren Raths der Stadt Ulm, von Newem Reformierte und verbesserte Bawordnung* (Ulm: Meder, 1612)

Rat der Reichsstadt Ulm, *Eines Ehrsamen Raths Der Statt Ulm Von Neuem Reformirte und verbässerte Bau-Ordnung* (Ulm: Kühn, 1683)

Rat der Reichsstadt Worms, *Der Stat Worm[b]s Reformacion statute[n] ordenu[n]g Satzung die alle[n] Stette[n]: com[m]unen: Regime[n]ten: fürste[n]thum: herschafften: Amptleute[n]: nutzlich: furdlich: vn[d] behülflich sein: vn[d] zu guter regierung erschiessen moge[n]* ([Straßburg]: [Knobloch], 1509)

Rat der Reichsstadt Worms, *Reformatio und erneuerte Ordnung der Apotecken, unnd wie es mit den Ordinariis physicis oder Stadtärzten, ihres Verdiensts halben, in deß Heiligen Reichs Freystadt Wormbs [...] Tax [...]* (Frankfurt a. M.: s.n., 1582)

Das ältere Recht der Reichsstadt Rottweil [...], ed. by Johannes Greiner (Stuttgart: Kohlhammer, 1900)

Rem, Wilhelm, “*Cronica newer Geschichten*” von Wilhelm Rem 1512-1527, ed. by Karl von Hegel and others (Leipzig: Hirzel, 1896)

Das rote Buch der Stadt Ulm: Quellenedition, ed. by Carl Mollwo, Württembergische Geschichtsquellen, 8 (Stuttgart: Kohlhammer, 1904)

Sammlung deutscher Rechtsalterthümer, ed. by Maximilian Prokop von Freyberg (Mainz: Simon Müller, 1828)

Schorer, Christoph, *Memminger Chronick, Oder Kurtze Erzählung vieler denckwürdigen Sachen; die sich allda nicht allein vor alten, sondern auch zu jetzigen Zeiten, bevorab in verwichenem dreyssigjährigen Krieg begeben [...]* (Ulm: Kuhn, 1660)

Das Stadtbuch von Augsburg, insbesondere das Stadtrecht vom Jahre 1276: mit einem lithographirten Facsimile der Handschrift nach der Originalhandschrift [...] ed. by Christian Meyer (Augsburg: Butsch, 1872)

Strupp, Joachim, *Nützliche Reformation, zu guter Gesundheit, und christlicher Ordnung, ... Erinnerungen, waser Gestalt es an allen Örten, wie auch allhier, zur Seelen und Leibes Wolfahrt, etc. löblichen und nützlichen zuhalten* (Frankfurt a. M.: Selbstverlag, 1573)

Vermischte Beyträge zu dem deutschen Recht: 4, ed. by Carl Friedrich Walch (Jena: Gollner, 1774)

Printed secondary sources

Albrecht, Stephan, ‘Gute Herrschaft – fürstengleich: Städtisches Selbstverständnis im Spiegel der neuzeitlichen Rathausikonographie’, in *Heiliges Römisches Reich Deutscher Nation 962 bis 1806: Altes Reich und neue Staaten 1495 bis 1806*, ed. by Heinz Schilling and others (Dresden: Sandstein Verlag, 2006), pp. 201-213

Angenendt, Arnold, 'Verschriftlichte Mündlichkeit – vermündlichte Schriftlichkeit: Der Prozeß des Mittelalters', in *Im Spannungsfeld von Recht und Ritual: Soziale Kommunikation in Mittelalter und früher Neuzeit*, ed. by Heinz Duchhardt and Gert Melville (Köln: Böhlau, 1997), pp. 3-27

Armer, Stephanie, *Friedenswahrung, Krisenmanagement und Konfessionalisierung: Religion und Politik im Spannungsfeld von Rat, Geistlichen und Gemeinde in der Reichsstadt Ulm 1554-1629* (Stuttgart: Kommissionsverlag W. Kohlhammer, 2015)

Arnold, Klaus, 'Städtelob und Stadtbeschreibung im späteren Mittelalter und in der Frühen Neuzeit', in *Städtische Geschichtsschreibung im Spätmittelalter und in der frühen Neuzeit*, ed. by Peter Johanek (Köln [u.a.]: Böhlau, 2000), pp. 247-268

Bähr, Andreas, 'Abgötterei stinkt: Unreinheit, Konfession und Krankheit im 17. Jahrhundert', in *Reinheit*, ed. by Peter Burschel (Wien [u.a.]: Böhlau, 2011), pp. 119-139

Bauer, Oswald, *Zeitungen vor der Zeitung: Die Fuggerzeitungen (1568 - 1605) und das frühmoderne Nachrichtensystem* (Berlin: AkademieVerlag, 2011)

Bauer, Thomas, *Im Bauch der Stadt: Kanalisation und Hygiene in Frankfurt am Main 16.-19. Jahrhundert*, Studien zur Frankfurter Geschichte, 41 (Frankfurt a. Main: Waldemar Kramer, 1998)

Biernoff, Suzannah, *Sight and Embodiment in the Middle Ages* (Basingstoke: Palgrave Macmillan, 2002)

Brakensiek, Stefan, 'Akzeptanzorientierte Herrschaft: Überlegungen zur politischen Kultur der Frühen Neuzeit', in *Die Frühe Neuzeit als Epoche*, ed. by Helmut Neuhaus, *Historische Zeitschrift*, Beiheft, 49 (München: Oldenbourg, 2009), pp. 395-407

Brendecke, Arndt, 'Informing the Council: Central Institutions and Local Knowledge in the Spanish Empire', in *Empowering Interactions: Political Cultures and the Emergence of the*

State in Europe 1300-1900, ed. by Wim Blockmans and others (Farnham: Ashgate, 2009), pp. 235-252

Brenner, Elma, 'The Leprous Body in Twelfth- and Thirteenth-Century Rouen: Perceptions and Responses', in *The Ends of the Body: Identity and Community in Medieval Culture*, ed. by Suzanne Conklin Akbari and Jill Ross (Toronto: University of Toronto Press, 2013), pp. 239-259

Burger, Daniel, "'Daran erkenn' ich meine Pappenheimer!": Das Handwerk der Nachtkärner oder Abtritt-Räumer in der Reichsstadt Nürnberg', in *Aborte im Mittelalter und der Frühen Neuzeit: Bauforschung, Archäologie, Kulturgeschichte*, ed. by Olaf Wagener (Petersberg: Imhof, 2014), pp. 197-205

Burger, Daniel, '[Eid und Ordnung der Nachtkärner]: (Nürnberg 8.12.1545-31.12.1586)', in *Die "gute" Policy im Reichskreis zur frühmodernen Normensetzung in den Kernregionen des Alten Reiches*, ed. by Wolfgang Wüst (Berlin: AkademieVerlag, 2015), pp. 681-686

Burghartz, Susanna, *Zeiten der Reinheit – Orte der Unzucht Ehe und Sexualität in Basel während der frühen Neuzeit* (Paderborn u.a.: Schöningh, 1999)

Busch, Ralf, 'Die Wasserversorgung des Mittelalters und der frühen Neuzeit in norddeutschen Städten', in *Stadt im Wandel*, ed. by Cord Meckseper (Stuttgart: Cantz, 1985), pp. 301-13

Calvi, Giulia, *Storie di un anno di peste: Comportamenti sociali e immaginario nella Firenze barocca* (Milan: Bompiani, 1984)

Carlino, Andrea, 'Leichenzergliederung als soziales Drama im Europa der Frühen Neuzeit', in *Spuren der Avantgarde: Theatrum anatomicum: Frühe Neuzeit und Moderne im Kulturvergleich*, ed. by Helmar Schramm and others, *Theatrum scientiarum*, 5 (Berlin, New York: De Gruyter, 2011), pp. 129-146

Carmichael, Ann G., *Plague and the Poor in Renaissance Florence* (Cambridge: Cambridge University Press, 1986)

Carmichael, Ann G., 'Contagion Theory and Contagion Practice in Fifteenth-Century Milan', *Renaissance Quarterly*, 44 (1991), 213-256

Cavallo, Sandra, and Storey, Tessa, *Healthy Living in Late Renaissance Italy* (Oxford: Oxford University Press, 2013)

Close, Christopher W., *The Negotiated Reformation: Imperial Cities and the Politics of Urban Reform, 1525-1550* (Cambridge: Cambridge University Press, 2009)

Cohen, Sherill, *The Evolution of Women's Asylums since 1500: From Refuges for Ex-Prostitutes to Shelters for Battered Women* (New York: Oxford University Press, 1992)

Coy, Jason P., Marschke, Benjamin, and Sabeian, David W., *The Holy Roman Empire Reconsidered* (New York: Berghahn Books, 2010)

Coy, Jason P., 'Magistrates, Beggars, and Labourers: Migration and Regulation in Sixteenth-Century Ulm', in *Gated communities? Regulating Migration in Early Modern Cities*, ed. by Bert de Munck and Anne Winter (Farnham: Ashgate, 2012), pp. 157-174

Delarue, Dominic Eric, 'Das Bild Augsburgs als Stadt. Repräsentation von Größe, Heiligkeit und Einigkeit in den Illustrationen zur Stadtchronik Sigismund Meisterlins', in *Zwischen Mimesis und Vision zur städtischen Ikonographie am Beispiel Augsburgs* ed. by Lieselotte E. Saurma-Jeltsch (Münster: LIT, 2010), pp. 35-58

Dinges, Martin, 'Pest und Staat: Von der Institutionengeschichte zur sozialen Konstruktion?', in *Neue Wege in der Seuchengeschichte*, ed. by Martin Dinges and Thomas Schlich (Stuttgart: Steiner, 1995), pp. 71-103

Dirlmeier, Ulf, 'Die kommunalpolitischen Zuständigkeiten und Leistungen süddeutscher Städte im Spätmittelalter (vor allem auf dem Gebiet der Ver- und Entsorgung)', in *Städtische Versorgung und Entsorgung im Wandel der Geschichte*, ed. by Jürgen Sydow (Sigmaringen: Thorbecke, 1981), pp. 113-150

Dirlmeier, Ulf, 'Zu den Lebensbedingungen in der mittelalterlichen Stadt: Trinkwasserversorgung und Abfallbeseitigung', in *Mensch und Umwelt im Mittelalter*, ed. by Bernd Herrmann (Stuttgart: Deutsche Verlags-Anstalt, 1986), pp. 150-159

Dirlmeier, Ulf, 'Zum städtischen Bauwesen der frühen Neuzeit: Ein Ausschnitt aus der Alltagswirklichkeit am Beispiel der Stadt Siegen', in *Öffentliches Bauen in Mittelalter und Früher Neuzeit: Abrechnungen als Quellen für die Finanz-, Wirtschafts- und Sozialgeschichte des Bauwesens*, ed. by Ulf Dirlmeier (St. Katharinen: Scripta-Mercaturae-Verlag, 1991), pp. 348-367

Dirlmeier, Ulf, 'Historische Umweltforschung aus der Sicht der mittelalterlichen Geschichte', in *Menschen und Städte: Ausgewählte Aufsätze*, ed. by Rainer S. Elkar and others (Frankfurt a. M.: Lang, 2012), pp. 219-233

Dirlmeier, Ulf, *Menschen und Städte. Ausgewählte Aufsätze*, ed. by Rainer S. Elkar and others (Frankfurt a. M.: Lang, 2012)

Douglas, Mary, *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo*, fifth edn. (New York: Routledge, 1991)

Dross, Fritz, and Kinzelbach, Annemarie, "'Nit mehr alls sein burger, sonder alls ein frembder": Fremdheit und Aussatz in frühneuzeitlichen Reichsstädten', *Medizinhistorisches Journal*, 46 (2011), 1-23

DRW Deutsches Rechtswörterbuch: Wörterbuch der älteren deutschen Rechtssprache, 13 vols. (and online), ed. by Akademie der Wissenschaften Heidelberg (Weimar, etc.: Hermann Böhlau, 1914-)

Eheberg, Karl T. von, 'Strassburg's Bevölkerungszahl seit Ende des 15. Jahrhunderts bis zur Gegenwart: I. Strassburg's Bevölkerungszahl gegen Ende des 15. Jahrhunderts', *Jahrbücher für Nationalökonomie und Statistik*, 7 (41) (1883), 297-314

Fischer, Alfons, *Geschichte des Deutschen Gesundheitswesens: Vom Gesundheitswesen der alten Deutschen zur Zeit ihres Anschlusses an die Weltkultur bis zum Preußischen Medizinaledik*, 2 vols. (Berlin: Herbig, 1933)

Fischer, Thomas, *Städtische Armut und Armenfürsorge im 15. und 16. Jahrhundert. Sozialgeschichtliche Untersuchungen am Beispiel der Städte Basel, Freiburg i. Br. und Straßburg* (Göttingen: Otto Schwartz, 1979)

Flachsbart, Otto, *Geschichte der Goslarer Wasserwirtschaft Eine Untersuchung über Wesen und Bedeutung der Wasserwirtschaft in der deutschen Stadtgeschichte* (Goslar: Brumby in Komm, 1928)

Fouquet, Gerhard, *Bauen für die Stadt: Finanzen, Organisation und Arbeit in kommunalen Baubetrieben des Spätmittelalters* (Köln: Böhlau, 1999)

Frie, Ewald, “‘Bedrohte Ordnungen’ zwischen Vormoderne und Moderne: Überlegungen zu einem Forschungsprojekt’, in *Die Aktualität der Vormoderne: Epochenentwürfe zwischen Alterität und Kontinuität*, ed. by Klaus Ridder and Steffen Patzold (Berlin: Akademie Verlag, 2013), pp. 99-109

Fuchs, Adolf, *Geschichte des Gesundheitswesens der freien Reichsstadt Kaufbeuren*, Allgäuer Heimatbücher, 54 (Kempten (Allgäu): Verlag des Heimatpflegers von Schwaben, 1955)

Fuhrmann, Bernd, ‘Die Beseitigung von Unrat als private und öffentliche Aufgabe in oberdeutschen Städten: (vornehmlich 14. bis 16. Jahrhundert)’, in *Aborte im Mittelalter und der Frühen Neuzeit: Bauforschung, Archäologie, Kulturgeschichte*, ed. by Olaf Wagener (Petersberg: Imhof, 2014), pp. 206-213

Geltner, G., ‘Healthscaping a Medieval City: Lucca’s Curia Viarum and the Future of Public Health History’, *Urban History*, 40 (2013), 395-415

Geltner, G., ‘Finding Matter Out of Place: Bologna’s *Fango* (“dirt”) Notary in the History of Premodern Public Health’, in *Lo sguardo lungimirante delle capitali. The far-sighted gaze of*

capital cities. Saggi in onore di Francesca Bocchi. Essays in honour of Francesca Bocchi, ed. by Rosa Smurra and others (Rome: Viella, 2014), pp. 307-321

Gertsman, Elina, ‘Die Multiplikation des Todes: *Dans macabre* und der “Anteil des Beschauers”’, in *Der Berliner Totentanz: Geschichte – Restaurierung – Öffentlichkeit*, ed. by Maria Deiters and others (Berlin: Lukas Verlag, 2014), pp. 104-114

Gödel, Carolin, ‘Die Jahresrechnungen des Bamberger Stadtbauhofes. Bemerkungen zu einem Rechnungsbestand des 15. Jahrhunderts’, in *Öffentliches Bauen in Mittelalter und Früher Neuzeit. Abrechnungen als Quellen für die Finanz-, Wirtschafts- und Sozialgeschichte des Bauwesens*, ed. by Ulf Dirlmeier (St. Katharinen: Scripta-Mercaturae-Verl, 1991), pp. 56-88

