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CHAPTER EIGHT

Policing the Environment in Premodern Imperial Cities and Towns: A Preliminary Approach

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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 on 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 provided, and in linguistic precision reveals the employment of comprehensive concepts

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 jedwedes 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.

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. 00-00 (GELTNER) 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 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

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 briefe* 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 führen solle* [...] 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, *Metzgerm Ordnung* (1549); Rat der Reichsstadt Nürnberg, *Vernere ordnung und satzung* [...] *Fleysch* (1607).

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 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

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. 00-00 (WEEDA) above.

²⁸ For sanitation in the household, see Cavallo and Storey, *Healthy Living in Late Renaissance Italy*.

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 ('*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

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.

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 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

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 pp. 000-0 (COOMANS) 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.

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, was a constant legislative concern (and subject of conflicts) in all imperial communities.⁴³ Yet during the

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 Saintly Body’.

⁴² *Stadtbuch Augsburg*, ed. Meyer, art. XXVII §3, 5-8, XLII, XLV, XLIX, LXIX, LXXXVIII, CIII, CIV, CXVIII, CXXI.

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 Polizeiordnungen*, ed. Baader, pp. 275-282, 288-289; Rat der Reichsstadt Nürnberg, *Reformacion* (1484) tit. 35; Rat der Reichsstadt Worms, *Reformacion* (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.

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 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

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 p. 00 (INTRODUCTION) above.

⁴⁵ *Deutsche Stadtrechte des Mittelalters*, ed. Gaupp, pp. 69-70 (Strasbourg); Rat der Reichsstadt Straßburg, *Policeij Ordnung*, Appendix 8-9.

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.

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 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

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*.

⁵⁴ *Nürnberger Polizeiordnungen*, ed. Baader, pp. 283-284.

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 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

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'.

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.

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, 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

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).

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

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 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

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 Einnnehmer- 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.

⁷⁰ Ulm Stadt Archiv, A [6779], [6780].

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 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

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.

⁷⁴ In Ulm the question of funding for maintenance and cleaning was frequently discussed: Ulm Stadtarchiv, A [3016], [3338].

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 image 8.1.⁷⁷ 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

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, 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. 00-00 (INTRODUCTION), 00-00 (WEEDA), 00-00 (GELTNER) above.

8.1. Ruined leprosy complex with tree stumps, Nördlingen, 1647 © Stadtarchiv Nördlingen

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, 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

⁸⁰ Delarue, 'Bild Augsburgs als Stadt', pp. 37-38; Arnold, 'Städte lob und Stadtbeschreibung'; Schilling, 'Grammatiken der Repräsentation'; Meyer, 'Mächtige Mauern'; Roeck, *Elias Holl*, pp. 61-84. See also pp. 00-00 (WEEDA) 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* [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*.

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 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

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.

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.

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 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

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 *Bettelherren* (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. 000-00 (DEMAITRE) below.

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.

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

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

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.

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 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 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.

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'.

¹⁰¹ Such concern is clearly expressed in regulations: Rat der Reichsstadt Nürnberg, *Reformacion* (1488), fol. 82v; Rat der Reichsstadt Worms, *Reformacion* (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.

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 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

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 p. 000 (NACHTGEBOREN) 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.

¹⁰⁶ *Frankfurter Amts- und Zunfturkunden*, ed. Schmidt, p. 95.

¹⁰⁷ *Frankfurter Amts- und Zunfturkunden*, ed. Schmidt, p. 106.

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 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

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.

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).

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 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

¹¹³ Frankfurt Institut für Stadtgeschichte, Ratssupplikation 1621, 2, fols 199r-200r.

¹¹⁴ Frankfurt Institut für Stadtgeschichte, Ratssupplikation 1621, 2, fol. 199r.

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.

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 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.

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