Goppold, Uwe, ‘Norms, Symbols and Modes of Decision-Making in Early Modern Cities: The Examples of Zürich and Münster’, in *Urban Elections and Decision-Making in Early Modern Europe, 1500-1800*, ed. by Rudolf Schlögl (Newcastle upon Tyne: Cambridge Scholars, 2009), pp. 52-70

Grohmann, Olaf, ‘Vom Umgang mit einer begrenzten Ressource: Wasser und Abwasser in nordwestdeutschen Städten des 17. und 18. Jahrhunderts’, *Niedersächsisches Jahrbuch für Landesgeschichte*, 80 (2008), 183-213

Guex, Françoise, *Bruchstein, Kalk und Subventionen: Das Zürcher Baumeisterbuch als Quelle zum Bauwesen des 16. Jahrhunderts*, Mitteilungen der Antiquarischen Gesellschaft in Zürich, 53 (Zürich: Rohr, 1986)

Härter, Karl, *Policey und Straffjustiz in Kurmainz: Gesetzgebung, Normdurchsetzung und Sozialkontrolle im frühneuzeitlichen Territorialstaat*, 2 vols. (Frankfurt a. M.: Klostermann, 2005)

Hardy, Anne I., *Ärzte, Ingenieure und städtische Gesundheit: Medizinische Theorien in der Hygienebewegung des 19. Jahrhunderts* (Frankfurt a. M.: Campus Verlag, 2005)

Henderson, John, 'The Black Death in Florence: Medical and Communal Responses', in *Death in Towns: Urban Responses to the Dying and the Dead, 100-1600*, ed. by Steven Bassett (Leicester: Leicester University Press, 1992), pp. 136-150

Hof, Axel, *Der soziale Ort der Gesundheit: Topographische Bibliographie zur Sozialgeschichte des Fürsorge-, Hospital-, Medizinal- und Wohlfahrtswesens* (Regensburg: Pustet, 2000)

Hubay, Ilona, *Incunabula der Staats- und Stadtbibliothek Augsburg* (Wiesbaden: O. Harrassowitz, 1974)

Jancke, Gabriele, and Schläppi, Daniel, *Die Ökonomie sozialer Beziehungen: Ressourcenbewirtschaftung als Geben, Nehmen, Investieren, Verschwenden, Haushalten, Horten, Vererben, Schulden* (Stuttgart: Steiner, 2015)

Johann, Anja, *Kontrolle mit Konsens: Sozialdisziplinierung in der Reichsstadt Frankfurt am Main im 16. Jahrhundert* (Frankfurt a. M.: Kramer, 2001)

Jütte, Robert, 'Stigma-Symbole: Kleidung als identitätsstiftendes Merkmal bei spätmittelalterlichen und frühneuzeitlichen Randgruppen (Juden, Dirnen, Aussätzige, Bettler)', *Saeculum*, 44 (1993), 65-89

Kampmann, Christoph, and Niggemann, Ulrich, *Sicherheit in der Frühen Neuzeit: Norm, Praxis, Repräsentation*, Frühneuzeit-Impulse, 2 (Cologne: Böhlau, 2013)

Kinzelbach, Annemarie, *Gesundbleiben, Krankwerden, Armsein in der frühneuzeitlichen Gesellschaft: Gesunde und Kranke in den Reichsstädten Überlingen und Ulm, 1500-1700* (Stuttgart: Steiner, 1995)

Kinzelbach, Annemarie, 'Infection, Contagion, and Public Health in Late Medieval and Early Modern German Imperial Towns', *Journal of the History of Medicine and Allied Sciences*, 61 (2006), 369-389

Kinzelbach, Annemarie, “‘An jetzt grasierender kranckheit sehr schwer darnider’”: “Schau” und Kontext in süddeutschen Reichsstädten der frühen Neuzeit’, in *Seuche und Mensch: Herausforderung in den Jahrhunderten*, ed. by Carl C. Wahrmann and others (Berlin: Duncker & Humblot, 2012), pp. 269-282

Kinzelbach, Annemarie, ‘Women and Healthcare in Early Modern German Towns’, *Renaissance Studies*, 28 (2014), 619-638

Kinzelbach, Annemarie, *Chirurgen und Chirurgiepraktiken: Wundärzte als Reichsstadtbürger, 16. bis 18. Jahrhundert* (Mainz: Donata Kinzelbach, 2016)

Kinzelbach, Annemarie, and Sturm, Patrick, ‘Der Siechenhauskomplex vor den Toren Nördlingens: Entwicklung, Funktion und bauliche Gestalt vom 13. bis zum 18. Jahrhundert’, *Jahrbuch Nördlingen*, 33 (2011), 25-54

Kluge, Mathias Franc, *Die Macht des Gedächtnisses: Entstehung und Wandel kommunaler Schriftkultur im spätmittelalterlichen Augsburg* (Leiden: Brill, 2014)

Kluger, Martin, *Historische Wasserwirtschaft und Wasserkunst in Augsburg Kanallandschaft, Wassertürme, Brunnenkunst und Wasserkraft* (Augsburg: Context Verlag, 2012)

Knoll, Martin, *Die Natur der menschlichen Welt: Siedlung, Territorium und Umwelt in der historisch-topografischen Literatur der frühen Neuzeit* (Bielefeld: Transcript, 2013)

Köbler, Gerhard, *Historisches Lexikon der Deutschen Länder: die deutschen Territorien vom Mittelalter bis zur Gegenwart*, seventh edn. (Munich: Beck, 2007)

Kriegk, Georg Ludwig, *Frankfurter Bürgerzwiste und Zustände im Mittelalter ein auf urkundlichen Forschungen beruhender Beitrag zur Geschichte des deutschen Bürgerthums* (Frankfurt a. M.: Sauerländer, 1862)

Kromer, Max, *“Wasser in jedweddes bürgers haus”: Die Trinkwasserversorgung, historisch verfolgt und dargestellt am Beispiel der ehemals Freien Reichsstadt Ulm* (Frankfurt a. M.: Ullstein, 1962)

Landolt, Oliver, ‘Von der Marginalisierung zur Kriminalisierung – Die Ausgrenzung mobiler Bevölkerungselemente in der spätmittelalterlichen Eidgenossenschaft’, *Das Mittelalter*, 16 (2011), 49-71

Laqua, Benjamin, ‘Aborte in Nachbarschaftsräumen – Konflikte und Kompromisse in deutschen Städten des Spätmittelalters’, in *Aborte im Mittelalter und der Frühen Neuzeit: Bauforschung, Archäologie, Kulturgeschichte*, ed. by Olaf Wagener (Petersberg: Imhof, 2014), pp. 178-185

Louthan, Howard, *Diversity and Dissent: Negotiating Religious Difference in Central Europe, 1500 - 1800* (New York: Berghahn, 2011)

Mann, Gunter, ‘Gesundheitswesen und Hygiene in der Zeit des Übergangs von der Renaissance zum Barock’, *Medizinhistorisches Journal*, 2 (1967), 107-123

Meixner, Christoph, ‘Regensburg’, in *Handbuch kultureller Zentren der Frühen Neuzeit: Städte und Residenzen im alten deutschen Sprachraum: III*, ed. by Wolfgang Adam and Siegrid Westphal (Berlin: de Gruyter, 2012), pp. 1695-1753

Meyer, Carla, ‘Mächtige Mauern – stolze Stadt: Bedeutung und Symbolik der Stadtbefestigung im spätmittelalterlichen Städtelob’, in *“Vmbringt mit starcken turnen, murn”: Ortsbefestigungen im Mittelalter*, ed. by Olaf Wagener, *Mediaevistik, Beihefte*, 15 (Frankfurt a. M.: Lang, 2010), pp. 85-100

Mühlsteff, Jana, *Ursprünge deutscher Medizinalgesetzgebung: Der Arzt-Beruf in städtischen Rechtsquellen des 14. - 16. Jh.* (Marburg: Tectum Verlag, 2008)

Münch, Peter, *Stadthygiene im 19. und 20. Jahrhundert: Die Wasserversorgung, Abwasser- und Abfallbeseitigung unter besonderer Berücksichtigung Münchens* (Göttingen: Vandenhoeck und Ruprecht, 1993)

Niggemann, Ulrich, 'Craft Guilds and Immigration: Huguenots in German and English Cities', in *Gated Communities? Regulating Migration in Early Modern Cities*, ed. by Bert de Munck and Anne Winter (Farnham: Ashgate, 2012), pp. 45-60

Nübling, Eugen, *Ulm's Lebensmittel-Gewerbe im Mittelalter: Ein Beitrag zur deutschen Städte- & Wirtschaftsgeschichte* (Ulm: Gebrüder Nübling, 1892)

Oelze, Patrick, 'Decision-Making and Civic Participation in the Imperial City (Fifteenth and Sixteenth Century): Guild Conventions and Open Councils in Constance', in *Urban Elections and Decision-Making in Early Modern Europe, 1500-1800*, ed. by Rudolf Schlögl (Newcastle upon Tyne: Cambridge Scholars, 2009), pp. 147-178

Park, Katharine, 'The Criminal and the Sainly Body: Autopsy and Dissection in Renaissance Italy', *Renaissance Quarterly*, 47 (1994), 1-33

Park, Katharine, *Secrets of Women: Gender, Generation, and the Origins of Human Dissection* (New York: Zone Books, 2006; paperback edn. 2010)

Pearson, Caspar, *Humanism and the Urban World: Leon Battista Alberti and the Renaissance City* (University Park, PA: Pennsylvania State University Press, 2011)

Pelling, Margaret, 'Contagion, Germ Theory, Specificity', in *Companion Encyclopedia of the History of Medicine*, ed. by William F. Bynum and Roy Porter, 2 vols (London: Routledge, 1993), I, pp. 309-334

Pfister, Christian, *Klimageschichte der Schweiz 1525-1860. Das Klima der Schweiz von 1525-1860 und seine Bedeutung in der Geschichte von Bevölkerung und Landwirtschaft*, 2 vols. (Bern: Haupt 1984)

Rawcliffe, Carole, *Leprosy in Medieval England* (Woodbridge: Boydell, 2006)

Rawcliffe, Carole, *Urban Bodies: Communal Health in Late Medieval English Towns and Cities* (Woodbridge: Boydell, 2013)

Reinhardt, Volker, *Überleben in der frühneuzeitlichen Stadt: Annona und Getreideversorgung in Rom 1563-1797* (Tübingen: Niemeyer, 1991)

Reith, Reinhold, *Umweltgeschichte der Frühen Neuzeit* (Munich: Oldenbourg, 2011)

Rodenwaldt, Ernst, *Leon Battista Alberti, ein Hygieniker der Renaissance* (Heidelberg: Springer, 1968)

Roeck, Bernd, *Eine Stadt in Krieg und Frieden: Studien zur Geschichte der Reichsstadt Augsburg zwischen Kalenderstreit und Parität* (Göttingen: Vandenhoeck und Ruprecht, 1989)

Roeck, Bernd, *Elias Holl ein Architekt der Renaissance* (Regensburg: Pustet, 2004)

Rogge, Jörg, 'Vom Schweigen der Chronisten: Überlegungen zu Darstellung und Interpretation von Ratspolitik sowie Verfassungswandel in den Chroniken von Hektor Müllich, Ulrich Schwarz und Burhard Zink', in *Literarisches Leben in Augsburg während des 15. Jahrhunderts*, ed. by Johannes Janota and Werner Williams-Krapp (Tübingen: Niemeyer, 1995), pp. 216-239

Roper, Lyndal, *Das fromme Haus: Frauen und Moral in der Reformation* (Frankfurt a. M.: Campus, 1995)

Rüther, Stefanie, 'Zwischen göttlicher Fügung und herrschaftlicher Verfügung: Katastrophen als Gegenstand spätmittelalterlicher Sicherheitspolitik', in *Sicherheit in der Frühen Neuzeit: Norm, Praxis, Repräsentation*, ed. by Christoph Kampmann and Ulrich Niggemann (Vienna: Böhlau, 2013), pp. 335-350

Sander, Antje 'Die Lüneburger Bauamtsrechnungen von 1386 bis 1388', in *Öffentliches Bauen in Mittelalter und Früher Neuzeit. Abrechnungen als Quellen für die Finanz-, Wirtschafts- und Sozialgeschichte des Bauwesens*, ed. by Ulf Dirlmeier (St. Katharinen: Scripta-Mercaturae-Verl, 1991), pp. 89-115

Schilling, Ruth, 'Grammatiken der Repräsentation: Die Sichtbarkeit der Zünfte in venezianischen und hansestädtischen Bild- und Textquellen um 1600', in *Stadtgemeinde und Ständegesellschaft: Formen der Integration und Distinktion in der frühneuzeitlichen Stadt*, ed. by Patrick Schmidt and Horst Carl (Berlin: LIT Verlag, 2007), pp. 72-105

Schilling, Ruth, *Stadtrepublik und Selbstbehauptung: Venedig, Bremen, Hamburg und Lübeck im 16.-17. Jahrhundert* (Cologne: Böhlau, 2012)

Schlögl, Rudolf, 'Power and Politics in the Early Modern European City: Elections and Decision-Making', in *Urban Elections and Decision-Making in Early Modern Europe, 1500-1800*, ed. by Rudolf Schlögl (Newcastle upon Tyne: Cambridge Scholars, 2009), pp. 2-28

Schmidt, Patrick, *Wandelbare Traditionen – tradiertter Wandel: Zünftische Erinnerungskulturen in der frühen Neuzeit* (Cologne: Böhlau, 2009)

Schneider, Jürg Erwin, 'Stadtgründung und Stadtentwicklung', in *Geschichte des Kantons Zürich*, ed. by Niklaus Flüeler and Marianne Flüeler-Grauwiler (Zürich: Werd-Verl, 1995) pp. 241-268

Schwerhoff, Gerd, 'Stadt und Öffentlichkeit in der Frühen Neuzeit – Perspektiven der Forschung', in *Stadt und Öffentlichkeit in der Frühen Neuzeit*, ed. by Gerd Schwerhoff (Cologne: Böhlau, 2011), pp. 1-28

Schumann, Ernst, *Verfassung und Verwaltung des Rates in Augsburg von 1276 bis 1368* (Rostock: Rats- und Universitätsdruckerei Adler, 1905)

Schuster, Beate, *Die freien Frauen. Dirnen und Frauenhäuser im 15. und 16. Jahrhundert, Geschichte und Geschlechter* (Frankfurt a. M., New York: Campus, 1995)

Schuster, Peter, *Das Frauenhaus: Städtische Bordelle in Deutschland (1350-1600)* (Paderborn: Schöningh, 1992)

Slack, Paul, 'Dearth and Social Policy in Early Modern England', *Social History of Medicine*, 5 (1992), 1-17

Steinhilber, Wilhelm, *Das Gesundheitswesen im alten Heilbronn: 1281-1871*,
Veröffentlichungen des Archivs der Stadt Heilbronn, 4 (Heilbronn: Vereinsdruckerei, 1956)

Stippak, Marcus, *Beharrliche Provisorien städtische Wasserversorgung und
Abwasserentsorgung in Darmstadt und Dessau 1869-1989* (Münster: Waxmann, 2010)

Sturm, Patrick, *Leben mit dem Tod in den Reichsstätten Esslingen, Nördlingen und
Schwäbisch Hall Epidemien und deren Auswirkungen vom frühen 15. bis zum frühen 17.
Jahrhundert* (Ostfildern: Thorbecke, 2014)

Stürzbecher, Manfred, 'The Physici in German-Speaking Countries from the Middle Ages to
the Enlightenment', in *The Town and State Physician in Europe from the Middle Ages to the
Enlightenment*, ed. by Andrew W. Russell (Wolfenbüttel: Herzog August Bibliothek, 1981),
pp. 123-129

Voigt, Dieter, *Die Augsburger Baumeisterbücher des 14. Jahrhunderts, vol. 1. Darstellung
and vol. 2. Transkriptionen* (Augsburg: Wißner 2017)

Wagener, Olaf, *Aborte im Mittelalter und der Frühen Neuzeit: Bauforschung, Archäologie,
Kulturgeschichte* (Petersberg: Imhof, 2014)

Würz, Simone, 'Konzeptionelle Überlegungen zur digitalen Edition der Augsburger
Baumeisterbücher', in *Konzeptionelle Überlegungen zur Edition von Rechnungen und
Amtsbüchern des späten Mittelalters*, ed. by Jürgen Sarnowsky and others (Göttingen: V&R
Unipress, 2016), pp. 107-113

Electronic sources

*Augsburger Stadtlexikon Online: Fundierte Informationen zur Geschichte der zweitältesten
Stadt Deutschlands* (Augsburg, 2010)

<https://opacplus.bsb-muenchen.de/metaopac/search?id=11800613&db=100>, last consulted 15
January 2019

Bauernfeind, Walter, 'Baugericht' in Stadtlexion Nürnberg (Nürnberg: Stadtarchiv 2002)
http://online-service2.nuernberg.de/stadtarchiv/objekt_start.fau?prj=verzeichnungen&dm=Lex_Internet&zeig=1247, last consulted 15 January 2019

Geltner, G., and Coomans, Janna, 'The History of Public Health in Pre-Industrial Societies: A Bibliography'
https://hcommons.org/?get_group_doc=1000698/1487196824-PremodernPublicHealthBibliographyUpdated2016.pdf, last consulted 15 January 2019

Unpublished theses

Giehl, Monika, 'Die Entwicklung der Fleischhygiene in Darmstadt von den Anfängen bis zum Ende des 18. Jahrhunderts' (Diss. med. vet., Justus Liebig Universität Gießen, 1990)

Heuschmid, Hermann, 'Die Lebensmittel-Politik der Reichsstadt Überlingen bis zum Anfall an Baden' (Diss. phil., Universität Freiburg, 1909)

Kopp, Hans Georg, 'Das Einnehmer- und das Baumeisteramt Augsburgs im 16. Jahrhundert. Studien zum Haushalt der freien Reichsstadt' (Diss. phil., Universität Augsburg, 1994)

Trometer, Johann, 'Das Augsburger Pilgerhaus: Studien zur Volkskunde und Kulturgeschichte einer caritativen Einrichtung vom 16. Jahrhundert bis 1806' (microfiche edn., Diss. rer. soc., Universität Augsburg, 1997)

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Conforti, ed., *Pathology in practice* (2018); ‘Common Knowledge: Bodies, Evidence, and Expertise in Early Modern Germany’, *ISIS*, 108/2 (2017) with A.J. Mendelsohn; and *Chirurgen und Chirurgie-Praktiken: Wundärzte als Reichsstadtbürger 16. bis 18. Jahrhundert* (2016).

CHAPTER NINE

Official Objectives of the *Visitatio Leprosorum*: Ambiguity, Ambivalence, and Variance

Luke Demaitre

Abstract

Until the eighteenth century, authorities regularly responded to reports of leprosy by ordering a formal examination, resulting in a certified judgment on the health and future of the suspect. This chapter is part of an ongoing project involving the collation of 600 certificates, recorded between 1250 and 1807, and preserved in Western European archives, set in the wider context of urban regulations, institutional statutes, and royal or imperial edicts. Contrary to prevailing stereotypes, public responses to leprosy varied quantitatively, qualitatively, regionally, and chronologically. A wide range of dynamics beyond the issue of contagion, which monopolizes retrospective discussions of Hansen's disease, is apparent. Public order was more often the paramount concern of examiners, while separation did not necessarily equate with exclusion.

Key words: contagion; diagnosis; leprosy; hospital; sequestration; poverty

Recent epidemics, from H1N1 to Ebola, have intensified, in popular perception and scientific reflection, the awareness of spreading disease. In historical studies, the awareness is contributing to a more focussed interest in the processes and agents of transmission. The tightening preoccupation with physical or 'objective' aspects of epidemics may cause a blurring of the context, while human causes and effects are relegated to a distant periphery. In addition, the narrower focus leads some historians to the anachronism of reading modern precision into earlier mentions of contagion, and others to the ahistorical assumption that public health is the immediate or sole objective of any official measure in epidemics. These tendencies, while most evident in the vibrant discourse on bubonic plague, also shape views on the history of Hansen's disease. Views on the early impact of leprosy on society, moreover, reflect the fashionable fascination with medieval 'marginality' when they place a

one-sided emphasis on the exclusion of lepers and on their treatment as a group.¹ A general aim of this essay is to broaden the understanding of communal responses to leprosy, at least of those that left an imprint in urban records. The more precise aim is to illuminate dimensions of ‘sanitary policing’ beyond the obvious issues of health, contagion, and sequestration.

Visitatio leprosororum

Official records of examinations and their outcomes concretely document the complex diversity in the treatment of lepers by society. The designation of documents as ‘official’ here means that they recorded a formal event, commonly bore the signatures of participants, and were intended for publication. The ‘viewing’, ‘visit’, or ‘test’ (*Besehung* or *Schau*, *visite*, *épreuve*, *proeve*) was a formal examination to determine the health and social future of a person who might be infected. A certificate (*Begutachtung* or *Gutachtung*, specific *Schauzettel* or *Schaubrief*; *lettre*; *bewys*) ranged from a simple and relatively small piece of paper to, in a few cases, an octavo parchment page.² It was routinely drawn up by a notary, and signed by the examiners and witnesses. If the document was handed to the examined individual, there would be little incentive to preserve it for posterity after his or her death. If the original or a copy was deposited with a requesting institution and/or the local government, it was more likely to land in hospital or municipal archives. This means, as should be noted at the outset, that the predominantly rural world will be visible, at best, through an urban prism.

Archived documents, still *in situ* or edited and in print, contain much information that has not yet been mined methodically. At this stage, the mining is a work in progress, so that even the most apparently secure inferences are open to adjustment. First, every newly discovered document widens the perspective available from the published collections, compiled by three researchers in particular, which supply the most abundant information, but which also call for caution because they are ‘edited’.³ Further, hitherto unexplored archives

¹ The emphasis was particularly evident in two studies published in 1988: *Soziale Randgruppen und Aussenseiter im Altertum*, ed. Weiler and Grassi; and Bériac, *Histoire des lépreux au Moyen Âge*.

² An excellent analysis of this variety in analogous German documents may be found in Kinzelbach, ‘Negotiating on Paper’.

³ Three collections of certificates carry substantial weight in my analysis. The first, published intermittently between 1907 and 1913, comprised articles by Sudhoff. The next collection was concentrated, systematic, and

may yield certificates that affect comprehensive assessments. Whether this happens or not, we will never be able to determine the ratio of preserved to lost records.⁴ Another challenge to the researcher is that most of the affidavits are terse, and the certified verdict or judgment (*iudicium*) is most often worded in a standardized formula. Nevertheless, a combined analytical and anecdotal perusal of the documents has already yielded a wealth of insights. When the certificates are assembled in a database, they provide a broad panorama and a framework for the multifarious details that are scattered through the testimonies. These details, often seemingly incidental and thus easily overlooked, afford glimpses into the distinct levels of daily life, popular attitudes, learned ideas, and, most pertinent to this inquiry, government policies. Occasional elaborations, moreover, reflect correlations and differences between those levels. Individual certificates will both support and illustrate the discussion of objectives in the *visitatio leprosorum*, which forms the second part of this essay. It would be difficult, however, to structure this discussion without first taking an overall look at the database.

The examined records, collected from French, German, and Netherlandish sources, date from 1250 to 1807.⁵ The inclusion of England would diffuse the focus of this survey because of substantial quantitative and qualitative differences.⁶ By confining the comprehensive and comparative examination to an area of the Continent that shares the relative homogeneity of Western Europe, yet reflects the divide between Gallic and Germanic cultures, with the Low Countries as a middle ground (a proposition which merits separate elaboration), it becomes possible to detect patterns and constants. This circumscription also facilitates the detection of relatively subtle variances, for example between the Pas-de-Calais

published with commentary by Bourgeois, *Lépreux et maladreries du Pas-de-Calais*. The most recent one, in line with current editorial standards, but also subjected to interpretation, constitutes the first volume of Picot, 'Malades ou criminels?'

⁴ Even in terms of the preserved records, the availability of those that have been edited, whether casually or collectively, may quantitatively and qualitatively skew our assessments.

⁵ A note on dates and documents may be helpful here. The latest actual certificate of which I have seen a copy is dated 1766. The latest public visitation of which I have found a record occurs sixteen years later (1782); but it does not report either the procedure or the result. My latest actual record of an examination provides the date (1807), the place (Wursach), the name of the subject, the finding, and the outcome (*absusöndern*), but is neither a certificate nor a report of the procedure.

⁶ Valuable insights would result from a systematic comparison between Continental and English responses, particularly if guided by the thorough discussion in Rawcliffe, *Leprosy in Medieval England*.

and the Rhineland, and of changes over a limited time span, especially from the fourteenth to the sixteenth century. Broader chronological developments and geographical differences merit inquiry beyond the confines of this essay, but even within the designated area the variations are pronounced enough to allow for delineation.

It is important to keep in mind that, even when distinct profiles emerge, they may be skewed by the dominance or rise of some communities and the decline of others, by social and political upheavals, and other historical coincidences, and, most directly, by the vicissitudes of archival preservation. Legal transactions were recorded in organized settings, which involved only a fraction of society, and they might attract exceptional attention for incidental reasons, such as a penchant for bureaucracy in certain locales or intense litigiousness in some periods. Certificates, on the other hand, as personalized one-time documents, were not allotted the same time and space for preservation as charters or deeds. These varying archival considerations affected not only the amount but also the character of the extant portion of the evidence. In general, it is reasonable to allow for a margin of error in the inductions, especially when they seem to reach statistical certainty. Notwithstanding these caveats, and even if the conclusions are tentative, the number of collected records and the diversity of their provenance should limit the degree of randomness and provide a reasonable measure of reliability.

The findings gain better definition by confining our analysis to the records that provide the most complete information about the place and time, examinees and examiners, and procedure and outcome of the examination. The selected records allowed for tabulation and quantification, and, subsequently, for plotting the data in instructive graphs. The resulting charts reproduced below should be viewed as more meaningful than random projections and less definitive than ironclad evidence. They will set the stage for the drama and dynamics of the *visitatio leprosorum* that will emerge from the testimonies. Chart one represents the regional provenances of the records which, in total, document 530 individual cases (out of a number growing into the 600s). The chart is helpful by indicating a regional balance in the data on which my analysis is based. However, the near-equal numbers from the two major regions do not signify exact parity between both, because we do not know their respective ratios of extant and lost records of examinations. Furthermore, the quantitative similarity may obscure qualitative differences that become visible in other approaches, and which underlie official policies. In fact, when the analysis is pursued in greater detail than is possible here, differences emerge even within narrower areas, as, for instance, between the Spanish Netherlands and the Dutch Republic in the Low Countries.

Chart 9.1. Geographical distribution of tallied records

Chart two displays results that are relatively predictable yet also open to further interpretation. The gender distribution of examinations in Chart two generally parallels the current consensus that, in premodern Europe, men considerably outnumbered women in contracting Hansen's disease. Aside from the epidemiological ratios, however, various social factors were responsible for the imbalance in examined subjects. Among these factors, none seems more consequential than the inequality between men and women in terms of public presence, mobility, and involvement in trades. The ramifications of this inequality for official objectives run through the certificates, as will become apparent. The overall distribution in Chart two will be refined by regional adjustments, particularly when further projections make allowance for two large files, one from French and the other from German archives, because these files skew the totals, and they will call for special attention (Charts eleven to thirteen below).

Tabulations of the rise, peak, and decline of examinations are also open to regional adjustments. Overall projections, however, of total numbers of examinations by half century and of percentile distribution by quarter century, reveal chronological patterns that are

Chart 9.2. Gender of individuals recorded as having been examined (percentages of the 530 total)

meaningful as well as surprising. The graphs peak sharply around 1525 in the absolute numbers (Chart three), but about a half-century earlier in percentages (Chart four). For timing the vertex even more precisely, I should add that around 15 per cent of all the tallied certificates were issued in the span of a mere five years, between 1491 and 1495. At face value, these peaks argue against the common assumption that leprosy declined abruptly after the Great Mortality of 1347-1350 and the subsequent waves of bubonic plague. Indeed, the later than expected peak was an initial trigger for my suspicion that factors other than the prevalence of leprosy itself motivated many *visitationes*. Aside from the influence of uneven documentation on the patterns, various external circumstances accounted for the steep rise and decline in the number of examinations. Such factors did include outbreaks of plague and the spread of *morbis gallicus* (the French Pox). The latter, in particular, would have been responsible for the time gap between French and German examinations, which appears in the bisected regional chronology of Chart five. The certificates themselves will show most

concretely how their timing was related to the religious, social, and political situations in general and in each region.

Chart 9.3. Chronological distribution (530 examinations in total)

Chart 9.4. Chronological distribution by percentages

An additional aspect of the chronology, which should not be overlooked in general projections such as Chart three, is the continuity of recorded examinations into the eighteenth century. The latest certifications of leprosy that I have found date to 1661 (Auxerre, France),

Chart 9.5. Chronological distribution of examinations by region

1734 (Wolfegg, Germany), and 1766 (Antwerp, Netherlands); the latest public visitation held specifically for the confirmation of leprosy occurred in 1782 (Antwerp, Netherlands), but information is lacking about the procedure and results. The late dates may be attributed to various factors, most of which were part of a broader historical setting, and each of which affected public policy, directly or indirectly. It is possible that Hansen's disease lingered longer outside Scandinavia than is generally assumed. Furthermore, it is likely that, notwithstanding advances in the differential diagnosis of leprosy, the subjects of scrutiny or their neighbours, and even the examiners, misidentified afflictions that closely mimicked the protean disease. A third reason is an integral part of my thesis. As individual *iudicia* will demonstrate, the term 'leprosy' was also applied to conditions that were not really medical. Even when contagiousness was an implicit issue, the label often served ulterior motives that were not always negative, as will become clearer from the certificates. The suggestion that underlying factors were at play arises even in a general overview of the verdicts that resulted from examinations. Chart six projects the percentages of *iudicia* that declared individuals to

be leprous, absolved them as ‘clean’, or issued a ‘suspended sentence’ rather than a decisive verdict.

Chart 9.6. Verdicts resulting from a visitatio (percentages of the 530 total)

Even at first sight, the distribution in Chart six argues against facile assumptions about the combined prevalence of leprosy and prejudice in premodern Europe. It should not be taken for granted that examiners found a relatively limited number of the *suspected* subjects to be leprous and almost half of them to be ‘clean’. An arguably more significant segment of the projection shows that the examiners withheld or deferred judgment in at least one-fifth of their visitations – with the noteworthy exception of one community, as we will see shortly. The provisional or suspended sentences may reflect what has been called ‘les hésitations des docteurs’, but they were also due to more complex factors, as an analysis of individual certificates will prove.⁷ Some of the complexity becomes perceptible in the different ratios of the verdicts when the results are divided by gender. Charts seven and eight reveal that,

⁷ For a region outside the purview of this essay, see Mazzoli-Guintard, ‘Notes sur une minorité d’al-Andalus’.

Charts 9.7 and 9.8. Verdicts by gender (percentages of the 530 total)

proportionately, women were *more* likely than men to be declared ‘clean’ but they were also *less* likely to receive an indecisive diagnosis. It is difficult to determine how much of this disparity is due to the gender ratios in the incidence of leprosy itself, to varying symptomatic manifestations, or to diagnostic procedures in examinations – and, in addition, to the previously mentioned social inequalities. Another near-imponderable will emerge shortly,

in the closer examination of the two voluminous files that slant the overall tabulations. Be that as it may, the general distribution of verdicts by gender will prove a useful context for the social conditions and official policies that influenced the *visitatio leprosorum*.

Charts 9.9 and 9.10. Gendered verdicts by region

The gendered verdicts are plotted along regional lines in Charts nine and ten, in order to provide a more nuanced background – and for clues to more complex ramifications. Every segment shows variation between the French and German judgments, with the exception of the relatively few women (4 per cent) who received a suspended sentence. German

certificates more than double the ratio of women who were declared clean, and they almost double the portion of exonerated men. In the most remarkable disparity, however, the percentage of confirmed leprosy men drops by 30 points. These variations underscore the previously expressed reservations about any general conclusions to be drawn from the computations, and they merit deeper probing than is feasible here. There are ways, however, to expose both the weight and the thrust of two disproportionately rich files, one in German and the other in French archives. It is possible, moreover, to strain out some of the factors that distort statistical projections *and* to recognize the broader relevance of these same factors. It will prove helpful to look more closely at the regional provenance of the certificates, to measure and compare their distributions of the verdicts, and to correlate the results with the respective contexts.

The tabulation of German verdicts is slanted by the provenance of a sizable majority in a single city, with as many as three-quarters of the examinations having been held in Cologne. This preponderance, while due to various factors in the particular urban *milieu*, is decisively important because physicians of the University of Cologne performed nearly every recorded *Schau*. The certificates routinely name the examining practitioners with their professional titles, and many add concrete details that demonstrate the dominance of the faculty of medicine in determining the incidence of leprosy. One salient instance of this dominance dates from 1486, when the entire faculty of medicine attended the examination of Margaretha, a Benedictine nun, whom they declared free of leprosy, ‘notwithstanding some red spots on the face’. The document stated explicitly that it bore the seal of the faculty dean; and the sworn beadle-notary of the *studium* witnessed and recorded the proceedings. The records further show that beadles summoned witnesses, scheduled and orchestrated the event, presented the candidate to the examiners, and even received his or her promise to obey the verdict.⁸ Another sign of the faculty’s central role is the explicit acknowledgement, in at least 130 certificates, that the examination was held in the home of the presiding doctor, who was frequently identified as the dean. It should be noted that the prominent role of university physicians in examinations was not unique to Cologne but a hallmark of German cities, from Tübingen to Nuremberg.

⁸ ‘Urkunden’, ed. Keussen, pp. 91, 93, 96.

Chart 9.11. Cologne gendered verdicts

Another distinctive characteristic and, to some extent, a complementary feature, of the German *Schaubriefe* is the relatively limited visibility of *leprosaria*. In the case of Cologne, only seven of more than 200 certificates refer to the city's largest and most celebrated leper hospital, which was called Melaten (and stood on the site of today's central cemetery). In all seven, dated from 1526 to 1648, the doctors unequivocally contradicted a 'less just' or 'false' *iudicium* that had been issued 'in the leper house (*domo leprosorio*) near Cologne' or 'by the lepers outside the walls'. The final visit to Melaten occurred in 1712 (the latest *visitatio* inside a leper hospital in my database), when the city senate summoned the faculty dean with a colleague 'to examine the lepers'; they dismissed eleven of the twelve inmates 'with a clean bill of health' (*muniti testimonio purificativo*), and they judged one woman to be infected. The prominence of the faculty of medicine, together with the low profile of the leper hospital, naturally shaped the procedure and the outcome of examinations, but not necessarily in a readily anticipated direction, as we discover in Chart eleven.

One relatively predictable figure in this chart is the percentage of undecided or ambiguous judgments. These judgments, it should be noted, commonly included the command of a return visit, together with the recommendation, more emphatic in the Cologne

Charts 9.12 and 9.13. Cologne verdicts by gender

records than elsewhere, that the subject should remain under the supervision of ‘an experienced physician’. Notwithstanding these stipulations, the degree of indecisiveness seems hardly consistent with the advanced learning and vaunted knowledge of the university

professors. It is even more remarkable, however, that these doctors declared such proportionately small numbers of examined men and women to be leprous. The disproportion becomes more impressive when the verdicts are tabulated for each gender separately, as in Charts twelve and thirteen.

These ratios, particularly the large proportion of men and the extraordinary number of women who were exonerated, give us pause for thought, with implications far beyond this inquiry. Suffice it here to consider a few of the causes that were responsible for the low rate of leprosy diagnoses. Elaborations in the Cologne certificates echoed contemporaneous indications that doctors, in Germany and elsewhere, steadily improved their ability to differentiate symptoms; they frequently qualified an exonerating diagnosis by explaining that they had reached it ‘notwithstanding’ (*non obstante*) the semblance of leprosy. For the limited number of positive verdicts, the repeated use of the terms ‘to be separated’ and ‘to be sequestered’ (*separandus*, *sequestrandus*) evinces the doctors’ awareness of the negative consequence of a leprosy diagnosis. Inversely, they were also resisting the hasty and sweeping pre-judgement of ‘lepers’ by the populace at large. In the case of Cologne, they may actually have resisted attempts by the Melaten hospital to inflate the number of certified lepers and thus to raise its principal source of income. In any event, the wide gap between the numbers of ‘alleged’ or ‘suspected’ and ‘condemned’ lepers expands our outlook beyond the role of medical examiners, to a broader context that includes popular fears, social unrest, and economic distress. In this context, the tabulations and testimonies should leave no doubt that, even if concerns with contagiousness were pervasive, various other motives were involved in the staging of a *visitatio leprosorum* and, even more, in the resulting verdict.

Iudicia

The correlation between fear of contagion and other incentives for official measures becomes clearer in a counterpart of the Cologne archive, namely, the voluminous file that skews the French overview. This counterpart is less massive, but it carries broader implications. It is a legacy of the former town of Montferrand (now a part of Clermont-Ferrand in Auvergne), where the municipal consuls presided over a special court called ‘Le Tribunal de la Purge’. This court had the power to summon suspected lepers, order their examination, certify the sentence, and enforce its consequences. It operated from at least the early fourteenth century, when it was recognized by the French King Philip IV, into the second half of the seventeenth century. The tribunal, with jurisdiction over neighbouring areas ranging from Rouerge to Beaujolais, generated copious records of its judgments. Johan Picot has recently mined the

Chart 9.14. Montferrand gendered verdicts

archival treasure trove, in a monumental study that has inspired much of this inquiry.⁹ Thanks to Picot's painstaking research and judicious analysis, the interpretation of 'purge' has become pivotal in my argument for the variety of motives behind the *visitationes* and *iudicia*.

Before parsing the certificates issued by the Tribunal de la Purge, and in order to complete our comparative and comprehensive framework, we should have an idea of the general patterns to be discerned in this archive. First, the overall distribution of verdicts here, which is illustrated in Chart fourteen, differed perceptibly from that in Cologne (Chart eleven), particularly in the gender ratios: men comprised a greater share of the examinees (82 per cent) in Montferrand than in Cologne (75 per cent). Differences become more sharply delineated in a projection of the Montferrand verdicts by gender, in Charts fifteen and sixteen. Nearly half of the examined men were judged leprous, in stark contrast with the mere 7 per cent in Cologne (Chart twelve); furthermore, four times more women were declared leprous than in Cologne (Chart thirteen). Conversely, the Tribunal examiners issued far fewer

⁹ Picot, 'Malades ou criminels?'. I am profoundly grateful to Dr. Picot for generously sharing not only his study *in toto* but also, in stimulating correspondence, his insights.

‘clean’ verdicts. They manifested greater confidence than the German university physicians

Charts 9.15 and 9.16. Montferrand verdicts by gender

about the diagnosis of male candidates while, on the contrary, appearing less than half as certain about the condition of female examinees. It should be noted that about a quarter of the Montferrand examiners were surgeons or barber-surgeons, and about a third had no medical credentials. These figures are consistent with the French *visitationes* in general, and they stand in contrast with the dominance of doctors in Cologne and in German *Besehungen* as a

Charts 9.17 and 9.18. French verdicts by gender without Montferrand

whole.¹⁰ This is also a suitable place for recognizing that individual verdicts were more likely to be recorded when they were certified by physicians, and that this correlation affected the pertinent documentation not only in volume but also in thrust, to an extent that is difficult to measure.

In one more projection, which is needed for a more nuanced evaluation of relative weight, the Montferrand file has been subtracted from the French total (of which it accounted for less than one third). The adjusted distributions, plotted in Charts seventeen and eighteen, demonstrate relative parity between Montferrand and the rest of France in the patterns of judgments of men, while the ratios were virtually inverted for women. The Tribunal file, however, had a less drastically distorting effect on the overall French profile than the impact of the Cologne verdicts on the German total (of which they made up more than three quarters): this becomes apparent when we collate Charts nine through eighteen. On the other hand, the Tribunal records are exceptionally valuable for assessing the objectives of *visitationes* and the motives behind *iudicia*. These records bear out the sense, which arises from the variation in the patterns projected above, that public health was not the single or simple motive for official measures, and that exclusion was not their sole or automatic objective. This impression advances toward certainty when we proceed from the tabulation of data to the exploration of contents.

The certificates issued by the Tribunal de La Purge leave no doubt about the goal ‘d’écarter de la société saine les lépreux signalés’, which Picot emphasized in his path-breaking study.¹¹ The primary objective of La Purge was indeed to rid and protect society from the danger of lepers spreading their dreaded disease by contagion, but this indisputable fact calls for several further observations. First, it is still advisable to point out that the notion of ‘contagion’ was then interpreted with far greater latitude than it is today. More important, the Tribunal’s ‘sanitary’ responsibility for preventing the spread of leprosy also embraced secondary concerns which ranged from social status to communal peace; similarly, sequestration was neither the absolute aim nor the exclusive method of ‘policing’ by La Purge. In a broader perspective, I suggest that the term ‘purge’ taints modern perceptions and that, for the sake of historical accuracy, we should consider the ambivalence of the Tribunal,

¹⁰ Non-university practitioners, who appear rarely in German certificates, included a *Scherer*, *Barbier*, *Bader*, and, quite late (hence possibly university-trained), a *Meister der Chyrurgie* and a *Kretzenmeister*.

¹¹ Picot, ‘Malades ou criminels?’, I, p. 9.

as a public agency less sinister than the Nazi *Gesundheitsgerichte*, but more directly coercive than the US Centers for Disease Control and Prevention.¹²

This (still inchoate) effort to determine the ambivalence or, more precisely, polyvalence in the motivation for promoting the *visitatio leprosororum* begins logically with official measures against the spread of disease before exploring a spectrum of ulterior objectives, from the preservation of public security and social harmony to safeguarding material welfare. If the fear of contagion was omnipresent, it was not always expressed, decisive, or heeded. To be sure, many formulas (more in French than in German certificates) bespeak worries about contagiousness, which were shared by the authorities, the populace, and physicians. In 1499, the Tribunal de la Purge declared Anthoine de Rochefort infected by leprosy, forbade him ‘to interact with the healthy’, and banned him from the most likely places of contagion ‘such as church, fountains, ovens, mills, and rivers’.¹³ In 1546, Maistre Jacques Desmaitres confirmed the ‘common voice’ in Bapaume that Claudine Detailleux was ‘chergie de la maladie contagieuse de lepre’.¹⁴ Such charges occasionally acquired a tone of urgency in warnings about danger and allusions to fear. In 1501, for example, Pollet Roze was exonerated in Béthune even though, paradoxically, he might have ‘morphew, which is a very dangerous kind of leprosy’.¹⁵ In 1550, evidence of white morphew induced the examining physicians, surgeons, and *ladres* from the two *leprosaria* in Saint-Omer to order the sequestration of Nicolas Bernard because this kind was ‘la plus dangereuse et contagieuse’.¹⁶

Several verdicts made the risk of contagion more concrete by identifying a ‘suspect’ as a barber or a baker and thus drawing attention to an occupation that involved, directly or indirectly, contact with people. In 1395, the butcher Jehan le Caron was forbidden ‘to engage in his trade in any manner’.¹⁷ In 1520, the Cologne doctors ordered a lay brother of the

¹² In view of the significant overlaps between leprosy legislation and eugenics, a valuable perspective can be drawn from histories of public health jurisprudence and ethics, such as Lombardo, ‘Medicine, Eugenics, and the Supreme Court’.

¹³ Picot, ‘Malades ou criminels?’, II, p. 240: ‘Declairons ledit maistre Anthoine Rochefort notaire estre entaché de ladite maledie de lepre [...] et ensuivant luy avons interdit la communication des saintz mesmement les lieux comme l’esglise, fontaines, fours, molins, rivières.’

¹⁴ Bourgeois, *Lépreux*, p. 228, note 8.

¹⁵ Bourgeois, *Lépreux*, p. 240, note 52.

¹⁶ Bourgeois, *Lépreux*, p. 186.

¹⁷ Bourgeois, *Lépreux*, p. 214.

Observant Order of Franciscans ‘to stay away from the task of cooking’, even though he was not yet ‘actually leprous’.¹⁸ In 1521, the Montferrand Tribunal addressed the complex case of Guillaume Chassot, the keeper of an inn ‘where many merchants spend time and stay’ and ‘grand personages come together’. Chassot suffered from leprosy according to ‘common rumour’; and many expressed the fear that he was in a position to cause ‘great harm’. The royal procurator took sworn depositions from nine witnesses, including seven butchers, several of whom declared that they would not want ‘to give Chassot a daughter in marriage, or to drink, eat or consort with him, for anything in the world’.¹⁹ The innkeeper received a two-month reprieve upon claiming ‘to be in no condition for being examined and palpated’ because he was suffering from ‘the disease of Naples which gave him a tertian fever’.²⁰ He managed to be released because of ‘la qualité de sa personne’, but he entered the *maladrerie* less than five months later.²¹

Two other occupations generated particular anxiety about contagion because they also entailed close contact with people. While they were ironically situated at opposite ends of the social spectrum, the exercise of both had implications that transcended issues of public health. At one end stood the ‘fille de joie’ who appeared before four Béthune barbers in 1500,²² and the ‘femme publisque’ who came to be examined in Montferrand in 1523. The latter’s fellow parishioners testified that she had led a ‘vie lubrique’ for some thirty years. She suffered from ‘some facial affliction similar to smallpox (*comme veyrolle*) almost as if she had been leprous’, a qualifier worth emphasizing because it hints at motives behind the fear of leprosy (and, arguably, of contagion). The witnesses declared that the parish had kept the woman out of church for two years, and that they had ‘come to fear her company’. One of them asserted that he would ‘not drink from her cup, eat with her, or sleep naked with her’,

¹⁸ ‘Urkunden’, ed. Keussen, p. 90.

¹⁹ Picot, ‘Malades ou criminels?’, II, pp. 203-206: ‘En laquelle hantent et frequentent journellement plusieurs marchans et autres gens tant d’estat que d’autres [...] par le moyen de quoy en peult advenir gros inconvenient [...] s’il avoit une filhe et ledit Chassot estoit a marier il ne la luy vouldroit donner en mariaige a cause de ladite suspicion et ne vouldroit boyre, manger ne frequenter avec luy pour riens du mond [...] commune renommée.’

²⁰ Picot, ‘Malades ou criminels?’, I, p. 365 note 279; I, pp. 46, 351: ‘[N]’estre pour le present en estat pour estre vizité et palpé pour ce qu’il a dict estre actainct d’autre maladie, scavoir est de la maladie de Napples quy luy a causé une fievre tierce.’

²¹ Picot, ‘Malades ou criminels?’, I, p. 429: ‘[L]a qualité de sa personne.’

²² Bourgeois, *Lépreux*, p. 239 note 47.

but he admitted not knowing whether she had leprosy or *maladie de Naples*. This uncertainty probably accounted for the suspended sentence pronounced upon ‘the public woman’.²³

At the opposite end of the conventional spectrum of respectability, clergymen were also targets of vigilance because of their interaction with others. In 1521, people suspected churchman (and one-time barber) Thorin Lebrauld to be infected. Many maintained that they were ‘afraid to approach his breath’ or ‘to sit close to him’ at supper after their *jeu de paume*. These noteworthy references to contagion by air or contact should not make us overlook the role of underlying emotions, as the witnesses reported that the cleric’s condition had ‘greatly worsened these past days, with a breaking voice, fits of anger, and pustules (*peste*), as if he were leprous’. The examiners of Le Tribunal, while admitting their inability ‘to know whether or not he was infected’, determined that, if the subject ‘was a priest and [the faithful] wished to receive communion from his chalice, they should not touch his vestments’.²⁴ The *visite* of a priest in 1564 further illustrates the combination of ambiguity in judging with a coherent sense of the risk of contagion *and* indistinct fear. The aldermen of Béthune recorded the complaint that Robert Constant, though suspected, ‘celebrates masses in churches, a very dangerous thing for the churchmen who celebrate after him, and for those who receive communion from him’. Doctors and surgeons ordered that Constant should not be allowed to say mass for six months, or even ‘to wear the vestments and ornaments of church’; however, they did not offer a decisive diagnosis.²⁵

²³ Picot, ‘Malades ou criminels?’, II, pp. 212-214: ‘Qu’elle a commun bruit depuis XXX ans en ca de mener vie lubrique et femme publique a tous [...] Deux ans ou environ que la parroisse deslors luy deffendut l’esglize et la communicacion des gens saintz et places publiques et commancerent les habitans de ladite parroisse depuis ledit temps la faire sequestrer et craindre sa compaignie par ce qu’il luy survint quelque maladie au visaige comme veyrolle quasi pres comme si elle eust esté ladre [...] Enquis ledit depposant s’il voudroit boire en son varre, manger, cocher tout nut a elle, dit que nom pour raison de ce que luy est sorty au visaige et qu’il ne scet si c’est maledie de lepre ou maledie de Napples [...] Si elle estoit trouvée nom entachée de ladite maledie de lepre luy estre permis la frequentation des saintz comme au paravant la suspicion.’

²⁴ Picot, ‘Malades ou criminels?’, II, pp. 209-212: ‘Plusieurs gens le suspectoit d’estre ladre et creignant s’aprocher de son alayne et estre pres de sa personne [...] de bien que aloient sopper ensemble et ampres ce qu’ilz eurent joué a la paume ou alarent sopper ensemble et quant vint a l’assielt dudit sopper chacun creignoit ce metre ampres de luy [...] s’il estoit presbtre s’ilz voudroient comugnier a son calisse, disent que non ne toucher ses abilhemens [...] par derniers jours le fait mal voir plus que les autres jours tellement qu’il a une voys cassé, collere, peste comme si estoit ladre.’

²⁵ Bourgeois, *Lépreux*, pp. 30, 241 note 53.

The substantial rate of indecisive verdicts, which is projected in Charts six through eighteen above, undoubtedly reflects the diligence of the examiners. It is even more indicative of the notorious diagnostic challenge presented by the stages, forms, and mimicries of leprosy or, in the words of Lille doctors in 1509, ‘les grans contrariétés que l’on trouvait en ladite maladie’.²⁶ Hesitant sentences by medical examiners sometimes drew strenuous objections from those who had initially raised a suspicion of leprosy. In 1464, a physician in Auriol, a suburb of Marseille, certified that because the symptoms of Bartolomeus Giraudi were still equivocal he should not yet be ‘completely separated’. The town officials, who had ordered the examination, ‘protested solemnly against the person’ and, perhaps more ominously, threatened to take action ‘against the goods of the physician’ if he maintained his provisional judgment.²⁷ While this is one of the numerous certificates that attest to concern about contagion, the threat by the Auriol magistrates also points to external pressures that might affect the outcome of the *iudicia leprosum*. It is natural to wonder, but difficult to determine, whether these pressures exerted greater influence on positive, negative, or indecisive diagnoses. As for the sources of pressure, the certificates offer unmistakable clues that contagion was not an all-absorbing preoccupation.

The certificates and contextual evidence further suggest that ‘contagion’ was a conveniently malleable notion, for they reveal a considerable degree of inconsistency, both in the wording of official measures and in actual conduct. A conscious and determined defence against infection would, for instance, have raised at least some reservations about the routine staging of examinations for leprosy in the homes of doctors and, most amazing, of distinguished faculty members, as we saw in Cologne. In a reverse instance, ‘several physicians and surgeons’ examined the Arras lawyer Adrien de Bellevalet in his own residence in 1574. They diligently inspected his entire body, his urine, and the blood drawn from his right arm; they found no tell-tale signs, although his nose and mouth were deformed, which they declared insufficient grounds for having him sequestered.²⁸ We may wonder whether the lawyer’s status contributed to his being examined at home and receiving a provisional clearance. With regard to contagion, this *visite* reminds us that examinations customarily involved procedures, including palpation and bloodletting, which would have

²⁶ Bourgeois, *Lépreux*, pp. 164, 313 note 102.

²⁷ ‘Procès-verbal’, ed. Barthélemy, p. 117.

²⁸ Bourgeois, *Lépreux*, pp. 211, 218 note.

been avoided by anyone who feared infection by momentary contact or, for that matter, by infected air (miasma).

Inconsistent attitudes towards contagiousness become more evident in the instances in which an inmate was allowed or even forced to leave a leper hospital. When regents exempted a leprous resident from the restrictions regarding sequestration, they did not add an express admonition that he or she should avoid contact with the healthy. This was the case when they granted permission to travel, most often for seeking a second opinion in another town, but sometimes for different personal reasons such as a pilgrimage. The risk of contagion was also disregarded, or at least relegated to second place, when a confirmed leper was simply released from the hospital into the community. This is what the residents of Saint-Ladre in Mons wanted to do in 1450 to a man who, they claimed, had been born elsewhere and therefore did not qualify for support.²⁹ Similarly, the municipal council of Aix-en-Provence in 1485 expelled a leper from the Saint-Lazare hospital because he was ‘a foreigner’.³⁰

Leprous ‘foreigners’ are of special importance to this essay because they bring perspective not only to inconsistent attitudes towards contagion but, beyond, to the complexity of threats and responses, as well as to the coexistence of exclusion and inclusion. The status of these lepers, however, is elusive and often confusing, because of local variations as well as scanty documentation.³¹ Their comprehensive history remains to be written and to be retrieved from an area of scholarship that falls between the extensive research on leper hospitals and the intense discussions of premodern responses to the disease of leprosy.³² As late as 1602, the officials of Nancy (Lorraine) ordered the nuns who administered La Madeleine to dismiss the *lèpres forains* whom they had admitted ‘to the disadvantage of the residents, to whom the right to alms belongs’.³³ In German the *Sondersiechen* or ‘outside sick’ were distinguished from the residents in a *Hauptsiechenhaus*,

²⁹ De Keyzer, ‘Lépreux et léproseries’, p. 536.

³⁰ Jean Pourrière, *Les Hôpitaux d’Aix-en-Provence*, p. 142 note 9.

³¹ A common but confusing assumption is that *Sondersiechen* were the only subjects of the *Schau*, as in ‘Vier Begutachtungen’, ed. Rieder, p. 385. A more recent author compounds the confusion about the group identity of leprous non-citizens, first by characterizing the Cologne Melaten as ‘das größte *Sondersiechenhaus* des Reiches’ [emphasis added], and then by equating ‘Aus-sätzigen’ [hyphenation by the author] and ‘Sondersiechen’: Felten, ‘Mittendrin statt außen vor?’, pp. 11, 13.

³² The most judicious assessment to date is Dross and Kinzelbach, “‘Nit mehr alls sein burger’”.

³³ Henri Le Page, ‘Madelaine-lès-Nancy’, p. 48.

and tellingly associated with the countryside as *Veltsiechen* or ‘the sick of the fields’.³⁴ In Dutch, the *akkerzieken* were distinct from the *hoge zieken* or ‘high sick’ (Bruges and Ypres) who lived in the ‘rich’ *leprosarium* (Ghent).³⁵ It is worth noting that the distinction between burgher and outsider, as well as the distance between town and country, could be bridged by communal care or sponsored association. In Bruges, for example, the leading Gruuthuuse family had patronized a charitable corporation or ‘guild’ (*gilde*) since 1396 for the benefit of the *ackersiecken* who were ‘staying one mile outside’ the town.³⁶ In the region between Antwerp and Brussels, the *veldzieken* became grouped in a confraternity with statutes that were approved by the prioress of the Leuven *leprosarium* in 1521, and by Emperor Charles V in 1531.³⁷

Wandering lepers may have outnumbered the inmates of institutionalized *leprosaria*. We will never know how many of them found shelter in smaller, less endowed, and less permanent abodes, from a *maladrerie* at the edge of town to a *cabane* in a deserted place. In addition, we may tend to underestimate the number of those who were, for all intents and purposes, homeless. By definition, ‘wandering’ or ‘vagrant’ lepers were less confined and more visible than their hospitalized counterparts. While proverbially avoided by the populace, they seem to have mingled among people more than is commonly assumed. When they grew disruptive because of their numbers, unruly lifestyle, importune begging, or physical appearance, they posed societal challenges that, in turn, triggered *ad hoc* interventions and long-term measures by municipal, regional, and imperial authorities. Their everyday presence left few traces in certificates, but it surfaces in lawsuits and accounts.

An entry in the town accounts of Bruges for 1309 lists a payment for two ‘guardians’ (*bewaeress*) of seventeen ‘sick people’ (*besiecte lieden*) outside the hospital.³⁸ In a more ominous instance recorded as a municipal disbursement, a messenger from Arras received 22 *sous* from the aldermen of Lille in 1465 for coming to warn them that four men had surreptitiously left Arras and taken to the road disguised as lepers, ‘habillés à ghisse de

³⁴ For a succinct and lucid note about *Veltsiechen* and leper housing in Koblenz, see the (unattributed) essay on <http://www.gr-atlas.uni.lu/index.php/articles/ge57/le205/ko209>.

³⁵ A request for admission was addressed to the commissioner ‘vande hooghesiecken van Brugge’ in 1510: Bruges, OCMW-Archief, stuk 14; *De Leprozerij*, ed. Mus, *passim*. ‘De Gentse leprozerie, beter gekend onder de naam “Rijke Gasthuis”, werd rond 1146 gesticht’: De Paermentier, ‘De relatie vrouw-ruimte’, at note 156.

³⁶ Dewitte, ‘Lodewijk van Gruuthuse’, p. 197.

³⁷ Tricot and Van Hee, ‘Pest en lepra’, p. 81.

³⁸ De Potter, ‘De leproos in de middeleeuwen’, p. 174.

ladre'; it is not clear whether they intended to exploit fear or mercy.³⁹ In 1516, the chapter of the cathedral of Troyes (Aube) lodged a complaint against two leprous priests for 'not residing in their huts (*bordis*) outside the walls but among the people' and who, 'worse, keep concubines who publicly bring ecclesiastical vestments to the [parish] church for the masses which those *leprosi* celebrate, to the scandal and peril of all the people'.⁴⁰

On the regional level, disciplinary control over *lèpres forains* was the responsibility, at least in some urban statutes, if not in practice, of the 'king of the scoundrels' (*roi des ribauds*). This official was also in charge of the brothels, with the title of *roi de l'amoureuse vie*, which reminds us that the sexual transmission of disease and the potential for crime on the margins of society were (and are) overlapping issues.⁴¹ On the imperial level, discipline was the sole concern of a stern ordinance 'against the vagabonds in Flanders' which Charles V issued in 1515, without alluding to any risk of spreading disease. The ordinance did not mention lepers explicitly, but impostors must have been among the roaming beggars who 'pretend to be disabled'.⁴² The Emperor's edict was reiterated through the sixteenth century. Widespread vagrancy remained a threat in times of war, plague, and famine; it is worth noting that associated dangers for public health received little attention from the authorities. Vagabondage merged with leprosy in a violent combination as late as the early eighteenth century, with the *Große Siechenbande*, gangs whose first members were, ironically, healthy inmates of *leprosaria* (including the Cologne Melaten). Some murderous highway robbers masqueraded as lepers, and a few even obtained a certificate or *Siechenbrief* by extortion. This dramatic climax, together with the preceding responses to the wandering lepers, proved that order could become more urgent than health as an objective in the service of the *res publica*.⁴³

The *visitationes* reveal neither the footprints of itinerant lepers nor the shadows of impostors, except for a few ambiguous allusions. They strangely lack echoes of the 'simulants' about whom Volcher Coiter and Georg Palma warned the authorities in 1572, and Ambroise Paré in 1573, when they formulated precise instructions for the examination of

³⁹ 'Documents inédits', ed. De la Fons de Mélicocq, p. 458 note 3.

⁴⁰ Troyes, Archives départementales de l'Aube, G 1281, fol. 62r.

⁴¹ Coomans, 'In Pursuit of a Healthy City'.

⁴² *Recueil des ordonnances des Pays-Bas*, ed. Laurent, pp. 457-458.

⁴³ For a different perspective on the correlation between urban order and communal health, see pp. 111-115 above.

lepers.⁴⁴ An illustrative and intriguing story emerges from a dozen certificates, with the likelihood that two brothers may have been persistent pretenders, as well as roving mendicants. Jean and Jacques de Volckerinckhove were examined repeatedly, in Saint-Omer and three other places between 1483 and 1509, only to be admitted to hospital but then to be discharged as healthy; in between, both incurred punishment, one for ‘reprehensible relations’ and the other for ‘a dishonorable request from a leprous woman (*ladresse*)’. The brothers deserve the benefit of the doubt as possible victims of a deceptive disease, yet they exemplify problems that, while accompanying leprosy, extended beyond questions of health. Whether or not Jean and Jacques were *vagantes*, their vicissitudes also make us think about the extent to which popular and official dealings with leprous individuals differed from responses to groups of lepers. I have not found clear evidence in German records that *Sondersiechen* were examined in individual sessions, in distinction from the celebrated group *Schau* in Nuremberg.⁴⁵ The picture is equally unclear for France. When judging Robert du Trymolet leprous in 1522, Le Tribunal ordered him ‘to withdraw to a place separated from the healthy’, but this separation did not preclude admission to a leper hospital.⁴⁶ Robert was also instructed, as Guillaume Cestrier had been two years earlier, ‘to carry the bowl and clappers’, the common attributes for lepers in public spaces; these implements, however, were carried not only by *lèpres forains* but also by residents of leper houses when they needed to travel.⁴⁷

Whenever the orders by Le Tribunal mentioned ‘separation’, they highlighted the court’s goal of removing confirmed lepers from the community, or, in other words, the exclusionary interpretation of ‘la Purge’. This interpretation reflected the outlook of a royally commissioned institution and of politicized juries that consisted of the town consuls and thus were controlled by prominent burgher families. To some extent, this context also accounts for the emphasis which the Montferrand judges placed on their *coercive power to purge society*, and which clearly influenced the medical examiners; the Cologne doctors, in contrast, judged

⁴⁴ For Coiter and Palma, see Nuremberg, Stadtbibliothek, Handschrift Cent.V, 42, fols. 140v-142r, 149v-153r, 156r-v. Paré, *Les oeuvres*, p. 1194, is the only place where Paré’s template is extant. See also Jütte, ‘Lepra-Simulanten’, pp. 25-42.

⁴⁵ Demaitre, *Leprosy in Premodern Medicine*, pp. 45-51.

⁴⁶ Picot, ‘Malades ou criminels?’, II, pp. 245-246: ‘Qu’il se ait a retirer et mectre en lieu separé des sains.’

⁴⁷ Demaitre, ‘The Clapper’. For example, when Yzabel Lolier was brought from Nancy to La Magdaleine in Toul in 1542, she received ‘a clapper, a wood cup, and a pair of gloves’: Le Page, ‘Madelaine-lès-Nancy’, p. 45.

with far less evidence of external influences, coercion, or the threat of ostracism. If the mandate of La Purge was patently exclusionary, however, it most often coexisted with an alternate objective and a note of inclusiveness. Numerous judgments expressed concern with restoring an individual's reputation or, at least, clearing the air of uncertainty. When a neighbour suspected him in 1497, Jehan Bosquet 'wanted to be cleared (*se vouloit fere purger*) and to know the truth'; the examiners did not find 'anything sufficient to condemn or absolve him', but they advised that he should be isolated until they could arrive at 'a true judgment'.⁴⁸ Different senses of 'purging' poignantly converged in the case of Jacmete Parset, who was 'accused by some people' of *mesellerie* and came to Le Tribunal in 1449. She asked to be 'cleared' (*expurgée*) in order 'to lift the suspicion' so that she might 'converse, eat and drink with healthy people'. With two consuls present, a physician and a barber examined Jacmete, who was found to be infected and accordingly sentenced 'to be separated from the company of people in order to avoid the dangers'. In addition, she was ordered to carry the clapper and to stay away from 'the church, the oven and fountains, in accordance with custom'.⁴⁹

Compelling evidence outside Montferrand supports the argument that 'purge' had an alternate meaning, aside from the more obvious sense which prevailed at Le Tribunal. Archbishop Berthold authorized members of the Mainz Faculty of Medicine in 1493 'to examine those suspected of leprosy' in order 'to make the truth *clear* and bright' (*pro purganda et limanda veritate*).⁵⁰ The prefect and aldermen of Valenciennes, together with the judges of the peace, in 1547 ordered Loys Fourment to be examined 'in order to *clear* or

⁴⁸ Picot, 'Malades ou criminels?', II, pp. 264-266: 'Dist qu'il se vouloit fere purger et savoir la verité s'il estoit entaché de ladite maladie de lepre [...] ne le troveront en luy chose souffisante pour le comdepner ou assouldre et conclurent entre eulx qu'il failloit encoure actendre le temps chault pour en fere vray jugement bien dirent entre eulx qu'il n'estoit pas bon le communiquer.'

⁴⁹ Picot, 'Malades ou criminels?', II, pp. 103-104: 'Disant que elle avoit esté aculée par aucunes gens ou autrement de la maladie appellée de lepre ou mesellerie en nous requerant que elle fust par nous expurgée et examinée pour soy ouster de ladite suspicion et savoir la verité du fait et affin qu'elle puisse converser, boyre et manger entre lez autres gens et personnes saines [...] que elle se de separe de la consorcie du peuple pour eviter les dangiers et que elle ait a pourter les claquetes que les ladres pourtent comme est de coustume et lui deffendent l'intrage de l'eglise, du four et des fontaignes comme est de coutume.'

⁵⁰ *Rheingauische Alterthümer*, ed. Bodmann, I, pp. 198-199. I am grateful to Lucy Barnhouse for referring me to this source.

convict him (*affin de le purger ou condempner*) of the suspicion pending against him'.⁵¹ At least one record hints at a third interpretation, or opens room for ambiguity between the two meanings of 'purge'. In a verdict reminiscent of Leviticus 13 and its focus upon ritual purity, the physician who examined Pierre Bernard in Saintes-Maries in 1347 decided that he 'should be separated from the company of the healthy and put in some place where he could and should complete his purification (*purgatorium adimplere*)'.⁵²

There is also a shade of ambiguity in the case of Giraud Bonvallet, who in 1510 came to Le Tribunal to defend himself against one Jehan Rossel. The latter, 'moved by malice, shouted in the street, "Go look for Giraud, that leper! I promise you that in the coming two or three weeks I will bring him to Montferrand to have him purged (*pour le fere purger*)." By these words Rossel has conceived great hatred and ill will towards Giraud.' The case sounded more judicial than medical, however, when Giraud requested permission to inform the Tribunal that three men who, inferentially, had joined Rossel in broadcasting his allegation were 'indigents who behaved badly, often from drinking too much, so that one should not believe their testimony with the same trust as is given to men of good standing'. Three physicians and three surgeons examined him, and agreed that Giraud, while 'on the way to falling into the said disease', did not yet need to be sequestered; nevertheless, he was enjoined to frequent public places as little as possible, and to 'appear in person a year hence'.⁵³ Giraud's case is but one of many in which aspects of public order were interwoven with the management of public health. This complexity is pervasive as a subtext in the

⁵¹ Wickersheimer, 'Beiträge zur Geschichte des Aussatzes', p. 145.

⁵² 'Procès-verbal', ed. Barthélemy, p. 120.

⁵³ Picot, 'Malades ou criminels?', II, pp. 228-229: 'Tout esmeu de malice [...] proffera a la Rue Publicque et entre les maisons telles paroles ou semblables: "va t'en querir ton cosin Girault Bonvalet, ladre qu'il est et te promes que dans quinze jours ou troys seupmaines prochaines je te le fere mener ou moy mesmes le maray a Montferrand pour le fere purger" par lesquelles paroles apart que ledit Rossel a consceu grand ayne et malvielence contre ledit Girault. Plus requiert ledit Bonvalet qu'il vous plaise informer que Barthelemy Boybas, Andrien Vidal et Pierre Fuzier sont gens pouvres et presque indigens et ont tres mauvaise conduyte en leurs affaires souvenoeffoys par tropt boyre ou par tropt menger a cause de quoy ont ne doit adjouster foy en leur tesmogniage si ample que on feroit a d'aultres gens de bonne qualité [...] non obstant que ledit Girault Bonvalet soit en chemin et voye de cheoir et tomber en ladite maladie de lepre se par medecine, sirurgie et bon regime n'est ecouru ainsi qu'il nous est apparu par les signes universelz et non obstant disons et declerons que pour le present ne doit poinct estre separé de la compagnie des sains, touteffoiz ne doit poinct hanter ladite compagnie des sains et mesmement es lieulx publicques maiz le moinctz que faire se pourra et en oultre disons qu'il sera bien faict et est chose necessaire de le faire de rechiefz comparoir en personne dans l'an revolu.'

archives of La Purge, but numerous certificates and complementary records refer clearly to issues of public order. These issues, which often sprang from emotion rather than reason, and which sometimes lurked behind the ostensible agenda of public health, ranged from prejudicial intolerance to threatening unrest.

It is relevant to emphasize here that prejudice, driven by emotion, had an ill-defined target; that its impulsive expressions require a second look; that it commonly arose from a local and popular base; and that it often competed with centralized policies. With some irony, the term ‘parochial’ is borne out in the certificates by the frequency with which rumours are tied to a specific parish or neighbourhood, and by the infrequency with which suspicions were confirmed by the examiners. The parishioners of Saint-Donat took the initiative in excluding a ‘public woman’ and proceeding ‘to have her sequestered’ in 1523.⁵⁴ Three years earlier, the sextons of the parish of Flat brought Guillaume Cestrier to Montferrand ‘in order to have him removed from the company of the healthy’.⁵⁵ In 1537, Benoiste Merle refused to pay Le Tribunal the cost of an indecisive examination that, inferentially, was prompted by rumours in her parish. The judges were more decisive in 1515 when, certifying that Anthonie Lymoges was ‘not infected at all’, they charged the parishioners of Le Crest with the expenses.

It is legitimate to think about underlying motives in allegations of infection and demands for examination. Furthermore, some scepticism is in order when a popular response or an official measure seems, at first glance, a mere matter of sanitary policy aimed simply at preventing contagion. Thus, it is easy to presume that danger to health motivated the magistrate of Béthune in 1312 to set aside a place for lepers, until one realizes that the initiative responded to repeated complaints from the townspeople about their ‘extremely unpleasant’ presence.⁵⁶ It is similarly tempting to make an exclusive connection between contagion and an intervention by the town council of Marseille in 1479 when, upon closer examination, we detect the deeper social dynamics of that timeless combination of prejudice and self interest known today as ‘not in my backyard’. The authorities ordered the regents of

⁵⁴ Picot, ‘Malades ou criminels?’, II, p. 212: ‘Femme publique a tous [...] Deux ans ou environ que la parroisse deslors luy deffendut l’esglise et la communicacion des gens saintz et places publiques et commancerent les habitans de ladite parroisse depuis ledit temps la faire sequestrer.’ See p. 90 above for similar cases in England.

⁵⁵ Picot, ‘Malades ou criminels?’, II, pp. 242-243: ‘Afin de le faire oster et vuyder de la compaignie des sains.’

⁵⁶ ‘[T]en hoogste onaangenaam’: De Potter, ‘De leproos in de middeleeuwen’, p. 175, citing the charters of the counts of Flanders, Nr 1258, in Lille.

Saint-Lazare to remedy a ‘nuisance’ caused by the hospital residents, who had to use a stream about two kilometers away to do their laundry; the local inhabitants had complained that ‘the leprous poor pass by coming and going, and they mingle, talk, and sit with the healthy and, what is worse, they wash their dirty clothes to the great detriment of the entire community.’⁵⁷

Communal homogeneity and decorum were criteria for impulsive reactions, arguably already during the ‘formation of a persecuting society’ and before they became channeled into more rigidly structured settings.⁵⁸ Appearance played an important role that, though more pronounced in popular than in official responses, should not be overlooked.⁵⁹ Augustin Thonner, dean of the faculty of medicine in Ulm in the mid-seventeenth century, pointedly underscored and elucidated the effects of disfigurement as complementing – or even surpassing – the danger of contagion. He reported consulting on a poor countrywoman who had come to town for an examination (*inspectio*) since, ‘covered by dry scabies, she was held for leprous because of this foul and loathsome sight (*ob tam fædum et abominandum contuitum*)’. The local magistrate determined that ‘she could not be tolerated in the company of the healthy, on account of her ugly looks (*tetrum aspectum*) and of the contagious malady’; she was to be remanded to a *leprosarium* unless there was an effective and affordable treatment, which Thonner indeed claimed to have provided.⁶⁰ It is significant that, while either he or the magistrate mentioned contagion matter-of-factly and almost casually, the accent was on looks, not only when it came to the suspicion of leprosy but also the threat of sequestration.

Thonner’s report bolsters an impression, which certificates and contemporaneous records convey, but which may be accidental, that Germanic sources drew special attention to aesthetics beyond the mere facts of visual appearance. The vocabulary occasionally fosters this impression while alluding to the nexus between infection and transmission through the senses. In 1572, for instance, seven members of the Nuremberg faculty signed an affidavit that, even though Hanns Statler was ‘hideous and frightful’ (*abschewlich und zu fliehen*), he

⁵⁷ ‘Procès-verbal’, ed. Barthélemy, p. 117.

⁵⁸ There is an arguably anachronistic tendency to emphasize fears of contagion while minimizing the impact of appearance when placing medieval responses to leprosy in a broader context; this tendency is exemplified in Moore, *The Formation of a Persecuting Society*.

⁵⁹ This consideration has prompted me to produce a monograph on *Premodern Responses to Disfiguring Disease*, currently in preparation. Many aspects of aesthetics await further inquiry; one important element is explored pp. 57-59 above.

⁶⁰ Augustinus Thonerus, *Observationum medicinalium*, p. 210.

did not need to be sequestered because he was ‘infected’ (*verunreinet*) by the French Pox rather than leprosy.⁶¹ In 1557, the Flemish sworn physicians of Ypres linked sense perception with contagion, communal reactions, *and* public responsibility when they entreated the Regents of the Poor to look after Janneken Brassers as she had ‘fallen into such utter corruption of *laderie* that no one was willing to take care of her *because of the great stench* of her sick body, for this would bring infection and corruption on everyone’.⁶² Medical verdicts occasionally sounded ambiguous, as in the 1595 recommendation in Nuremberg that Kunigunde Scherlin, although not leprosy, needed to be sequestered until she recovered from her ‘hideous (*abschewlichen*) scab’ lest she ‘infect (*beflecket*) others with it’.⁶³ Even when they paired contagiousness with repulsiveness, however, the doctors usually recognized the difference between appearance, symptoms, and causes. In 1492, the dean and two members of the Mainz faculty of medicine, after thoroughly examining Notburgis ‘at her humble request’, solemnly testified that she was ‘not infected or made foul (*defedatam*) by the evil of leprosy, of which she stands accused’.⁶⁴

Few issues occasioned more examinations, drew a more emotional reaction, or posed a greater threat to social harmony than ‘accusations’ and suspicions, because these caused fear, animus, and unrest in the suspect as well as in the community. In 1525, Anthoine de Montbardon, ‘of good and respectable parents and of old lineage without anyone suspected of leprosy’, appealed to La Purge after ‘certain information had been posted by hateful and malevolent witnesses’.⁶⁵ From the early-fourteenth to the mid-seventeenth century, the most telling characterization of a person who requested to be examined for leprosy was that she or he had been unjustly defamed, *defamata* or *iniuria defamatus*. *Fama*, with the dual meaning of rumour and reputation, was an almost ubiquitous term in the certificates. The consequences of ‘defamation’ were expressed concretely in Cologne in 1651, when Isac von Brisack, a ship’s captain on the Mosel and Rhine, was found ‘completely clean’ after he had

⁶¹ ‘Vier Begutachtungen’, ed. Rieder, p. 385.

⁶² *De Leprozerij*, ed. Mus, IV, p. 27.

⁶³ ‘Vier Begutachtungen’, ed. Rieder, p. 385.

⁶⁴ *Rheingauische Alterthümer*, ed. Bodmann, I, p. 188.

⁶⁵ Picot, ‘Malades ou criminels?’, II, p. 230: ‘Combien qu’il soit estraict de bons et noctables parens de bonne et ancienne lignée et sans ce que luy ne ses preddecesseurs ayent esté actaings ne aucunement suspicionnez d’aucune maladie de lepre mesmement ledit Montbardon ne autrement par quelque information faicte aposte par gens suspectz et par tesmoins hayneulx et malveilhans.’

‘complained that many avoid contact with him and that this kept him from practising his craft’.⁶⁶

Suspicion acquired an accent of guilt when adjectives such as *inculpatus*, *accusé*, and *geschuldiget* were used. Judges of Le Tribunal often deepened the insinuation by phrasing their verdicts as condemnations. Thus, they ‘condemned’ Anthoine de Rochefort as infected in 1499 and, at the same time, ‘condemned’ him to a penalty of 100 *livres* if he did not enter a *maladrerie* within six weeks. Similar formulations appeared in other places, such as Béthune, where examiners routinely employed the term *condamnabile* in certificates from 1500 to 1511. Certain expressions reinforced the suggestion of guilt inversely. In 1515, the Montferrand judges exonerated Anthonie Faramonde with the phrase ‘we absolve’ her, in direct opposition to condemning (‘we condemn’) her accusers to pay the cost of the examination.⁶⁷ In 1331, at the request of several cleared ‘suspects’, the chancellor of Forez ordered the castellan of Cervières (Loire) to ‘pronounce an absolving verdict’.⁶⁸ The doctors in Cologne, too, issued more than one ‘*sententia absolutoria*’, particularly in the 1560s. One of these cleared Petrus Dammer of suspicion, ‘notwithstanding the verdict to the contrary in the *leprosarium*’.⁶⁹

Examinations and verdicts frequently caused disagreements, among which those between doctors and the administrators and inmates of leper hospitals are the most visible. In 1608, Cologne doctors rejected the verdict by which a youth from Antwerp had ‘been rashly and falsely held for unclean by the lepers’.⁷⁰ A judgment by the lepers of Melaten in 1574, that Tryn van Vrechen was leprous, drew a sharp rebuke from two faculty members, who protested to the town fathers that the *Lepraschau* should be entrusted to ‘the medical profession’ rather than to the ‘ignorant regents of the *leprosarium*’.⁷¹ The medical judges in Saint-Omer were more diplomatic in 1557, when they argued that Jehan Siredieu ought to be admitted to La Magdelaine, even though the lepers of the house had tried to keep him out by

⁶⁶ ‘Urkunden’, ed. Keussen, p. 98.

⁶⁷ Picot, ‘Malades ou criminels?’, II, p. 241: ‘Avons absoluté et absolvons ladite deffendarresse [...] avons condempné et condempnons les comis et habitans dudit lieu du Crest es fraiz faictz par ledit procureur au pourchas et poursuyte de fere fere ladite visitacion.’

⁶⁸ Picot, ‘Malades ou criminels?’, I, p. 327: ‘De prononcer une sentence absolutoire.’

⁶⁹ ‘Urkunden und Aktenstücke’, ed. Keussen, p. 97.

⁷⁰ ‘Urkunden und Aktenstücke’, ed. Keussen, p. 98.

⁷¹ Demaitre, *Leprosy in Premodern Medicine*, pp. 24-25. For the rivalry between Melaten and the Faculty of Medicine in context, see Uhrmacher, ‘Die Lepra in Köln’, pp. 102-103.

claiming that he ‘was only infected by a dry scab which he could have caught by poverty and deprived living’.⁷² In a reverse case, the mother superior of the Terzieken *leprosarium* in Antwerp rejected the judges’ verdicts on five suspects in 1701 because she had not been present at the examination.⁷³ The case is telling, because religious women who administered leper houses in the southern Netherlands (Antwerp, Bruges, and Ghent) appear to have maintained the upper hand over physicians more consistently and longer than anywhere else.

The issue of prerogative arose regularly in examinations, to the point of drawing more attention from officials than leprosy itself, at least as an issue of public order. The physicians of La Purge in 1488 overruled the consuls of Ambert (Puy-de-Dôme) who had confined George Chastaing as leprosy.⁷⁴ In an apparently more intense case of dissent, the Montferrand judges in 1542 reversed the confinement of Jehanne Freydefont by the consuls of Olliergues, who had trespassed on the jurisdiction of La Purge.⁷⁵ There were outright contests between towns over the right to hold examinations, and some of these led higher authorities to intervene, not always successfully. The Secret Council of Charles V in 1552 prohibited the town of Kortrijk (Courtrai) from performing examinations, upon a joint complaint from the administrators of the *Lazarie* in Ghent, of Saint Mary Magdalen in Bruges, of the *leprosarium* of the Hooghen Zieken (High Sick) outside Ypres, and of the ‘*Lazarie* of Free Flanders’. It took almost a year, and an intervention from the Emperor, before Kortrijk stopped ‘usurping’ the *prueve vander lazarie*.⁷⁶ It took much longer (from at least 1568 to 1586) and repeated interventions by the Duke of Württemberg, to resolve a similar dispute between Tübingen and Stuttgart.⁷⁷ In conflicts such as these, the maintenance of control was at stake as much as the management of health.

Competition for control often overlapped with the material ramifications of leprosy that focused official attention upon a broad spectrum of economic and social concerns. So much of this spectrum is reflected in the certificates that it calls for a separate study, which would complement the ongoing research into, and discussion of, the budgets and property transactions of leper hospitals, as well as the bequests that they received. Suffice it here to

⁷² Bourgeois, *Lépreux*, p. 31.

⁷³ Van Schevensteen, *La Lèpre dans le Marquisat d’Anvers*, p. 57.

⁷⁴ Picot, ‘Malades ou criminels?’, I, p. 62; II, p. 37.

⁷⁵ Picot, ‘Malades ou criminels?’, I, pp. 62-63; II, p. 58.

⁷⁶ *De Leprozerij*, ed. Mus, IV, pp. 21-27.

⁷⁷ Demaitre, *Leprosy in Premodern Medicine*, pp. 44-45.

summarize the salient fiscal aspects of the *visitatio*. Fees constitute the most immediately visible component, since they covered the cost of the procedure, regularly furnishing details on the amounts disbursed and on their distribution among the participants. Fees were often combined with fines for non-compliance and penalties for transgressions. There were different regional accents, which are at least partly due to the provenance of the records. German certificates were most precise about the fees of the doctors, as could be expected. French records more often specified reimbursements for travel, including the hire and provisioning of horses, lodging, and the meals of escorts. Poverty was mentioned frequently, earlier in France, as the reason for a reduction or remission of payment.

The issue of poverty also arose at the other end of a *iudicium*, when leprosy was confirmed. In some certificates, it even received more attention than the verdict itself. In 1573, a doctor in the hospital of Béthune determined that the widow Bétime needed to be sequestered, to be placed in the *maladrerie*, and ‘to be supported and provided for from the goods of that house as *bourgeoise*’.⁷⁸ As Annemarie Kinzelbach has shown most persuasively for German imperial towns, the focus of government measures shifted, in the late sixteenth century, to a preoccupation with poverty which almost entirely eclipses concern about contagiousness.⁷⁹ The certificates display earlier harbingers of emerging economic priorities. In 1448, the authorities in Saint-Omer decided that Jehan Gheers, though judged not to be leprous but disposed to the disease, should be examined in La Magdeleine every week ‘for the sake of charity and mercy, in consideration of his poverty’.⁸⁰ In 1457, the sworn physicians of Frankfurt recognized that the widow Fransbergerinn had a cancer of the lips and nose rather than leprosy, yet they proposed that her condition warranted a grant of the privilege (*fryheit*) to beg, as well as ‘the alms of the separated people’.⁸¹ The shift towards an economic agenda is amply documented, for the Low Countries, by the emphasis on ‘expenses’ (*costen*) in an ordinance which the regents ‘vanden Hooghen Zieken’ in Ypres formulated in the years between 1520 and 1524.⁸² In 1559, the Ypres examiners clearly aimed for the alleviation of poverty rather than the accuracy of the diagnosis when they found

⁷⁸ Bourgeois, *Lépreux*, p. 241 note 53.

⁷⁹ Kinzelbach, ‘Negotiating on Paper’. I am deeply grateful to Professor Kinzelbach for sharing this seminal article with me before it was published.

⁸⁰ Bourgeois, *Lépreux*, pp. 30, 314, note 108.

⁸¹ ‘Dokumente zur Ausübung der Lepraschau’, ed. Sudhoff, p. 152.

⁸² *De Leprozerij*, ed. Mus, III, pp. 95-108.

Joos Gauweloos not to have leprosy but a condition that ‘may be as incurable as any kind of leprosy’, with the result that he was ‘very miserable, infected forever, and in utter need of alms’.⁸³

Conclusion

With their allusions to economic considerations, and particularly with their references to poverty and the need for alms, the certificates convincingly prove two principal propositions about the *visitatio leprosorum*. First, they demonstrate that official policies regarding leprosy reached far beyond contagion and, strictly speaking, beyond issues of public health. With more specific implications, the *iudicia* also confirm that their objective was not limited to sequestration but extended to social justice and, where necessary, the provision of succour. Even Le Tribunal de la Purge exemplified a dual goal, which undermines any tendency towards a one-sided and essentially negative interpretation of the word ‘purge’. In 1525 it manifested both its mandate to exclude lepers *and* its concern to offer them care by appointing a ‘quêteur pour les lépreux’. Conventional assumptions might lead one to think of a functionary charged with the *quête* or ‘search’ for suspects in order to purge society of a contagious menace. The nomination, however, specified that the officeholder should be licensed:

[T]o carry clappers together with a cup as if he were among those poor, so that he might draw more effectively people who are devoted to give them alms.

However, we forbid him to sit or to place his cup where similar *ladres* have the right to place theirs, for we do not intend to prejudice their right to do so.⁸⁴

To be sure, there were varying patterns in the soliciting of alms and the control of begging. These patterns most likely contribute to the quantitative gender disparities, particularly between Montferrand and the rest of France, which certainly cannot be attributed solely to epidemiological factors or varying health conditions.

⁸³ *De Leprozerij*, ed. Mus, IV, pp. 29-30.

⁸⁴ Picot, ‘Malades ou criminels?’, II, pp. 198-199: ‘De pourter cliquetes et d’icelles ensemble du baril user comme s’il estoit du nombre desdits pouvres et pour mieulx atraire les gens devotz a leur donner l’ausmone touteffoys nous luy defendons de ne asseoir ou poser baril en lieu que semblables ladres ont droit de poser les leurs car n’entendons preiudicier en leurs droitz de ce faire.’ A ‘clapper boy’ (*klapknecht*) with a similar function is mentioned, but tied to the annual ‘begging procession’ (*bedeltocht*), by Meulemeester, ‘De melaatsenklepper’, p. 393. The precise mandate of this official merits further inquiry.

More puzzling is the pronounced gender difference between Montferrand, where almost half of examined men were judged leprosy, and Cologne, where the ratio was a mere 7 per cent. The disproportion may reflect a divergence between the commission of judges to safeguard the community and the endeavour of physicians to limit the number of ‘condemned’ suspects. The rich archives of Cologne and Montferrand document urban outlooks rather than rural conditions, and they no doubt slant some of my inferences. Their weight, however, is balanced by information gleaned from numerous documents, diverse in type and provenance, which add credence and also detail and perspective. Further research should be instrumental in refining these conclusions. A more urgent desideratum is an expansion of the comparative overview, first, with a more methodical examination of the similarities and differences between France, Germany, and the Netherlands, and then between the Continent and England. It may be equally promising, if more challenging, to pursue similar explorations and comparisons south of the Alps and the Pyrenees, into Central and Eastern Europe, to the Mediterranean region – and beyond, into global and chronological space.

This initial exploration of the certificates is but a ‘horizontal’ or ‘latitudinarian’ attempt to weave discrete documents into one narrative; the next step, indispensable to any true history, is a ‘longitudinarian’ study of continuity and change over time. In the present narrative, the collected evidence from certificates has not been used to deny or minimize the role of public health, contagion, or separation in official measures. Rather, it opens dimensions beyond simplified views of responses and motives, and it shows that lepers, rather than constituting a society of the excluded, were an organic part of mainstream society, whether as a challenge to public health or public order, or as individuals who were entitled to rights and assistance. The examined certificates offer one more antidote to the reductionist and ‘polarizing equation between leprosy and contagion, lepers and rejection, and leperhouses and segregation’, and to the stubbornly ‘postulated’ universality of concerns with contagiousness and prevention.⁸⁵ Furthermore, when assembled into a mosaic, the *iudicia leprosum* convey far-reaching implications, across centuries and borders. Even within a circumscribed period and area, they open a broader perspective on ‘sanitary policing’: they reveal the complexity of official responses to epidemics, of the motives behind public health measures, and even of popular attitudes towards ‘the other’.

⁸⁵ Touati, ‘Contagion and Leprosy’, pp. 182-3.

BIBLIOGRAPHY

Archival sources

Agen, Archives départementales de Lot-et-Garonne, BB 24, 26. Documents (from Agen, 1523, 1535, and 1538) kindly shared by Johan Picot.

Auxerre, Archives départementales de l'Yonne, E 481, G 1633, H 2398

Bruges, OCMW-Archief, Fonds Magdalena Leprozerie, Reg. nr. 4; lias 80, stuk 14

Montpellier, Archives départementales de l'Hérault, II E 35/42. Documents (from Ganges, 1570) kindly shared by Bruno Tabuteau.

Nevers, Archives départementales du Nivernais, cahier CC 120

Nuremberg, Stadtbibliothek, Handschriftenabteilung, Handschrift Cent.V, 42

Troyes, Archives départementales de l'Aube, G 1281, G 3394, G 3395, 41 H 1

Tübingen, Universitätsarchiv, MS 20/10, 'Gutachten der medizinische Fakultät'

Printed primary sources

'Beiträge zur Geschichte der Kölner Lepra-Untersuchungen. i. Teil. A. 1491-1664. Lepra-Untersuchungsprotokolle der Kölner medizinische Fakultät', ed. by Hermann Keussen, *Lepra*, 14 (1914), 80-98

De Leprozerij, genaamd het Godshuis der Hoge Zieken te Ieper. Oorkonden, I (1176-1300) - IV (1546-1581), in *Bijdragen tot de geschiedenis van de liefdadigheidsinstellingen te Ieper*, ed. by Octaaf Mus, vols. II-V (Ieper: OCMW, 1950-1954)

‘Documents inédits sur la maladrerie et les lépreux de Lille. Épreuve de ladres’, ed. by Alexandre de la Fons de Mélicocq, *Revue des Sociétés Savantes des Départements*, third series, 4 (1864), 458-465

‘Dokumente zur Ausübung der Lepraschau in Frankfurt am Main im XV. Jahrhundert’, ed. by Karl Sudhoff, *Lepra: Bibliotheca internationalis*, 13 (1913), 141-169

‘Eine kölnische Lepraschau vom Jahre 1357’, ed. by Ernest Wickersheimer, *Archiv für Geschichte der Medizin*, 2 (1908-1909), 434

‘Lepraschaubriefe aus dem 15. Jahrhundert’, ed. by Karl Sudhoff, *Archiv für Geschichte der Medizin*, 4 (1910-1911), 370-378

‘Lepraschaubriefe aus Italien’, ed. by Karl Sudhoff, *Archiv für Geschichte der Medizin*, 5 (1911-1912), 434-435

‘Mittelalterliche Aussatz-Proben’, ed. by Karl Sudhoff, *Archiv für Geschichte der Medizin*, 3 (1909-1910), 80

‘Neue Aussatzproben aus dem Anfang des 14. Jahrhunderts’, ed. by Karl Sudhoff, *Archiv für Geschichte der Medizin*, 8 (1914-1915), 71

Paré, Ambroise, *Les oeuvres d'Ambroise Paré [...] : diuisees en vingt huict liures, avec les figures & portraicts, tant de l'anatomie que des instruments de chirurgie, & de plusieurs monstres: reueuës & augmentees par l'auteur* (fourth edn., Paris: Gabriel Buon, 1585)

‘Procès-verbal de visite d’un lépreux en 1464 et relation juridique d’une autopsie en 1499’, ed. by Louis Barthélemy, *Actes du comité médical des Bouches-du-Rhône*, 20 (1881-1882), 116-122

Recueil des ordonnances des Pays-Bas. Deuxième série, 1506-1700. Tome premier, contenant les ordonnances du 7 Octobre 1506 au 16 Décembre 1519, ed. by Charles Laurent (Brussels: Goemaere, 1893)

Rheingauische Alterthümer, oder, Landes- und Regiments-Verfassung des westlichen oder Niederrheingaus im mittlern Zeitalter. Erste Abteilung. Die Landesverfassung, ed. by Franz Joseph Bodmann (Mainz: Kupferberg, 1819)

Thonerus, Augustinus, *Observationum medicinalium, haud trivialium, libri quatuor* (Ulm: Johannes Gerlinus, 1649)

‘Urkunden und Aktenstücke zur Geschichte der Leprauntersuchung in Köln und Umgegend, 1357-1712’, ed. by Hermann Keussen, *Lepra*, 14 (1914), 108-112

‘Vier Begutachtungen Aussatzverdächtiger durch das Nürnberger Medizinalcollegium zu Ende des 16. Jahrhunderts’, ed. by Otto Rieder, *Archiv für Geschichte der Medizin*, 4 (1910-1911), 384-385

‘Vier Schemata für Lepraschau-Atteste der Wiener medizinische Fakultät’, ed. by Karl Sudhoff, *Archiv für Geschichte der Medizin*, 6 (1912-1913), 392-393

‘Weitere Lepraschaubriefe aus dem 14.-17. Jahrhundert’, ed. by Karl Sudhoff, *Archiv für Geschichte der Medizin*, 5 (1911-1912), 154

‘Wurzacher Lepraschaubriefe aus den Jahren 1674-1807’, ed. by Karl Sudhoff, *Archiv für Geschichte der Medizin*, 6 (1912-1913), 424-434

Printed Secondary Sources

Bériac, Françoise, *Histoire des lépreux au Moyen Âge. Une société d'exclus* (Paris: Presses Universitaires de France, 1988)

Borradori, Piera, *Mourir au monde: les lépreux dans le Pays de Vaud (XIIIe - XVIIe siècle)* (Lausanne, Université de Lausanne: Cahiers lausannois d'histoire médiévale, 7, 1992)

Bourgeois, Albert, *Lépreux et maladreries du Pas-de-Calais (Xe - XVIIIe siècles)* (Arras: Mémoires de la Commission départementale des monuments historiques du Pas-de-Calais, 14:2, 1972)

Brenner, Elma, *Leprosy and Charity in Medieval Rouen* (Woodbridge: Boydell, 2015)

Burch, Sally L., ‘Leprosy and Law in Bérout’s *Roman de Tristan*’, *Viator*, 38 (2007), 141-154

De Keyzer, Walter, 'Lépreux et léproseries dans le Comté de Hainaut au Moyen Âge', in *Recueil d'études d'histoire hainuyère offertes à Maurice A. Arnould*, ed. by Jean-Marie Cauchies and Jean-Marie Duvosquel, 2 vols (Mons: Analectes d'histoire du Hainaut, 1983), I, pp. 521-544

Demaitre, Luke, *Leprosy in Premodern Medicine: A Malady of the Whole Body* (Baltimore: Johns Hopkins University Press, 2007)

Demaitre, Luke, 'The Clapper as "Vox Miselli": New Perspectives on the Iconography of Leprosy', in *Leprosy and Identity in the Middle Ages: From England to the Mediterranean*, ed. by Elma Brenner and François-Olivier Touati (Manchester: Manchester University Press, forthcoming)

De Potter, Frans, 'De leproos in de middeleeuwen', *Het Belfort*, 6 (1891), 170-177

Dewitte, Alfons, 'Lodewijk van Gruuthuse en de akkerzieken, 1489', *Biekorf*, 98 (1998), 195-198

Dross, Fritz, and Kinzelbach, Annemarie, "'Nit mer alls sein burger, sonder alls ein frembder". Fremdheit und Aussatz in frühneuzeitlichen Reichstädten', *Medizinhistorisches Journal*, 46 (2011), 1-23

Fay, Henri Marcel, *Histoire de la lèpre en France: lépreux et cagots du sud-ouest, notes historiques, médicales, philologiques suivies de documents* (Paris: Champion, 1910)

Felten, Sebastian, 'Mittendrin statt außen vor? Ein neuer Ort für Melaten bei Köln und der "Paradigmenwechsel" in der Leprosengeschichtsschreibung', *Geschichte in Köln. Zeitschrift für Stadt- und Regionalgeschichte*, 57 (2010), 11-37

Hort, Irmgard, 'Aussätzig in Melaten. Regeln zur Krankheitsdiagnose um 1540/1580', in *Quellen zur Geschichte der Stadt Köln: Spätes Mittelalter und frühe Neuzeit (1396-1794)*, ed. by Joachim Deeters and others (Cologne: Bachem Verlag, 1996), pp. 168-173

Jütte, Robert, 'Lepra-Simulanten', in *Neue Wege in der Seuchengeschichte*, ed. by Martin Dinges and Thomas Schlich (Stuttgart: Medizin, Gesellschaft und Geschichte, 6, 1995), pp. 25-42

Keussen, Hermann, 'Nachrichten über die in den Lepraprotokollen genannten Professoren und Lizentiaten, welche an den Untersuchungen teilnahmen', *Lepra*, 14 (1914), 98-108

Kinzelbach, Annemarie, 'Infection, Contagion, and Public Health in Late Medieval and Early Modern German Imperial Towns', *Journal of the History of Medicine and Allied Sciences*, 61 (2006), 369-389

Kinzelbach, Annemarie, "'an jetzt grasierender kranckheit sehr schwer darnidert". "Schau" und Kontext in süddeutschen Reichsstädten der frühen Neuzeit', in *Seuche und Mensch. Herausforderung in den Jahrhunderten*, ed. by Carl Christian Wahrmann and others (Berlin: Historische Forschungen, 95, 2012), pp. [269]-282

Kinzelbach, Annemarie, 'Negotiating on Paper: Councillors, Medical Officers and Patients in an Early Modern City', in *The Physician and the City in Early Modern Europe*, ed. by Andrew Mendelsohn and others (London: Routledge, forthcoming)

Kinzelbach, Annemarie, and Sturm, Patrick, 'Der Siechenhauskomplex vor den Toren Nördlingens: Entwicklung, Funktion und bauliche Gestalt vom 13. bis zum 18. Jahrhundert', *Jahrbuch Nördlingen*, 33 (2011), 25-54

Lombardo, Paul A., 'Medicine, Eugenics, and the Supreme Court: From Coercive Sterilization to Reproductive Freedom', *Journal of Contemporary Health Law & Policy*, 13 (1996), 1-25

Meulemeester, Jean Luc, 'De melaatsenklepper in het Museum van O.-L.-Vrouw-ter-Potterie te Brugge', *Antiek*, 22:7 (1988), 393-399

Le Page, Henri, 'Madelaine-lès-Nancy', *Mémoires de la Société d'Archéologie Lorraine*, 3 (1874), 33-64

Maréchal, Griet, 'Lepra-onderzoek in Vlaanderen (XIVde – XVIde eeuw)', *Annalen van de Belgische Vereniging voor Hospitaalgeschiedenis*, 14 (1976), 27-65

Maréchal, Griet, 'De leprozen in de kwartieren Brugge en het Brugse Vrije. Nieuwe cijfers', *Annales de la Société d'émulation de Bruges*, 116 (1979), 147-162

Mazzoli-Guintard, Christine, 'Notes sur une minorité d'al-Andalus: Les lépreux', in *Homenaje al profesor Carlos Posac Mon*, ed. by Manuel Ramírez and others, 3 vols (Ceuta: Instituto de Estudios Ceutíes, 1998), I, pp. 319-325

Moore, Robert I., *The Formation of a Persecuting Society: Authority and Deviance in Western Europe, 950-1250* (Malden, MA: Blackwell, 2007)

Picot, Johan, "'La Purge': une expertise juridico-médicale de la lèpre en Auvergne au Moyen Âge", *Revue historique*, 662 (2012), 204-292

Pourrière, Jean, *Les Hôpitaux d'Aix-en-Provence au Moyen âge: XIIIe, XIVe et XVe siècles* (Aix-en-Provence: Paul Roubaud, 1969)

Prevenier, Walter, 'Sociale spanningen rond leprozen en akkerzieken in 15e eeuws Vlaanderen', in *Bewogen en bewegen. De historicus in het spanningsveld tussen economie en cultuur*, ed. by Willem Frijhoff and Minke Hiemstra (Tilburg: H. Gianotten, 1986), pp. 232-248

Rawcliffe, Carole, *Leprosy in Medieval England* (Woodbridge: Boydell, 2006)

Schaefer, R.J., 'Die Lepraatteste in den Akten der medizinischen Fakultät an den alten Universität Köln', *Lepra*, 1 (1913), 249-252

Schwarz, Ignatius, 'Zur Geschichte der Lepraschau', *Archiv für Geschichte der Medizin*, 4 (1910-1911), 383-384

Soziale Randgruppen und Aussenseiter im Altertum: Referate vom Symposium "Soziale Randgruppen und Antike Sozialpolitik" in Graz (21. bis 23. September 1987), ed. by Ingomar Weiler and Herbert Grassi (Graz: Leykam, 1988)

Sudhoff, Karl, 'Die Clever Leprosenordnung vom Jahre 1560', *Archiv für Geschichte der Medizin*, 4 (1910-1911), 386

Sudhoff, Karl, 'Was geschah mit den (nach erneuter Schau) als "leprafrei" Erklärten und aus den Leprosorien wieder Entlassenen, von behördlicher und ärztlicher Seite?', *Archiv für Geschichte der Medizin*, 6 (1912-1913), 149

Sudhoff, Karl, 'Eine Blutprobe zur Erkennung der Lepra', *Archiv für Geschichte der Medizin*, 6 (1912-1913), 159

Sudhoff, Karl, 'Einige Dokumente zur Geschichte der Lepraprophylaxe in Süditalien in der 2. Hälfte des 13. Jahrhunderts', *Archiv für Geschichte der Medizin*, 8 (1914-1915), 424

Sudhoff, Karl, 'Ein neues Leprazeichen bei der Blutprüfung', *Archiv für Geschichte der Medizin*, 11 (1918-1919), 232

Tabuteau, Bruno, 'Vingt mille léproseries au Moyen Âge? Tradition française d'un poncif historiographique', *Memini. Travaux et documents*, 15 (2011), 115-124

Touati, François-Olivier, *Maladie et société au Moyen Âge. La lèpre, les lépreux et les léproseries dans la province ecclésiastique de Sens jusqu'au milieu du XIV^e siècle* (Brussels: De Boeck Université, 1998)

Touati, François-Olivier, 'Contagion and Leprosy: Myth, Ideas and Evolution in Medieval Minds and Societies', in *Contagion: Perspectives from Pre-Modern Societies*, ed. by Lawrence Conrad and Dominik Wujastik (Aldershot: Ashgate 2000), pp. 179-202

Tricot, Jean-Pierre and Van Hee, Robrecht, 'Pest en lepra in de zestiende eeuw', in R. van Hee, ed., *Ziek of gezond ten tijde van Keizer Karel. Vesalius en de gezondheidszorg in de 16de eeuw* (Ghent: Academia Press, 2000), pp. 73-83

Uhrmacher, Martin, 'Die Lepra in Köln vom 12. bis 18. Jahrhundert', in *Krank und Gesund. 2000 Jahre Krankheit und Gesundheit in Köln*, ed. by Thomas Deres (Cologne: Kölnisches Stadt Museum, 2005), pp. 98-113

Van Schevensteen, A.F.C., *La Lèpre dans le Marquisat d'Anvers aux temps passés* (Brussels: Etablissements d'Imprimerie l'Avenir, 1930)

Westerink, Karin, 'Ter ere Gods en onze Lieve Vrouw van Eiteren, een leprozengilde', *Historische Kring IJsselstein*, 43 (1987), 41-57

Wickersheimer, Ernest, 'Beiträge zur Geschichte des Aussatzes in Frankreich und in den benachbarten Ländern', *Archiv für Geschichte der Medizin*, 5 (1911-1912), 144-153

Electronic sources (including some unpublished theses)

De Gelder, Anouk, “‘In God’s ban geslagen?’ Lepralijders van de 13e- tot vroege 16e-eeuw in Vlaanderen, een studie naar infectiebesef” (MA Thesis, University of Ghent, 2014)
http://lib.ugent.be/fulltxt/RUG01/002/162/440/RUG01-002162440_2014_0001_AC.pdf last consulted 15 August 2016

De Paermentier, Els, ‘De relatie vrouw-ruimte in religieuze en caritative instellingen te Gent in de veertiende en vijftiende eeuw. Een onderzoek naar verschillende aspecten van de geografisch-stedelijke, architecturale, sociale en rituele ruimte bij een twintigtal instellingen’ (MA Thesis, University of Gent, 1997)
http://www.ethesis.net/caritative/car_inst_inhoud.htm last consulted 10 December 2016

Fleck, Udo, “‘Diebe - Räuber - Mörder’: Studie zur kollektiven Delinquenz rheinischer Räuberbanden an der Wende vom 18. zum 19. Jahrhundert’ (PhD Thesis, University of Trier, 2003)
http://ubt.opus.hbznrw.de/volltexte/2007/399/pdf/Raeuber_01_Text.pdf last consulted 20 September 2016

Kinzelbach, Annemarie, ‘Leprosaria: The Simultaneity of Segregation and Integration in Southern German Towns’, abstract for the INHH conference, ‘Segregation and Integration in the History of the Hospital’, 10-11 April 2015, Dubrovnik
https://www.academia.edu/11924818/Leprosaria_the_Simultaneity_of_Segregation_and_Integration_in_Southern_German_Towns last consulted 15 November 2016

Murphy, Hannah Saunders, ‘Reforming Medicine in Sixteenth-Century Nuremberg’ (PhD Thesis, University of California, Berkeley, 2012)
http://digitalassets.lib.berkeley.edu/etd/ucb/text/Murphy_berkeley_0028E_12995.pdf downloaded 5 June 2016

Unattributed, a note about *Veltsiechen* and leper housing in Koblenz
<http://www.gr-atlas.uni.lu/index.php/articles/ge57/le205/ko209> accessed 15 November 2016

Other unpublished theses

Coomans, Janna, 'In Pursuit of a Health City: Sanitation and the Common Good in the Late Medieval Low Countries' (PhD Thesis, University of Amsterdam, 2018)

Picot, Johan, 'Malades ou criminels? Les lépreux devant le tribunal de la Purge de Montferrand à la fin du Moyen Âge', 3 vols. (PhD Thesis, Université Jean Moulin Lyon 3, 2012)

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